

Scuola universitaria professionale della Svizzera italiana
Dipartimento formazione e apprendimento
Centro competenze innovazione e ricerca sui sistemi educativi

SUPSI

Well-being in Education Systems

Conference Abstract Book
Locarno 2019

Luciana Castelli, Jenny Marcionetti,
Andrea Plata and Alice Ambrosetti (Eds.)

Well-being in Education Systems

Conference Abstract Book, Locarno 2019

Luciana Castelli, Jenny Marcionetti, Andrea Plata and Alice Ambrosetti

Well-being in Education Systems

Conference Abstract Book, Locarno 2019

Well-being in Education Systems

Conference Abstract Book. Locarno 2019

Luciana Castelli, Jenny Marcionetti, Andrea Plata and Alice Ambrosetti (Eds.)

978-3-456-86026-8

© 2019, Hogrefe AG
Länggass-Strasse 76, 3012 Bern
www.hogrefe.ch

Publishing: Hogrefe AG
Editing: Alice Ambrosetti, Luciana Castelli, Valentina Giovannini, Jenny Marcionetti and Andrea Plata
Cover image and layout: Jessica Gallarate, Dipartimento formazione e apprendimento,
Scuola universitaria professionale della Svizzera italiana

All rights reserved. Not to be translated or reproduced in whole or part, stored in a retrieval system, or transmitted in any form or by any means, photocopying, mechanical, electronic, recording or otherwise, without Publisher's permission in writing.

Preface

The Department of Education and Learning (DFA) of the University of Applied Sciences and Arts of Southern Switzerland (SUPSI) hosted the 2nd International Conference on Well-Being in Education Systems from 12 to 14 November 2019, organized by the Centre for Innovation and Research in Education Systems (CIRSE), exactly two years after the first edition.

The well-being of students, teachers and school principals of all levels of education is an extremely topical issue. In August 2019, a Swiss Trade Union alerted the Swiss media and the public to the issue of the sexual harassment of apprentices - especially female apprentices - in the workplace and at school.

Another news item bouncing around the Swiss media in the summer of 2019 concerned the main reasons why university students are increasingly turning to professional psychologists for help: isolation, social pressure and a tendency to suppress negative feelings (data taken from the annual report of the Psychological Counselling Centre of the University and the ETH of Zurich).

However, the variety of cases is indeed much more complex and differentiated. Given the proven importance and impact of the socio-educational context on teaching and learning, scientific research must address the issues of educational well-being, and act as a stimulus and support for all those who direct, work at or attend schools, so that schools themselves can continue to learn and improve.

The second edition of the conference was also open to teachers, principals and professionals, so the DFA of Locarno was once again designated as the venue for meeting, updating and sharing the outcomes of local, national and international research studies conducted on well-being in education.

Once again, the conference was made possible thanks to the financial and logistical support of the DFA and to the Swiss National Science Foundation (SNSF). The organization and implementation of the entire event, on the other hand, were the result of the great commitment of CIRSE members, assisted by their colleagues from the Communication Service and the Information Technology and Multimedia Service.

I hope you all enjoy reading this work, and that I will meet many of you in Locarno in the autumn of 2021 for the third edition of the conference, to discuss new best practice and the progress achieved by research conducted on well-being in education systems.

Prof. Michele Egloff
Head of CIRSE

Prefazione

Il Dipartimento formazione e apprendimento (DFA) della Scuola universitaria professionale della Svizzera italiana (SUPSI) ha ospitato, dal 12 al 14 novembre 2019, il 2° Convegno internazionale sul benessere nei sistemi educativi, organizzato dal Centro innovazione e ricerca sui sistemi educativi (CIRSE), a due anni esatti dalla prima edizione.

Il tema del benessere di allievi, docenti e direttori dei diversi ordini scolastici rimane di estrema attualità. Lo scorso mese di agosto un sindacato nazionale svizzero ha richiamato l'attenzione dei media e della popolazione sulla questione delle molestie sessuali subite dagli apprendisti, soprattutto dalle apprendiste, sul posto di lavoro e a scuola. Un'altra notizia rimbalzata nei media svizzeri durante l'estate 2019 riguarda le principali ragioni che spingerebbero gli studenti universitari a rivolgersi sempre più frequentemente agli psicologi, ovvero isolamento, pressione sociale e tendenza a reprimere i sentimenti negativi (dati del rapporto annuale del Centro di consulenza psicologica dell'Università e del Politecnico di Zurigo). La casistica è indubbiamente molto più complessa e differenziata. Visti l'importanza e l'impatto comprovati del contesto socioeducativo sull'insegnamento e sull'apprendimento, la ricerca scientifica deve affrontare le questioni inerenti il benessere in campo educativo e fungere da stimolo e supporto per tutti coloro che la scuola la gestiscono, la fanno o la frequentano, affinché a sua volta la scuola possa continuare a imparare e a migliorare.

Per la seconda edizione del convegno, aperto anche ai docenti e ai direttori, come pure a tutti gli addetti ai lavori della scuola, si è quindi proposto nuovamente il DFA di Locarno quale luogo d'incontro, di aggiornamento e di scambio della ricerca locale, nazionale e internazionale sul benessere nei sistemi educativi.

Ancora una volta, il convegno è stato reso possibile grazie al supporto finanziario e logistico del DFA e al Fondo nazionale svizzero per la ricerca scientifica (FNS). L'organizzazione e la realizzazione dell'intero evento sono invece frutto del grande impegno profuso dai membri del CIRSE, coadiuvati dai colleghi del Servizio comunicazione e del Servizio informatica e multimedia.

Auguro a tutti una buona lettura, con l'auspicio di ritrovarci numerosi a Locarno nell'autunno 2021 per la terza edizione del convegno, a discutere di nuove buone prassi e dei progressi della ricerca sul benessere nei sistemi educativi.

Prof. Michele Egloff
Responsabile CIRSE

Table of contents

Castelli L., Marcionetti J., Plata A., Ambrosetti A. <i>Introduction, Introduzione</i>	1, 3
Fraccaroli E., <i>Capitale psicologico, motivazione e academic self. Quale influenza su comportamenti, atteggiamenti e prestazione degli studenti</i>	5
Masdonati J., <i>Alla ricerca di un lavoro dignitoso: L'influenza dei sistemi educativi sulla qualità della transizione formazione-impiego</i>	9
Nota L., <i>Traiettorie per progettare il futuro in modo inclusivo e sostenibile</i>	13
Pluess M., <i>The importance of the environment for the well-being of sensitive children</i>	16
Roffey S., <i>Relationships and social capital at school</i>	21
Schonert-Reichl K. A., <i>Promoting the well-being of children through social and emotional learning: recent research and implications for education</i>	26
Wagner L., <i>Which character strengths matter most at school? Addressing the role of students' character strengths in achievement and well-being at school</i>	33
Student well-being	
Ambra F. I., Ferraro F. V., Ferra V., Basile S., Girardi F., Menafro M., Iavarone M. L., <i>Impact of sport training on healthy behavior in a group of 108 adolescents: a pilot study using S.M.A.R.T. questionnaire</i>	43
Basch J., <i>An exploration of internal assets and external resources as a pathway for building resilience</i>	48
Genoud P. A., Dessibourg M., Gay P., <i>Stress on board the educational ship: How can we prevent students from emotionally drowning?</i>	53
Lattke L. S., De Lorenzo A., Settanni M., Rabaglietti E., <i>Socio-relational well-being and dropout in vocational schools: a study on school engagement and satisfaction</i>	57
Marone F., Navarra M., Buccini F., <i>Strategie di inclusione scolastica, benessere in classe e processi di soggettivazione dei figli degli immigrati nella città di Napoli</i>	61
Neary S. L., Ruggeri M., <i>Wellbeing PArtners: a targeted approach to minimizing PA student burnout</i>	67
Parola A., Marcionetti J., Donsì L., <i>Not in Education, Employment or Training: transizione all'età adulta, pianificazione del futuro e ricadute sulla salute nel contesto italiano</i>	71
Petrocchi S., Schulz P. J., Camerini A.-L., <i>The interaction between low quality of peer relationships at school and risk taking-tendency on substance use in adolescence: evidence from a longitudinal study</i>	76
Petrucci F., Marcionetti J., Castelli L., <i>Impatto delle dimensioni dell'istituto scolastico sul benessere dei preadolescenti</i>	80
Pham G., Hauser M., <i>The relationship between being frequently bullied and sense of belonging at school and the moderating effect of power distance</i>	84

Raccanello D., Vicentini G., Loderer K., Burro R., <i>Benessere psicologico nella transizione tra scuola primaria e secondaria: un contributo alla validazione italiana della School-Related Well-Being Scale usando il modello di Rasch</i>	88
Strobel J., Koch A. F., <i>Outside the box or in the norm? Differential aspects of student misbehavior and wellbeing as a potential multi-level outcome</i>	93
Zambianchi M., <i>The relevance of time perspective for the eudaimonic well-being in the emerging adulthood</i>	98
 Burnout and teacher well-being	
Addimando L., <i>Work engagement e pratiche didattiche nella scuola dell'obbligo: uno studio sull'insegnamento dei docenti in Ticino</i>	107
Buonomo I., Benevene P., Fiorilli C., <i>Health and motivation in school-principals: the gender effect</i>	112
Castelli L., Di Martino P., Panero M., Sbaragli S., <i>Evolution of preservice primary teachers' attitudes towards mathematics and its teaching</i>	116
Cesarano V. P., Russo A., <i>Il benessere come garanzia del successo scolastico: quali rappresentazioni e strategie</i>	121
Diagne D., <i>Factors affecting teachers' job satisfaction: does money matter?</i>	124
Gay P., Genoud P. A., <i>Which emotional skills should a teacher develop to last in the long run? Relations between well-being, burnout and emotional intelligence in a sample of 202 primary school teachers</i>	128
Gordon A. L., <i>Teachers' well-being, self-actualisation and job satisfaction: Exploring the realities of early career teachers' experiences through creative writing</i>	133
Iorio I., Ambrosetti A., <i>Percezione degli studenti del burnout lavorativo dei docenti: validazione della scala</i>	138
Maas J., Schoch S., Scholz U., Rackow P., Schüler J., Wegner M., Keller R., <i>The association between teachers' perceived time pressure and emotional exhaustion and the role of school leaders' social support: findings of a longitudinal study</i>	142
Mariotta L., <i>Collaborative practice between occupational therapists and teachers in elementary schools in Southern Switzerland</i>	146
Sappa V., Maeusli-Pellegatta P., Vieceli C., <i>Il Teatro Forum come strumento per sostenere il benessere degli insegnanti: uno studio esplorativo ticinese</i>	150
Van Droogenbroeck F., Spruyt B., <i>The teacher burnout illusion - Can schools actually do something to help?</i>	155
 Well-being promotion	
Barrett H., Hevey D., O'Connor H., <i>Examining the effectiveness of peer-led mindfulness meditation on secondary school students' mental well-being, emotion regulation and mindfulness</i>	161
Basso A., Cornaglia Ferraris P., <i>La terapia dell'avventura a bordo di Nave Italia</i>	165
Batini F. e Bartolucci M., <i>La promozione del benessere scolastico e l'empowerment cognitivo degli studenti attraverso la lettura ad alta voce: una sperimentazione nazionale</i>	170

Goodman L., Manno M., “The only class that has prepared me to live a better life”: the impact of a credit-bearing well-being course at a diverse American university	174
Labalestra R., Ghezzi C., Marani E., Quintiliani G., Centri di integrazione nelle scuole della periferia romana	180
Lucciarini E., Gay P., Bressoud N., High school swiss students’ perception of five minutes’ mindfulness meditations at the beginning of their 45 minutes’ lesson	185
Maggiolini S., Zanfroni E., Differentiation for inclusion: promoting educational well-being for every student. An Italian case study	190
Milan L., The implementation of the Schoolwide Enrichment Model to promote talent development in Italian schools	194
Montuori S., La Motta R., Zanetti M. A., Modello interdisciplinare STIMA: valorizzare il potenziale cognitivo e le competenze socio-emotive a scuola	198
Nohilly M., Tynan F., Promoting well-being in Irish primary schools: an exploratory study incorporating the voices of teachers	202
Potter C., Teaching resilience to at-risk undergraduates	208
Santilli S., Ginevra M. C., Nota L., ‘The Good Actions’: a kindergarten children intervention to promote social behavior and an inclusive friendship	213
Vicentini G., Rocca E., Barnaba V., Dal Corso E., Burro R., Raccanello D., Uno studio pilota su Prevenzione Emotiva e Terremoti nella scuola primaria (progetto PrEmT): come potenziare le strategie di regolazione delle emozioni	217
Zambianchi M., Ampliando il concetto di educazione: il modello Life Skill Education applicato alla Terza Età come risorsa efficace per l’invecchiamento positivo. Un progetto di ricerca-azione partecipata	222
Zanetti M. A., Sparaciari S., Progetto “B.I.C.: BENESSERE IN CLASSE”: proposta nelle scuole di attività per promuovere il benessere e lo sviluppo socioemotivo	228
 Well-being and academic achievement	
Aleksandrova L., Aysmontas B., Lvova I. V., Flow, intrinsic motivation and subjective wellbeing in educational settings	235
Brandao De Souza C., Pasini M., Intelligenza Emotiva e creatività a scuola	240
Carelli E., Lizzori A., Zanetti M. A., Alto potenziale cognitivo e sviluppo socio emotivo: un percorso di supporto in ambito scolastico	245
Fiore B., The “full time project” in Italian Primary Schools: a good chance for educational success and well-being? Some results	249
Gay P., Bressoud N., Lucciarini E., Gomez J.-M., Rime J., Samson A. C., What are the functions of positive emotions in fostering school engagement in primary school (and how to deal with it)?	253
Güsewell A., Music education and emotional engagement	258
Marciano L., Camerini A.-L., Screen time, sleep, and physical activity: associations with academic achievement among Swiss students	263
Marciano L., Camerini A.-L., Smartphone overuse, attention problems, and media multitasking: their associations with academic achievement in Swiss students	268

Morinaj J., Hascher T., <i>The longitudinal relation between student well-being and academic achievement</i>	273
Index of authors	279

Introduction

Luciana Castelli¹, Jenny Marcionetti¹, Andrea Plata¹ and Alice Ambrosetti¹

¹ Scuola Universitaria Professionale della Svizzera Italiana

Interest in the issue of well-being in education systems is growing: questions and practices of academic research, but also the policies, decisions and actions that define what happens in schools, testify to increasing attention and a growing scientific and political sensitivity to the issue. On the one hand, scholars and researchers who deal with issues such as school success, psychosocial adaptation, individual development, work, counselling and many other traditional issues in education, increasingly aim to identify, formalize and analyze factors that promote well-being, and to integrate them consistently and rigorously into established theoretical and methodological frameworks. This is in order to provide a solid basis on which to construct a well-being oriented path to progress” in the same disciplines that have always been involved with school and education. On the other hand, even those who have the task of deciding, acting and intervening in educational contexts increasingly try to make use of scientific research results to move towards a perspective of promotion and development of people, environments and communities in order to increase their well-being. For example, the OECD subjective well-being measurement guidelines, and the inclusion of well-being measurement variables in the international PISA program go in this direction.

As in the first edition, the contributions of the speakers invited to the 2nd International Conference on well-being in education systems provided interpretations and ideas for debate on the issues addressed during the conference.

Kimberly Schoenert-Reichl, from the University of British Columbia, presented a reflection on socio-emotional education, resilience and well-being for students and teachers.

Sue Roffey, from the University of Exeter and the University of Western Sydney, introduced the second day of the conference with a talk on the importance of positive relationships with regard to fostering learning, decreasing negative behaviors and promoting mental health and well-being at school.

Franco Fraccaroli, from the University of Trento, introduced three central constructs for student well-being, namely psychological capital, motivation and academic self, in relation to the study of behaviors, attitudes and school achievements.

Lisa Wagner, from the University of Zurich, presented the perspective of positive psychology, with a talk on the topic of character strengths, their importance in the school context and how it is possible to intervene on them within the classroom.

Jonas Masdonati (University of Lausanne), Laura Nota (University of Padua) and Michael Pluess (Queen Mary University of London) presented and discussed studies and research results during a symposium addressing the topic of possible actions and future directions for fostering well-being in education systems and for society.

Finally, the 49 contributions from teachers and researchers who presented projects, results and practices on well-being in education systems, could be assembled into four thematic areas.

“Student well-being” groups together studies and research work on the contextual, relational and individual factors that affect the well-being of pupils and students. The issues discussed in depth in this chapter include: the impact of school size, and the greater impact of relational aspects, such as the support relationships between peers or with adults, as well

as the importance of school belonging, resilience and the temporal perspective for adapting well to current and future contextual challenges.

"Burnout and teacher well-being" brings together studies and research work on intra-personal resources, such as emotional competences, or inter-personal ones, such as support from colleagues and collaboration with other professionals, available to teachers in order to promote and improve their well-being at work.

The chapter entitled "Well-being promotion" presents, evaluates and discusses the results of interventions such as meditation and mindfulness practices, interventions to strengthen resilience or promote pro-social behavior, or even broader projects aimed at improving the well-being of entire school institutes.

Finally, the chapter "Well-being and academic achievement" reports the results of studies that explore the relationship between personality characteristics, social/emotional skills and individual behaviors, and school achievement and well-being.

Introduzione

Luciana Castelli¹, Jenny Marcionetti¹, Andrea Plata¹ e Alice Ambrosetti¹

¹ Scuola Universitaria Professionale della Svizzera Italiana

L'interesse verso il tema del benessere nei sistemi educativi è sempre più crescente: gli interrogativi e le prassi della ricerca accademica, ma anche le politiche, le decisioni e le azioni che definiscono e orientano quanto riguarda e accade negli istituti scolastici, testimoniano una sempre maggiore attenzione e una crescente sensibilità scientifica e politica verso il tema. Da una parte, studiosi e ricercatori che si occupano di temi quali la riuscita scolastica, l'adattamento psico-sociale, lo sviluppo individuale, il lavoro, l'orientamento e molti altri temi "classici" degli studi in ambito educativo, si pongono sempre di più l'obiettivo di individuare, formalizzare e approfondire fattori che favoriscono il benessere, e di integrarli in maniera coerente e rigorosa entro cornici di riferimento ormai consolidate. Ciò per fornire basi solide su cui costruire un progresso orientato al benessere nelle stesse discipline che da sempre si occupano di scuola ed educazione. Dall'altra, anche chi ha il compito di decidere, agire e intervenire nei contesti educativi, sempre più spesso cerca di fare tesoro dei risultati della ricerca scientifica per orientarsi verso una prospettiva di promozione e sviluppo di persone, ambienti e comunità al fine di aumentarne il benessere. In questa direzione vanno ad esempio la redazione delle linee guida OCSE per la misurazione del benessere soggettivo e l'inclusione di variabili che misurano il benessere nell'indagine internazionale PISA.

Gli interventi dei relatori invitati al 2° Convegno internazionale sul benessere nei sistemi educativi hanno fornito, come per la prima edizione, le chiavi di lettura e gli spunti di approfondimento per il dibattito sui temi affrontati durante il convegno.

Kimberly Schoenert-Reichl, dell'Università della British Columbia, ha presentato una riflessione su educazione socio-emotiva, resilienza e benessere per allievi e docenti.

Sue Roffey, delle Università di Exeter e Western Sydney, ha introdotto i lavori del secondo giorno con un intervento sull'importanza delle relazioni positive per favorire l'apprendimento, diminuire i comportamenti negativi e promuovere la salute e il benessere mentale a scuola.

Franco Fraccaroli, dell'Università degli Studi di Trento, ha introdotto tre costrutti centrali per la riflessione sul benessere degli studenti, ossia capitale psicologico, motivazione e academic self, in relazione allo studio di comportamenti, atteggiamenti e risultati scolastici degli studenti.

Lisa Wagner, dell'Università di Zurigo, ha infine presentato la prospettiva della psicologia positiva, con una conferenza sul tema dei *character strenghts*, la loro importanza nel contesto scolastico e come è possibile intervenire su di essi all'interno delle classi.

Jonas Masdonati (Università di Losanna), Laura Nota (Università degli Studi di Padova) e Michael Pluess (Queen Mary University di Londra) hanno presentato studi, risultati di ricerca all'interno di un simposio che ha affrontato il tema delle possibili azioni e dei possibili indirizzi futuri per favorire condizioni di benessere nei sistemi educativi e per la società.

Infine, è stato possibile raggruppare i 49 contributi di docenti e ricercatori che hanno presentato progetti, risultati e prassi sul benessere nei sistemi educativi, in quattro ambiti tematici.

"Student well-being", riporta studi e ricerche sui fattori contestuali, relazionali e individuali che influiscono sul benessere di allievi e studenti: l'impatto delle dimensioni dell'istitu-

to scolastico e quello più importante degli aspetti relazionali che includono le relazioni di supporto tra pari o con gli adulti di riferimento, così come l'importanza del senso di appartenenza scolastica e quella di resilienza e prospettiva temporale per un buon adattamento alle sfide contestuali presenti e future, sono alcune delle tematiche approfondite in questo capitolo.

In "Burnout and teacher well-being" sono raggruppati studi e ricerche sulle risorse interne, quali ad esempio le competenze emotive, o esterne, quali ad esempio il supporto da parte dei colleghi e le possibilità di collaborazione con altri professionisti, a disposizione dei docenti per favorire il loro benessere lavorativo.

Nel capitolo "Well-being promotion", sono presentati, valutati e discussi i risultati di interventi quali ad esempio le pratiche di meditazione e mindfulness, gli interventi atti a fortificare la resilienza o a promuovere il comportamento pro-sociale, o ancora progetti più ampi volti al miglioramento del benessere di interi istituti scolastici.

Infine, nel capitolo "Well-being and academic achievement", sono riportati anche i risultati di studi e ricerche che mettono in relazione specifiche caratteristiche di personalità, le competenze socio-emotive e alcuni comportamenti individuali con la riuscita scolastica e il benessere.

Capitale psicologico, motivazione e *academic self*. Quale influenza su comportamenti, atteggiamenti e prestazione degli studenti

Franco Fraccaroli¹

¹ Università degli Studi di Trento

Negli ultimi decenni si è sviluppato un dibattito interdisciplinare (in prevalenza tra psicologi e pedagogisti) sulla possibilità di considerare alcune tipologie di caratteristiche individuali, oltre alle tradizionali di natura accademica e cognitiva, per spiegare il successo formativo. L'interesse è rivolto alle cosiddette "*non-cognitive skills*" (Di Francesco, 2013; Di Francesco et al., 2015). Anche se non esiste una definizione univoca e precisa di tali competenze, in genere gli ambiti a cui si fa riferimento sono quelli emotivi, psico-sociali e legati alle caratteristiche di personalità. Si utilizza il termine "*non-cognitive skills*" per indicare risorse psicologiche, non prioritariamente coinvolte nel trattamento ed elaborazione delle informazioni, quali la motivazione, alcuni tratti di personalità funzionali alla buona riuscita sociale, il livello di "*agency*" individuale nel cercare di orientare e condizionare gli eventi. Ovviamente, nel funzionamento psicologico concreto tutte queste dimensioni sono fuse assieme per guidare le scelte, le preferenze e il comportamento individuale. Nel dibattito attuale tali competenze vengono considerate strategiche, in un'ottica evolutiva, per i percorsi di carriera (formativi e lavorativi) successivi, e per un'adeguata esperienza di vita come cittadino/a. Ad esempio, secondo recenti evidenze, la coscienza e l'auto-regolazione/controllo sono predittori di esiti formativi (ad es. accesso all'università) e lavorativi (ad es. tempo di ingresso al mondo del lavoro). Ci sono poi una serie di "*life outcomes*" che vengono considerati in letteratura come legati allo sviluppo delle competenze non cognitive. Tra questi, ad esempio, la stabilità finanziaria in età adulta e la riduzione alla propensione al crimine e alla devianza (Heckman, Stixrud, & Urzua, 2006; Schoon, 2008; Sherman et al., 1997; West et al., 2016).

L'ampia famiglia di concetti che rientrano sotto l'etichetta di "*non cognitive skills*" merita di essere affrontata secondo una prospettiva critica, considerando i limiti concettuali e le ambiguità insite in questa classificazione "in negativo" (*non-cognitive skills*). Infatti, si può ritenere che non esistano skills (o abilità) che non abbiano una base cognitiva, intesa come processamento di informazioni. Parallelamente, è difficile pensare a processi cognitivi completamente sprovvisti di una base "emotiva" e "psico-sociale". L'aspetto emotivo influenza ampiamente tutta una serie di processi eminentemente cognitivi, come l'attenzione e la focalizzazione che sono frequentemente in balia di una più o meno marcata propensione ansiogena del soggetto. Per essere più precisi, si dovrebbe parlare di skills "non accademiche", cioè non centrate immediatamente sullo sviluppo di apprendimenti (*literacy e numeracy*).

Un ulteriore sforzo da compiere concerne la classificazione di diverse caratteristiche individuali a carattere “non-cognitivo”. A cominciare dai tratti di *personalità* intesi come caratteristiche differenziali piuttosto stabili che regolano la nostra interazione con gli altri e con l’ambiente; essi rappresentano l’architettura stabile di tendenze comportamentali, una organizzazione interna del nostro modo di agire che rende in parte regolari e stabili le nostre condotte sociali. Ad esempio il modello del Big Five (Caprara, 2013), descrive tali tratti di *personalità* (coscienziosità, estroversione, amicalità, nevroticismo, apertura mentale) che è difficile considerare come “competenze” in senso stretto, ma che sicuramente ne possono essere predittori o co-variate. Poropat (2009) ha svolto una meta-analisi sul rapporto tra tratti di personalità e performance scolastica. Altre ricerche e modellizzazioni considerano il *capitale psicologico* (ottimismo, speranza, resilienza, auto-efficacia percepita) (Luthans, Avey, Avolio, & Peterson, 2010), che può essere definito come uno stato positivo dell’individuo relativamente stabile, ma comunque fortemente condizionato dalle circostanze. Si tratta di un insieme di risorse fondamentali per fronteggiare le sfide, raccogliere le opportunità e sormontare le difficoltà dell’agire quotidiano. Risorse di natura psicosociale che possono influenzare atteggiamenti, comportamenti e riuscita scolastica. Un altro modo ancora per trattare dimensioni non-cognitive fa riferimento alla *sfera motivazionale*. La motivazione può essere descritta come quella spinta energetica che garantisce impegno, sforzo e persistenza nel raggiungimento degli obiettivi individuali e sociali. Dipende generalmente da disposizioni personali a perseguire il soddisfacimento di bisogni (autonomia, competenza, relazioni, secondo il modello della Self-Determination Theory) e da condizioni di contesto che favoriscono o meno il raggiungimento di tali scopi (Deci & Ryan, 2000). Qui sono in gioco fattori quali l’energia, la volizione e la perseveranza della persona e si tratta di individuare il locus di generazione della motivazione (intrinseco o estrinseco). Di particolare importanza nel contesto scolastico è la motivazione ad apprendere (De Beni & Moè, 2000). Infine, altri aspetti possono riguardare la *struttura del self*. È possibile definire il costrutto di concetto di sé come l’insieme delle percezioni che ciascun individuo ha su sé stesso; quindi come l’insieme di caratteristiche, attributi, qualità e mancanze, capacità e limiti, valori e relazioni che le persone riconoscono come descrittori di sé stessi, e come base di conoscenza per definire la propria identità (Hamachek, 1985). Nello specifico dell’ambito educativo, ad esempio, il concetto di sé in matematica, o in lettura e comprensione del testo, può essere definito come la percezione delle abilità individuali, da parte degli stessi individui, nel “far bene” in determinati ambiti disciplinari, e nella dimestichezza nell’apprendimento di tali ambiti (“*academic self concept*”) (Corbière, Fraccaroli, Mbekou, & Perron, 2006). Il quadro può essere completato comprendendo altri elementi riferibili alla capacità di *controllo e regolazione individuale* (controllo dell’ansia) e a *capacità meta-cognitive* (capacità di pianificazione; self-monitoring).

Le caratteristiche individuali di natura “non cognitiva” sopra definite sono state esaminate in due indagini condotte in diversi contesti territoriali in Italia. Lo scopo di tali indagini era di capire il ruolo di tali caratteristiche individuali nell’esperienza scolastica di studenti delle scuole secondarie di primo grado (prestazione scolastica; atteggiamenti; comportamenti). In entrambi i casi si tratta di indagini su ampi campioni e a carattere longitudinale. La prima riguarda una più ampia sperimentazione sociale condotta nel quinquennio scorso dalla Fondazione per la Scuola della Compagnia di San Paolo di Torino su Istituti Comprensivi di Piemonte e Liguria (si veda per una ampia descrizione della sperimentazione: Checchi & Chiosso, 2019). Il campione esaminato è composto di 1676 soggetti, appartenenti a 24 scuole. Circa il 50% sono femmine, mentre il 6,5% sono nati all’estero. Il risultato di maggiore interesse concerne il rapporto tra variabili psico-sociali e i punteggi alle prove INVALSI in ma-

tematica e italiano dei singoli studenti in T₁ (nel primo anno del ciclo) e in T₂ (alla fine del ciclo scolastico). Le analisi condotte hanno mostrato che, in entrambi i tempi di rilevazione, aspetti quali una più elevata motivazione intrinseca, un concetto di sé più positivo riferito alle materie di studio (italiano e matematica), una più elevata auto-efficacia risultano positivamente correlate con i punteggi ottenuti dagli studenti e dalle studentesse nelle prove INVALSI (sia in italiano che in matematica) (Pisanu & Fraccaroli, 2019).

La seconda indagine è in corso nella Provincia Autonoma di Trento su Scuole Secondarie di primo grado. I primi dati ottenuti riguardano un questionario somministrato nella primavera del 2018 a circa 2100 studenti, di cui circa il 35% con entrambi o un genitore straniero. I dati sono stati raccolti attraverso un questionario *web-based* in 25 istituti comprensivi della Provincia di Trento, per un totale di 111 classi. I dati ottenuti, oltre a confermare le tendenze descritte nel primo studio (vedere sopra), mostrano l'importanza di alcuni tratti di personalità (coscienziosità e apertura mentale) e del capitale psicologico come fattori predittivi del successo scolastico (votazione finale e prove INVALSI). Inoltre, le stesse variabili di personalità e il capitale psicologico risultano correlate in misura significativa con alcuni comportamenti e atteggiamenti relativi alla vita extra-scolastica, come, ad esempio, il senso civico e l'attenzione alla sostenibilità ambientale.

I risultati ottenuti in entrambe le indagini suggeriscono una serie di implicazioni pratiche relative al tema degli interventi e delle iniziative scolastiche. Vista l'importanza delle caratteristiche individuali a carattere non cognitivo, ci si deve interrogare su come sia possibile intervenire, con programmi rivolti direttamente a studenti, ma anche ai docenti, per il potenziamento di alcune caratteristiche individuali. Possono essere oggetto di programmi di sensibilizzazione? Possono divenire oggetto di programmi formativi ad hoc? Come il contesto scolastico può dare risposta a queste domande di formazione?

Bibliografia

- Caprara, G. V. (2013). *Motivare è riuscire. Le ragioni del successo*. Bologna, Italia: Il Mulino.
- Cecchi, D., & Chiosso, G. (a cura di). (2019). *È possibile una scuola diversa? Una ricerca sperimentale per migliorare la qualità scolastica*. Bologna, Italia: Il Mulino.
- Corbière, M., Fraccaroli, F., Mbekou, V., & Perron, J. (2006). Academic self-concept and academic interest measurement: A multi-sample European study. *European Journal of Psychology of Education*, 21(1), 3-15.
- De Beni, R., & Moé, A. (2000). *Motivazione e apprendimento*. Bologna, Italia: Il Mulino.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- Di Francesco, G. (a cura di). (2013). Le competenze per vivere e lavorare oggi. Principali evidenze dall'Indagine PIAAC. *Collana Isfol Research Paper*, 9.
- Di Francesco, G., Roma, F., Giancola, O., Mineo, S., Bastianelli, M., & Fraccaroli, F. (2015). The relationship between competences and non-cognitive dimensions. The experience of the “PIAAC Italia” survey. *Osservatorio Isfol*, 3, 123-144.
- Hamachek, D. E. (1985). The self's development and ego growth: Conceptual analysis and implications for counselors. *Journal of Counseling & Development*, 64(2), 136-142.

- Heckman, J. J., Stixrud, J., & Urzua, S. (2006). The effects of cognitive and noncognitive abilities on labour market outcomes and social behavior. *Journal of Labour Economics*, 24, 411-482.
- Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly*, 21, 41-67.
- Pisanu, F., & Fraccaroli, F. (2019). Caratteristiche psicosociali e apprendimento degli studenti. Evidenze empiriche e riflessioni. In D. Checchi & G. Chiosso (a cura di), *È possibile una scuola diversa? Una ricerca sperimentale per migliorare la qualità scolastica* (pp. 195-226). Bologna, Italia: Il Mulino.
- Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*, 135, 322-338.
- Schoon, I. (2008). A transgenerational model of status attainment: The potential mediating role of school motivation and education. *National Institute Economic Review*, 205, 72-82.
- Sherman, L. W., Gottfredson, D. C., MacKenzie, D. L., Eck, J. E., Reuter, P., & Bushway, S. D. (1997). *Preventing crime: What works, what doesn't, what's promising*. Washington, DC: National Institute of Justice.
- West, M. R., Kraft, M. A., Finn, A. S., Martin, R. E., Duckworth, A. L., Gabrieli, C. F. O., & Gabrieli, J. D. E. (2016). Promise and Paradox. *Educational Evaluation and Policy Analysis*, 38(1), 148-170.

Alla ricerca di un lavoro dignitoso: L'influenza dei sistemi educativi sulla qualità della transizione formazione-impiego

Jonas Masdonati¹

¹ Université de Lausanne

Un numero crescente di ricerche e di teorie in psicologia dell'orientamento si interessano al concetto di lavoro decente o dignitoso (*decent work*) ed ai fattori che ne facilitano o ne impediscono l'accesso alle lavoratrici o ai lavoratori adulti. Pochi di questi studi si sono però domandati cosa caratterizza e influenza un inserimento professionale dignitoso. Basandosi su ricerche e riflessioni recenti su questo tema, ci proponiamo di definire i criteri di una transizione scuola-lavoro dignitosa e di identificarne i fattori istituzionali, sociali e psicologici predittivi, tra cui spicca il ruolo chiave del sistema educativo.

Percorsi scolastici e professionali e psicologia dell'orientamento

Da circa trent'anni le ricerche mostrano che i percorsi professionali (le "carriere") diventano sempre più complessi e meno prevedibili (p.es., Fournier, Zimmermann, Gauthier, Masdonati, & Lachance, 2016; Tomlinson, Baird, Berg, & Cooper, 2018). Questa complessificazione, che non tocca soltanto la vita lavorativa, ma già i percorsi all'interno del sistema formativo (Gomensoro et al., 2017), ha due effetti principali. In primo luogo è all'origine di nuove configurazioni di situazioni di precarietà o di incertezza professionale – basti pensare ai rischi inerenti le "nuove" forme di impiego come lo *slashing*, il lavoro su chiamata, il tempo parziale imposto e l'autoimprenditorialità. In secondo luogo accentua l'importanza delle situazioni di transizione, che aumentano in frequenza e complessità e il cui esito ha un impatto determinante sul modo in cui si profilano i percorsi professionali.

Di fronte a questi cambiamenti strutturali dei percorsi, la psicologia dell'orientamento è spinta a innovare le sue fondamenta teoriche e i suoi interventi. Da un lato, orientare non si limita più all'accompagnamento degli allievi che escono dalla scuola media, ma concerne anche popolazioni dai profili e dai bisogni eterogenei, tra cui spicca quello dell'adulto alle prese con un cambiamento professionale, potenziale o effettivo, voluto o meno (Soidet, Blanchard, & Olry-Louis, 2018). Da un altro lato, orientare non significa più semplicemente aiutare a scegliere il miglior mestiere o la formazione più idonea, ma anche e soprattutto accompagnare individui che vivono delle transizioni professionali complesse e che sono esposti al rischio di precarietà professionale o di esclusione sociale. A interventi centrati sull'abbinamento tra un profilo individuale e le caratteristiche dei mestieri si aggiungono accompagnamenti psicosociologici e educativi che mirano, per esempio, ad insegnare ad attraversare una transizione, ad affermarsi in un mondo competitivo e a promuovere l'inclusione e la giustizia sociale (Blustein, Kenny, Di Fabio, & Guichard, 2019).

Lavoro dignitoso e *psychology of working*

Tra i diversi modelli teorici ed empirici emergenti che mirano a capire meglio le nuove dinamiche del mercato del lavoro e dei percorsi scolastici e professionali e le loro conseguenze per la psicologia dell'orientamento, spicca e si ritaglia attualmente uno spazio importante la psicologia dell'attività lavorativa (*Psychology of Working Theory*, PWT, Blustein, 2013; Duffy, Blustein, Diemer, & Autin, 2016). La PWT insiste sulla necessità di permettere a ogni lavoratore e lavoratrice, ma anche alle persone che ambiscono a un lavoro, di esercitare un lavoro decente o dignitoso (*decent work*), definito come un impiego che offre condizioni fisiche e interpersonali sicure, l'accesso a una copertura assicurativa in caso di malattia, una retribuzione adeguata, sufficiente tempo libero e riposo, nonché valori in accordo con quelli familiari e della comunità.

Le ricerche che si basano su questa teoria (vedi, per la Svizzera, Masdonati, Schreiber, Marcionetti, & Rossier, 2019) mostrano che l'accesso a un lavoro dignitoso dipende innanzitutto da fattori contestuali, come situazioni di difficoltà socioeconomica o l'appartenenza a gruppi sociali marginalizzati, e che l'opportunità di esercitare questo tipo di lavoro permette di soddisfare i bisogni fondamentali di sopravvivenza, di autodeterminazione e di appartenenza sociale (Blustein, 2013; Duffy et al., 2016). La PWT postula inoltre che il legame tra questi predittori sociali e un lavoro dignitoso è influenzato da fattori di mediazione psicosociali, come l'adattabilità e la volizione professionale, ed è moderato da una coscienza critica, dal supporto sociale, da una personalità proattiva e dalle condizioni del mercato del lavoro.

PWT e transizione scuola-lavoro

Se le ricerche che confermano la pertinenza della PWT per capire le sfide con le quali i lavoratori contemporanei sono confrontati sono sempre più numerose, rari sono gli studi che si sono domandati cosa caratterizza e influenza un inserimento professionale dignitoso. Partendo da questa constatazione, ci siamo associati agli autori della PWT per riflettere su come questa teoria possa essere adattata alle specificità della transizione tra la scuola e il lavoro (Masdonati, Massoudi, Blustein, & Duffy, submitted), riflessioni che hanno dato adito a un modello teorico (si veda Masdonati et al., submitted). Il modello pone al centro la nozione di transizione scuola-lavoro dignitosa, intesa come un processo complesso piuttosto che come un semplice cambiamento. Secondo quest'ottica, una transizione è riuscita non solo quando la persona trova un lavoro uscendo dalla scuola, ma soprattutto quando è capace di trovare un impiego di qualità, che sia in legame con la sua formazione e che non consista in una situazione di *underemployment*.

Un'analisi approfondita della letteratura scientifica internazionale mostra che le caratteristiche del sistema educativo e dell'ambiente sociale e familiare hanno una forte influenza sulla qualità della transizione scuola-lavoro. Inoltre, il sentimento di autoefficacia e la costruzione identitaria "sostituiscono" l'adattabilità e la volizione della PWT in qualità di fattori di mediazione del legame tra determinanti contestuali e esito della transizione, legame che è pure moderato dalle competenze dei giovani, dalla qualità del sostegno sociale di cui possono beneficiare e dalle condizioni specifiche del mercato del lavoro verso il quale si dirigono. Infine, il modello presuppone che una transizione riuscita influenzi positivamente la probabilità di accedere a un lavoro dignitoso significativo per la persona (*meaningful*), ma anche di beneficiare di una certa sicurezza professionale e di aumentare la propria occupabilità (*employability*).

Il ruolo chiave del sistema educativo

Il modello rileva chiaramente che, benché strettamente legate ad altri fattori d'influenza, le caratteristiche del sistema educativo sono tra i predittori più importanti di una transizione scuola-lavoro riuscita (Schoon & Heckhausen, 2019). In particolare, la capacità o meno di un sistema di garantire una transizione dignitosa dipende da due fattori: il suo grado d'inclusività ed il regime transizionale privilegiato. Un sistema può, in effetti, essere più o meno inclusivo e quindi in misura di compensare, o perlomeno attutire, eventuali disuguaglianze legate all'ambiente ed all'origine sociale degli studenti e delle studentesse. I sistemi che mantengono quest'ultimi e in una filiera comune (*common track*) il più a lungo possibile e indipendentemente dalla loro performance scolastica, nonché quelli che permettono di progredire al proprio ritmo e di cambiare filiera senza essere penalizzati, sono considerati i più inclusivi. All'opposto, i sistemi più precocemente selettivi, rigidi e che differenziano gli allievi e le allieve in funzione del loro rendimento scolastico, non fanno che inasprire i determinismi sociali e le disuguaglianze di fronte alla sfida transizionale (Holtmann, Menze, & Solga, 2017). Questi sistemi espongono inoltre i e le giovani a una probabilità più elevata di abbandono scolastico, fattore a rischio nelle società della conoscenza e nelle economie che valorizzano le qualificazioni.

Schoon e Heckhausen (2019) invitano inoltre a interessarsi al "regime transizionale" che sottostà a un sistema educativo, vale a dire agli "*institutional arrangements*" (Schoon & Heckhausen, 2019, p. 140) che determinano il momento e il grado di fluidità della transizione scuola-lavoro. Questa prospettiva permette in particolare di confrontare i vantaggi e gli svantaggi dei sistemi educativi che valorizzano la formazione professionale (p.es., Svizzera e Germania) e di quelli che valorizzano la filiera accademica (p.es., Stati Uniti e Francia). Il vantaggio dei primi, specialmente nei sistemi "duali" che propongono l'alternanza scuola-lavoro, è di permettere una transizione progressiva e istituzionalizzata, guidata. Il loro difetto è il ricorso a processi selettivi precoci - e quindi spesso dipendenti da determinismi sociali - sia durante la scuola obbligatoria che al momento dell'entrata in formazione professionale. Al contrario, i sistemi che danno priorità alla via accademica comportano il vantaggio di ritardare l'entrata nel mercato del lavoro, ma anche due inconvenienti non trascurabili: non sembrano preparare adeguatamente al mondo del lavoro e, soprattutto, non sono attrezzati per prevenire un inserimento professionale precario dei giovani che hanno difficoltà scolastiche o che presentano un rapporto negativo con la scuola e che abbandonano spesso gli studi prematuramente (i cosiddetti *work-bound youth*).

La scuola e le aspirazioni

La configurazione del sistema educativo ha un impatto importante sulla maniera in cui le o i giovani attraversano la transizione scuola-lavoro, che a sua volta influenza la qualità del loro percorso professionale e, in particolare, le opportunità di accedere a un lavoro dignitoso. Purtroppo però un sistema educativo perfetto in merito di transizione non esiste. Sembra quindi necessario riflettere e sviluppare dei regimi transizionali che combinino e massimizzino i vantaggi di ogni sistema educativo, in modo da rendere possibili delle transizioni progressive e inclusive. Una pista in questo senso consisterebbe nel rivisitare il sistema di formazione professionale in alternanza, i cui vantaggi transizionali sono innegabili e provati, in modo che non sia veicolo di disuguaglianze sociali e di prime esperienze professionali negative. Comunque sia, è importante mirare a un sistema educativo che permetta al maggior numero di giovani di fare delle scelte e di realizzare dei progetti professionali che

corrispondono alle loro aspirazioni. In questo senso, l'applicazione, alle sfide transizionali, dei concetti di *agency* (Holtman et al., 2017; Schoon & Heckhausen, 2019) e di capacità ad aspirare (*capacity to aspire*; Appadurai, 2004) sembra promettente.

Bibliografia

- Appadurai, A. (2004). The capacity to aspire: Culture and the terms of recognition. In V. Rao & M. Walton (Eds.), *Culture and public action* (pp. 59-84). Stanford, CA: Stanford University Press.
- Blustein, D. L. (2013). The psychology of working: A new perspective for a new era. In D. L. Blustein (Ed.), *The Oxford handbook of the psychology of working* (pp. 3-18). New York, NY: Oxford University Press. doi: 10.1093/oxfordhb/9780199758791.013.0001
- Blustein, D. L., Kenny, M., Di Fabio, A., & Guichard, J. (2019). Expanding the impact of the Psychology of Working: Engaging psychology in the struggle for decent work and human rights. *Journal of Career Assessment*, 27, 3-28. doi:10.1177/1069072718774002
- Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K. L. (2016). The psychology of working theory. *Journal of Counseling Psychology*, 63, 127-148. doi:10.1037/cou0000140
- Fournier, G., Zimmermann, H., Gauthier, C., Masdonati, J., & Lachance, L. (2016). Vers l'élaboration d'un cadre d'analyse des parcours professionnels: l'éclairage de l'approche du Parcours de vie et des théories récentes en développement de carrière. In G. Fournier, E. Poirel & L. Lachance (Eds.), *Éducation et vie au travail: Perspectives contemporaines sur les parcours de vie professionnelle* (pp. 93-143). Québec, Canada: Presses de l'Université Laval.
- Gomensoro, A., Meyer, T., Hupka-Brunner, S., Jann, B., Oesch, D., ... Scharenberg, K. (2017). *Situation professionnelle à l'âge de 30 ans: Mise à jour des résultats de l'étude longitudinale TREE*. Berne, Suisse: TREE.
- Holtmann, A. C., Menze, L., & Solga, H. (2017). Persistent disadvantages or new opportunities? The role of agency and structural constraints for low-achieving adolescents' school-to-work transitions. *Journal of Youth and Adolescence*, 46, 2091-2113. doi:10.1007/s10964-017-0719-z
- Masdonati, J., Massoudi, K., Blustein, D. L., & Duffy, R. (submitted). *Moving toward decent work: Application of the Psychology of Working Theory to the school-to-work transition*.
- Masdonati, J., Schreiber, M., Marcionetti, J., & Rossier, J. (2019). Decent work in Switzerland: Context, conceptualization, and assessment. *Journal of Vocational Behavior*, 110, 12-27. doi:10.1016/j.jvb.2018.11.004
- Schoon, I., & Heckhausen, J. (2019). Conceptualizing individual agency in the transition from school to work: A social-ecological developmental perspective. *Adolescent Research Review*, 4, 135-148. doi:10.1007/s40894-019-00111-3
- Soidet, I., Blanchard, S., & Olry-Louis, I. (2018). S'orienter tout au long de la vie: bilan et perspectives de recherches. *Savoirs*, 48, 13-51. doi:10.3917/savo.048.0013
- Tomlinson, J., Baird, M., Berg, P., & Cooper, R. (2018). Flexible careers across the life course: Advancing theory, research and practice. *Human Relations*, 71, 4-22. doi:10.1177/0018726717733313

Traiettorie per progettare il futuro in modo inclusivo e sostenibile

Laura Nota¹

¹ Università degli Studi di Padova

Seppur con connotazioni differenti il lavoro ha accompagnato l'evoluzione umana e possiamo dire che anche nei tempi attuali esso rimane un fenomeno significativo nella vita delle persone e delle stesse società. Potremmo anche arrivare ad affermare che si tratta di una componente che aiuta a connotare la nostra umanità, in quanto tramite esso gli individui esercitano la loro razionalità, il pensiero, l'immaginazione, interagiscono e danno il proprio contributo alla società. Le riflessioni e le lotte che hanno ruotato intorno al lavoro, capitale, valore, sfruttamento, classi sociali, proprio in relazione al fatto che si tratta di una attività vitale cosciente, associata in alcune fasi storiche all'incremento delle disuguaglianze e del disagio, ha permesso forme di progresso e cambiamento che hanno migliorato le condizioni di vita complessive, anche lavorative (Scuttari & Nota, 2019; Nota & Soresi, 2018).

Oggi stiamo nuovamente sperimentando un momento preoccupante con frange sempre più consistenti del lavoro, e della vita formativa e sociale che vi ruota attorno, protese ad assumere caratteristiche particolari, in relazione a configurazioni strutturali associate a derive ideologiche, a polarizzazioni, a disuguaglianze, comportanti forme di individualismo sfrenato, atomizzazione dei lavoratori e delle lavoratrici e così degli studenti e delle studentesse, propensione ad annullare la dignità, a deumanizzare, con erosione delle energie positive e dei livelli di salute (Guichard, 2018; Santilli, Di Maggio, Ginevra, Nota, & Soresi, in press).

Tutto questo si innesta in un quadro che vede miopi ed egoistiche scelte di 'sfruttamento delle risorse', politiche interessate soprattutto alla gestione del presente e al mantenimento del consenso rinforzando, di fatto e in tal modo, la tendenza allo depauperamento delle risorse naturali, ad un consumismo così sfrenato ed inquinante da mettere seriamente a rischio la vita futura del nostro stesso pianeta (Giovannini, 2018; Nota & Soresi, 2018). Dobbiamo anche ricordare l'incremento dei movimenti dei popoli, con tassi di migrazione in aumento, l'espandersi in quasi tutti i settori professionali dell'automazione, la presenza di condizioni lavorative sempre più precarie, e la paradossale richiesta che si indirizza alle persone di diventare, nonostante quanto sopra, più competitive, più resilienti, di essere 'costantemente' pronte e all'altezza di imprevedibili opportunità, di diventare 'imprenditori' di se stesse anche in assenza di reali capitali da mettere in gioco (Soresi, 2018).

Questo quadro di riferimento che delinea vite personali e lavorative così alienanti, incastonato nella morsa neoliberista, necessita di essere esaminato, compreso, analizzato nelle sue ripercussioni sui più, e, per quanto qui ci riguarda, sui processi di costruzione del futuro e fronteggiato, modificato. Dobbiamo riuscire a comprendere quali conseguenze possono avere richieste così pesanti rivolte agli individui, come tollerare le ambiguità, considerare

positivamente l'incertezza e la precarietà, aggiornarsi costantemente, sviluppare *employability* e forme di adattamento che potremmo dire anche estreme. Queste richieste sembrano avere un impatto significativo e negativo sull'esistenza e sul benessere delle persone, stimolando sensazioni di disagio e di sconforto e spingendo le persone a disinvestire nella propria identità (Santilli et al., in press).

I binomi che tradizionalmente regolavano il tema della scelta professionale, della formazione e dell'inclusione lavorativa, come ad esempio interessi e lavoro, interessi e scuola, titolo di studio e lavoro, scelte e decisioni, profili personali e collocamento, domanda ed offerta, maturità e stabilità lavorativa, formazione professionale e sicurezza lavorativa, ecc., sembrano non valere più e lasciare spazio ad altri decisamente più preoccupanti quali quelli dell'incertezza e dell'insicurezza, della flessibilità e della precarietà, del mercato e della competizione, e così via. Non possiamo più nascondere il fatto che ciò necessita di cambi di passo e di nuovi investimenti anche nell'ambito delle attività di orientamento, che rischiano di essere scarsamente di supporto alle giovani generazioni (Guichard, 2018; Nota & Soresi, in press).

Si vuole così condividere la convinzione che per dare il nostro contributo dobbiamo poterci riappropriare dei compiti fondanti dell'orientamento e della sua capacità di dare valore alle persone, e soprattutto a quelle che sperimentano le maggiori difficoltà (Nota & Soresi, in press). Desideriamo delineare delle traiettorie per il prossimo futuro che, rimettendo al centro il ruolo sociale dell'orientamento, ci permettano di fornire una maggiore coscienza di quanto sta avvenendo in questo mondo globalizzato e invischiato in politiche neoliberali, di dare attenzione a nuove piste inclusive e sostenibili nelle quali si dovrebbe investire per la costruzione di futuri di qualità, e di suggerire azioni su come aiutare le giovani generazioni e le persone maggiormente vulnerabili a uscire dalle nebbie del presente', a guardare avanti, anche considerando gli obiettivi dell'Agenda 2030, ad aspirare ancora e insieme per un futuro migliore, a non 'guardare solo al proprio orticello' ma a costruire delle comunità che non possono che essere inclusive e sostenibili.

Fare orientamento significherà anche stimolare a guardare alla realtà esterna e a ciò che accadrà ricordando che tutto questo non potrà essere interpretato e manipolato in funzione unicamente dei propri interessi, delle proprie passioni e dei propri capitali umani (Holley, Sultana, & Thomsen, 2018). In questo modo apparirà scorretto e superficiale porre, in un contesto di orientamento, l'antico quesito "Cosa vuoi fare da grande?" o chiedere verso quale professione si pensa di orientare interessi, attitudini e competenze. E così particolare attenzione verrà data al progetto Il progetto *Stay inclusive, sustainable, curious, cosmopolitan, ...* che nascendo all'interno di queste considerazioni parte dal presupposto che è sempre più inutile, se non proprio nocivo e deontologicamente scorretto, continuare a proporre elenchi di competenze più o meno soft o smart, ritenendole strumentali all'apparire competitivi e adeguati, più che strumenti per una crescita sociale consapevole e attenta alle sorti e alle minacce che l'umanità e l'intero pianeta hanno di fronte (Nota & Soresi, 2018; Nota et al., in press). Con esso si vuole investire nel promuovere la propensione a guardare oltre, un po' di più e più spesso a ciò che potrà accadere a sé e agli altri, alla salvaguardia del nostro pianeta, individuando responsabilità, impegni e quale *mission possibile* si desidera intraprendere e porre in essere per il proprio futuro.

Il progetto si articola in una serie di strumenti, da un lato, e di percorsi di *career intervention*, dall'altro. Gli strumenti guidano i giovani ad individuare le preoccupazioni per il futuro, da un lato, così come una serie di scenari futuri, dall'altro, di cui ci si dovrà fare carico dal momento che la qualità della vita delle prossime generazioni dipenderà anche da come riusciremo a fronteggiare una serie preoccupante di problemi e difficoltà. Inoltre veniamo stimolati a riflettere sulle proprie idee a proposito dell'economia, del mondo del lavoro,

dell'importanza dell'investimento nello studio e nell'aggiornamento continuo, di progettare in condizioni di incertezza, così come sull'eterogeneità che caratterizza i contesti lavorativi e le società e il valore del cosmopolitismo. Per quanto riguarda i percorsi di *career intervention*, questo progetto punta a dare enfasi alle specificità, alle unicità delle persone, al fine di valorizzarle e di permettere ad ognuna di poter pensare a come utilizzare al meglio ciò che possiede sia per sé che per gli altri, da un lato, ma anche a considerare le sfide che si desidera ingaggiare, alla luce dell'agenda 2030, e quindi su ciò che si dovrà apprendere e potenziare, sulle condizioni da stimolare e ricercare, sulle occasioni da scoprire con un'insaziabile curiosità e sulle "missioni" da perseguire con tenacia (Nota, Di Maggio, & Santilli, 2019; Nota & Soresi, in press).

Bibliografia

- Giovannini, E. (2018). *L'utopia sostenibile*. Bari, Italia: Laterza.
- Guichard, J. (2018). Life Design Interventions and the Issue of Work. In V. Cohen Scali, J. P. Pouyaud, M., Drabik Podgorna, G., Aisenson, J. L. Bernaud, ... J.V Guichard, (Eds.), *Interventions in Career Design and Education : Transformation for Sustainable Development and Decent Work* (pp. 15-28). Paris, France: Springer, Cham.
- Hooley, T., Sultana, R. G., & Thomsen, R. (2018). *Career Guidance for Emancipation: Reclaiming Justice for the Multitude*. London: Routledge.
- Nota, L., & Soresi, S. (Eds.). (2018). *Counseling and Coaching in Times of Crisis and Transitions: From Research to Practice*. Abingdon, Oxford: Routledge.
- Nota, L., & Soresi, S. (2018). *Il contributo dell'orientamento all'Agenda*. Disponibile da <http://asvis.it/goal4/articoli/239-3294/il-contributo-dellorientamento-allagenda-2030>
- Nota, L., Santilli, S., Di Maggio, I., Ginevra, M. C., & Soresi, S. (in press.). Inclusive and sustainable career and life design. In M. Kern & M. Wehmeyer (Eds.), *The International Handbook on Positive Education*. London: Palgrave Macmillan.
- Nota, L., & Soresi S. (in press). *L'orientamento e la progettazione professionale. Modelli, strumenti e buone pratiche*. Bologna, Italia: Il Mulino.
- Nota, L., Di Maggio, I., & Santilli, S. (2019). La costruzione di un futuro inclusivo e sostenibile. *Rivista di Scienze dell'Educazione*, 2, 221-233.
- Santilli, S., Di Maggio, I., Ginevra, M. C., Nota, L., & Soresi, S. (in press.) Life Design, Inclusion and sustainable development: constructs, dimensions and new instruments to stimulate a quality future design for all. In M. Yuen, W. Beamish, & V. S. Solberg (Eds.), *Careers for Students with Special Educational Needs -Perspectives on Development and Transitions from the Asia-Pacific Region*. New York, NY: Springer
- Scuttari, A., & Nota, L. (2019). Costruire contesti universitari inclusivi e sostenibili. In L. Nota, M. Mascia, & T. Pievani (Eds.), *Diritti umani e inclusione*. Bologna, Italia: Il Mulino
- Soresi, S. (2018). *In materia di orientamento, ha ancora senso formulare consigli e proporre profili?*. Disponibile da <https://www.sio-online.it/2018/12/20/materia-orientamento-ancora-senso-formulare-consigli-proporre-profilo-partre-seconda/>

The importance of the environment for the well-being of sensitive children

Michael Pluess¹

¹ Queen Mary University of London

It is well established among developmental psychologists that children as well as adults differ in how strongly they are affected by experiences they make with some being more and some less sensitive to the effects of environmental influences. Highly sensitive children tend to be more vulnerable when exposed to adverse experiences but also benefit disproportionately more from supportive experiences. Such *Environmental Sensitivity*, broadly defined as “the ability to register and process external stimuli” (Pluess, 2015), is a basic characteristic which is observable across most species (Wolf, van Doorn, & Weissing, 2008), including humans. The capacity for *Environmental Sensitivity* enables individuals to “read the environment” in order to respond and adapt to the specific environmental challenges and opportunities they find themselves in. Hence, this ability is of fundamental importance for an individual’s successful development. Although one may expect that all individuals should have a similar ability to adapt to conditions of the environment, a large number of empirical studies suggest that people differ substantially in *Environmental Sensitivity* with some being more and some less affected by contextual factors (Belsky & Pluess, 2009, 2013).

Hundreds of studies provide empirical evidence for the existence of individual differences in *Environmental Sensitivity* (for review, see Belsky & Pluess, 2009, 2013; Pluess & Belsky, 2010, 2013) and multiple theories have been proposed to explain the detected differences in sensitivity (Belsky & Pluess, 2016; Ellis, Boyce, Belsky, Bakermans-Kranenburg, & Van IJzendoorn, 2011). Traditionally, differences in *Environmental Sensitivity* have almost exclusively been framed within a *Vulnerability-Stress* model with heightened sensitivity seen primarily as risk factor for the development of problematic outcomes when faced with adversity. For example, according to the *Diathesis-Stress* framework or *Dual-Risk* model (Monroe & Simons, 1991; Zuckerman, 1999) it is understood that individuals differ in their vulnerability to the negative effects of adverse experiences with “vulnerable” individuals succumbing to adversity while “resilient” ones either remain resistant when faced with the same adversity or recover relatively quickly without any long-term impairments. A different perspective has been provided in the more recent frameworks of *Differential Susceptibility* (Belsky & Pluess, 2009), *Biological Sensitivity to Context* (Boyce & Ellis, 2005), and *Sensory Processing Sensitivity* (Aron, Aron, & Jagiellowicz, 2012) according to which more vulnerable individuals are not just more negatively affected by adverse environments but also benefit disproportionately more from positive and supportive aspects of their environment. In other words, people may differ in their *Environmental Sensitivity* more generally, rather than some being exclusively vulnerable,

with some being less and some more affected by both negative and positive environmental influences (Belsky & Pluess, 2009; Pluess, 2015). The observation that people differ in response to positive experiences, such as psychological intervention and high quality care (Pluess & Boniwell, 2015), has recently been summarised in the concept of *Vantage Sensitivity* (Pluess & Belsky, 2013). What all these different frameworks have in common is that they propose that people differ fundamentally in their sensitivity to environmental influences. Therefore, it has been proposed to use the umbrella term of *Environmental Sensitivity* (Pluess, 2015) when describing people's individual degree of sensitivity to negative and/or positive environmental exposures.

Environmental Sensitivity has been associated with various genetic, physiological, and psychological/behavioural traits. For example, children carrying the short allele of the *Serotonin Transporter* gene (5-HTTLPR) and the long version of the *Dopamine Receptor D4* gene (DRD4) have been found to be more sensitive to both negative as well as positive experiences (Bakermans-Kranenburg & van IJzendoorn, 2011; van IJzendoorn, Belsky, & Bakermans-Kranenburg, 2012). The physiological stress response system, including cortisol reactivity, has also been associated with *Environmental Sensitivity* (Obradovic, Bush, Stamplerdahl, Adler, & Boyce, 2010). Finally, a large number of studies on infant temperament provide evidence that children with a more difficult, or reactive, temperament—often characterised by expressed negative emotionality—are not only more adversely affected by low quality parenting but also particularly responsive to positive parenting practices (Slagt, Dubas, Dekovic, & van Aken, 2016). Although our knowledge regarding the exact mechanisms underlying such individual differences in *Environmental Sensitivity* is currently very limited, it has been proposed that processes related to the sensory perception and cognitive processing of environmental information may play a central role (Pluess, 2015). While genetic factors have been shown to contribute to systems involved in several of these processes (e.g., amygdala reactivity, see Gard, Shaw, Forbes, & Hyde, 2018; Murphy et al., 2013), other sensitivity factors such as physiological reactivity and negative emotionality may more likely represent behavioural manifestations of sensitivity rather than elucidating our understanding of sensitivity mechanisms.

Given the hypothesised complexity of higher-order cognitive processes underlying sensitivity, it may not be surprising that measures of more general and more easily observable sensitivity-related behaviours and experiences such as the *Highly Sensitive Child* (HSC) scale (Pluess et al., 2018) and the short version of the *Highly Sensitive Person* (HSP) scale (Pluess, Lionetti, Aron, & Aron, 2019), both of which are based on 12 items, have proven successful in capturing sensitivity in both children and adults, whether based on self-report (Nocentini, Menesini, & Pluess, 2018), parent-report (Slagt, Dubas, van Aken, Ellis, & Dekovic, 2018) or behavioural observation (Lionetti, Klein, Aron, Aron, & Pluess, in press). For example, we tested in one study which involved 11-year old girls from a secondary school in London whether sensitive children benefitted more from a universal school-based resilience-promoting intervention (Pluess & Boniwell, 2015). Sensitivity was measured with the HSC scale which children completed themselves and improvement over time was tested with a repeatedly assessed depression symptom scale. We found that highly sensitive children's depressive symptoms decreased significantly over time in response to the intervention whereas girls with low sensitivity did not show any improvement at all. In a longitudinal study conducted in the Netherlands, where parents were asked to complete the HSC scale for their 4-5 year old children, Slagt et al. (2018) found that more sensitive children were more strongly

affected by changes in the parenting quality they experienced. Consistent with a *Differential Susceptibility* pattern, sensitive children developed more externalizing problems when they experienced increases in negative parenting, but also had fewer problems when negative parenting decreased. More recently, we developed a new measure of sensitivity that is based on the observation of typical behaviours of three year old children (Lionetti et al., in press). In this new study we provided evidence for the validity of our measure of behaviourally observed *Environmental Sensitivity* as a moderator of parenting quality on children's early development. The study featured a large sample of 292 children and their mothers. Sensitivity was coded by trained psychologists using our newly developed observational measure for the specific and objective assessment of *Environmental Sensitivity*, the *Highly Sensitive Child-Rating System* (HSC-RS). We found that more sensitive children were more affected by the parenting they received compared to less sensitive children. The more sensitive children were more likely to develop externalizing behaviour problems when they experienced a more permissive parenting style (i.e., low discipline) but showed also more advanced levels of social competence when their parents applied a more authoritative parenting style which is characterised by consistently enforcing rules whilst also providing emotional warmth and acceptance. In other words, more sensitive children were more affected by both negative and positive aspects of parenting regarding the development of both maladaptive and adaptive outcomes.

Importantly, most of the measures of sensitivity that we developed can be easily applied by both researchers and practitioners without requiring expertise in genetics and the measurement of physiological reactivity. The availability of HSC and HSP data in large samples also enabled the recent investigation of the distribution of *Environmental Sensitivity* in the general population. According to these analyses, sensitivity appears to be normally distributed, similar to other common individual traits. However, the application of more sophisticated and data-driven statistical analyses in multiple samples also revealed that individuals fall into three distinct sensitivity groups, along a continuum from low to high (i.e., tri-modal distribution), with 30% of the population being characterised by low sensitivity, 40% by medium, and 30% by high sensitivity (Lionetti et al., 2018; Pluess et al., 2018). This distribution is largely consistent with theory (Aron et al., 2012) and previous computer simulations (Wolf et al., 2008) and confirms that a significant minority of 30% appear to be especially sensitive to their environment. Hence, better knowledge on the common trait of *Environmental Sensitivity* through high quality research will be of relevance (and applicable) to a considerable proportion of the general population not just a few children. Following the popular metaphor of referring to less sensitive children as “*dandelions*”, because they are robust and grow everywhere, and more sensitive children as “*orchids*” given that they require special care but flourish especially beautifully when growing up in the right setting (Boyce & Ellis, 2005), we named the group with medium sensitivity “*tulips*” given that they are somewhere between the dandelions and orchids (Lionetti et al., 2018).

Whilst the role of *Environmental Sensitivity* has been investigated repeatedly in relation to parenting, we know relatively little about whether and how sensitivity affects children in school. There is an urgent need to investigate sensitive children in the educational context given that school represents an important factor for children's social, behavioural and cognitive development. We are currently preparing to set up a new study on sensitivity in a number of primary schools in Ticino, Switzerland. The *Sensitivity in School* study aims at the development and validation of new sensitivity measures that can used by teachers and

educational psychologist. In order to do so we will follow about 200 children longitudinally during the first two years of primary school and investigate the role of children's sensitivity regarding their socio-emotional and academic development in relation to observationally assessed school quality. The findings of the proposed study will significantly advance our understanding regarding the role of children's sensitivity in relation to primary school besides providing new tools for the assessment of sensitivity in the school context. This unique study is funded by the Jacobs Foundation and involves an international team of researchers, including colleagues from SUPSI (Locarno, Switzerland). We are very grateful to all the teachers, children and parents that agreed to participate in this important project.

We also understand the importance of providing reliable information on *Environmental Sensitivity* to parents and teachers. Although there is generally a growing interest in the temperament trait of sensitivity, reliable information that is up-to-date and based on solid empirical research is not easily accessible to the general public. We will bridge this information gap by developing and launching a new website on *Environmental Sensitivity* that aims at improving the knowledge exchange between researchers and the general public. The new website, to be launched in June 2020 and funded by Jacobs Foundation, will not only educate the general public and disseminate research findings in an accessible and easily understandable way with interactive features (e.g., visitors will be able to complete an online version of the various sensitivity scales) but also provide opportunities to get actively involved in research. In addition, the website will facilitate exchange and collaboration between researchers.

References

- Aron, E. N., Aron, A., & Jagiellowicz, J. (2012). Sensory processing sensitivity: a review in the light of the evolution of biological responsiveness. *Personality and Social Psychology Review*, *16*(3), 262-282. doi:10.1177/1088868311434213
- Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2011). Differential susceptibility to rearing environment depending on dopamine-related genes: new evidence and a meta-analysis. *Development and Psychopathology*, *23*(1), 39-52. doi:10.1017/s0954579410000635
- Belsky, J., & Pluess, M. (2009). Beyond diathesis stress: differential susceptibility to environmental influences. *Psychological Bulletin*, *135*(6), 885-908. doi:10.1037/a0017376
- Belsky, J., & Pluess, M. (2013). Beyond risk, resilience, and dysregulation: phenotypic plasticity and human development. *Development and Psychopathology*, *25*(4 Pt 2), 1243-1261. doi:10.1017/S095457941300059X
- Belsky, J., & Pluess, M. (2016). Differential Susceptibility to Environmental Influences. In D. Cicchetti (Ed.), *Developmental Psychopathology* (3rd ed., Vol. 3, pp. 59). New York, NY: Wiley.
- Boyce, W. T., & Ellis, B. J. (2005). Biological sensitivity to context: I. An evolutionary-developmental theory of the origins and functions of stress reactivity. *Development and Psychopathology*, *17*(2), 271-301.
- Ellis, B. J., Boyce, W. T., Belsky, J., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2011). Differential susceptibility to the environment: An evolutionary-neurodevelopmental theory. *Development and Psychopathology*, *23*(01), 7-28. doi:10.1017/S0954579410000611
- Gard, A. M., Shaw, D. S., Forbes, E. E., & Hyde, L. W. (2018). Amygdala Reactivity as a Marker of Differential Susceptibility to Socioeconomic Resources During Early Adulthood. *Developmental Psychology*, *54*(12), 2341-2355. doi:10.1037/dev0000600

- Lionetti, F., Aron, A., Aron, E. N., Burns, G. L., Jagiellowicz, J., & Pluess, M. (2018). Dandelions, tulips and orchids: evidence for the existence of low-sensitive, medium-sensitive and high-sensitive individuals. *Translational psychiatry*, 8(1), 24. doi:10.1038/s41398-017-0090-6
- Lionetti, F., Klein, D. N., Aron, A., Aron, E., & Pluess, M. (in press). Observer-Rated Environmental Sensitivity Moderates Children's Response to Parenting Quality in Early Childhood. *Developmental Psychology*.
- Monroe, S. M., & Simons, A. D. (1991). Diathesis-stress theories in the context of life stress research: implications for the depressive disorders. *Psychological Bulletin*, 110(3), 406-425.
- Murphy, S., Norbury, R., Godlewska, B., Cowen, P., Mannie, Z., Harmer, C., & Munafo, M. (2013). The effect of the serotonin transporter polymorphism (5-HTTLPR) on amygdala function: a meta-analysis. *Molecular Psychiatry*, 18(4), 512-520.
- Nocentini, A., Menesini, E., & Pluess, M. (2018). The Personality Trait of Environmental Sensitivity Predicts Children's Positive Response to School-Based Antibullying Intervention. *Clinical Psychological Science*, 6(6), 848-859. doi:10.1177/2167702618782194
- Obradovic, J., Bush, N. R., Stamperdahl, J., Adler, N. E., & Boyce, W. T. (2010). Biological Sensitivity to Context: The Interactive Effects of Stress Reactivity and Family Adversity on Socio-emotional Behavior and School Readiness. *Child Development*, 81(1), 270-289.
- Pluess, M. (2015). Individual Differences in Environmental Sensitivity. *Child Development Perspectives*, 9(3), 138-143. doi:10.1111/cdep.12120
- Pluess, M., Assary, E., Lionetti, F., Lester, K. J., Krapohl, E., Aron, E. N., & Aron, A. (2018). Environmental sensitivity in children: Development of the Highly Sensitive Child Scale and identification of sensitivity groups. *Developmental Psychology*, 54(1), 51-70. doi:10.1037/dev0000406
- Pluess, M., & Belsky, J. (2010). Children's Differential Susceptibility to Effects of Parenting. *Family Science*, 1(1), 14-25.
- Pluess, M., & Belsky, J. (2013). Vantage sensitivity: Individual differences in response to positive experiences. *Psychological Bulletin*, 139(4), 901-916. doi:10.1037/a0030196
- Pluess, M., & Boniwell, I. (2015). Sensory-Processing Sensitivity predicts treatment response to a school-based depression prevention program: Evidence of Vantage Sensitivity. *Personality and Individual Differences*, 82(0), 40-45. doi:http://dx.doi.org/10.1016/j.paid.2015.03.011
- Pluess, M., Lionetti, F., Aron, E., & Aron, A. (2019). *Individual Differences in Environmental Sensitivity: Evidence of Experimental Studies*. Manuscript in preparation.
- Slagt, M., Dubas, J. S., Dekovic, M., & van Aken, M. A. (2016). Differences in Sensitivity to Parenting Depending on Child Temperament: A Meta-Analysis. *Psychological Bulletin*, 142 (10). doi:10.1037/bul0000061
- Slagt, M., Dubas, J. S., van Aken, M. A. G., Ellis, B. J., & Dekovic, M. (2018). Sensory Processing Sensitivity as a Marker of Differential Susceptibility to Parenting. *Developmental Psychology*, 54(3), 543-558. doi:10.1037/dev0000431
- Van IJzendoorn, M. H., Belsky, J., & Bakermans-Kranenburg, M. J. (2012). Serotonin transporter genotype 5HTTLPR as a marker of differential susceptibility? A meta-analysis of child and adolescent gene-by-environment studies. *Translational psychiatry*, 2, e147. doi:10.1038/tp.2012.73
- Wolf, M., van Doorn, G. S., & Weissing, F. J. (2008). Evolutionary emergence of responsive and unresponsive personalities. *Proceedings of the National Academy of Sciences of the United States of America*, 105(41), 15825-15830. doi:10.1073/pnas.0805473105
- Zuckerman, M. (1999). Diathesis-stress models. In M. Zuckerman (Ed.), *Vulnerability to psychopathology: A biosocial model* (pp. 3-23). Washington, DC: American Psychological Association.

Relationships and social capital at school

Sue Roffey¹

¹ Exeter University

Introduction

Feelings and relationships are everywhere, all the time, including in the school environment. How someone feels and the quality of their relationships are symbiotic. If relationships are going well and are supportive, you are much more likely to feel good about yourself and the world around you. Although some policy makers and school leaders may prefer to sideline emotions and positive interactions as irrelevant to the main business of schools, they are in fact central to learning outcomes, effective responses to challenging behaviours and promoting mental health and wellbeing. This paper gives a brief oversight of the evidence for these assertions, defines what we might mean by a healthy relationship and explores how schools might build social capital for the wellbeing of all stakeholders.

Learning

Hattie (2009), in his seminal analysis of over 800 meta-analyses relating to achievement, talks of the importance of the teacher-student relationship and rates the quality of this as making the most difference to student outcomes. Anxiety in all its forms shuts down thinking, so it makes sense for schools to actively promote positive emotions wherever possible, and avoid generating negative ones.

When children feel valued, safe, comfortable and heard, their cognitive pathways are more likely to be open to new information and they will be more able to be creative, innovative and problem-solve (Frederickson, 2009). They are, in fact, better able to learn. This requires a high level of emotional literacy from adults (Dolev & Lesham, 2017), and a determination to inhibit bullying and other negative peer interactions by actively promoting friendship, respect and inclusion (Roffey, 2013; Dobia, Parada, Roffey, & Smith, 2019).

Resilience and wellbeing

Children are increasingly exposed to a range of adversities that impact negatively on their mental health and psycho-social functioning. This undermines their ability to focus, learn and retain information (Fell & Hewstone, 2015). Positive social connectedness is a critical protective factor, both in having someone who believes in the best of you and also having a sense of belonging (Werner, 2013). Supportive and enabling relationships are also a facil-

iator of other protective factors (Roffey, 2017a), such as confidence and constructive use of intelligence. The burgeoning research on epigenetics indicates that even pre-dispositions and genetic expression can be significantly influenced by environmental conditions, specifically those related to stress (Rutten et al., 2013; Champagne, 2010). The most powerful of environmental influences is the quality of relationships.

Challenging behaviour

Students dealing with chronic or acute adversity often struggle to settle to learning, conform to expectations or be compliant. They may occasionally lose emotional control. When behaviour policies are based in a behaviourist (reward and sanctions) approach, these pupils are often punished and sometimes excluded. This reinforces their negative feelings about themselves, others and being at school. In effect it hands vulnerable young people a 'double whammy' – bad things happen to them at home and they come to school and more bad things happen. It is unsurprising that this often contributes to mental health difficulties and/or a 'school to prison' pipeline (Skiba et al., 2006). Although not a panacea, a relational approach to promoting pro-social behaviour and responding to challenges is more likely to have longer-term positive impact (Roffey, 2011). This means teachers demonstrating belief in the best self of the student, using strengths-based language and not jumping to conclusions about intention. Using emotional literacy in tense situations is helpful, and includes simple strategies such as not invading a student's physical space when they already feel threatened. It also means fostering a sense of belonging (Dobia et al., 2019).

Schools as systems

Bronfenbrenner's ecological model (2005) applied to schools indicates that what happens in one part of the system has impact on what happens in another. Conversations about students and families in the staffroom make a difference to perceptions of individuals and this can determine what happens in the classroom. Teacher wellbeing is as important as pupil wellbeing in promoting positive school culture (Roffey, 2012b). Although there continues to be a lack of clarity around the concept, social capital is increasingly cited as having a role to play in addressing educational and social issues. Social capital in school refers not simply to the number of connections between stakeholders but the quality of their interactions (Stone, 2003; Roffey, 2008). Inclusive, strong, school communities are those where there is a shared vision and purpose that gives meaning and motivation to all students, not just a select elite. Many of these signs of well-being are embedded in social structures – how people perceive and relate to each other (e.g. Murray-Harvey, 2010; Noble & McGrath, 2012). Schools are inevitably on a continuum from a toxic culture at one end of the spectrum to high social capital at the other. As toxic environments impact negatively on all stakeholders, including pupils, it makes sense for school leaders to be active in understanding what it means to build high social capital, why this matters, and put things in place to develop this.

What is a healthy relationship and how do you build high social capital?

Positive Relationships: Promoting Positive Relationships across the world (Roffey, 2012a) has seventeen chapters, written by both academics and practitioners, on a wide range of relationships, including couple, parent-child, friendship, professional, work and school. The ASPIRE acronym was developed as an outcome of identifying commonalities throughout these chapters

as well as for a pedagogy for effective social and emotional learning (Roffey, 2017b), and is introduced here as a framework for positive relationships, whole school wellbeing and high social capital. ASPIRE stands for agency, safety, positivity, inclusion, respect and equity.

Agency: A factor contributing to authentic wellbeing is self-determination (Ryan & Deci, 2019). A relationship where one person has control over another is not healthy. Coercive control in a partnership is now grounds for legal action in the UK. Agency and being involved in decisions that concern you is therefore critical. In schools this means giving all stakeholders the opportunity to contribute to policy and practice. Although school leaders need to make final decisions, teachers who believe they have been authentically consulted are more likely to accept new policy (Roffey, 2008). Giving pupils a structured framework to identify the values they would like to see in their class or school is more effective than imposing a set of rules. In schools there is often a conversation around teachers being ‘in control’. A focus on agency suggests that although educators need to be in charge of situations, pedagogy and curriculum delivery, it promotes healthier relationships to give young people responsibility for making choices and determining consequences.

Safety: No-one thrives in a relationship that is not safe, physically, psychologically and emotionally. Children need to feel safe and cared for in order to develop well and reach out to try new things. Safety in school means building a culture that inhibits bullying and intimidation at any level and values diversity. Reducing individual competitiveness enables students to see their own progress rather than being a loser in comparison to others. Personal learning and personal bests, together with accepting mistakes as part of learning help students feel safe, both in interactions with others and in taking risks with learning.

Positivity: This includes using the language of strengths rather than deficits in order to support more positive self-concepts for pupils (Zacarian, Alvarez-Ortiz, & Haynes, 2017). Being solution-focused changes conversations to focus on future possibilities rather than past mistakes and promotes the positive emotions of optimism and hope. An important aspect of healthy childhood is play, especially active fun. Smiling, and especially laughing together releases oxytocin, the neurotransmitter that powers connection and boosts resilience. This makes other aspects of positive relationships more likely – kindness, cooperation, acknowledgement, thankfulness and giving.

Inclusion: Feeling accepted is now recognised as fundamental to psychological wellbeing, and school belonging now features strongly in the literature for both wellbeing and academic outcomes (e.g. Allen & Boyle, 2018). Belonging can be either inclusive or exclusive, and although the latter can be supportive for those inside the group it can be toxic on a community level as it risks dehumanising those outside (Roffey, 2013). Inclusion therefore means welcoming and valuing every person within a school, providing opportunities for participation and breaking down barriers between cliques. Social and emotional learning that routinely mixes pupils out of their normal social groups and provides activities to help them find commonalities with those they don’t usually talk with, is one strategy; giving students responsibility for ensuring everyone feels they belong is another (Roffey, in press).

Respect: Many schools cite respect in their mission statement but this does not always translate into practice. Respect includes taking contexts into account in interactions with others – not only personal circumstances but also cultural norms and practices (Dobia & Roffey,

2016). It means asking rather than telling, being courteous, not pre-judging but actively listening, allowing for a wide range of perspectives in a discussion and not putting anyone down for having a different view. How people are spoken about in a school is as critical as direct interactions, as this determines how individuals and groups are positioned. Respect also entails acknowledging others and their contributions and not taking these for granted.

Equity: Whereas equality means treating everyone the same, equity takes account of difference and acknowledges that not everyone starts out with the same advantages. It therefore means being flexible in order to promote equal opportunities and enable all students to achieve (Field, Kuczerea, & Pont, 2017). Using authority to empower others leads to democratic decision making rather than imposition of demands. This principle is therefore strongly aligned with inclusion, respect and agency. Treat others how you would wish to be treated.

Summary

We have several crises in the western world, including a rise in intolerance, an unthinking response to fake news and a worrying increase in mental health concerns for young people. What happens in education is critical, not only for the students of today but the world in which they will be living, working and participating. We need an education system that models, teaches and incorporates all aspects of positive relationships not just for academic attainments but to help create the world we want to live in.

References

- Allen, K. A., & Boyle, C. (Eds.). (2018). *Pathways to Belonging: Contemporary Research in School Belonging*. The Netherlands: Brill.
- Champagne, F. A. (2010). Epigenetic Influence of social experiences across the life-span. *Developmental Psychobiology*, 52, 299-311.
- Bronfenbrenner, U. (2005). The developing ecology of human development: Paradigm lost or paradigm regained. In U. Bronfenbrenner (Ed.), *Making human beings human: Bioecological perspectives on human development* (pp. 94-105). Thousand Oaks, CA: Sage.
- Dobia, B., Parada, R. H., Roffey, S., & Smith, M. (2019). Social and emotional learning: From individual skills to class cohesion. *Educational and Child Psychology*, 36(2), 78-90.
- Dobia, B., & Roffey, S. (2016). Respect for culture: Social and emotional learning with Aboriginal and Torres Strait Islander Youth. In E. Frydenberg, A. J. Martin, & R. J. Collie (Eds.), *Social and Emotional Learning in Australia and the Asia-Pacific* (pp. 313-334). Dordrecht: Springer.
- Dolev, N., & Lesham, S. (2017). Developing emotional intelligence competence amongst teachers. *Teacher Development*, 21(1), 1-19.
- Field, S., Kuczerea, M., & Pont, B. (2007). *No More Failures: Ten Steps to Equity in Education*. OECD.
- Fell, F., & Hewstone, M. (2015). *Psychological perspectives on poverty*. York, England: Joseph Rowntree Foundation.
- Fredrickson, B. (2009). *Positivity*. London, England: Crown Publishers.
- Hattie, J. (2009). *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*. London, England: Routledge.

- Murray-Harvey R. (2010). Relationship influences on students' academic achievement, psychological health and well-being at school. *Educational & Child Psychology*, 27(1), 104-116.
- Noble, T., & McGrath, H. (2012). Well-being and resilience in young people and the role of positive relationships. In S. Roffey (Ed.), *Positive relationships: Evidence-based practice across the world* (pp. 17-33). The Hague, Netherlands: Springer.
- Roffey, S. (2008). Emotional literacy and the ecology of school wellbeing. *Educational and Child Psychology*, 25(2) 29-39.
- Roffey, S. (2011). *Changing Behaviour in Schools: Promoting Positive Relationships and Wellbeing*. London, England: Sage Education.
- Roffey, S. (Ed.). (2012a). *Positive Relationships: Evidence based practice across the world*. Dordrecht, Netherlands: Springer.
- Roffey, S. (2012b). Teacher wellbeing, pupil wellbeing: Two sides of the same coin. *Educational and Child Psychology*, 29(4), 8-17.
- Roffey, S. (2013). Inclusive and exclusive belonging: The impact on individual and community wellbeing. *Educational and Child Psychology*, 30(1), 38-48.
- Roffey, S. (2017a). Ordinary magic' needs ordinary magicians: The power and practice of positive relationships for building youth resilience and wellbeing. *Kognition und Paedagogik*, 103, 38-57.
- Roffey, S. (2017b). The ASPIRE principles and pedagogy for the implementation of social and emotional learning and whole school wellbeing. *International Journal of Emotional Education*, 9(2), 59-71.
- Roffey, S. (in press). *Circle Solutions for Student Wellbeing 3rd Edition*. London, England: Sage Education.
- Rutten, B. P. F., Hammels, C., Geschwind, N., Menne-Lothmann, C., Pishva, E., Schruers, K, ... & Wichers, M. (2013). Resilience in mental health: linking psychological and neurobiological perspectives. *Acta Psychiatrica Scandinavica*, 128(1), 3-20.
- Ryan, R. M., & Deci, E. L. (2019). Supporting autonomy, competence, and relatedness: The coaching process from a self-determination theory perspective. In P. Brownell, S. English, & J. Sabatine (Eds.), *Professional coaching: Principles and practice* (pp. 231-246). New York, NY: Springer.
- Skiba, R., Reynolds, C. R., Graham, S., Sheras, P., Close Conely, J., & Garcia-Vasquez, E. (2006). *Are zero tolerance policies effective in the schools? An evidentiary review and recommendations*. Zero Tolerance Task Force Report for the American Psychological Association.
- Stone, W. (2003). Bonding, bridging and linking social capital. *Stronger Families Learning Exchange*, 4, 13-16.
- Werner, E. E. (2013). What can we learn about resilience from large scale longitudinal studies? In S. Goldstein & R. Brooks (Eds.), *Handbook of Resilience in Children 2nd Edition* (pp. 87-102). Dordrecht, Netherlands: Springer.
- Zacarian, D., Alvarez-Ortiz, L., & Haynes, J. (2017). *Teaching to Strengths: Supporting Students living with Trauma, Violence, and Chronic Stress*. ASCD.

Promoting the well-being of children through social and emotional learning: recent research and implications for education

Kimberly A. Schonert-Reichl¹

¹University of British Columbia

Introduction

What competencies are needed to ensure that children and youth will thrive and flourish in their roles as the citizens of tomorrow? In the face of current societal, economic, environmental, and social challenges, identifying the skills and competencies that children and young people need for the future is critical now more than ever before (Schonert-Reichl & Weissberg, 2014). What has emerged in recent years is a growing consensus among educators, researchers, policy makers, and the public-at-large that what is needed is a more comprehensive vision of education — one that includes an explicit focus on promoting students' social and emotional competence and well-being alongside their academic achievement (Bushaw & Lopez, 2013).

One promising approach that has been suggested as a way to improve children's success in school and in life is through universal school-based approaches designed to promote students' social and emotional learning (SEL) that are integrated and embedded into the contexts of classrooms and schools. SEL is defined the process of acquiring the competencies to recognize and manage emotions, develop caring and concern for others, establish positive relationships, make responsible decisions, and handle challenging situations effectively (Weissberg, Durlak, Domitrovich, & Gullotta, 2015). That is, SEL teaches the personal and interpersonal skills we all need to handle ourselves, our relationships, and our work effectively and ethically (Greenberg, 2010).

This paper begins by providing a rationale for SEL in today's world, followed by a delineation of the various dimensions that comprise SEL. In the next section, a description of some of key findings from recent research on SEL is put forth. This paper ends by offering some directions for future work and on how an understanding of SEL has implications for our thinking about education in schools.

Making the case for SEL in schools

Addressing the social, emotional, and mental health needs of children has become a priority in many countries across the globe as dialogues about educational reform and the integration of SEL into policy and curriculum are proliferating (e.g., the British Columbia new Curriculum and Assessment Framework that now includes SEL in their Kindergarten to

Grade 12 Curriculum: <https://curriculum.gov.bc.ca/>). SEL is now a worldwide phenomenon, with SEL approaches and programs being implemented in countries throughout the world (Frydenberg, Martin, & Collie, 2017; Humphrey, 2013; Torrente, Alimchandani, & Aber, 2015). Analogously, large scale organizations such as the World Bank, the World Health Organization (WHO), and the Organization for Economic and Cooperative Development (OECD) are joining in the call for a more explicit and intentional consideration of social and emotional competencies and well-being into both education and health (e.g., OECD 2015, 2018; Varela, Kelcey, Reyes, Gould, & Sklar, 2013; World Health Organization, 2003).

Growing concerns about the mental health and well-being of children has been a significant catalyst for this growing attention (Domitrovich, Durlak, Staley, & Weissberg, 2017). Moreover, schools, in particular, have been implicated as contexts that can play a crucial role in fostering students' social and emotional development and well-being, and have been acknowledged as one of the primary settings in which activities to promote social and emotional competence and prevent mental health problems should occur.

The SEL competencies

SEL builds from work in child development, classroom management, prevention, and emerging knowledge about the role of the brain in self-awareness, empathy, and social-cognitive growth, and focuses on the skills that allow children to calm themselves when angry, make friends, resolve conflicts respectfully, and make ethical and safe choices (Weissberg et al., 2015). In short, SEL competencies comprise the foundational skills for positive health practices, engaged citizenship, and school success. SEL is sometimes called “the missing piece,” because it represents a part of education that is inextricably linked to school success.

One framework for SEL has been created by the Collaborative for Academic, Social, and Emotional Learning (CASEL), a nonprofit organization in Chicago, IL that has been at the forefront in efforts to promote SEL. Since its inception, CASEL has defined SEL more specifically and has served as a guide to school-based SEL programming (www.casel.org). Based on extensive research, CASEL (Weissberg et al., 2015) has identified five interrelated sets of cognitive, affective, and behavioural competencies that are central to SEL: Self-Awareness (e.g., the ability to accurately recognize one's feelings and thoughts and their influence on behaviours); Self-Management (e.g., the ability to regulate one's emotions, thoughts and behaviours in different situations); Social Awareness (e.g., the ability to take the perspective of and empathize with others from diverse backgrounds and cultures); Relationship Skills (e.g., the ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups); Responsible Decision Making (e.g., the ability to make constructive choices about personal behaviour, social interactions and school and life expectations based on consideration of ethical standards and the well-being of self and others).

SEL: three key research findings

The past decade has witnessed a burgeoning research literature in the field of SEL. In the following section, highlights from some of the recent SEL research are delineated.

SEL Skills in Childhood Predict Academic Achievement and Adult Success

Recognizing the interrelationships between social-emotional competencies and academ-

ic success, researchers have argued that fostering positive social and emotional development may be key to enhancing academic growth (Greenberg et al., 2003). Empirical evidence supports this contention. For example, in one early study that, Wentzel (1993) found that middle school students' prosocial classroom behaviours were better predictors of academic achievement than were their standardized test scores, even after taking into account academic behaviour, teachers' preferences for students, IQ, family structure, sex, ethnicity, and days absent from school. Similarly, in a longitudinal study of Italian children, Caprara, Barbaranelli, Pastorelli, Bandura, and Zimbardo (2000) found that prosocial behaviour in third grade significantly predicted both academic achievement and social preference five years later, when children were in eighth grade. In a short-term, longitudinal study of 6th grade Canadian students, Oberle, Schonert-Reichl, Hertzman, and Zumbo (2014) examined the association between social and emotional competence and academic achievement in early adolescents, and found that social-emotional competence in grade 6 predicted higher scores in math and reading in seventh grade.

In addition to playing a crucial role in predicting academic success, longitudinal research also documents links between children's social and emotional skills and later success in adulthood. For instance, Moffitt et al. (2011) followed a cohort of 1000 children from birth to 32 years in New Zealand, assessing children's self-control across the ages of 3, 5, 7, 9, and 11 years via reports from researcher-observers, teachers, parents, and the children themselves. Self-control in childhood was found to predict physical health, substance dependence, personal finances, and criminal offending in adulthood, even after taking into account intelligence, social class, and problems the children had in adolescence (e.g., smoking, school drop-out, having an unplanned baby).

More recently, Jones, Greenberg, and Crowley (2015) examined the degree to which late adolescent and early adult outcomes were predicted by teacher ratings of children's social competence measured many years earlier, when children were in kindergarten, following 753 kindergarten children longitudinally for 13 to 19 years. Kindergarten teacher ratings of children's prosocial skills were found to be significant predictors of whether participants would graduate from high school on time, complete a college degree, obtain stable employment in adulthood, and be employed full time in adulthood.

Social and emotional skills are malleable and can be taught

SEL is grounded in research from developmental cognitive neuroscience that indicates that social and emotional skills can be taught across the life span and are viewed as more malleable than IQ (Heckman, 2007). Perhaps the most compelling evidence for the importance of SEL programs in promoting students' social-emotional competence and academic achievement comes from a meta-analysis conducted by Durlak et al. (2011) of 213 school-based, universal SEL programs involving 270,034 students from kindergarten through high school. Students who received an SEL program, relative to students who did not receive an SEL program, were found to demonstrate significant improvements in four outcomes: (1) SEL skills, (2) prosocial attitudes, (3) positive social behaviours, and (4) academic performance, and significant decreases in two outcomes: (1) conduct problems and (2) emotional distress. For example, SEL students outperformed non-SEL students on indices of academic achievement by 11 percentage points. Moreover, when classroom teachers and other school personnel implemented SEL programs, all six outcomes were positively effected, in contrast to SEL programs implemented by non-school personnel, in which only three of the six were positively

effected (i.e., improved SEL skills and prosocial attitudes, decreased conduct problems).

SEL skills are durable

Do students maintain their SEL competencies after the SEL program has ended? Research by Hawkins, Kosterman, Catalano, Hill, and Abbott (2008) documented the long-term positive effects of multi-year SEL programming on student outcomes, and found significantly reduced diagnosable mental health disorders at age 24 and age 27, which was 12 and 15 years after their SEL intervention had ended. Their results also showed intervention effects indicating better educational and economic achievement among those individuals who received the SEL intervention in contrast to those who did not.

Taylor and colleagues (2017) conducted a systematic review to address the relative paucity of evidence on the long-term effectiveness of SEL programming. A total of 82 research studies evaluating school-based, universal SEL programs involving 97,406 ethnically and socio-demographically diverse students, from kindergarten to high school. Results demonstrated that students who had received an SEL intervention continued to show increases in social-emotional skills, positive behaviours and academic achievement, and decreases in conduct problems, emotional distress, and drug use up to almost four years after program completion, in contrast to those students who did not receive an SEL intervention.

Next steps in moving SEL into the next decade

1. Assessing SEL in Schools and Communities

One crucial step in advancing the future agenda of promoting students' social and emotional competence in schools and communities involves the development and implementation of psychometrically sound and developmentally appropriate measurement tools to assess and monitor children's social and emotional development over time. In just the past few years, there has been a surge of interest and important advances in the design and implementation of a corpus of measures and monitoring tools in the field of SEL. At the forefront of this work is CASEL's SEL Assessment Workgroup (see <https://measuring.sel.casel.org/our-initiative/>). The project was formed with the specific intention of advancing progress in the field of developing SEL tools and assessments that are practical and feasible to use, scientifically sound, and actionable.

In British Columbia (BC), Canada, researchers at the University of British Columbia are building toward a comprehensive child development monitoring system. A central component of this system is the Early Development Instrument (EDI) -- a teacher-report questionnaire that has been used across BC since 2001 to gather data about children's development at age five. EDI data provide essential insights into how the health and well-being of children is changing over time so that evidence-based decision making can improve our investment in children and therefore improve child development outcomes (see earlylearning.ubc.ca). HELP researchers also created the Middle Years Development Instrument (MDI; Schonert-Reichl et al., 2012), a measure designed to routinely and reliably assess children's SEL competencies and assets during these transitional 'middle childhood' years between childhood and early adolescence (Thomson et al., 2017). The MDI is now being used in school districts in BC, across Canada and internationally (Castelli et al., 2018)

2. Translating the science of SEL for practice and policy

Another one of the biggest challenges that confronts the field of SEL is the translation of knowledge garnered from rigorous research on the effectiveness of programs into policy and widespread practice (Greenberg, 2010). Clearly, there is a need for greater efforts to translate science for practice and policy so that SEL approaches can be better integrated into schools and communities. Such efforts can help build the processes and structures needed to foster high-quality implementation and promote sustainability of programs.

3. Integrating SEL into teacher preparation

Effective SEL interventions and skill development occurs when teachers' possess the requisite social and emotional skills to create an environment that is safe, caring, supportive, and well-managed, and have the competencies and knowledge to effectively implement SEL programs. Teachers are the engine that drives SEL programs and practices in classrooms and school, and teachers own SEL competence and well-being plays a critical role in influencing the learning context and the infusion of SEL into classrooms and schools (Jones, Bouffard, & Weissbourd, 2013).

One critical dimension on the agenda for the next generation of SEL research and practice includes a better understanding of the ways in which the preparation of educators leads to high-quality implementation of SEL programs and practices (Schonert-Reichl, 2019). For example, how pre-service teacher education programs can best prepare teachers with the background knowledge necessary to succeed in the teaching profession has become a recent topic among educators, policymakers, and the public at large. Research on the extent to which pre-service teacher education includes information and/or training directly in SEL is in a nascent stage, with some efforts showing promise (Schonert-Reichl, Hanson-Peterson, & Hymel, 2015; Schonert-Reichl et al., 2017).

Conclusions

Although much has been learned in the past decade about SEL, the field has further to go before firm conclusions can be made about the specific ways in which an SEL approach advances children's short-term and long-term school and life success. For example, what are the processes and mechanisms that lead to successful improvements in children's social and emotional competence across programs? Which programs work best for which children? And under what conditions is optimal development fostered? These are the types of questions that are being asked among both educators and researchers, and are the types of questions asked by those who share a focus on determining the factors underlying the development of children's social and emotional competence and well-being in school.

References

- Best, J. R., & Miller, P. H. (2010). A developmental perspective on executive function. *Child Development, 81*, 1641-1660.
- Bushaw, W. J., & Lopez, S. J. (2013, September). Which way do we go? The 45th annual PDK/Gallup poll of the public's attitudes toward the public schools. *Phi Delta Kappan, 95*(1), 8-25.
- Caprara, G. V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. G. (2000). Prosocial foundations of children's academic achievement. *Psychological Science, 11*, 302-306.

- Castelli, L., Marcionetti, J., Crescentini, A., & Sciaroni, L. (2018). Monitoring preadolescents' well-being: Italian validation of the Middle Years Development Instrument. *Child Indicators Research*, 11, 609-628. <https://doi.org/10.1007/s1218>.
- Collaborative for Academic, Social, and Emotional Learning. (2015). *2015 CASEL guide: Effective social and emotional learning programs—Preschool and elementary school edition*. Chicago, IL: Author. Retrieved from <http://www.casel.org/guide>
- Domitrovich, C. E., Durlak, J., Staley, K. C., & Weissberg, R. P. (2017). Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk and school children. *Child Development*, 88, 408-416.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). Enhancing students' social and emotional development promotes success in school: Results of a meta-analysis. *Child Development*, 82, 474-501.
- Frydenberg, E., Martin, A. J., & Collie, R. J. (Eds.). (2017). *Social and emotional learning in Australia and the Asia-Pacific: Perspectives, programs and approaches*. Melbourne, Australia: Springer Social Sciences.
- Greenberg, M. T. (2010). School-based prevention: Current status and future challenges. *Effective Education*, 2, 27-52.
- Hawkins, J. D. et al. (2008). Effects of social development intervention in children 15 years later. *Archives of Pediatric and Adolescent Medicine*, 162, 1133-1141.
- Heckman, J. J. (2007). The economics, technology, and neuroscience of human capability formation. *Proceedings of the National Academy of Sciences*, 104, 13250-13255.
- Humphrey, N. (2013). *Social and emotional learning: A critical appraisal*. London, England: Sage.
- Jones, S. M., Bouffard, S. M., & Weissbourd, R. (2013). Educators' social and emotional skills vital to learning. *Phi Delta Kappan*, 94, 62-65.
- Jones, D. E., Greenberg, M. T., & Crowley, M. (2015). Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *American Journal of Public Health*, 105, 2283-2290.
- Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., . . . Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, 108, 2693-2698.
- Oberle, E., Schonert-Reichl, K. A., Hertzman, C., & Zumbo, B. (2014). Social-emotional competencies make the grade: Predicting academic success in early adolescence. *Journal of Applied Developmental Psychology*, 35, 138-147.
- Organization for Economic Co-operation and Development (OECD). (2015). *Skills for Social Progress: The Power of Social and Emotional Skills*. OECD Skills Studies, OECD Publishing, Paris.
- Organization for Economic Co-operation and Development (OECD). (2018). *The future of education and skills: Education 2030*. E2030 Position Paper. OECD Publishing, Paris.
- Schonert-Reichl, K. A. (2019). Advancements in the landscape of social and emotional learning and emerging topics on the horizon. *Educational Psychologist*, 54(3), 222-232.
- Schonert-Reichl, K. A., & Weissberg, R. P. (2014). Social and emotional learning during childhood. In T. P. Gullotta & M. Bloom (Eds.), *Encyclopedia of primary prevention and health promotion* (2nd ed., pp. 936-949). New York, NY: Springer Press.
- Schonert-Reichl, K. A., Guhn, M., Gadermann, A. M., Hymel, S., Sweiss, L., & Hertzman, C. (2012). Development and validation of the Middle Years Development Instrument: Assessing children's well-being and assets across multiple contexts. *Social Indicators Research*, 144(2), 345-369 doi: 10.1007/s11205-012-0149-y

- Schonert-Reichl, K. A., Hanson-Peterson, J. L., & Hymel, S. (2015). Social and emotional learning and pre-service teacher education. In J. A. Durlak, R. P. Weissberg, C. E. Domitrovich, & T. P. Gullotta (Eds.), *Handbook of social and emotional learning: Research and practice* (pp. 406-421). New York, NY: Guilford.
- Schonert-Reichl, K. A., Kitil, M. J., & Hanson-Peterson, J. (2017). *To reach the students, teach the teachers: A national scan of teacher preparation and social and emotional learning. A report prepared for the Collaborative for Academic, Social, and Emotional Learning (CASEL)*. Vancouver, BC.: University of British Columbia.
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A Meta-analysis of follow-up effects. *Child Development, 88*, 1156-1171.
- Thomson, K., Oberle, E., Gadermann, A. M., Guhn, M., Rowcliffe, P., & Schonert-Reichl, K. (2017). Measuring social-emotional development in the middle childhood: the Middle Years Development Instrument. *Journal of Applied Developmental Psychology, 55*, 107-118.
- Torrente, C., Alimchandani, A., & Aber, J. L. (2015). International perspectives on social and emotional learning. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook on social and emotional learning: Research and practice* (pp. 566-587). New York, NY: Guilford Publications.
- Varela, A. D., Kelcey, J., Reyes, J., Gould, M., & Sklar, J. (2013). *Learning and resilience: The crucial role of social and emotional well-being in contexts of adversity*. Education Notes. Washington, DC: The World Bank in collaboration with the International Rescue Committee.
- Weissberg, R. P., Durlak, J. A., Domitrovich, C. E., & Gullotta, T. P. (2015). Social and emotional learning: Past, present, and future. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook of social and emotional learning: Research and practice* (pp. 3-19). New York, NY: Guilford.
- Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology, 85*, 357-364.

Which character strengths matter most at school? Addressing the role of students' character strengths in achievement and well-being at school

Lisa Wagner¹

¹ Universität Zürich

Schools are commonly named examples of (potential) *positive institutions* as children and adolescents spend a lot of time in school and thus, experiences made in school are likely to impact later life. Positive institutions are described as institutions that enable the development of positive traits (Seligman & Csikszentmihalyi, 2000). Given this definition, knowledge on the role of positive traits (i.e., character strengths) at school is highly relevant to any question related to the role of schools as (potential) positive institutions. In the following, I will briefly present the VIA classification (Peterson & Seligman, 2004) as the basis to empirically investigate character strengths, summarize the extant evidence on the role of students' character strengths for their experiences (i.e., achievement and well-being) at school, and highlight strategies that have been proposed to foster character strengths in the context of schooling. Schools are commonly named examples of (potential) *positive institutions* as children and adolescents spend a lot of time in school and thus, experiences made in school are likely to impact later life. Positive institutions are described as institutions that enable the development of positive traits (Seligman & Csikszentmihalyi, 2000). Given this definition, knowledge on the role of positive traits (i.e., character strengths) at school is highly relevant to any question related to the role of schools as (potential) positive institutions. In the following, I will briefly present the VIA classification (Peterson & Seligman, 2004) as the basis to empirically investigate character strengths, summarize the extant evidence on the role of students' character strengths for their experiences (i.e., achievement and well-being) at school, and highlight strategies that have been proposed to foster character strengths in the context of schooling.

What are character strengths?

The VIA classification of character strengths and virtues (Peterson & Seligman, 2004) is considered one of the most important accomplishments of Positive Psychology, that is, the study of “the positive features that make life worth living” (Seligman & Csikszentmihalyi, 2000, p. 5). The classification was the result of a collaborative project aiming to provide a framework for the description (and building on this, the assessment and the development) of positively valued traits that enable a “good life” for oneself and others. Character strengths are seen as trait-like individual differences that are fulfilling, positively valued, and ubiquitous that together make up a multidimensional conceptualization of the good character (Peterson & Seligman, 2004), which is also compatible with other character concepts (cf. Ruch & Wag-

ner, in press). As such, the VIA classification represents the positive counterpart of traditional classifications describing mental illnesses, and it was even suggested that mental illnesses could be characterized as the opposite, the absence, or the excess of the character strengths described in the VIA classification (Seligman, 2015). The 24-character strengths are organized under six virtues¹:

1. **Wisdom and knowledge** – Cognitive strengths that entail the acquisition and use of knowledge.

- **Creativity** [originality, ingenuity]: Thinking of novel and productive ways to conceptualize and do things; includes artistic achievement but is not limited to it.
- **Curiosity** [interest, novelty-seeking, openness to experience]: Taking an interest in ongoing experience for its own sake; finding subjects and topics fascinating; exploring and discovering.
- **Judgment** [critical thinking]: Thinking things through and examining them from all sides; not jumping to conclusions; being able to change one’s mind in light of evidence; weighing all evidence fairly.
- **Love of Learning**: Mastering new skills, topics, and bodies of knowledge, whether on one’s own or formally; obviously related to the strength of curiosity but goes beyond it to describe the tendency to add systematically to what one knows.
- **Perspective** [wisdom]: Being able to provide wise counsel to others; having ways of looking at the world that make sense to oneself and to other people.

2. **Courage** – Emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external or internal.

- **Bravery** [valor]: Not shrinking from threat, challenge, difficulty, or pain; speaking up for what is right even if there is opposition; acting on convictions even if unpopular; includes physical bravery but is not limited to it.
- **Perseverance** [persistence, industriousness]: Finishing what one starts; persisting in a course of action in spite of obstacles; “getting it out the door”; taking pleasure in completing tasks.
- **Honesty** [authenticity, integrity]: Speaking the truth but more broadly presenting oneself in a genuine way and acting in a sincere way; being without pretense; taking responsibility for one’s feelings and actions.
- **Zest** [vitality, enthusiasm, vigor, energy]: Approaching life with excitement and energy; not doing things halfway or halfheartedly; living life as an adventure; feeling alive and activated.

3. **Humanity** – Interpersonal strengths that involve tending and befriending others.

- **Love**: Valuing close relations with others, in particular those in which sharing and caring are reciprocated; being close to people.

1. © Copyright 2004-2019, VIA Institute on Character. All Rights Reserved. Used with Permission. www.viacharacter.org

- **Kindness** [generosity, nurturance, care, compassion, altruistic love, “niceness”]: Doing favors and good deeds for others; helping them; taking care of them.
- **Social intelligence** [emotional intelligence, personal intelligence]: Being aware of the motives and feelings of other people and oneself; knowing what to do to fit into different social situations; knowing what makes other people tick.

4. **Justice** – Civic strengths that underlie healthy community life.

- **Teamwork** [citizenship, social responsibility, loyalty]: Working well as a member of a group or team; being loyal to the group; doing one’s share.
- **Fairness**: Treating all people the same according to notions of fairness and justice; not letting personal feelings bias decisions about others; giving everyone a fair chance.
- **Leadership**: Encouraging a group of which one is a member to get things done and at the time maintain time good relations within the group; organizing group activities and seeing that they happen.

5. **Temperance** – Strengths that protect against excess.

- **Forgiveness**: Forgiving those who have done wrong; accepting the shortcomings of others; giving people a second chance; not being vengeful.
- **Humility**: Letting one’s accomplishments speak for themselves; not regarding oneself as more special than one is.
- **Prudence**: Being careful about one’s choices; not taking undue risks; not saying or doing things that might later be regretted.
- **Self-regulation** [self-control]: regulating what one feels and does; being disciplined; controlling one’s appetites and emotions.

6. **Transcendence** – Strengths that forge connections to the larger universe and provide meaning.

- **Appreciation of beauty and excellence** [awe, wonder, elevation]: Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life, from nature to art to mathematics to science to everyday experience.
- **Gratitude**: Being aware of and thankful for the good things that happen; taking time to express thanks.
- **Hope** [optimism, future-mindedness, future orientation]: Expecting the best in the future and working to achieve it; believing that a good future is something that can be brought about.
- **Humor** [playfulness]: Liking to laugh and tease; bringing smiles to other people; seeing the light side; making (not necessarily telling) jokes: liking to laugh and joke; bringing smiles to other people.
- **Spirituality** [faith, purpose]: Having coherent beliefs about the higher purpose and meaning of the universe; knowing where one fits within the larger scheme; having beliefs about the meaning of life that shape conduct and provide comfort

An increasing number of studies has supported the relevance of character strengths for well-being or flourishing, both in children and adolescents (e.g., Gillham et al., 2011) and in adults (e.g., Wagner, Gander, Proyer, & Ruch, 2019).

Which character strengths matter most in the context of schooling?

Several studies have also demonstrated the relevance of students' character strengths for a wide range of desirable outcomes at school. More concretely, character strengths were found to be related to (a) school achievement (e.g., Park & Peterson, 2006; Wagner & Ruch, 2015; Wagner & Ruch, 2019a, 2019b; Weber & Ruch, 2012; Weber, Wagner, & Ruch, 2016), (b) well-being at school (e.g., Wagner & Ruch, 2019a, 2019b; Weber & Ruch, 2012; Weber et al., 2016), (c) cognitive, emotional, behavioral, and social adjustment following transitions between different school forms (Shoshani & Aviv, 2012; Shoshani & Slone, 2013), (d) academic self-efficacy (Weber & Ruch, 2012), (e) classroom behavior (Ruch, Platt, & Hofmann, 2014; Wagner & Ruch, 2015; Weber & Ruch, 2012), (f) likeability and both quantity and quality of friendships in the classroom (Park & Peterson, 2006; Wagner, 2019), (g) positive relationships with teachers (Wagner & Ruch, 2019b); and (h) the frequency of experiencing flow at school (Wagner & Ruch, 2019b).

From an applied perspective, these findings support the notion of fostering students' character strengths in the context of schooling. But which of the 24 character strengths matter the most? Across several studies, love of learning and perseverance emerged as strongest predictors of school achievement. They also accounted for additional variance beyond the influence of intelligence and conscientiousness, which are known as the best predictors of school achievement (Wagner & Ruch, 2019b). In addition, love of learning and perseverance consistently predicted school satisfaction and the experience of positive affect at school, which also goes along with the character strengths of zest, hope, gratitude, self-regulation, and prudence. Experiencing low negative affect, on the other hand, is additionally related to students' social intelligence, honesty, and teamwork. Considering the experience of flow at school as an outcome (see Wagner & Ruch, 2019b), adds the strengths of judgment and fairness to the list of school-related strengths. Additionally, positive relationships at school represent another relevant aspect of well-being at school. Wagner (2019) identified 12-character strengths most relevant to positive relationships at school. Considering these strengths as well would add the character strengths of love, kindness, perspective, leadership, forgiveness, humility, and humor, resulting in a total of 19 strengths that "matter at school". However, also the five remaining character strengths have shown meaningful relationships with certain aspects of positive experiences at school, and hence should not be neglected in strengths-based interventions.

When deciding which character strengths should be addressed in interventions, three additional thoughts might be worth considering: Firstly, research on strengths-related behavior at school (Wagner & Ruch, 2019a) demonstrates the relevance of a shared perception (by students in one classroom) that character strengths are desirable at school. Secondly, as argued by Linkins, Niemiec, Gillham and Mayerson (2015), a wider focus including also character strengths that are related not only to success and well-being in school, but also in later life, is advisable. It is assumed that developing a vocabulary for a variety of strengths, being able to spot them in others and oneself, as well as displaying one's own strengths inside and outside of school, is a promising strategy of strengths-based interventions. While these ideas are in line with theoretical assumptions and first evidence, more rigorous empirical

studies are still lacking. Thirdly, a sole focus on the individual student might be too narrow. Character strengths are assumed to contribute not only to the individual's flourishing, but also to the well-being of others (cf. Peterson & Seligman, 2004). Even though this claim is also yet to be comprehensively tested, some empirical results provide support: for instance, a number of character strengths – including strengths such as honesty that were typically not strongly related to individual well-being – were found to be positively related to friendship quality, as reported by the best friend, even when the friend's character strengths were accounted for (Wagner, 2019). Thus, displaying strengths-related behavior at school might also enhance others' well-being.

How can character strengths be fostered at school?

Linkins et al. (2015) distinguish two basic approaches that can be pursued when designing interventions based on character strengths in the context of education. First, educators can focus on a fixed set of character strengths that are deemed of particular importance. This *prescriptive* approach is in line with much of the traditional work on character education. As presented above, it would be possible to determine certain character strengths that most strongly relate to specific desired outcomes at school (such as positive relationships among students). However, when taking a more comprehensive approach to flourishing at school, it seems difficult to find character strengths that are not of relevance. A *descriptive* approach, on the other hand, focuses on the individual's own character strengths, and as such, treats all character strengths as equally relevant (e.g., students are encouraged to explore new ways to display their own strengths, which might be different for each student).

Lavy (2019) identified four key elements of character strengths interventions in the context of education: (1) providing knowledge on character strengths by means of developing a language for talking about character strengths; (2) fostering the identification of character strengths in oneself and others; (3) instructing students to display strengths-related behavior (e.g., in new situations etc.); and (4) encouraging reflection on own and others' strengths-related behavior. In addition, she notes that such interventions best use a multi-level approach by including not only students, but also teachers and other staff members as well as including a group or school perspective (cf. Linkins et al., 2015). Only few controlled studies on school-based character strengths interventions exist, which may be also due to difficulties in implementing such research designs in the applied setting of schools. While the existing studies have yielded promising results (e.g., Proctor et al., 2011; Quinlan, Swain, Cameron, & Vella-Brodrick, 2015), further research is needed to corroborate the effectiveness of these approaches.

Conclusion

Taken together, I argue that – despite the need for further research – evidence shows that students' character strengths matter for experiencing positive emotions, being engaged, feeling connected, and also for being successful at school. While certain character strengths, such as love of learning and perseverance, are an almost natural fit with the typical demands of school, all character strengths should have a place in school. A focus on all 24 character strengths would help schools in serving the function of a positive institution.

References

- Gillham, J., Adams-Deutsch, Z., Werner, J., Reivich, K., Coulter-Heindl, V., Linkins, M., ... Seligman, M. E. P. (2011). Character strengths predict subjective well-being during adolescence. *The Journal of Positive Psychology, 6*, 31–44. doi:10.1080/17439760.2010.536773
- Lavy, S. (2019). A review of character strengths interventions in twenty-first-century schools: Their importance and how they can be fostered. *Applied Research in Quality of Life*. Advance online publication. <https://doi.org/10.1007/s11482-018-9700-6>
- Linkins, M., Niemiec, R. M., Gillham, J., & Mayerson, D. (2015). Through the lens of strength: A framework for educating the heart. *The Journal of Positive Psychology, 10*, 64–68. doi:10.1080/17439760.2014.888581
- Park, N., & Peterson, C. J. (2006). Character Strengths and Happiness among Young children: content Analysis of Parental Descriptions. *Journal of Happiness Studies, 7*(3), 323–341. doi: 10.1007/s10902-005-3648-6
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. New York, NY: Oxford University Press.
- Proctor, C., Tsukayama, E., Wood, A. M., Maltby, J., Eades, J. F., & Linley, P. A. (2011). Strengths Gym: The impact of a character strengths-based intervention on the life satisfaction and well-being of adolescents. *The Journal of Positive Psychology, 6*, 377–388. doi:10.1080/17439760.2011.594079
- Quinlan, D. M., Swain, N., Cameron, C., & Vella-Brodrick, D. A. (2015). How ‘other people matter’ in a classroom-based strengths intervention: Exploring interpersonal strategies and classroom outcomes. *The Journal of Positive Psychology, 10*, 77–89. doi:10.1080/17439760.2014.920407
- Ruch, W., Platt, T., & Hofmann, J. (2014). The character strengths of class clowns. *Frontiers in Psychology, 5*, 1075. doi:10.3389/fpsyg.2014.01075
- Ruch, W., & Wagner, L. (in press). Character building and adolescent development. In S. Hupp & J. Jewell (Eds.), *The Encyclopedia of Child and Adolescent Development*, New Jersey, NJ: Wiley.
- Seligman, M. E. P. (2015). Chris Peterson’s unfinished masterwork: The real mental illnesses. *The Journal of Positive Psychology, 10*, 3–6. doi:10.1080/17439760.2014.888582
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*, 5–14. doi:10.1037/0003-066X.55.1.5
- Shoshani, A., & Aviv, I. (2012). The pillars of strength for first-grade adjustment – Parental and children’s character strengths and the transition to elementary school. *The Journal of Positive Psychology, 7*, 315–326. doi:10.1080/17439760.2012.691981
- Shoshani, A., & Slone, M. (2013). Middle school transition from the strengths perspective: Young adolescents’ character strengths, subjective well-being, and school adjustment. *Journal of Happiness Studies, 14*, 1163–1181. doi:10.1007/s10902-012-9374-y
- Wagner, L. (2019). Good character is what we look for in a friend: Character strengths are positively related to peer acceptance and friendship quality in early adolescents. *The Journal of Early Adolescence, 39*, 864–903. doi:10.1177/0272431618791286
- Wagner, L., Gander, F., Proyer, R. T., & Ruch, W. (in press). Character strengths and PERMA: Investigating the relationships of character strengths with a multidimensional framework of well-being. *Applied Research in Quality of Life*.
- Wagner, L., & Ruch, W. (2015). Good character at school: Positive classroom behavior mediates the link between character strengths and school achievement. *Frontiers in Psychology, 6*, 610. doi:10.3389/fpsyg.2015.00610

- Wagner, L., & Ruch, W. (2019a). *Displaying character strengths in behavior is related to well-being and achievement at school: Evidence from between- and within-werson analyses*. Manuscript submitted for publication.
- Wagner, L., & Ruch, W. (2019b). *Character strengths predict achievement, satisfaction, flow, and positive relationships at school beyond intelligence and personality*. Manuscript submitted for publication.
- Weber, M., & Ruch, W. (2012). The role of a good character in 12-year-old school children: Do character strengths matter in the classroom? *Child Indicators Research*, 5, 317–334. doi:10.1007/s12187-011-9128-0
- Weber, M., Wagner, L., & Ruch, W. (2016). Positive feelings at school: On the relationships between students' character strengths, school-related affect, and school functioning. *Journal of Happiness Studies*, 17, 341–355. doi:10.1007/s10902-014-9597-1

Student well-being

Impact of sport training on healthy behavior in a group of 108 adolescents: a pilot study using S.M.A.R.T. questionnaire

Ferdinando I. Ambra¹, Francesco V. Ferraro², Valeria Ferra¹, Serena Basile³,
Francesco Girardi¹, Mariarosaria Menafro³ and Maria Luisa Iavarone¹

¹ Università degli studi di Napoli "Parthenope"

² Bournemouth University

³ Azienda Sanitaria Locale ASL Napoli 1 Centro, Nucleo Operativo di Neuropsichiatria Infantile

Introduction

Sport participation is associated with positive developmental outcomes (Biddle & Asare, 2011). Adolescents involved in organized sport training show greater health-related quality of life (Vella, Gardner, Kemp, & Swann, 2018), a most favorable cardio-metabolic profiles (Idris et al., 2015) and healthier body composition (Vella et al., 2018). Conversely, a sedentary lifestyle is associated with higher junk food consumption and worsening of body composition (i.e. BMI) (Tremblay et al., 2011). Further, high screen time exposure is associated with lower fitness (Aggio, Ofunleye, Voss, & Sandercock, 2012) and has a negative impact on self-esteem (Ekeland, Heian, & Hagen, 2005). On the contrary adolescents physically active appear to be less prone to mental distress (Larun, Nordheim, Ekeland, Hagen, & Heian, 2006) and show higher level of cognitive abilities, discipline, responsibility and empathy (Fraser-Thomas, Côté, & Deakin, 2005). In addition, technological development, including 24/7 access to the internet and social media, appear to have a substantial role in sleep disorders (Mazzer, Bauducco, Lingon, & Boersma, 2018) which in turn affect physical health, learning abilities, school attendance and emotion regulation (Shochat, Cohen-Zion, & Tzischinsky, 2014). Further, increased time spent in using technology has been linked to lower academic performance and less personal contentment among adolescents (Rideout, Foehr, & Roberts, 2010).

In Italy, the school program provides 2 hours a week of physical education, during which students can practice physical activity or receive a lecture on sport science. Furthermore, the National Statistics Institute (Istituto Nazionale di Statistica, 2017) reports that 61% of teenagers between 11 and 14 have practised sport continuously during 2015. However, there are 30% of teenagers who practice physical activity less than one hour a week.

Research Aim and Hypothesis

The aim of this study is to demonstrate how an increase in sport activities during school time could improve adolescents' healthy lifestyle.

To date, we plan to measure the effects of sport training on the use of technologies and its impacts on adolescent's lifestyle using the S.M.A.R.T. questionnaire (Iavarone, Ambra, & Ferra, 2018).

The research team hypothesizes that sport activities have positive effects on eating habits, sleeping patterns and produce a higher level of social skills (i.e. relationship with peers). In

addition, the researchers hypothesize that there are no statistically significant differences between participants practising Individual Sports vs Team Sports.

Methods

Enrolled Subjects

A group of 36 adolescents (11-13 years, 14M/22F) not practicing sport (NS) were recruited from a school in Naples (Italy). Two other groups of 36 adolescents (11-13 years 14M/22F in each group) who practice sports were also enrolled from the same school and divided into Individual Sports (IS) and Team Sports (TS), respectively.

S.M.A.R.T. Questionnaire

S.M.A.R.T. is the acronym of the Italian words for Sport, Movement, Eating habits and Sleeping Patterns, Relationships and Technologies developed at the University of Naples Parthenope (Iavarone et al. 2018). The questionnaire consists of 5 sub-tests evaluating 5 domains: the subscale "Sport" evaluates motivation, involvement and participation to sport activity; "Movement" explores active lifestyle attitude; "Eating Habits and Sleeping Patterns" concerns healthy lifestyle attitude; "Relationship" inquiries into interactive social behaviors and social skills; "Technologies" explores critical and conscious use of technologies and parental control. Each domain contains a different number of questions that present multiple answers with a score from 0 to 3, with a higher score indicating healthier habits. The mean of all the answer gives the score of each domain and the global score is calculated by summing each sub-test score.

For the purpose of this study, only the effects of sport training on Eating Habits and Sleeping Patterns, Relationships and Technologies are considered. The scales evaluating both Eating Habits and Sleeping Patterns have been divided into two sub-scales to evaluate whether there are differences between those behaviors within participants.

All participants received the questionnaire in a classroom setting, under the supervision of Dr. Ferrà and Dr. Basile. Prior to testing, all participant's parents received and signed a General Data Protection Regulation agreement for the treatment of personal data, according to the 1964 Helsinki Declaration and its later amendment on comparable ethical standard.

Statistics and Results

The mean score obtained by the whole sample in Eating Habit was 2.08 with a standard deviation (SD) of 0.38 (NS mean= 1.72, SD = 0.36; IS mean = 2.25, SD = 0.25; TS mean = 2.27, SD = 0.22), while the mean in Sleeping Patterns was 1.83 with a SD of 0.86 (NS mean = 1.185, SD = 0.87; IS mean = 2.06, SD = 0.67; TS mean = 2.24, SD = 0.65). Whole sample obtained a mean in Relationship of 1.99, with a SD of 0.48 (NS mean = 1.82, SD = 0.59; IS mean = 2.09, SD = 0.37; TS mean = 2.08, SD = 0.40), while the mean obtained in Technologies was 1.62, with a SD of 0.33 (NS mean = 1.39, SD = 0.39; IS mean = 1.76, SD = 0.25; TS mean = 1.70, SD = 0.23). To evaluate the differences between groups and between sex a one-way ANOVA with Scheffé post-hoc test was performed. Statistical significance was determined *a priori* as $p < 0.05$. Sex appears not to have any significant effect ($p > 0.05$) on the results (Eating Habits: $F = 0.13$; Sleeping Patterns $F = 0.31$; Relationships $F = 0.03$; Technologies $F < 0.01$).

Regardless of participants' sex, there are not significant differences ($p > 0.05$) between who practiced Individual or Team sports in all the dimensions (Eating Habits: $F = 0.13$; Sleeping Patterns $F = 0.31$; Relationships $F = 0.03$; Technologies $F < 0.01$).

Individual and Team sport groups show higher score compared with NS in the dimension of Eating Habits ($F = 43.29, p < 0.01$; IS vs NS: $p < 0.01$; TS vs NS: $p < 0.01$) and Sleeping Patterns ($F = 21.10, p < 0.01$; IS vs NS: $p < 0.01$; TS vs NS $p < 0.01$).

The analysis also shows significant differences between groups in Relationship ($F = 4.04, P = 0.02$), with only the IS presenting higher score than NS in this dimension ($p = 0.05$). However, when comparing between individuals of the same sex, only males of IS presented higher score than male of NS ($p = 0.05$).

Individual and Team sports groups show higher scores than NS in the Technology consume ($F = 15.43, p < 0.01$; IS vs NS: $p < 0.01$; TS vs NS: $p < 0.01$). When considering each sex separately, the analysis shows that males in IS record higher scores than NS ($p = 0.01$), which presents no significant differences when compared to TS ($p > 0.05$). Between the females instead record higher scores both in IS and TS if compared to NS (IS vs NS: $p < 0.01$; TS vs NS: $p < 0.01$).

Discussion

According to the hypothesis, results do not show any significant differences between IS and TS groups among all explored dimensions; this brings us to assume that the type of sport (Individual vs Team sports) does not affect the dimensions considered in this study.

Both IS and TS groups obtained higher scores compared to NS in Eating Habits and Sleeping Patterns dimensions, which is in accordance with previous research with adolescent (Borraccino et al., 2016) suggesting that sport exercises improve nutrition awareness and quality of sleep.

In the Technology dimension, when the groups were analyzed by sex, males in the IS group record higher scores compared to males in NS group. On the contrary, males in TS and females in TS and IS groups record higher scores compared to males and females in NS group. In the Relationship dimensions, only IS males show a higher score than NS males, with no significant differences between the remaining groups. We speculate that females within NS groups could try to compensate for the lack of relational context by the use of technology. Males performing IS seem to present higher relational abilities and higher awareness in the use of technology compared with NS males, while TS males did not show those differences. It is rational to conceive that males have been involved in TS to repair a lack of socialization. Indeed, they did not present significant differences in the technology domain compared with NS males. As also reported by Caplan (2007), socially anxious subjects could prefer on-line interactions than face-to-face encounters because they perceive greater control over self-representation online.

Conclusions

The research shows that sport activities have an important impact on healthy behavior, including socialization and awareness in the use of technology. These results suggest that sports should be practiced by a higher number of adolescent, for example including activities with sport associations during and/or after school time in the school programs.

Future research should include an analysis of the effect of physical activities on a population that have never been involved in sports before, using other assessments (i.e. psychological test such as MMPI-A) also measuring participants' characteristics (i.e. bioimpedance) in order to evaluate the effect of sports on psychological functioning and compare it with body composition (e.g. effect of lower level of adipose fat and depression or anxiety).

Limits of the research

This observational study aimed to obtain an insight into adolescent daily habits, investigating the relationship between sports activity and healthy behaviour. As expected, we reported a series of limitations: i) the questionnaire was administered to a group of adolescents recruited from one school, so we cannot generalize the results to a larger population; ii) the research also lacks of statistical power. Authors believe that a higher sample size would have shown a higher correlation between sports activity and health behaviors.

Nevertheless, this outcome was expected and data collected can inform future research proving a solid background to calculate the sample size. Hence, future research should recruit a higher number of participants from different settings in order to produce normative data, and standardized the S.M.A.R.T. questionnaire.

References

- Aggio, D., Ogunleye, A. A., Voss, C., & Sandercock, G. R. (2012). Temporal relationships between screen-time and physical activity with cardiorespiratory fitness in English schoolchildren: a 2-year longitudinal study. *Prev. Med.*, 55(1), 37–39. doi:10.1016/j.ypmed.2012.04.012
- Biddle, S. J. H., & Asare, M. (2011). Physical Activity and Mental Health in children and adolescents: a review of reviews. *Br J Sports Med.*, 45, 886–895. doi:10.1136/bjsports-2011-090185
- Borraccino, A., Lemma, P., Berchiolla, P., Cappello, N., Inchley, J., Dalmaso, P., Charrier, L., Cavallo, F., & Italian HBSC 2010 Group. (2016). Unhealthy food consumption in adolescence: role of sedentary behaviour and modifiers in 11-, 13- and 15-year-old Italians. *European Journal of Public Health*, 1–6. doi:10.1093/eurpub/ckw056
- Caplan, S. E. (2007). Relations Among Loneliness, Social Anxiety, and Problematic Internet Use. *CyberPsychology & Behavior*, 10(2), 234–242. doi:10.1089/cpb.2006.9963
- Ekeland, E., Heian, F., & Hagen, K. B. (2005). Can exercise improve self-esteem in children and young people? A systematic review of randomised controlled trials. *Br J Sports Med.*, 39, 792–8. doi:10.1136/bjism.2004.017707
- Fraser-Thomas, J. L., Côté, J., & Deakin, J. (2005). Youth Sports Program: An avenue to foster positive youth development. *Physical Education and Sport Pedagogy*, 10(1), 19–40. doi:10.1080/1740898042000334890
- Iavarone, M. L., Ambra, F. I., & Ferra, V. (2018). “Vivere S.M.A.R.T.”: per una didattica delle attività motorie in adolescenza. In M. Parricchi (a cura di), *Educazione al benessere: cibo, corporeità, relazioni* (pp. 41–48). Zeroseiup.
- Idris, N.S., Evelein, A. M. V., Geerts, C. C., Sastroasmoro, S., Grobbee, D. E., & Uiterwaal, C. S. P. M. (2015). Effect of physical activity on vascular characteristics in young children. *Eur. J. Prev. Cardiol*, 22, 656–664. doi:10.1177/2047487314524869
- Istituto Nazionale di Statistica. (2017). *Anno 2015 la pratica sportiva in Italia*. Retrieved from <https://www.istat.it/it/files/2017/10/Pratica-sportiva2015.pdf>
- Larun, L., Nordheim, L. V., Ekeland, E., Hagen, K. B., & Heian, F. (2006). Exercise in prevention and treatment of anxiety and depression among children and young people. *Cochrane Database Syst Rev.*, 3, CD004691. doi:10.1002/14651858.CD004691.pub2
- Mazzer, K., Bauducco, S., Linton, S. J., & Boersma, K. (2018). Longitudinal associations between time spent using technology and sleep duration among adolescents. *Journal of Adolescence*, 66, 112–119. doi:10.1016/j.adolescence.2018.05.004

- Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). *Generation M2: Media in the lives of 8 to 18-year-olds*. California, CA: Henry J. Kaiser Family Foundation. Retrieved from <https://files.eric.ed.gov/fulltext/ED527859.pdf>
- Shochat, T., Cohen-Zion, M., & Tzischinsky, O. (2014). Functional consequences of inadequate sleep in adolescents: A systematic review. *Sleep Medicine Reviews*, 18, 75–87. doi:10.1016/j.smrv.2013.03.005
- Tremblay, M. S., LeBlanc, A. G., Kho, M. E., Saunders T. J., Larouche R., Colley R. C., ... Connor Goyer, S. (2011). Systematic review of sedentary behaviour and health indicators in school-aged children and youth. *Int. J. Behav. Nutr. Phys. Act.*, 8, 98. doi:10.1186/1479-5868-8-98
- Vella, S. A., Gardner, L. A., Kemp, B., & Swann, C. (2018). Health Related Quality of Life as a longitudinal mediator of the relationship between participation in organised sports and adiposity among young people. *Preventive Medicine Report*, 12, 66-70. Retrieved from doi:10.1016/j.pmedr.2018.07.006

An exploration of internal assets and external resources as a pathway for building resilience

Jodi Basch¹

¹ Queen's University

Introduction

The purpose of this research is to explore the connection between internal assets, external resources and resilience in students as they transition from secondary school to post-secondary institutions.

When students transition from secondary school to post-secondary institutions, they experience the challenges that accompany entering a new stage of life and beginning higher education (Praharso, Tear, & Cruwys, 2017). However, before entering post-secondary school, students are not typically equipped with the tools needed to cope with and bounce back from stressful life events. As a result, students need to draw on their resilience to survive (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002), and more importantly, to thrive (Bonnanno, 2004). In their article, Holdsworth, Turner, and Scott-Young (2018) propose that life transitions bring upon a substantial amount of stress. Moreover, Holdsworth et al. (2018) maintained that throughout their years at the university, students have the opportunity to foster, establish and develop their knowledge, skills, and strengths despite the stress that they experience. This transition allows them to draw from, develop and demonstrate their resilience (Rew & Horner, 2003).

Sheryl Sandberg and Adam Grant write in *Option B* (2017), that building resilience is analogous to building a muscle. While an individual can strengthen their resilience, it is not something that happens automatically. In the beginning, building, developing and drawing from an individual's resilience can be incredibly strenuous. Similarly, to strengthening a muscle, developing resilience consumes a high amount of energy and may appear onerous, or even impossible. Nevertheless, as they continue to practice and build their resilience, it becomes easier, more natural and more accessible. Consequently, less energy is necessary to tap into the resilience and muscle memory begins to kick in (Sandberg & Grant, 2017). To truly build one's resilience, it is vital to nurture and foster an individual's internal assets and external resources (Grotberg, 1995; Fergus & Zimmerman 2005). By developing these protective factors, individuals can learn to cope with, adapt to, and thrive in the face of adversity (Worsley, 2014). Through the exploration of resilience from a strength-based lens, individuals can develop an understanding of how they can flex and strengthen their resilience muscle.

The Resilience Doughnut is a theoretical framework, based off of Bronfenbrenner's ecological systems theory. This model highlights the importance of combining internal assets and external resources in strengthening resilience. When an individual combines their internal assets with external resources, they are more prepared to cope with and grow from adverse life situations (Fergus & Zimmerman, 2005; Worsley, 2014; Worsley, 2015).

Research Questions and Aims

The research aims to understand the construct of resilience and identify internal assets and external resources that post-secondary students draw from to develop and demonstrate resilience.

The following questions will guide my research:

- 1) How do post-secondary students define resilience?
- 2) What factors contribute to the development of resilience in students?
- 3) What internal assets do post-secondary students draw from? What external resources do post-secondary students turn to for support?
- 4) How do internal assets and external resources work together?
- 5) Is Worsley's (2006) Resilience Doughnut framework an appropriate model for exploring student resilience?

Methodology and Methods

This study consists of a mixed-methods approach, which will include a two-phase sequential explanatory research method. This will be done through the use of resilience scales, the resilience report, and focus groups.

To reach a wide range of students and measure transition to post-secondary education, the demographics of the study will be first-year students living away from home. Participants in this research study must be 18 years of age or older. This age inclusion is essential as one of the screening tools is only appropriate for adults (Friborg, Hjemdal, Rosenvinge, & Marinussen, 2003). Participants will be recruited through the Residence Life Department to meet these requirements. An email will be sent to all first-year university students living in Queen's Residence six to eight weeks following their transition to residence. This time frame is important as it will allow participants the opportunity to settle into their new environment, yet still, be impacted by this life transition. The researcher is hoping to reach students from diverse backgrounds.

Once participants are recruited, their resilience levels will be assessed using the Connor-Davidson Resilience Scale (Connor & Davidson, 2003), and the Resilience Scale for Adults (Friborg et al., 2003). Connor and Davidson (2003) define highly resilient individuals as participants who rank in the 75th percentile or higher on their resilience scale (Connor-Davidson Resilience Scale). Similarly, Friborg et al., (2003) define highly resilient individuals as participants who score in the top quarter of their resilience scale (Resilience Scale for Adults). Students invited to participate in focus groups will be required to fit the criteria of highly resilient individuals on both self-assessments. These scales have been empirically studied and validated. These scales will be analyzed using factor analysis.

Moreover, the Resilience Report (Worsley, 2006) will be employed to allow students to map their internal assets and external resources. Once assessed, highly resilience individuals will be selected for focus groups to determine how they draw upon their resilience and inspire strengths in others as this is the threshold for highly resilience individuals. Once the focus groups are transcribed, the researcher will use constant comparative analysis (Glaser & Strauss, 1967) to analyze the data. The transcript will be broken down into open codes, axial codes, and finally, into thematic codes.

Results/Desired Outcomes

This study is still in the preliminary stages. As such, the expected outcomes would include knowledge of how resilience individuals harness their resilience through the transition from secondary school to post-secondary institutions. It will provide an understanding of how post-secondary students harness their internal assets, and external resources to boost their resilience.

After completing both the quantitative (phase one) and qualitative (phase two) components of the study, the expected results would be as follows:

- 1) A relationship will emerge between resilience, internal assets, and external resources. Moreover, it will highlight social support as a key element of developing resilience.
- 2) Highly resilient individuals will identify with their external resources more than their internal assets.
- 3) A connection will emerge between internal assets and external resources.
- 4) Post-secondary students can effectively use Worsley's (2006) Resilience Doughnut framework to better understand their strengths, assets and resources.

Discussion

This analysis will allow for an exploration of resilience through a strength-based lens. "Strengthening resilience appears to expand our speed and capacity for meeting life's demands" (Stoltz, 2004, p.20). Due to the complexities of life circumstances, individuals will experience many challenging and stressful situations.

Assets are internal promotive and protective factors that are central to an individual. For assets to be effective, an individual requires the belief that they can develop (Yeager & Dweck, 2012). Assets commonly associated with resilience are competence, coping skills, problem-solving skills, autonomy, a sense of purpose, identity formation and orientation to the future (Fergus & Zimmerman, 2005; Masten, 2001).

An individual cannot succeed purely by drawing on their resilience, which is why resources play an integral role in building resilience. Resources are protective factors that are external to an individual. Resources associated with resilience include having a mentor, connecting with a supportive adult and being a part of a community (Caldwell, Kohn-Wood, Schmeelk-Cone, Chavous, & Zimmerman, 2004; Elkington, Bauermeister & Zimmerman, 2011; Fergus & Zimmerman, 2005).

While internal assets and external resources are integral to building resilience in an individual, it is essential that they operate in tandem to holistically support an individual. The

Resilience Doughnut is a theoretical framework developed by expanding Bronfenbrenner's ecological systems theory. It strives to bridge the gap between assets and resources and demonstrate how the two are interrelated and necessary for resilience (Worsley, 2006). This model initially focused on children in diverse settings but has since been adapted for adults, (Worsley, 2015). The model consists of two connecting circles; the inner circle represents the internal assets than an individual has and an outer circle that represents their external resources. As a relatively new model, The Resilience Doughnut Model is important to examine as it combines an individual's sense of self with their external supports. This multifaceted approach provides insight into how individuals develop their resilience and ultimately, learns to thrive.

When an individual exhibits strength in at least three of the seven external resources and can form connections between them (Luthar, Sawyer, & Brown, 2006), they can experience the benefits of resilience. While an individual will still exhibit negative emotions in response to stressful life events, they will experience the benefits of their protective and promotive factors. Worsley (2014) coined this phenomenon as having a doughnut moment. A doughnut moment may result in "heightened emotions, which can be long-lasting and help them to thrive" (Worsley, 2015, p. 60). An individual can create a doughnut moment by thinking critically about how they can connect their top external factors. While initially, this may appear as a daunting task, Worsley (2015) proposes that these connections are highly present in an individual's life and they can be found everywhere. Moreover, she posits that individuals are already connecting their strengths but by mindfully focusing on the process, they can enhance the benefits they are already experiencing. She created guiding questions that can help an individual see the connection between their strengths if they are struggling to notice this for themselves (Worsley, 2015). The more doughnut moments that an individual can cultivate and recognize, the easier it will be for them to respond to adversity in their lives. This will contribute to positive functioning and the ability to navigate, recover, and grow from difficult situations (Worsley, 2014).

When individuals receive support from others in their lives, they are more prepared to navigate adverse life events (Stoltz, 2004). A mixed-methodology framework based on the Resilience Doughnut framework is important as it will statistically validate perceptions of resilient individuals. First, it creates a formula for how an individual's internal assets and external resources can be combined to help an individual thrive. The model allows individuals to be optimistic and hopeful while also being easy to understand, creative and fun way to explore the concept of resilience (Worsley, 2015). As the model takes a strength-based approach, individuals can focus on what is working rather than what is going wrong. As such, individuals can foster these strengths and the connections between them rather than reinforcing the negativity bias. Finally, there are multiple ways to use the model as educators, mental health professionals, community leaders, individuals, and others can implement this model a way that is accessible for them. Moreover, the model can be applied and implemented in children, adults, and communities.

References

- Bonanno, G. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59(1), 20-28.

- Caldwell, C. H., Kohn-Wood, L. P., Schmeelk-Cone, K. H., Chavous, T. M., & Zimmerman, M. A. (2004). Racial discrimination and racial identity as risk or protective factors for violent behaviours in African American young adults. *American journal of community psychology, 33*(102), 91-105.
- Connor, K., & Davidson, J. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety, 18*(2), 76-82.
- Elkington, K. S., Bauermeister, J. A., & Zimmerman, M. A. (2011). Do parents and peers matter? A prospective socioecological examination of substance use and sexual risk among African American youth. *Journal of adolescence, 34*(5), 1035-1047.
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding health development in the face of risk. *Annual Review Public Health, 26*(1), 399-419.
- Friborg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: what are the central protective resources behind healthy adjustment? *International journal of methods in psychiatric research, 12*(2), 65-76.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Grotberg, E. H. (1995). A guide to promoting resilience in children. *Early Childhood Development: Practical reflections, 8*(1), 3-39.
- Holdsworth, S., Turner, M., & Scott-Young, C. M. (2018). ... Not drowning, waving. Resilience and university: a student perspective. *Studies in higher education, 43*(11), 1837-1853.
- Luthar, S. S., Sawyer, J. A., & Brown, P. J. (2006). Conceptual issues in studies of resilience. *Annals of the New York Academy of Sciences, 1904*(1), 105-115.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American psychologist, 56*(3), 227.
- Praharso, N. F., Tear, M. J., & Cruwys, T. (2017). Stressful life transitions and wellbeing: A comparison of the stress buffering hypothesis and the social identity model of identity change. *Psychiatry research, 247*, 265-275.
- Rew, L., & Horner, S. D. (2003). Youth resilience framework for reducing health-risk behaviors in adolescents. *Journal of Pediatric Nursing, 18*(6), 379-388.
- Sandberg, S., & Grant, A. (2017). *Option B: Facing adversity, building resilience, and finding joy*. New York, NY: Knopf.
- Schaufeli, W. B., Martinez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students: A cross-national study. *Journal of cross-cultural psychology, 33*(5), 464-481.
- Stoltz, P. G. (2004). Building resilience for uncertain times. *Leader to Leader, 2004*(31), 16-20.
- Worsley, L. (2006). *The Resilience Doughnut. The secret of strong kids*. Sydney, Australia: Wild and Woolley publications.
- Worsley, L. (2014). Building resilience in three Australian high schools, using the resilience doughnut framework. In S. Prince-Embury, & D. Saklofske, (Eds), *Resilience interventions for youth in diverse populations* (pp. 217-257). New York, NY: Springer.
- Worsley. (2015). The Resilience Doughnut; Combining Strengths to thrive. In Holden, M. C. (Ed.), *Victim Victorious: From Fire to Phoenix* (pp. 67-88). Robina, Australia: Nova Science Publishers.
- Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist, 47*(4), 302-314.

Stress on board the educational ship: How can we prevent students from emotionally drowning?

Philippe A. Genoud¹, Malika Dessibourg¹ and Philippe Gay²

¹ Université de Fribourg

² Haute Ecole Pédagogique du Valais

Introduction

Various researches (e.g. Schraml, Perski, Grossi, & Simonsson-Sarnecki, 2011) show that a high proportion of secondary school students feel very stressed. Thus indicating that stress is not the preserve of active professionals, but also affects teenagers. Different stressors have been identified in various studies. This allows us to distinguish internal causes, which are particularly related to pubertal changes and external causes, such as the transition from primary to secondary school or parental pressure (Colten & Gore, 1991).

Among chronic stressors – the ones that have the greatest impact on teenagers – those that are directly (e.g. having too much homework) or indirectly (e.g. having quarrels with peers) related to school are preponderant (Plancherel, Bettschart, Bolognini, Dumont, & Halfon, 1997). Academic exigencies, as well as pressure from teachers, parents, and even from the student him or herself, may have a negative impact on both his or her psychological (Sim, 2000) and physical well-being (Meylan et al., 2014).

Just like in a professional context, the development of burnout can be a response to permanent stress at school (Salmela-Aro, 2011). In fact, while burnout syndrome has mainly been studied with workers in areas of care and services (such as teachers), it can also be present in pupils of all ages (Meylan, Doudin, Curchod, & Stephan, 2011). A three-dimensional model suggested by Maslach and Jackson (1981) is usually used to explain it: 1) emotional exhaustion characterized by intense fatigue and an inability to get involved in work; 2) cynicism or depersonalization, which accounts for the difficulty of maintaining empathy and distance in interpersonal relationships; and 3) the lack of personal accomplishment that brings an individual to a sense of failure in his work.

However, the transition from stress to burnout is not inevitable. Numerous studies have shown that people are not equal in the face of stress and have identified protective factors. Without listing them exhaustively, two categories can be made: (1) personal factors such as having effective coping strategies or particular emotional skills (Genoud & Reicherts, 2009), (2) contextual factors such as having social support in the professional, family or personal environment (Koniarek & Dudek, 1996). Such results have been clearly established regarding burnout at work. However, there are fewer similar findings in the school field. For example, Jacobs and Dodd (2003) note the importance of having supportive friends with a sample of

university students. In a younger sample, Salmela-Aro, Kiuru, Pietikäinen and Jokela (2008) report: “The more negative the adolescents’ perception of the school climate, the less they felt they received support from school, and the less they felt they received positive motivation from teachers, the more burnout they experienced” (p. 20).

Research question and objectives

The purpose of our contribution is to bring a better understanding of the links between the stressors perceived by students and the development of burnout. Our study aims to take into account moderating factors (buffer) related to perceived classroom climate in particular. We expect certain dimensions of the classroom climate to play a moderating factor in the development of student burnout.

Methodology, methods and sample

Regarding the methodology, a questionnaire (paper and pencil) was submitted to 180 students (56% of girls) at the end of compulsory schooling (average age: $M = 14.1$, $SD = 0.5$) in the French-speaking (53%) and German-speaking (47%) parts of the canton of Fribourg. The questionnaires were filled in anonymously. The scales used are the following:

- (1) Daily Troubles during Adolescence scale (Plancherel et al., 1997) with 19 items presenting stressful situations in the school context (e.g. having too many homework) as well as in the personal context (e.g. having acne).
- (2) School Burnout Inventory (SBI) by Meylan, Doudin, Curchod-Ruedi, Antonietti and Stephan (2015) corresponding to the French version of the Salmela-Aro et al. (2009) questionnaire and evaluating three dimensions (emotional exhaustion, cynicism and decreased sense of personal accomplishment) with 18 items;
- (3) An ad hoc questionnaire including 36 items from the Moos and Trickett’s Classroom Environment Scale (Moos & Trickett, 1987), evaluating six dimensions in three domains: interpersonal relations (class cohesion and proximity to teachers), retention or change variables of the system (rules-organization and innovation), and orientation towards goals and personal development (difficulty and task orientation).

All the dimensions have a satisfactory to very good internal consistency.

Analyses and results

Firstly, and as was expected, the analysis of the results shows a strong correlation between the level of stress and emotional exhaustion ($r = .50$, $p < 1\%$). This link is a little weaker – but still marked – with cynicism ($r = .37$, $p < 1\%$) as well as with decrease in the feeling of personal accomplishment ($r = .42$, $p < 1\%$). These coefficients only slightly differ according to gender. Similarly, when looking at stress and burnout levels by gender, there is no significant difference in comparing girls and boys.

Correlations between classroom climate perception measures and the three dimensions of burnout are generally weak. Difficulty is the exception, the correlation amounting to $r = .50$

on average. However, our results highlight the fact that the dimensions of interpersonal relationships play a moderating role between stress and burnout, but only in boys. Indeed, this effect is very pronounced regarding teacher proximity in this group as the prediction of emotional exhaustion from stress varies by more than 15% ($\Delta R^2 = .15$; $p < 1\%$) according to perceived proximity. This factor is therefore able to lessen the development of burnout.

The same is true for class cohesion, since this dimension appears to be a buffer factor in boys, with a marked moderating effect ($\Delta R^2 = .11$, $p < 1\%$).

Discussion

Although links between stress and burnout no longer need to be demonstrated given the abundance of publications in this area, the identification of ways to prevent students from experiencing emotional exhaustion remains an important goal. In addition to the effectiveness of different personal coping strategies to reduce the impact of stress (e.g. Seiffge-Krenke, 2011), some contextual factors may also have a significant influence. Indeed, our results show that classroom climate proves to be a moderating factor in the development of burnout in boys. More specifically, the quality of relations within the class (felt cohesion) as well as those developed with the teacher (including its perceived proximity).

Despite various limits that will be presented in parallel to the analyses, our results highlight the need for teachers to be attentive to the climate they establish in their classroom. Indeed, although students partially shape the atmosphere of the classroom, the influence of teacher behavior and classroom management (which in turn impacts interpersonal relationships) remains predominant in creating a climate conducive to student learning and well-being. Many approaches – especially those involving active participation of students (e.g. Makela, Helfenstein, Lerkkanen, & Poikkeus, 2018) – can be implemented to improve the social climate in the classroom.

References

- Colten, M. E., & Gore, S. (1991). *Adolescent stress: causes and consequences*. New York, NY: Aldine de Gruyter.
- Genoud, P. A., & Reicherts, M. (2009). Emotional openness as a protective factor against burnout. In R. V. Schwartzhoffer (Ed.), *Psychology of burnout: Predictors and coping mechanisms* (pp. 167-181). New York, NY: Nova Science Publishers.
- Jacobs, S., & Dodd, D. (2003). Student burnout as a function of personality, social support, and workload. *Journal of College Student Development*, 44, 291-303.
- Koniarek, J., & Dudek, B. (1996). Social support as a buffer in the stress-burnout relationship. *International Journal of Stress Management*, 3(2), 99-106.
- Makela, T., Helfenstein, S., Lerkkanen, M.-K., & Poikkeus, A.-M. (2018). Student participation in learning environment improvement: Analysis of a co-design project in a Finnish upper secondary school. *Learning Environments Research*, 21(1), 19-41.
- Maslach, C., & Jackson, S. E. (1981). *Maslach Burnout Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Meylan, N., Doudin, P.-A., Curchod, D., & Stephan, P. (2011). School burnout in adolescents: Differences in background variables and exploration of school-related stress at the end of compulsory schooling. *Ricerche di Psicologia*, 4, 539-563.

- Meylan, N., Doudin, P.-A., Curchod-Ruedi, D., Antonietti, J.-P., Gyger Gaspoz, D., Pfulg, L., & Stephan, P. (2014). Burnout scolaire et consommation de substances: une étude exploratoire chez les adolescents "tout-venant". *Neuropsychiatrie de l'Enfance et de l'Adolescence*, 63(4), 238-243.
- Meylan, N., Doudin, P.-A., Curchod-Ruedi, D., Antonietti, J.-P., & Stephan, P. (2015). Stress scolaire, soutien social et burnout à l'adolescence: quelles relations? *Education et Francophonie*, 43(2), 135-153.
- Moos, R. H., & Trickett, E. J. (1987). *Classroom environment scale manual* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Plancherel, B., Bettschart, W., Bolognini, M., Dumont, M., & Halfon, O. (1997). Influence comparée des événements existentiels et des tracas quotidiens sur la santé psychique à la préadolescence. *Neuropsychiatrie de l'Enfance et de l'Adolescence*, 45(3), 126-138.
- Salmela-Aro, K. (2011). Le burnout des élèves. In D. Curchod-Ruedi, P.-A. Doudin, L. Lafortune, & N. Lafranchise (Eds), *La santé psychosociale des élèves* (pp. 32-44). Québec: Presses de l'Université du Québec.
- Salmela-Aro, K., Kiuru, N., Pietikäinen, M., & Jokela, J. (2008). Does school matter? The role of school context in adolescents' school-related burnout. *European Psychologist*, 13(1), 12-23.
- Salmela-Aro, K., Kiuru, N., Leskinen, E., & Nurmi, J.-E. (2009). School-Burnout Inventory: Reliability and validity. *European Journal of Psychological Assessment*, 25(1), 48-57.
- Schraml, K., Perski, A., Grossi, G., & Simonsson-Sarnecki, M. (2011). Stress symptoms among adolescents: The role of subjective psychosocial conditions, lifestyle, and self-esteem. *Journal of Adolescence*, 34(5), 987-996.
- Seiffge-Krenke, I. (2011). Coping with relationship stressors: A decade review. *Journal of Research on Adolescence*, 21(1), 196-210.
- Sim, H. (2000). Relationship of daily hassles and social support to depression and antisocial behavior among early adolescents. *Journal of Youth and Adolescents*, 29(6), 647-659.

Socio-relational well-being and dropout in vocational schools: a study on school engagement and satisfaction

Lynda S. Lattke¹, Aurelia De Lorenzo¹, Michele Settanni¹ and Emanuela Rabaglietti¹

¹ Università di Torino

Introduction

Research shows that the dropout phenomenon is not a sudden choice, but rather the result of a process lasting years (Christenson, Sinclair, Lehr, & Godber, 2001) characterized by the presence of indicators of abandonment, such as low attendance, and experiences of school failure. If we analyze the contextual factors that influence this phenomenon from an ecological perspective that requires continuous interaction between the various levels, these contexts can be divided into three broad categories: family, school and community (APA, 2012). Currently, Italy has one of the highest European dropout rates (14%) among youth aged 18-24 (ISTAT, 2017). According to the MIUR analysis (2017), Italian students are at greater risk of dropping out of school at five stages of their educational path: during or at the end of a school year in middle school, during the transition from middle school to high school, during or at the end of a school year during high school. The data on the overall dropout phenomenon in high school indicate a 4.3% dropout rate, or 112'240 out of a total of 2'613'619 pupils. This reality is particularly relevant for those attending vocational schools, especially given that this choice often represents their last opportunity to obtain a diploma and they may already have a history of dropping out of school. In Italy, vocational programs represent an opportunity for the fulfillment of school obligation and the achievement of a three-year professional qualification and therefore a powerful means to counter school dispersion and the dropout phenomenon. The course of study is under the responsibility of the region and aims to favor the development of specific and basic professional skills, necessary to support the occupational capacity and social inclusion of individuals as well as the competitiveness of the local economic and productive system. The dropout phenomenon leads to a decreased state of well-being and to greater societal disparities (Freudenberg & Ruglis, 2007). In other words, not only the student is affected but so is the class, the school, the family, the community and the nation at large. Studies have shown that the promotion of socio-relational skills can help improve students' self-efficacy, relationships with peers and teachers as well as their level of satisfaction and of school engagement. This makes the studying experience more conducive to learning and potentially reduces absenteeism and dropout rates (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Research question and objectives

Our research explores the current situation of students attending vocational schools and

aims to study their social-relational well-being and how it relates to their school situation and risk of dropping out.

Specifically, we study the relationship between:

- school engagement and previous school performance, school intentions for the future and intentions to drop out;
- school satisfaction and previous school performance and school intentions for the future.

Methodology, methods and sample

Two-hundred thirty-five adolescents, (20% females) between the ages of 13 and 24 ($M=15.5\pm 1.50$), attending the first and second years of two vocational schools in Piedmont, Italy, were enrolled. At the beginning of the school year, we administered an anonymous, self-report questionnaire, which collected socio-demographic data with the purpose of studying the relationship between well-being and school performance. The research is composed of key constructs such as School Satisfaction, School Engagement and Intention to dropout, in order to measure students' well-being and their socio-relational skills. The construct of school engagement is the theoretical foundation of many theories which explain the dropout phenomenon and finds its origin in theory of social control (Archambault, Janosz, Fallu, & Pagani, 2009). Engagement can be broadly defined as a commitment and investment of time and energy in learning, combined with the identification and sense of belonging to the school. For the evaluation of school engagement, Wang and colleagues (2011) developed a questionnaire based on 6 factors of first order and 3 factors of second order: in this way each of the three dimensions of school engagement summarizes two sets of factors. Behavioral engagement contains the items of the subscales of attention and school compliance (indicator of negative behaviors). Emotional engagement contains the subscales of belonging (indicator of the level of acceptance, respect and support perceived) and of the valuing of school education. Finally, cognitive engagement summarizes the two subscales of the use of cognitive strategies and of self-regulated learning. The questionnaire consists of 25 items that can be answered through a 5-point likert scale. In order to analyze the dimension of school satisfaction, reference was made to the validation study of the Satisfaction With Life Scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985). Satisfaction is defined as "a global assessment of a person's quality of life based on their own criteria" (Shin & Johnson, 1978, p. 478). Specifically, school satisfaction (Nurmi, Niemivirta, & Salmela-Aro, 2003) was investigated in its components, namely satisfaction of the course of study, interest in school subjects, personal life satisfaction through 5 items on a Likert scale. In order to analyze the Intention to Dropout, Hardre and Reeve (2003), based on self-determination theory, tested a motivational model to explain the conditions under which high school students formulate their intentions to persist or drop out. According to them, students' perceptions of self-determination and competence constitute their internal motivational resources, which support their engagement and persistence in school. To assess intention to dropout we have used three items: two have been used before by Vallerand, Fortier and Guay (1997) ("I sometimes consider dropping out of school" and "I intend to drop out of school"), and one ("I sometimes feel unsure about continuing my studies year after year") was added by Hardre and Reeve (2003). Regarding the students' school situation and risk of dropping out, we considered their previous school performance understood as the number of times they had repeated a school year (never, once, more than once); and future school intentions

should the student fail the current school year (stay at the same school, change to another one or choose to drop out).

Analyses and results

The result of ANOVAs showed the emergence of statistically significant differences concerning School Engagement and School Satisfaction with respect to previous school performance and the future choices regarding the students' schooling. Regarding future choices, students who in the event of failing the school year would choose to re-enroll at the same school, showed a higher level of Behavioral Engagement/Attentiveness ($F=7,629$; $p=0.001$), Emotional Engagement/School Belonging ($F=8.457$; $p=0.000$) and School Satisfaction ($F=9.489$; $p=0.000$) compared to classmates who would drop out. Furthermore, considering previous school performance, students who have never failed a school year showed higher levels of Behavioral Engagement/School Non-Compliance ($F=8.886$; $p=0.000$). Emotional Engagement/School Belonging ($F=3.820$; $p=0.023$) and School Satisfaction ($F=2.993$; $p=0.052$) were higher compared to classmates who had failed a school year more than once ($p=0.003$; $p=0.032$; $p<0.001$) yet these students instead had higher data points for Cognitive Engagement/Self-Regulated Learning ($F=4.535$; $p=0.012$) when compared to those students who had never failed ($p=0.018$). Finally, Intention to Dropout was negatively associated, although rather weakly, with several dimensions of School Engagement: Behavioral Engagement/Attentiveness ($r=-0.035$, $p<0.01$), Cognitive Engagement/Cognitive Strategy Use ($r=-0.026$, $p<0.01$), and Behavioral Engagement/School Non-Compliance ($r=0.031$, $p<0.01$).

Discussion

In Italy, most of the data collected by the National Student Registry Office, supplemented with data from the Regional Registries, refer to the school situation of students enrolled in state and private high schools. As a result, most research on the dropout phenomenon (Benvenuto, Rescalli, & Visalberghi, 2000; Bartolucci & Batini, 2016) may not exhaustively describe the educational situation in regards to the well-being and risk of dropping out of school, particularly of vocational students. According to Capperucci (2016), failing a school year is a double-edged sword because on the one hand it aims to reinforce the student's knowledge, on the other it can cause negative effects, such as poor school performance or risk of dropping out of school, without obtaining a diploma (Jacob & Lefgren, 2009). In line with these studies, our data show that students who have never failed a school year are more satisfied with their school experience and show a greater capacity for compliance and emotional belonging, while a better capacity for self-regulated learning manifests itself for students with 2 or more years of school failure. Another aspect to consider is the future choices students would make in the event of school failure: students who expressed their intention to re-enroll in the same school are more satisfied with their school experience and report a greater attention and emotional involvement than the students willing to drop out. A similar direction was underlined for the students who showed higher school engagement in association with lower school intention to drop out.

In this sense we underline the importance of the previous school experience and its weight in the choices of future life choices in the event of dropping out.

The right to study, as explained in Article 34 of the Italian Constitution and in Article 26 of the Universal Declaration of Human Rights (1948), must be protected and enhanced for each student. This also means having the possibility to complete the study path in the most con-

genial and appropriate way possible for everyone's needs. This is a further result to which our study has come, taking into account that it involved students from vocational orientation schools. Furthermore, these results highlight the importance of promoting a social and emotional learning approach in the classroom. In other words, it is fundamental to improve, through interventions and good practices, the social relational skills not only of students but of all the main key players within the Italian school system. This can be a strategy to promote school well-being and reduce school dropout.

References

- APA. (2012). *Facing the school dropout dilemma*. Washington, DC: Author. Retrieved August, 10, 2017.
- Archambault, I., Janosz, M., Fallu, J. S., & Pagani, L. S. (2009). Student engagement and its relationship with early high school dropout. *Journal of Adolescence*, 32(3), 651-670.
- Benvenuto, G., Rescalli, G., & Visalberghi, A. (a cura di). (2000). *Indagine sulla Dispersione scolastica*. Firenze, Italia: La Nuova Italia.
- Bartolucci, M., & Batini, F. (2016). *Dispersione scolastica. Ascoltare i protagonisti per comprenderla e prevenirla*. Milano, Italia: Franco Angeli.
- Capperucci, D. (2016). L'abbandono precoce dell'istruzione e della formazione in Europa: cause, interventi e risultati. *Lifelong Lifewide Learning*, 12(28), 33-58.
- Christenson, S., Sinclair, M., Lehr, C., & Godber, Y. (2001). Promoting successful school completion: Critical conceptual and methodological guidelines. *School Psychology Quarterly*, 16(4), 468.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432.
- Freudenberg, N., & Ruglis, J. (2007) Reframing School Dropout as a Public Health Issue. *Preventing Chronic Disease*, 4, A107.
- Hardre, P. L., & Reeve, J. (2003). A motivational model of rural students' intentions to persist in, versus drop out of, high school. *Journal of Educational Psychology*, 95, 347-356
- ISTAT. (2017) *Noi Italia. 100 statistiche per capire il paese*. Retrieved from <http://www.istat.it>.
- Jacob, B., & Lefgren, L. (2009). The Effect of Grade Retention on High School Completion. *American Economic Journal of Applied Economics*, 1(3), 33-58.
- MIUR. (2017). *La dispersione scolastica nell'a.s. 2015/2016 e nel passaggio all'a.s. 2016/2017*. Roma, Italia: MIUR.
- Nurmi, J. E., Niemivirta, M., & Salmela-Aro, K. (2003). *The satisfaction with educational track scale*. Finland: University of Jyväskylä and University of Helsinki.
- Shin, D. C., & Johnson, D. M. (1978). Avowed Ed Diener happiness as an overall assessment of the quality Department of Psychology of life. *Social Indicators Research*, 5, 475-492.
- Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting: toward a motivational model of high school dropout. *Journal of Personality and Social Psychology*, 72(5), 1161.
- Wang, M. T., Willett, J. B., & Eccles, J. S. (2011). The assessment of school engagement: Examining dimensionality and measurement invariance by gender and race/ethnicity. *Journal of School Psychology*, 49(4), 465-480.

Strategie di inclusione scolastica, benessere in classe e processi di soggettivazione dei figli degli immigrati nella città di Napoli

Francesca Marone¹, Maria Navarra¹ e Francesca Buccini¹

¹ Università degli Studi di Napoli Federico II

Introduzione

La presenza di seconde generazioni (Rumbaut, 1997), figlie dell'immigrazione, ossia di giovani ragazzi e ragazze nati da genitori immigrati, ma nati e/o cresciuti in Italia, è una realtà ormai consolidata (Strozza, 2009).

L'attuale complessità della società italiana nel suo divenire sempre più multietnica e multiculturale chiede, pertanto, all'educazione di approcciarsi in maniera diversa ai curricula formativi, agli stili comunicativi, alla gestione educativa delle differenze e dei bisogni di apprendimento.

La relazione, l'incontro con gli altri, la gestione delle differenze sono i temi che oggi guidano i sistemi educativi, non soltanto mediante i contenuti di insegnamento-apprendimento, ma anche attraverso lo stile di insegnamento, un ambiente ricco di occasioni, il clima sociale positivo, le strategie metodologiche più appropriate. La presenza in classe di questi alunni/e, il confronto con altre culture, costituisce occasione preziosa per l'affermazione dell'identità culturale di tutti gli studenti, di comprensione e rispetto della diversità.

L'accesso all'istruzione rappresenta una meta fondamentale per questi giovani in quanto tende a favorirne l'inclusione nella cultura del paese di accoglienza, essendo l'ambiente scolastico il luogo privilegiato nel quale confrontarsi, riconoscendo e valorizzando la propria cultura di appartenenza. La costruzione dell'identità è, quindi, subordinata al rapporto con l'alterità e si alimenta dall'incontro con gli altri.

L'educazione interculturale, comparsa ufficialmente nella scuola italiana negli anni '90 attraverso la normativa scolastica, si basa "sulla consapevolezza che i valori che danno senso alla vita non sono tutti nella nostra cultura, ma neppure nelle culture degli altri...educare all'interculturalità significa costruire la disponibilità a conoscersi e farsi conoscere nel rispetto dell'identità di ciascuno..." (circolare ministeriale n. 73, 1994).

Oggi, a distanza di anni, le coordinate di politica educativa alle quali le istituzioni scolastiche devono fare riferimento sono ormai delineate e si fondano su precise scelte pedagogiche attente al riconoscimento e alla valorizzazione delle diversità, proponendosi di agire sul piano cognitivo, mediante la conoscenza e le informazioni sul mondo e sugli altri, e sul piano affettivo, dando attenzione alla relazione, all'interazione, alla storia di tutti e di ciascuno.

L'inserimento nelle classi e l'accoglienza, il clima relazionale, l'elaborazione di progetti specifici costituiscono, quindi, elementi basilari per l'effettiva realizzazione del diritto allo studio. L'azione di mediazione delle figure professionali educative, pertanto, ha come finalità quella di facilitare il percorso di costruzione della propria identità, dando ampio spazio alla dimen-

sione relazionale e all'interazione sociale tra alunne/i, utilizzando le peculiari diversità di ognuno da intendere come fonte di ricchezza e mai ostacolo (Marone, 2014).

Il presente contributo illustra i risultati provvisori di una ricerca ancora in corso sulle esigenze dei minori immigrati nelle scuole secondarie di primo grado della città di Napoli al fine di promuoverne il successo scolastico e formativo¹. La decisione di focalizzarsi su questa fase della scolarizzazione è stata dettata dal fatto che questa può essere considerata cruciale sul piano evolutivo per quanto riguarda l'acquisizione e il consolidamento delle competenze linguistiche e degli apprendimenti, ma anche rispetto a una riuscita integrazione dei soggetti giacché coincide con la definizione dell'identità personale (Besozzi, Colombo, & Santagati, 2012).

Domanda di ricerca e obiettivi

I minori di origine non italiana rappresentano il 25% della popolazione immigrata totale residente in Italia nel 2014. Lo stesso indicatore è del 16% in Campania. L'inserimento educativo delle seconde generazioni di immigrati è senza dubbio un obiettivo primario delle società europee moderne, multietniche e multiculturali, perché l'accumulo di capitale umano costituisce un prerequisito generale per una migliore inclusione nelle diverse sfere della vita quotidiana e, soprattutto, rappresenta la base per riuscire nel corso della vita. In altre parole, l'istruzione gioca un ruolo importante nel determinare una mobilità sociale intergenerazionale verso l'alto così da conseguire uno status socioeconomico più elevato in termini di condizioni di lavoro e di vita.

La presente indagine mira a comprendere gli elementi che determinano i processi di inclusione sociale e il successo formativo di questi ragazzi, per essere in grado di identificare gli aspetti ancora problematici di questo processo e le strategie da sviluppare.

Favorire percorsi di inclusione sociale in Italia e in Europa, basati su un approccio interculturale, significa farsi carico delle vulnerabilità psicologiche che esistono simultaneamente a traumi culturali (De Micco, 2011). Considerando questa doppia cornice di riferimento è possibile attuare percorsi in grado di affrontare le conseguenze della trasmissione transgenerazionale dell'esperienza migratoria anche in quegli adolescenti che non l'hanno vissuta in prima persona eppure ne vivono gli effetti a posteriori (Rosoli; 1988; Sayad, 2004).

Inoltre, a questi fattori si aggiungono diversi squilibri non facilmente etichettabili che a vario titolo concorrono ai processi di inclusione o piuttosto esclusione degli adolescenti figli di genitori immigrati. Si tratta di dinamiche complesse concernenti aspetti psicologici, politici, sociali e culturali che prendono forma e agiscono sia a livello collettivo sia individuale. I fattori determinanti, qui esplorati utilizzando diverse fonti di micro-dati, concernono i temi dell'abbandono scolastico, del rischio di discriminazione scolastica percepita e delle aspettative formative e occupazionali. Nello specifico, il focus della ricerca mira ad esplorare i sentimenti, le aspettative e gli ostacoli che fanno parte delle esperienze di apprendimento nelle carriere scolastiche dei giovani migranti.

Lo studio ha l'obiettivo ulteriore di discutere in che misura si possano creare a scuola spazi di cooperazione in cui la diversità sia sperimentata come valore, indagando la prospettiva

1. L'indagine è parte del programma di ricerca *School inclusion strategies and social cohesion challenges of immigrant immediate descendants in Italy* [Strategie di inclusione scolastica e opportunità di coesione sociale dei figli di immigrati in Italia] - SCHOOL/GEN2 (responsabile del progetto Giuseppe Gabrielli - Università degli Studi di Napoli Federico II), finanziato in data 07/03/2017 dal Programma per il finanziamento della ricerca di Ateneo (annualità 2017 e 2018), D.R. n.408 del 07/02/2017 (CUP: E6617000330001).

degli studenti, degli insegnanti e dei dirigenti, nonché dei rappresentanti delle associazioni, laddove siano presenti. Pertanto, il contributo identifica risorse, disagi, cambiamenti nelle attitudini degli studenti dei gruppi classe coinvolti in relazione alla diversità culturale e mappa i loro cambiamenti relativamente alla sensibilità interculturale, all'alfabetizzazione emozionale e alla disponibilità al confronto.

Metodologia, metodi e campione

Il campione della ricerca è costituito da 83 studenti frequentanti la scuola secondaria di primo grado (classi prime, seconde e terze). La distribuzione per genere è caratterizzata da 44 studentesse e 39 studenti, per un totale di 83 individui. Tra questi, 12 studentesse e 16 studenti sono "di seconda generazione". L'età media è di 12 anni.

Per la realizzazione dell'indagine, sono stati utilizzati alcuni strumenti di ricerca qualitativa in profondità, quali i focus group e la scrittura autobiografica.

Le modalità di conduzione dell'indagine e di coinvolgimento dei partecipanti, nonché gli argomenti trattati sono stati condivisi e partecipati, soprattutto nella fase di progettazione esecutiva, con i responsabili scolastici e/o i docenti di riferimento.

La ricerca, che si avvale del contributo di saperi pedagogici, psicologici e sociologici, è stata condotta in più fasi. La prima ha previsto incontri con la metodologia del focus group con gli studenti, la seconda fase ha previsto la produzione di narrazioni scritte e disegni; l'ultima fase ha visto coinvolti i genitori degli studenti "di seconda generazione" in focus group.

Gli incontri, opportunamente registrati e trascritti, costituiscono il corpus dei dati della prima fase di analisi.

Quanto emerso dalla prima fase della ricerca è stato analizzato con due metodologie: una che si avvale dell'utilizzo del software T-LAB; l'altra che, attraverso uno sguardo fenomenologico, ha favorito l'individuazione di cornici tematiche emergenti.

La seconda fase ha previsto la somministrazione di un questionario breve con domande aperte che invitavano gli studenti coinvolti a rispondere in forma narrativa, sia sotto forma di riflessioni autobiografiche, sia di metafore e infine, anche grafica, chiedendo di esprimere il proprio percepito tramite il disegno. Ciò al fine di esplorare le aspettative, il benessere, i desideri e le rappresentazioni che gli studenti hanno di sé stessi congiuntamente a quelli degli altri, significativi nel loro contesto di vita.

I contenuti narrativi sono stati valutati attingendo alla *grounded theory*, mediante l'analisi delle ricorrenze lessicali. In particolare, i dati qui discussi emersi dal corpus testuale preso in considerazione sono stati organizzati dapprima in matrici di sintesi e successivamente analizzati con il programma NVIVO.

Analisi e risultati

Dalla lettura fenomenologica delle narrazioni relative ai focus group sono emerse tre cornici tematiche:

- la polarizzazione delle relazioni tra compagni di classe divisi in due gruppi: femmine e maschi. Il gruppo *femmine* appare più coeso, senza sottogruppi interni e capace di integrare le ragazze di ogni cultura. Il gruppo "maschi" è più frammentato, con sottogruppi in aula e fuori dall'aula, in alcuni casi con divisioni nette tra *italiani* e *non italiani*. Sembra esserci una differenza di genere nell'accoglienza dell'alterità, visibile anche in quei casi

in cui il ragazzo “di seconda generazione”, che non riesce a collocarsi nel gruppo maschi, è accolto dal gruppo *femmine*;

- la scuola come luogo di apprendimento vs. gruppo classe come luogo di relazioni. Emerge la mancata integrazione tra istanze educative e aspetti relazionali che si proietta sulla visione del ruolo docente;
- le difficoltà relazionali legate all'apprendimento della lingua italiana. Nei casi degli studenti provenienti da paesi asiatici (Filippine, Cina, India), spesso ricongiunti ai genitori in Italia dopo un lungo periodo nei paesi di origine, si assiste a fenomeni di isolamento maggiore. In alcuni casi, colei o colui che conosce l'italiano meglio degli altri, diviene traduttore in classe, assumendo il ruolo di mediatore tra i docenti e i compagni e tra i docenti e i suoi genitori.

L'analisi condotta con l'ausilio del software T-LAB ha avuto come obiettivo quello di chiarire quanto emerso dalla lettura fenomenologica dei testi. Il processo di analisi ha restituito una soluzione a 3 cluster ciascuno dei quali riconducibile ad un tema omogeneo, pertanto l'analisi consente di riassumere gli aspetti più rilevanti secondo il punto di vista degli studenti. “Universo relazionale” è la definizione che abbiamo dato al cluster_01 che include lemmi (*videochiamata, bullismo, litigi, femmine, maschi, motivi, capire, cinese, fastidio, problemi, rispetto, scherzare, giudicare, imparare, aiutare, paura*) riguardanti le modalità di relazione tra gli studenti: netta divisione tra i generi, conflittualità diffusa e relazioni mediate spesso dall'utilizzo dei cellulari. La presenza dei lemmi bullismo/paura ci pone interrogativi di complessità maggiore, per l'assenza di riferimenti agli insegnanti, agli adulti e al sistema scolastico in generale.

È solo nel cluster_03, disposto sul piano fattoriale in un quadrante distante da quello del cluster_01, che la scuola fa la sua comparsa: *parlare, professore, scuola media, classe, cambiare, persone, comportamento, conoscere, gruppo* è l'insieme di lemmi di cui il cluster è composto. Rinominandolo “Universo scolastico”, ci si rende conto della distanza che nelle narrazioni degli studenti si frappone tra la scuola e le relazioni, o meglio, come se l'universo relazionale fosse un sottoinsieme di quello scolastico, in esso contenuto ma separato in cui l'insegnante non è considerato un adulto a cui riferirsi. Nel cluster_02 confluiscono i lemmi che raccontano il tempo libero degli studenti (*casa, compiti, uscire, giocare, amico, divertire*). I lemmi dei cluster non contengono aggettivi: sono caratterizzati da oggetti (e soggetti) e sembrano essere narrabili ma di difficile accesso.

Secondariamente si è proceduto con l'analisi narrativa delle risposte scritte relative alle domande del questionario, incentrate sui temi della socializzazione con la finalità di far emergere rappresentazioni, attribuzioni causali e vissuti legati all'esperienza scolastica, alle relazioni familiari e tra pari, ai percorsi di apprendimento e al successo formativo; indagando altresì il ruolo delle rete, dei dispositivi mobili e dei social network attraverso l'utilizzo di molteplici punteggiature, sfumature e contenuti di senso.

La rappresentazione grafica ottenuta, in cui le parole presenti in un testo vengono rappresentate con font di dimensioni proporzionali alla loro diffusione nel testo e riorganizzate in base ad una forma, è stata elaborata applicando alcuni correttivi. A partire dalle matrici di sintesi dei dati, si è proceduto alla creazione di un elenco di *Stop Words*, ossia adottando un criterio di esclusione grammaticale (pronomi, preposizioni). Il grafico *Word Cloud* così costruito mostra dunque la frequenza delle parole salienti maggiormente utilizzate dai ragazzi per rispondere alle domande riguardanti l'integrazione scolastica, gli episodi significativi avvenuti durante l'anno scolastico, le loro aspettative per il futuro e le soluzioni che propongono a genitori, compagni ed insegnanti per migliorare il clima in classe.

In particolare, le 50 parole più utilizzate evidenziano l'idea dei ragazzi che l'integrazione passi attraverso la conoscenza della lingua italiana (*parlare, l'italiano, lingua*). Emerge inoltre "cinese" come unico riferimento ad una origine altra, confermando una maggiore difficoltà, e curiosità, in relazione a compagni di classe che nella nostra esperienza di ricerca hanno mostrato grande difficoltà nel comunicare in italiano. Emerge il valore dello studio e il ruolo degli insegnanti, così come emerge la possibilità che l'integrazione possa passare anche attraverso esperienze extrascolastiche (*gita, giro, gruppo*).

Discussione

La scuola fatica ad adattarsi ai cambiamenti e molti insegnanti sembrano resistere ad essi, manifestando l'adesione a volte solo formale a progetti o azioni da intraprendere. Il nodo dell'apprendimento, e quindi anche dell'integrazione, è rappresentato dalla conoscenza dell'italiano, per la comunicazione e per lo studio. Anche il rapporto scuola-famiglia viene individuato come un aspetto critico tra i più importanti, per le carenze e le difficoltà di comunicazione, di condivisione, di sostegno reciproco tra genitori e insegnanti. L'idea di integrazione per gli intervistati significa "sentirsi parte", accettazione e apertura, comunicazione, possibilità di incontro e di confronto. Nella descrizione del clima di classe o di scuola a volte emergono episodi che ben descrivono le difficoltà delle relazioni tra gli studenti. Rari, ma presenti, sono il fenomeno del bullismo o le forme di contrapposizione tra gruppi, così come la tendenza a fare gruppo tra studenti della stessa nazionalità. L'assenza di aggettivi, cioè di riferimenti alla qualità delle esperienze, segnala la scarsa alfabetizzazione emotiva degli studenti e la necessità di un progetto di educazione affettiva in cui creare esperienze di apprendimento attraverso le quali gli studenti possano acquisire consapevolezza dei propri stati affettivi, confrontandoli quelli dei compagni. Gli studi di pedagogia interculturale testimoniano il bisogno di fornire agli insegnanti non solo degli strumenti metodologici e linguistici, ma anche dei percorsi per formarsi alle capacità relazionali. L'insegnante si fa mediatore, facilitatore nel riconoscimento del valore delle culture che vengono in contatto fra loro ai fini di un arricchimento reciproco. Solo così è possibile ripensare strategie, percorsi e modelli formativi più adeguati per discenti e docenti; didattiche e teorie pedagogiche che ospitino soggetti reali con i loro talenti e le loro biografie.

Attività aggiuntive di valorizzazione della lingua e della cultura d'origine, anche mediante coinvolgimento della famiglia, delle comunità straniere, degli enti locali rendono effettivamente realizzabile il diritto alla scuola come volano di sviluppo personale e familiare. Gli adolescenti di seconda generazione, corrono il rischio di sviluppare un'ambivalenza identitaria a sua volta causa di conflitti generazionali tra le origini e il contesto in cui vivono. "Questi bambini, soprattutto una volta divenuti adolescenti, sono spinti da un'ambizione divorante d'identità al singolare. [...] Non riconoscere il loro ruolo porterà al conflitto, non alla costruzione di un legame, e diventerà allora davvero grande il rischio che, per soddisfare il proprio bisogno di riconoscimento, loro cedano alla tentazione divorante della singolarità, anche a prezzo della violenza" (Moro, 2000, p. 23). Pertanto, compito della scuola è contribuire a favorire positivamente la formazione di un'identità ibrida, vivendo e interiorizzando la cultura e i valori della "nuova società", senza rinnegare le proprie radici. In questa prospettiva si conciliano unità e diversità, si sviluppano i concetti di dialogo e accoglienza, il principio di uguaglianza si integra con il riconoscimento e la valorizzazione della diversità. Fondamentale è l'azione della scuola, quindi, come luogo di educazione e di alfabetizzazione alla complessità dei segni e dei linguaggi presenti nel paesaggio socioculturale dei ragazzi. L'intersezione tra le esperienze di alunni portatori di diversi modelli culturali consente, me-

dianche l'estensione delle mappe cognitive ed affettive di ciascuno una espansione della personalità in direzione sociale e relazionale. La curiosità e l'interesse per l'altro, nasce proprio nella scuola, e rappresenta l'unica possibilità in grado di contrastare l'intolleranza, senza annullare le differenze e soprattutto senza appiattirle con l'indifferenza. La condizione che più caratterizza questi ragazzi è, tuttavia, l'essere costantemente in bilico tra due culture, il vivere una condizione di "disorientamento linguistico" (Coluccia & Ferretti, 2010, p. 22), che non fa riferimento solo alla questione della conoscenza di più lingue in quanto "chi vive la cultura e parla la lingua, oltre che conoscere le 'cose', condivide anche il modo di pensare, di interpretare il mondo, di fare inferenze e predizioni" (Bettoni, 2006, p. 5). La valorizzazione del plurilinguismo, in rapida diffusione all'interno del sistema scolastico, rappresenta un'opportunità in questa prospettiva. Il mantenimento della lingua d'origine, che ha risvolti positivi sulla crescita cognitiva, deve essere oggi considerato un diritto in quanto "la lingua materna non è un vestito o un guanto che si toglie che si mette, ma un elemento costitutivo della storia e dell'identità di ciascuno" è "un sistema di segni, di immagini, di concetti, di rappresentazioni possibili, di cripte; un universo che abitiamo e che portiamo con noi" (De Mauro, 1995, p. 90).

Bibliografia

- Besozzi, E., Colombo, M., & Santagati, M. (2012). *Misurare l'integrazione nelle classi multietniche*. Rapporto ISMU.
- Bettoni, C. (2006). *Usare un'altra lingua. Guida alla pragmatica interculturale*. Roma-Bari, Italia: Laterza.
- Circolare Ministeriale 2 marzo 1994, n. 73. Disponibile da https://www.edscuola.it/archivio/norme/circolari/cm073_94.html
- Coluccia, A., & Ferretti, F. (2010). *Immigrati di seconda generazione a scuola. Una ricerca in Toscana*. Milano, Italia: FrancoAngeli
- De Mauro, T. (1995). *Seimila lingue nel mondo. "Introduzione" alla collana "I Mappamondi"*. Roma, Italia: Sinnos Editrice.
- De Micco, V. (2011). Dal trauma alla memoria. Il gruppo interno tra origine e appartenenza in bambini migranti. *Gruppo e migrazioni*, 25.
- Marone, F. (2014). Seconde generazioni crescono: modelli pedagogici, pratiche per l'inclusione e costruzioni identitarie. In P. Donadio, G. Gabrielli, & M. Massari (a cura di), *Uno come te. Europei e nuovi europei nei percorsi di integrazione* (pp. 131-154). Milano, Italia: FrancoAngeli-Ismu.
- Moro, M. R. (2000). *Enfants d'ici venus d'ailleurs. Naître et grandir en France*. Paris, France: La Découverte et Syros.
- Rosoli, G. (1988). La condizione sanitaria dell'emigrante. In *Atti del I Convegno internazionale Medicina e Migrazioni*. Roma, Italia.
- Rumbaut, R. (1997). Assimilation and its discontents: between rhetoric and reality. *International Migration Review*, 31(4), 923-960.
- Sayad, A. (1999). *La double absence*. Paris, France: Editions du Seuil.
- Strozza, S. (2009). Le seconde generazioni: il punto della situazione in Italia. In O. Casacchia, L. Natale & A. Guarneri (a cura di), *Tra i banchi di scuola. Alunni stranieri e italiani a Roma e nel Lazio* (pp. 19-42). Milano, Italia: FrancoAngeli.

Wellbeing PArtners: a targeted approach to minimizing PA student burnout

Stephanie Neary¹ and Mary Ruggeri¹

¹ Yale University PA Online Program

Introduction

Clinician burnout is a pervasive problem in the medical field with prevalence estimates hovering around 50% of current providers and medical students alike (Nedrow, Steckler, & Hardman, 2013). There is no universal definition of burnout, but key signs and symptoms overlap significantly with the diagnostic criteria of depression. This study focuses on identifying demographics that may put students at risk, understanding perceived willingness to use mental health resources, and addressing mental health stigma among physician assistant (PA) students. We aim to determine whether discussing mental illness and linking students with relevant and specific resources during PA training impacts burnout, depression, and comfort seeking help from mental health professionals during their training. Our hope is that by reducing stigma and providing students with tools and resources, we can reduce the barriers to seek treatment and better prepare them for a career in medicine.

Research Question and Aims

Despite the knowledge that suicide rates among physicians are twice that of the general population and ~50% of physicians are struggling with burnout, few studies explore the role that addressing well-being and mental health stigma during medical training may play in reducing depression and burnout rates during clinical practice (Nedrow et al., 2013; Dyrbye, Massie, & Eacker, 2010). While the majority of research has focused on physicians, increased rates of burnout and depression are not limited to this role. Rather, this problem affects other clinicians as well, including nurse practitioners, pharmacists and physician assistants (Tawfik et al., 2018). This project seeks to determine if there is a significant link between key demographic and environmental factors and PHQ-9 scores of students at various stages of their training.

A 2016 study of >2100 female physicians revealed that, “almost 50% of women believed that they had met the criteria for mental illness but had not sought treatment” (Gold, Andrew, Goldman, & Schwenk, 2016, abstract). Additionally, it found that only 6% of physicians who had received a formal mental illness diagnosis or treatment of a mental illness had disclosed this information on their state licensure applications. Among the primary reasons cited for avoiding mental health care were both the belief they could self-manage and the belief that a mental illness diagnosis would be embarrassing or shameful (Gold et al., 2016). By creating

a learning environment where mental health and well-being is openly discussed, and students are actively linked with resources and encouraged to seek care, we hope to change the foundation of how medical providers view their own mental health. A recent study shows that PA students begin to experience burnout while in school, including emotional exhaustion, depersonalization and feelings of low personal accomplishment (Orozco, Furman, Roman, Guthrie, & Jackson, 2015). Our aim is to provide mental health tools and resources to support students both as they enter school and throughout their training, as well as identify and work to reduce the factors that may serve to exacerbate these conditions.

Multiple focus groups were held with current PA students at different phases of their training throughout the development of this study. We found that many students felt they were alone in feeling overwhelmed, stressed or struggling with a mental illness. Their concerns extended beyond the difficulty of their medical training to include increased relationship or marital complications, changes in support networks, physical health, and financial stressors. These findings prompted us to capture both demographic and environmental factors, along with PHQ-9 scores, as part of our research. The target population for this project is first year physician assistant students across the US. In 2017, there were 224 accredited PA programs ranging from 20-300 students each (potential impact of 9750 students according to 2017 data). The number of accredited PA programs continues to grow each year.

Methods

At orientation, mid-point didactic (6 months into curriculum), and end-point didactic (12 months into curriculum), students will complete Patient Health Questionnaire (PHQ-9) screening and a series of 20 demographic and environmental questions. Demographic questions range from gender, age, and marital status to method of paying tuition, perceived level of support, and recent life changes. Additionally, students are asked whether they believe they would reach out for professional mental health help if needed and if they are confident in knowing what mental health resources are available to them. Students are then immediately provided program-specific mental health resources and granted access to an original well-being website, Wellbeing PARTners, that provides a compilation of continuously evolving, new and curated contents. The resources included, and topics addressed on the website, were compiled based on information derived from focus groups held with current PA students in multiple programs. The Wellbeing PARTners website also includes videos from other PA students who have elected to share their personal stories, reinforcing to viewers that they are not alone in their experience and working to reduce stigma among students. Along with each resource, students answer a poll regarding their perceived usefulness of the resource and their desire to see more, similar content. This feedback is used to support future iterations of the website and drive further development, but is not analyzed formally as part of the study. Currently, success of the website is gauged on the amount and type of feedback as well as number of unique visitors.

Analyses, results and discussion

Multiple regression analysis will be used to analyze collective data from all participating PA programs and determine the value of the independent variables (a variety of student

demographic and program specific factors) on the dependent variable (PHQ-9 score). Each of the three surveys will be treated as three separate time points, with time being factored in as a covariate¹. This project has the ability to give PA educators well-being data that is not only specific to our profession, but also specific to the PA student population in particular. Formal data of this nature does not currently exist. Currently, PA educators must rely on existing publications that focus on practicing PAs, physicians, or medical students to predict trends in the student population.

As PA educators, our role is to facilitate the training and development of the next generation of providers. We view it as our responsibility to identify evidence-based ways to successfully prepare our students for a career in medicine, developing both their clinical acumen and personal well-being. We believe that a crucial part of this responsibility lies in fostering an environment where mental health is managed with the same attention and support as physical health. By modeling this in training programs, we hope that students will carry these ideals forward into their careers as practicing PAs. Our hope is to reduce student burnout while in school, provide coping mechanisms for stress as well as awareness of and access to mental health resources - a collection of knowledge and skills that will translate into their future careers.

In addition to the reduction of burnout, we believe strongly in the promotion of well-being and the impact of positive psychology. The implementation of this program, we believe, will allow us to identify at-risk students and not only mitigate depression and anxiety, but actively work to improve student well-being. By connecting students with mental health resources and making the usage of these resources a very normal and frequent part of our cohort-wide discussions, we believe this is a first, and critical, step in reducing the stigma around mental health for medical providers. As a profession we have established and accepted that burnout and mental illness are prevalent among providers; it is now time to begin working towards a solution.

The pilot of this project was launched in January of 2019 within the Yale PA Online Program. 49 of 59 students consented to this study. During orientation, PHQ-9 screening results revealed that 22% of incoming students scored a 5 (mild depression) or above, 22% reported feeling hopeless, down or depressed, and 4% expressed suicidal ideation. Additionally, 43% expressed both not feeling confident knowing what mental health resources are available and not feeling confident they would reach out if they needed help. This is significant as most current research focuses on practicing PAs, with attention given to work hours, clinical setting, and stress of the job leading to burnout. This pilot study shows us that these early signs of burnout are present in many students entering their training, conflicting with current research that suggests that high rates of burnout are due to these other job-related factors. This early data reinforces the idea that increased attention needs to be given to creating training programs that address mental health stigma and promote well-being.

With the launch of this study to multiple PA programs starting in May 2019, we will be able to correlate PHQ-9 scores to the 20 different demographic and environmental questions surveyed and gain a stronger understanding of how to reduce stigma, improve access to resources, and promote well-being among future PAs across the US. With 57 unique visitors

1. This data will be available by summer 2019, in time for presenting at the conference.

and 336 total page views in the first month the website was available to the pilot program's students, the Wellbeing PARTners website is helping provide evidence-based mental health tools to support students both as they enter school and throughout their training. Feedback from this initial pilot has been overwhelmingly positive and with the impending expansion, we are excited to see the continued impact this project will make on our profession. This study is not without limitations, most notably, that a control group is not being used. Given the nature of the content, it was decided that all students should be given access to the appropriate mental health resources and access to these resources should not be withheld for the purposes of this study. Additionally, students are unable to be tracked over the year as each survey is administered independently and anonymously so only aggregate cohort data can be viewed, rather than tracking the progression of individual students over 12 months. This approach was selected to provide the highest level of anonymity to students.

References

- Dyrbye, L., Massie, F., & Eacker, A. (2010). Relationship between burnout and professional conduct and attitudes among U.S. medical students. *JAMA*, *304*, 1173-1180.
- Gold, K., Andrew, L., Goldman, E., & Schwenk, T. (2016). "I would never want to have a mental health diagnosis on my record": A survey of female physicians on mental health diagnosis, treatment, and reporting. *General Hospital Psychiatry*, *43*, 51-57. doi:10.1016/j.genhosppsych.2016.09.004
- Nedrow, A., Steckler, N., & Hardman, J. (2013). Physician resilience and burnout: Can you make the switch? *Family Practice Management*, *20*(1), 25-30.
- Orozco, J. M., Furman, J. A., Roman, C., Guthrie, J., & Jackson, C. (2016). Burnout prevalence in PA students. *Journal of the American Academy of Physician Assistants*, *29*(10), 1. doi:10.1097/01.jaa.0000490115.04561.27
- Tawfik, D. S., Profit, J., Morgenthaler, T. I., Satele, D. V., Sinsky, C. A., Dyrbye, L. N., . . . Shanafelt, T. D. (2018). Physician Burnout, Well-being, and Work Unit Safety Grades in Relationship to Reported Medical Errors. *Mayo Clinic Proceedings*, *93*(11), 1571-1580. doi:10.1016/j.mayocp.2018.05.014

Not in Education, Employment or Training: transizione all'età adulta, pianificazione del futuro e ricadute sulla salute nel contesto italiano

Anna Parola¹, Jenny Marcionetti² e Lucia Donsì¹

¹ Università degli Studi di Napoli Federico II

² Scuola universitaria professionale della Svizzera italiana

Introduzione

I cambiamenti nel passaggio all'epoca post-moderna, caratterizzata da incertezza e instabilità del mercato del lavoro e organizzazioni fluide, (*de-jobbing*, Savickas, 2012) hanno inciso notevolmente sui tempi della transizione dalla scuola al mondo del lavoro (Bynner & Parsons, 2002) e sul numero di transizioni di carriera che gli individui devono compiere nell'arco della vita (Savickas, 2007).

I giovani tenuti ai margini del mercato del lavoro vengono comunemente definiti come NEET. L'acronimo - *Not in Education, Employment or Training* - è utilizzato sia a livello mondiale che europeo (Agnoli, 2015; Quintini & Martin, 2006) come categoria definitoria dei giovani che non sono inseriti in percorsi di istruzione e formazione né occupati. La letteratura sul tema mostra quanto la dilatazione della transizione al mondo del lavoro (Bynner, 2012; Bynner & Parsons, 2002) abbia notevoli ripercussioni sui piani di carriera dei giovani (Leccardi, 2006). L'individuo, terminato il periodo della scolarizzazione, sperimenta periodi di forte instabilità ed incertezza con conseguenze sulla transizione all'età adulta (*delay syndrome*, Livi Bacci, 2008; Arnett, Žukauskienė, & Sugimura, 2014). Inoltre, non sperimentare in giovane età un primo passaggio al mondo del lavoro rappresenta un fattore di rischio in termini di sviluppo perché ostacola l'acquisizione di quel capitale identitario (Côté, 1997) necessario per un futuro inserimento nel mercato del lavoro accedendo a stipendi dignitosi (*decent work*, Duffy, Blustein, Diemer, & Autin, 2016).

Accanto a questo, l'assenza di lavoro incide sul benessere psicologico. La letteratura riporta effetti sulla partecipazione sociale e politica (Nardi et al., 2013) e una percezione di malessere legata al proprio stato di salute (Parola & Donsì, 2018). Numerose sono le review e meta-analisi che riportano la presenza di stati depressivi e ansiosi e insorgenza di psicopatologie (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Paul & Moser, 2009). Inoltre, studi riportano effetti negativi sulla salute a lungo termine: sintomi psicosomatici, e più in generale psicologici, in età adulta sono riportati come conseguenze della disoccupazione giovanile (Brydsten, Hammarström, Strandh, & Johansson, 2015).

Obiettivi e scopi

Obiettivo della ricerca è la comprensione delle dinamiche psicologiche connesse al fenome-

no NEET, al fine di studiare come e quanto i fattori economico-contestuali attuali che caratterizzano la condizione NEET influenzino alcune dinamiche evolutive dei giovani adulti e impattino sulla salute psicologica. In particolare, lo studio si propone di comprendere se allo status NEET possano associarsi difficoltà nella capacità di progettazione del futuro, ritardi nella transizione all'età adulta e se a tutto ciò possano anche correlarsi livelli di malessere sia interno che agito all'esterno.

Per fare questo, lo studio si propone di testare la differenza tra NEET e non-NEET per poter meglio discriminare quanto ciò che emerge sia specifico della condizione NEET al netto delle problematiche già insite nella fascia d'età dei giovani adulti, note nella letteratura della psicologia dello sviluppo (Arnett, 2007; Arnett et al., 2014; Reifman, Arnett, & Colwell, 2007). Obiettivi specifici sono di rilevare a) gli atteggiamenti verso il futuro e progettualità; b) la percezione rispetto alla transizione all'età adulta; c) la presenza di problematiche internalizzanti e/o esternalizzanti della salute.

Metodo

Partecipanti

Lo studio ha coinvolto 450 giovani dai 25 ai 34 anni della regione Campania, 150 studenti (75M; 75F) 150 occupati (75M; 75F) e 150 NEET (75M; 75F). Per i criteri di rappresentatività, la dimensione del simple-size è stata calcolata a priori con l'ausilio del software G*Power 3.1.9.2 (Faul, Erdfelder, Buchner, & Lang, 2009), tenendo conto della percentuale di giovani NEET nella fascia d'età scelta per la Campania, regione con la percentuale più alta di NEET nel contesto italiano (al momento della rilevazione dati, 38.8%; Istat, 2018). La raccolta dati è stata effettuata dal primo autore nell'anno 2018.

Misure

Short-Form Time Perspective Inventory (S-TPI; validazione italiana di D'Alessio, Guarino, De Pascalis, & Zimbardo, 2003). È stata somministrata la Scala del Futuro (PT.F, 9-items). Ai soggetti è chiesto di ripensare alle esperienze presenti e future della propria vita e indicare su una scala da 1 (=molto falso) a 5 (=molto vero) quanto le affermazioni sono vere per sé. Per la scala l' α di Cronbach è pari a .80.

Scala di Autocollocazione per la Percezione della Transizione all'età adulta (Donsì, Parrello, & Castelluccio, 2002). Ai giovani è chiesto di ripensare alla propria transizione e indicare il proprio posizionamento scegliendo un punteggio da 1 (=adolescenza) a 7 (=età adulta).

Adult Self Report 18-59 (ASR; Achenbach & Rescorla, 2003). Sono state somministrate 4 Syndromic Scales: Anxious/Depressed (18-items); Withdrawn (8-items); Aggressive Behavior (15-items); Rule-Breaking Behavior (14-items). Ai soggetti è richiesto di leggere una serie di affermazioni che descrivono le persone e indicare per ogni voce quanto esse li descrivano allo stato attuale o negli ultimi sei mesi, su una scala da 0 (=non vero) a 2 (=molto vero o molto spesso). Per questo studio l' α di Cronbach per ogni singola scala è pari rispettivamente a .93, .88, .89, .72.

Analisi dei dati

Come analisi preliminari sono state calcolate medie, deviazioni standard e correlazioni sulle

variabili Prospettiva temporale Futura (PT.F), Transizione e Syndromic Scales. Ai fini di creare un unico gruppo di confronto (Non-NEET) con la categoria NEET, è stato condotto il test di significatività delle correlazioni tra Studenti e Occupati. È stata poi condotta un'analisi della varianza (ANOVA) per verificare la differenza tra i gruppi (NEET vs Non NEET) per le variabili dipendenti.

In seguito, è stato effettuato un modello di equazioni strutturali (SEM) per testare l'incidenza della condizione NEET sulle variabili di outcome poste nel modello, con l'ausilio del software AMOS. Nel dettaglio, la variabile NEET (1=Non NEET; 2=NEET) è stata impostata come predittore e le variabili PT.F, Transizione e le Syndromic Scales come outcome. Per il modello, sono stati considerati differenti indici di fit: goodness-of-fit index (GFI), comparative fit index (CFI), Tucker-Lewis index (TLI), e root mean square error (RMSEA). In linea con la letteratura, il modello risulta adeguato se presenta buoni indici di fit per GFI, CFI e TLI con valori approssimativamente intorno al .90 o superiore (Medsker, Williams, & Holahan, 1994); e RMSEA .08 o inferiore (Byrne, 2010).

Risultati

Le analisi di correlazione sulla totalità del campione mostrano che le più forti correlazioni sono presenti tra le scale dell'ASR, Anxious/Depressed e Withdrawn ($r=.79, p\leq.01$), Anxious/Depressed e Aggressive Behavior ($r=.82; p\leq.01$), Withdrawn e Aggressive Behavior ($r=.73; p\leq.01$). Di tali correlazioni si è tenuto conto all'interno del modello di equazioni strutturali.

Il test di significatività delle correlazioni effettuato tra Studenti ed Occupati mostra che i due gruppi possono essere considerati appartenenti alla stessa popolazione. L'analisi della varianza, condotta per effettuare un confronto tra i gruppi NEET e Non-NEET, mostra una differenza significativa per tutte le variabili dello studio: PT.F, $M_{\text{studenti}}=30.33; M_{\text{occupati}}=32.57; M_{\text{NEET}}=28.53; F(2,447)=16.563, p<.001, \eta^2=.069$; Transizione all'età adulta, $M_{\text{studenti}}=4.90; M_{\text{occupati}}=5.65; M_{\text{NEET}}=4.61; F(2,447)=26.748, p<.001, \eta^2=.107$; Anxious/Depressed, $M_{\text{studenti}}=13.13; M_{\text{occupati}}=9.60; M_{\text{NEET}}=18.41; F(2,447)=46.789, p<.001, \eta^2=.173$; Withdrawn, $M_{\text{studenti}}=4.40; M_{\text{occupati}}=3.25; M_{\text{NEET}}=6.71; F(2,447)=27.149, p<.001, \eta^2=.108$; Aggressive Behavior, $M_{\text{studenti}}=7.62; M_{\text{occupati}}=5.36; M_{\text{NEET}}=10.17; F(2,447)=18.830, p<.001, \eta^2=.078$ e Rule-Breaking Behavior, $M_{\text{studenti}}=2.62; M_{\text{occupati}}=2.52; M_{\text{NEET}}=4.39; F(2,447)=15.830, p<.001, \eta^2=.066$.

Gli indici di fit del modello di equazioni strutturali (SEM) mostrano un buon adattamento del modello ai dati, $\chi^2(21)=166.26, CFI=.999, NFI=.999, TLI=.988, RMSEA=.046$.

I risultati mostrano un effetto della condizione NEET sulle variabili PT.F. ($\beta=-.22, p<.001$), Transizione ($\beta=-.12, p<.01$), Anxious/Depressed ($\beta=.25, p<.001$), Withdrawn ($\beta=.17, p<.001$), Aggressive Behavior ($\beta=.12, p<.01$) e Rule-Breaking Behavior ($\beta=.19, p<.001$). Inoltre, la visione negativa del futuro ha un effetto sulle scale Anxious/Depressed ($\beta=-.36, p<.001$), Withdrawn ($\beta=-.45, p<.001$), Aggressive Behavior ($\beta=-.34, p<.001$), e Rule-Breaking Behavior ($\beta=-.28, p<.001$). Dai risultati emerge anche che una percezione minore di transizione all'età adulta ha un effetto su alcune Syndromic Scale, e in particolare sulle scale Anxious/Depressed ($\beta=-.23, p<.001$), Withdrawn ($\beta=-.20, p<.001$) e Rule-Breaking Behavior ($\beta=-.26, p<.001$).

Conclusioni

La ricerca mostra che i fattori economico-contestuali che caratterizzano la condizione

NEET influenzano le dinamiche evolutive dei giovani e impattano sulla loro salute psicologica. Il confronto tra giovani NEET e giovani Non-NEET ha infatti permesso di comprendere quanto la condizione di inattività lavorativa e formativa pesi sullo sviluppo e sul benessere dell'individuo.

I risultati mettono in luce che i giovani NEET si sentono ancora indietro rispetto all'età adulta, considerando il lavoro come un fattore necessario alla transizione e, accanto a questo, il futuro assume una coloritura negativa. Inoltre, essere NEET ha un forte impatto sulla salute psicologica, in termini sia di *internalizing* (ansia, depressione, ritiro sociale) sia di *externalizing* (comportamenti aggressivi e trasgressivi).

La ricerca non è priva di limiti, già oggetto di discussione per direzioni future di ricerca. In particolare, potrebbe essere utile, accanto alla dimensione di rischio, cogliere se e quali fattori protettivi possano invece intervenire per diminuire gli effetti della condizione di disoccupazione sulla salute. Accanto a questo, proprio in relazione alla direzione degli effetti, sarebbe auspicabile adottare studi di tipo longitudinale. In conclusione, la ricerca mette in luce come una transizione non adattiva al mondo del lavoro risulti essere una condizione di rischio per gli adolescenti e i giovani che si avviano al processo di costruzione delle proprie carriere nell'epoca del *de-jobbing* (Savickas, 2012). I nostri risultati confermano l'importanza di definire modelli di intervento di counseling che possano sostenere i giovani nel processo di costruzione di carriera, tenendo conto delle dinamiche del contesto in cui i giovani sono inseriti.

Bibliografia

- Achenbach, T. M., & Rescorla, L. A. (2003). *Manual for the ASEBA adult forms & profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, and Families.
- Agnoli, M. S. (2015). *Generazioni sospese. Percorsi di ricerca sui giovani*. Milano, Italia: FrancoAngeli.
- Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives*, 1(2), 68-73.
- Arnett, J. J., Žukauskienė, R., & Sugimura, K. (2014). The new life stage of emerging adulthood at ages 18-29 years: implications for mental health. *The Lancet Psychiatry*, 1(7), 569-576.
- Brydsten, A., Hammarström, A., Strandh, M., & Johansson, K. (2015). Youth unemployment and functional somatic symptoms in adulthood: results from the Northern Swedish cohort. *The European Journal of Public Health*, 25(5), 796-800.
- Bynner, J. (2012). Policy reflections guided by longitudinal study, youth training, social exclusion, and more recently NEET. *British Journal of Educational Studies*, 60(1), 39-52.
- Bynner, J., & Parsons, S. (2002). Social exclusion and the transition from school to work: the case of young people not in education, employment or training. *Journal of Vocational Behavior*, 60, 289-309.
- Byrne, B. (2010). *Structural equation modelling with AMOS* (2nd ed.). New York, NY: Routledge.
- Côté, J. E. (1997). An empirical test of the identity capital model. *Journal of Adolescence*, 20, 577-597.
- D'Alessio, M., Guarino, A., De Pascalis, V., & Zimbardo, P. G. (2003). Testing Zimbardo's Stanford Time Perspective Inventory (STPI) - short form. An Italian study. *Time & Society*, 12, 333-347.
- Donsì, L., Parrello, S., & Castellaccio, G. (2002). Esperienze di autonomia e prospettiva temporale: una ricerca con studenti universitari meridionali. *Ricerche di Psicologia*, 2, 137-155.

- Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K. L. (2016). The psychology of working theory. *Journal of Counseling Psychology, 63*, 127-148.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: tests for correlation and regression analyses. *Behavior research methods, 42*, 1149-60.
- Istat. (2018). Disponibile da: http://dati.istat.it/Index.aspx?DataSetCode=DCCV_NEET1
- Leccardi, C. (2006). Redefining the future: Youthful biographical constructions in the 21st century. *New directions for child and adolescent development, 113*, 37-48.
- Livi Bacci, M. (2008). *Avanti giovani, alla riscossa. Come uscire dalla crisi giovanile in Italia*. Bologna, Italia: Il Mulino.
- McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of applied psychology, 90*(1), 53-76.
- Medsker, G. J., Williams, L. J., & Holahan, P. J. (1994). A review of current practices for evaluating causal models in organizational behavior and human resources management research. *Journal of Management, 20*, 439-464.
- Nardi, B., Arimatea, E., Giunto, P., Lucarelli, C., Nocella, S., & Bellantuono, C. (2013). Not Employed in Education or Training (NEET) adolescents with unlawful behaviour: an observational study. *Journal of Psychopathology, 19*, 42-48.
- Parola, A., & Donsi, L. (2018). Sospesi nel tempo: inattività e malessere percepito in giovani adulti NEET. *Psicologia della Salute, 3*, 44-73.
- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational behavior, 74*(3), 264-282.
- Quintini, G., & Martin, S. (2006). *Starting well or losing their way? The position of youth in the labour market in Oecd countries*. OECD Social, Employment and Migration Working Papers, No.39. Paris, France: OECD Publishing.
- Reifman, A., Arnett, J. J., & Colwell, M. J. (2007). Emerging adulthood: Theory, assessment and application. *Journal of Youth Development, 2*(1), 37-48.
- Savickas, M. L. (2007). Internationalisation of counseling psychology: Constructing cross-national consensus and collaboration. *Applied Psychology: An International Review, 56* (1), 182-188.
- Savickas, M. L. (2012). Life design: A paradigm for career intervention in the 21st century. *Journal of Counseling & Development, 90*(1), 13-19.

The interaction between low quality of peer relationships at school and risk taking-tendency on substance use in adolescence: evidence from a longitudinal study

Serena Petrocchi¹, Peter J. Schulz¹ and Anne-Linda Camerini¹

¹ Università della Svizzera italiana

Among the potential risk factors for substance use in adolescence, low quality peer relationships at school (Hemphill et al., 2011; Kim, Catalano, Haggerty, & Abbott, 2011; Niemala et al., 2011; Sigurdson, Wallander, & Sund, 2014) and risk taking-tendency (Desrichard & Denarie, 2005; Schutter, van Bokhoven, Vanderschuren, Lochman, & Matthys, 2011) are two individual predictors. According to Gottfredson and Hirschi's (1990) theory, deviant actions, such as smoking and drinking, are more likely to occur when a person with low self-control has the opportunity of a misconduct (Gottfredson & Hirschi, 1990). Our thesis is that low quality of peer relationship at school, in the form of bullying tendency, exposes individuals with low-self-control to a high-risk environment that enhance the probability to behavioural risk decision-making, such as smoking and drinking (Gerrard, Gibbons, Houlihan, Stock, & Pomeroy, 2008; Wills & Dishion, 2004). We hypothesize that risk-taking tendency *combined with* bullying perpetration leads to increased frequency of substance use one year later, because their interaction emphasizes even lower levels of self-control compared to the scenario in which the two act independently. We tested those associations through Structural Equation model and we also tested whether the strength and the direction of the associations between risk-taking tendency, bullying perpetration, and substance use is gender invariant.

Methods

Participants

At T1, the participants were 1307 students (Mage = 12.42; SD = .58; 50% boys; 4.9% attrition rate from T1 to T2). Non-parametric tests between T1 and T2 did not yield significant differences in any of the variables under examination.

Measures

Bullying perpetration. At T1, adolescents were asked to say how many times they engaged in a range of bullying behaviors during the last three months (Mössle, 2012). Response options ranged from 1 "never" to 4 "always" ($\alpha = .80$, $r_s > .41$).

Risk-taking tendency. At T2, trait-like risk-taking tendency was assessed with six items (Gerrard, Gibbons, Vande Lune, Pexa, & Gano, 2002). Response options ranged from 1 "not at all true" to 5 "very true" ($\alpha = .88$, $r_s > .63$).

Substance use. Both at T1 and T2, adolescents were asked to report their drinking and smoking behavior during the past 3 months with 2 items. Response options ranged from 1 “never” to 5 “always”.

The following confounders were considered: age, gender, family structure, perceived family prosperity (Currie et al., 2004), end-term grades for math and Italian (at T1) and behavioral conduct (at T2); T1 depressive symptoms (Faulstich, Carey, Ruggiero, Enyart, & Gresham, 1986), family relations (Venkatraman, Dishion, Kiesner, & Poulin, 2010), parental rules on smoking and alcohol consumption (Venkatraman et al., 2010), and a general trait-like social desirability (Camerini & Schulz, 2018); T2 friends’ use of cigarettes/alcohol (Gerrard et al., 2002), and parental communication about smoking/drinking (Gerrard et al., 2002).

Results

The regression analyses did not show any significant effect of the confounding variables on substance use, therefore none of them were considered in the subsequent analyses. The path analysis showed that, controlling for the autoregressive effect of substance use (T1 → T2), the interaction term for bullying at T1 and adolescents’ trait-like risk-taking tendency at T2 was significantly positively associated with substance use at T2 ($\beta = .11$; $p < .001$). Risk-taking tendency at T2 was also significantly positively associated with substance use at T2 ($\beta = .39$; $p < .001$), while the main effect of bullying at T1 on substance use at T2 was not significant. The model showed good fit of the data, $\chi^2(115) = 553.38$, $p < .001$, CFI = .94, RMSEA = .05 (90LO = .05, 90HI = .059, PCLOSE = .056).

The pick-up-point analysis on the interaction revealed that when levels of risk-taking tendency are high, bullying perpetration does not increase substance use one year later. On the other hand, when levels of risk taking-tendency are low, high levels of bullying in T1 significantly increase substance use in T2. However, in absolute terms, adolescents high in risk-taking tendency report more frequent smoking and drinking episodes compared to adolescents low in risk-taking tendency, independent of their engagement in bullying behavior towards their peers.

The multigroup analysis was carried out constraining the models by gender (baseline model: $\chi^2(230) = 735.35$, $p < .05$; CFI = .925; RMSEA = .041 (90% confidence interval = .38-.44). Measurement invariance was met, $\chi^2(243) = 778.32$, $p < .05$; CFI = .92; RMSEA = .041 (90LO = .38; 90HI = .44). For all the abovementioned paths, equality constraints did not result in a significant deterioration in model fit, $\Delta\chi^2(15) = 44.36$, $p < .001$, Δ CFI = .005, Δ RMSEA = .0, with the exception of the path between bullying at T1 and substance use at T2, $\Delta\chi^2(15) = 85.74$, $p < .001$, Δ CFI = .011, Δ RMSEA = .001, indicating gender differences for this causal relationship.

Discussion

The results demonstrate that risk taking-tendency moderates the impact of bullying perpetration on substance use. Contrary to past findings (Kim et al., 2011; Niemala et al., 2011), our study revealed that bullying on its own does not constitute a risk factor, but it does so in combination with risk-taking tendency. Our findings speak for a reinforcement in low self-control caused by the interaction of bullying and risk taking-tendency.

In particular, in high risk-taking adolescents, bullying perpetration does not increase the subsequent frequency of smoking and drinking. This means that adolescents who are high in risk taking are more prone to be substance users, over and above their social behaviors with peers. For adolescents low in risk-taking, exerting bullying behaviors towards peers increases the frequency of subsequent nicotine and alcohol consumption. For these adolescents, substance use may be a way to cope with negative emotions arising from their malicious actions (Poulsen & Kashy, 2011; Ciarocco, Sommer, & Baumeister, 2011; Zadro, Williams, & Richardson, 2005). In this vein, it seems that bullying tendency represents an environmental opportunity factor which enhance the probability to substance use.

As expected, gender did not influence the strength and the direction of the associations between bullying, risk-taking tendency, their interaction, and substance use. Hence, risk-taking tendency moderates the impact of bullying on substance use for both girls and boys alike, even if past research has underlined that there are gender differences in the prevalence of bullying, risk-taking tendency, and substance use.

This study has several limitations. First, the large sample size was followed over the course of two years in early adolescence. Future research should analyze the transition from early adolescence to middle and late adolescence in order to study the reciprocal effects between risk-taking tendency, bullying, and substance use over time. Second, the present research has analyzed the quality of peer relation at school in the form of bullying tendency. Future research should consider other measure of positive peer interaction (Rotenberg, Petrocchi, Lecciso, & Marchetti, 2013).

Our findings demonstrate that intervention programs should integrate different types of adolescents' expressions of self- and emotional-control at school because their interdependence could have an impact on the prevention of unhealthy and risky behaviors.

References

- Camerini, A., & Schulz, P. J. (2018). Social desirability bias in child-report social well-being: Evaluation of the Children's Social Desirability Short Scale using Item Response Theory and examination of its impact on self-report family and peer relationships. *Child Indicators Research*, 11(4), 1159-1174. doi:10.1007/s12187-017-9472-9
- Ciarocco, N. J., Sommer, K. L., & Baumeister, R. F. (2001). Ostracism and ego depletion: The strains of silence. *Personality and Social Psychology Bulletin*, 27, 1156-1163. doi:10.1177/0146167201279008
- Currie, C., Roberts, C., Morgan, A., Smith, E., Settertobulte, W., Samdal, O., & Barnekow Rasmussen, V. (2004). *Young people's health in context*. Copenhagen, Denmark: WHO Regional Office for Europe. Retrieved from http://www.who.int/immunization/hpv/target/young_peoples_health_in_context_who_2011_2012.pdf
- Desrichard, O., & Denarié, V. (2005). Sensation seeking and negative affectivity as predictors of risky behaviors: a distinction between occasional versus frequent risk-taking. *Addictive Behavior*, 30(7), 1449-1453. doi:10.1016/j.addbeh.2005.01.011
- Faulstich, M. E., Carey, M. P., Ruggiero, L., Enyart, P., & Gresham, F. (1986). Assessment of depression in childhood and adolescence: an evaluation of the Center for Epidemiological Studies Depression Scale for Children (CES-DC). *The American Journal of Psychiatry*, 143(8), 1024-1027.

- Gerrard, M., Gibbons F. X., Houlihan A. E., Stock M. L., & Pomery, E. A. (2008). A dual-process approach to health risk decision making: the prototype willingness model. *Developmental Review*, 28, 29–61. doi:10.1016/j.dr.2007.10.001
- Gerrard, M., Gibbons, F. X., Vande Lune, L., Pexa, N. A., & Stock, M. L. (2002). Adolescents' substance-related risk perceptions: Antecedents, mediators, and consequences. *Risk, Decision, and Policy*, 7, 175–191. doi:10.1017/S1357530902000637
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.
- Hemphill, S. A., Kotevski, A., Herrenkohl, T.I., Bond, L., Kim, M. J., Toumbourou, J. W., & Catalano, R. F. (2011). Longitudinal consequences of adolescent bullying perpetration and victimisation: a study of students in Victoria, Australia. *Criminal Behaviors & Mental Health*, 21, 107–116. doi:10.1002/cbm.802
- Kim, M. J., Catalano, R. F., Haggerty, K. P., & Abbott, R. D. (2011). Bullying at elementary school and problem behavior in young adulthood: a study of bullying, violence and substance use from age 11 to age 21. *Criminal Behaviors & Mental Health*, 21, 136–144. doi:10.1002/cbm.804
- Mössle, T. (2012). "Dick, dumm, abhängig, gewalttätig?". *Problematische Mediennutzungsmuster und ihre Folgen im Kindesalter*. Germany: Nomos Verlagsgesellschaft. doi:10.5771/9783845236902_1
- Niemala, S., Brunstein-Klomek, A., Sillanmaki, L., Helenius, H., Piha, J., Kumpulainen, K., ... Sourander, A., (2011). Childhood bullying behaviors at age eight and substance use at age 18 among males. A nationwide prospective study. *Addictive Behaviors*, 36, 256–260. doi:10.1016/j.addbeh.2010.10.012
- Poulsen, J. R., & Kashy, D. A. (2011). Two sides of the ostracism coin: How sources and targets of social exclusion perceive themselves and one another. *Group Processes & Intergroup*, 15(4), 457–470. doi:10.1177/1368430211430517
- Rotenberg, K., Petrocchi, S., Lecciso, F., & Marchetti, A. (2013). Children's Trust Beliefs in Others and Trusting Behavior in Peer Interaction. *Child Development Research*, 1–8. doi:10.1155/2013/806597
- Schutter, D. J., van Bokhoven, I., Vanderschuren L. J., Lochman, J. E., & Matthys, W. (2011). Risky decision making in substance dependent adolescents with a disruptive behavior disorder. *Journal of Abnormal Child Psychology*, 39(3), 333–339. doi:10.1007/s10802-010-9475-1
- Sigurdson, J. F., Wallander, J., & Sund, A. M. (2014). Is involvement in school bullying associated with general health and psychosocial adjustment outcomes in adulthood? *Child Abuse & Neglect*, 38, 1607–1617. doi:10.1016/j.chiabu.2014.06.001
- Venkatraman, S., Dishion, T. J., Kiesner, J., & Poulin, F. (2010). Cross-cultural analysis of parental monitoring and adolescent problem behavior: Theoretical challenges of model replication when east meets west. In V. Guilamo-Ramos, J. Jaccard, & P. Dittus (Eds.), *Parental Monitoring of Adolescents: Current Perspectives for Researchers and Practitioners* (pp. 90–123). New York, NY: Columbia University Press.
- Wills, T. A., & Dishion, T. J. (2010). Temperament and Adolescent Substance Use: A Transactional Analysis of Emerging Self-Control. *Journal of Clinical Child & Adolescent Psychology*, 33(1), 69–81. doi:10.1207/S15374424JCCP3301_7
- Zadro, L., Williams, K. D., & Richardson, R. (2005). Riding the "O" train: Comparing the effects of ostracism and verbal dispute on targets and sources. *Group Processes & Intergroup Relations*, 8(2), 125–143. doi:10.1177/1368430205051062

Impatto delle dimensioni dell'istituto scolastico sul benessere dei preadolescenti

Franck Petrucci¹, Jenny Marcionetti¹ e Luciana Castelli¹

¹ Scuola universitaria professionale della Svizzera italiana

Quadro teorico

La soddisfazione di vita e cioè il giudizio che ognuno dà globalmente alla qualità della propria vita (Diener, 1984), così come il senso di appartenenza alla scuola frequentata, possono essere intesi come due importanti indicatori di benessere del pre-adolescente. La soddisfazione di vita, infatti, è associata a diverse caratteristiche personali, psicologiche e sociali positive sia in adolescenza (Proctor, Linley, & Maltby, 2009) che nell'età adulta (DeNeve & Cooper, 1998). Per quanto riguarda il senso di appartenenza alla scuola, è stato mostrato un effetto positivo di questo sulle aspettative di successo e sul valore attribuito al lavoro scolastico, così come sull'impegno e sul successo scolastico (Allen, Kern, Vella-Brodick, Hattie, & Waters, 2016; Juvonen, 2006; Neel & Fuligni, 2013).

Come possibili predittori della soddisfazione di vita e del senso di appartenenza scolastica sono stati individuati diversi fattori individuali e relazionali. Alla soddisfazione di vita sono stati ad esempio associati l'autoefficacia scolastica (Vecchio, Gerbino, Pastorelli, Del Bove, & Caprara, 2007), l'empatia (Dickert, Sagara, & Slovic, 2011), il comportamento prosociale (Caprara & Steca, 2005), la percezione di presenza di adulti di riferimento a scuola (Castelli, Marcionetti, Crescentini, & Sciaroni, 2018), l'appartenenza al gruppo (Delle Fave, Brdar, Freire, Vella-Brodick, & Wissing, 2011) e la presenza di amicizie importanti (Amati, Meggiolaro, Rivellini, & Zaccarin, 2018). Anche al senso di appartenenza scolastica sembrano contribuire in particolare relazioni sociali positive tra pari (Janosz, Georges, & Parent, 1998; Juvonen, 2006) e tra docenti e studenti (Janosz et al., 1998).

Se gli studi sulle variabili individuali e relazionali associate a questi due indicatori di benessere sono molti, più rari sono invece gli studi che hanno investigato l'effetto delle dimensioni dell'istituto scolastico su di essi. I lavori di review della letteratura sull'effetto delle dimensioni scolastiche sembrano concordi nell'affermare che la soddisfazione di studenti e docenti tende ad essere meno elevata nelle scuole di grandi dimensioni (Goodlad, 1984; Swanson, 1988). Questo potrebbe essere dovuto al fatto che le dimensioni scolastiche più elevate hanno un effetto negativo sul clima scolastico (Gregory & Smith, 1987; Stolp & Smith, 1995). Ad esempio, sembrerebbe che gli studenti e i docenti delle scuole più piccole siano più affabili e premurosi rispetto a quelli delle scuole più grandi. Secondo lo studio di Fowler e Walberg (1991) a più elevate dimensioni dell'istituto scolastico si assocerebbe anche una minore propensione degli studenti ad identificarsi con la loro scuola. Meier (1996) ha in effetti

riscontrato come negli istituti con più di 400 allievi, circa il 30% mostri di avere senso di appartenenza alla propria scuola, mentre nelle scuole di dimensioni più ridotte la percentuale aumenta al 70%. Secondo l'autore, questo aumento del senso di appartenenza nelle scuole più piccole sarebbe dovuto a diversi fattori: le persone nelle scuole di dimensioni meno elevate si conoscono meglio e si rispettano di più; l'anonimato presente nelle scuole di dimensioni più elevate aumenta la rabbia e la violenza fisica; e le scuole di più piccole dimensioni sono meno intimidenti per i genitori.

Obiettivo dello studio

L'obiettivo di questo studio era di verificare se la dimensione dell'istituto scolastico in termini di numerosità di allievi iscritti ha un impatto sul benessere soggettivo degli allievi, e in particolare sulla loro soddisfazione di vita e sul loro senso di appartenenza alla scuola.

Metodo, strumenti e popolazione

Per la raccolta dei dati è stato utilizzato il questionario Middle Years Development Instrument (MDI), sviluppato e validato in Canada in lingua inglese (Schoenert-Reichl et al., 2013) e tradotto e validato in italiano (Castelli et al., 2018). L'MDI è un questionario composto da diverse scale per la misura del benessere di bambini e preadolescenti di età compresa fra 6 e 12 anni.

La popolazione oggetto di studio è composta da 1'698 allievi di Scuola media appartenenti a 20 diversi istituti scolastici nel Canton Ticino, in Svizzera. Di questi, il 48% sono maschi, il 48% femmine, la restante parte (4%) non ha riportato il genere. L'età media dei soggetti è 11.6 anni (SD=.71; min 10, max 15). Rispetto alla struttura familiare, il 65% della popolazione vive con entrambi i genitori, il 16% solo con uno dei due genitori, il 15% a tempo parziale con entrambi i genitori, il 4% vive in una famiglia con composizione diversa dalle precedenti. La lingua parlata a casa è solo l'italiano per il 57% della popolazione, l'italiano e un'altra lingua per il 35% della popolazione; l'8% della popolazione invece a casa parla solo una lingua che non è l'italiano.

La raccolta dati ha avuto luogo durante 4 anni scolastici (dal 2013/14 al 2016/17). Quattro istituti scolastici hanno partecipato al rilevamento da 2 a 3 volte nel corso del periodo considerato. In totale disponiamo quindi di 27 gruppi (dove un gruppo corrisponde a un istituto scolastico in un anno scolastico) costituiti, in media, da 63 individui.

Analisi e risultati

L'effetto dell'istituto, e più in particolare della sua dimensione, sulla soddisfazione di vita e sul senso di appartenenza alla scuola, è stato analizzato con dei modelli multilivello (Raudenbush & Bryk, 1986). Sono stati prima di tutto stimati dei modelli "vuoti" per ciascuna delle due componenti del benessere considerate. I risultati ottenuti mostrano che sia per la soddisfazione di vita che per il senso di appartenenza scolastica esiste una varianza interistituti statisticamente significativa. Quest'ultima è estremamente modesta, poiché rappresenta rispettivamente l'1% e il 2,5% della varianza totale di ciascuno dei due indicatori di benessere considerati, tuttavia permette tecnicamente di considerare che esiste un effetto modesto dell'istituto frequentato sul benessere degli allievi e ci permette quindi di costruire modelli multilivello più complessi che integrano le caratteristiche degli allievi e degli isti-

tuti. Abbiamo quindi testato un ulteriore modello nel quale sono stati inseriti genere, età, struttura familiare e lingua parlata a casa come caratteristiche sociodemografiche, l'autoefficacia scolastica, l'empatia e il comportamento prosociale quali caratteristiche di personalità, la percezione di presenza di adulti di riferimento a scuola, l'appartenenza al gruppo e la presenza di amicizie importanti quali variabili relazionali.

I risultati dell'analisi hanno mostrato la presenza di un effetto positivo dell'autoefficacia scolastica e del sentimento di appartenenza al gruppo sulla soddisfazione di vita e sul senso di appartenenza scolastica, un effetto positivo delle relazioni di amicizia e della presenza di un adulto di riferimento a scuola sul sentimento di appartenenza scolastica e un effetto negativo di una struttura familiare diversa da quella tradizionale sulla soddisfazione di vita. Tutti gli effetti sono significativi al livello $p < .001$.

Per quanto concerne la dimensione dell'istituto scolastico si è osservato un effetto negativo e al limite della significatività statistica di questa variabile soltanto sul sentimento di appartenenza scolastica ($p=.05$). In altre parole, a parità di livello di sentimento di autoefficacia, presenza di adulti a scuola, amicizie importanti e sentimento di appartenenza al gruppo, più la dimensione dell'istituto aumenta più il sentimento di appartenenza alla scuola diminuisce, risultato che sembra confermare l'ipotesi di un vantaggio a favore degli istituti più piccoli in termini di benessere degli allievi. Tuttavia, va notato che l'effetto istituto è solo in parte un effetto della dimensione in quanto quest'ultima permette di spiegare solo il 17% della varianza inter-istituti, che, va ricordato, rappresenta solo il 2,5% della varianza totale del senso di appartenenza scolastica.

Conclusioni

Lo studio ci ha permesso di evidenziare un effetto, sebbene molto modesto, delle dimensioni dell'istituto sul senso di appartenenza scolastica, mentre non è stato osservato alcun effetto sulla soddisfazione di vita. I nostri risultati sono tuttavia da considerare con una certa cautela in quanto le ricerche di Opdenakker e Van Damme (2000) sull'analisi multilivello hanno dimostrato che il numero di livelli considerati nella modellizzazione può influenzare significativamente i risultati e la stima dei parametri, e in particolare, nel nostro caso, la stima della varianza inter-istituti. Saranno quindi condotte analisi successive per testare la robustezza di questi risultati iniziali e determinare se la classe non rappresenti un contesto più rilevante per l'analisi delle differenze nei livelli di benessere degli allievi. Ad esempio, si potrebbe ipotizzare che la composizione della classe o le pratiche didattiche del docente abbiano un effetto ancora più importante sugli indicatori di benessere considerati.

Bibliografia

- Allen, K., Kern, M. L., Vella-Brodick, D., Hattie, J., & Waters, L. (2016). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, 30(1), 1-34.
- Amati, V., Meggiolaro, S., Rivellini, G., & Zaccarin, S. (2018). Social relations and life satisfaction: the role of friends. *Genus*, 74(1), 7.
- Caprara, G. V., & Steca, P. (2005). Self-efficacy beliefs as determinants of prosocial behavior conducive to life satisfaction across ages. *Journal of Social and Clinical Psychology*, 24, 191-217.

- Castelli, L., Marcionetti, J., Crescentini, A., & Sciaroni, L. (2018). Monitoring Preadolescents' Well-being: Italian Validation of the Middle Years Development Instrument. *Child Indicators Research*, 2, 609-628.
- Delle Fave, A., Brdar, I., Freire, T., Vella-Brodrick, D., & Wissing, M. P. (2011). The eudaimonic and hedonic components of happiness: Qualitative and quantitative findings. *Social Indicators Research*, 100, 185-207.
- DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective wellbeing. *Psychological Bulletin*, 124, 197-229.
- Dickert, S., Sagara, N., & Slovic, P. (2011). Affective motivations to help others: A two-stage model of donation decisions. *Journal of Behavioral Decision Making*, 24(4), 361-376.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Fowler, W. J., Jr., & Walberg, H. J. (1991). School size, characteristics, and outcomes. *Educational Evaluation and Policy Analysis*, 13, 189-202.
- Goodlad, J. (1984). *A place called school*. New York, NY: McGraw-Hill.
- Gregory, T. B., & Smith, G. R. (1987). *High schools as communities: The small school reconsidered*. Bloomington, IN: Phi Delta Kappa.
- Janosz, M., Georges, P., & Parent, P. (1998). L'environnement socioéducatif à l'école secondaire: Un modèle théorique pour guider l'évaluation du milieu. *Revue Canadienne de Psychoéducation*, 27(2), 285-306.
- Juvonen, J. (2006). Sense of belonging, social bonds, and school functioning. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (2nd ed., pp. 655-674). Mahwah, NJ: Erlbaum.
- Meier, D. W. (1996). The big benefits of smallness. *Educational Leadership*, 54, 12-15.
- Neel, C. G. O., & Fuligni, A. (2013). A longitudinal study of school belonging and academic motivation across high school. *Child Development*, 84(2), 678-692.
- Opendakker, M.-C., & Van Damme, J. (2000). The importance of identifying levels in multilevel analysis: an illustration of the effects of ignoring the top or intermediate levels in school effectiveness research. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice*, 11(1), 103-130.
- Proctor, C. L., Linley, P. A., & Maltby, J. (2009). Youth life satisfaction: A review of the literature. *Journal of Happiness Studies*, 10, 583-630.
- Raudenbush, S. W., & Bryk, A. S. (1986). A hierarchical model for studying school effects. *Sociology of Education*, 59, 1-17.
- Schonert-Reichl, K. A., Guhn, M., Gadermann, A. M., Hymel, S., Sweiss, L., & Hertzmann, C. (2013). Development and validation of the middle years development instrument (MDI): assessing children's well-being and assets across multiple contexts. *Social Indicators Research*, 114, 345-369.
- Stolp, S., & Smith S. C. (1995). *Transforming school culture*. Eugene, OR: ERIC Clearinghouse on Educational Management.
- Swanson, A. D. (1988). The matter of size: A review of the research on relationships between school and district size, pupil achievement, and cost. *Research in Rural Education*, 5, 1-8.
- Vecchio, G. M., Gerbino, M., Pastorelli, C., Del Bove, G., & Caprara, G. V. (2007). Multi-faceted self-efficacy beliefs as predictors of life satisfaction in late adolescence. *Personality and Individual Differences*, 43, 7, 1807-1818.

The relationship between being frequently bullied and sense of belonging at school and the moderating effect of power distance

Giang Pham¹ and Manuela Hauser¹

¹Pädagogische Hochschule St. Gallen

Introduction

Bullying – “the systematic abuse of power” (Smith & Sharp, 1994) – has been recognized as a common and persistent problem among children since decades (Whitney & Smith, 1993). The PISA 2015 data confirmed the prevalence of bullying at school as an actual international issue. 11% of all 15-year-old participants across 72 countries reported that they were made fun of, 4% were pushed or hit by other students at least a few times a month (OECD, 2017a). Being bullied can go hand in hand with a variety of problems, among them psychological problems (Baldry, 2004) and psychosomatic disorders (Gini & Pozzoli, 2013), even in the long-term (Drydakis, 2014). Therefore, the importance of understanding possible causes and being able to early identify high-risk groups can facilitate preventing bullying at school.

Despite disagreement on the definition, most researchers agreed on three main characteristics of bullying: repetition, intention to harm, and unequal power between the bully and the victim (Menesini & Salmivalli, 2017). Empirical findings have repeatedly confirmed that students with apparent disadvantages or vulnerabilities such as poor physical health, less attractive appearance, learning problems, family situation and personal characteristics are more likely the targets of bullying regardless of sex and social class (Sweeting & West, 2010; Menesini & Salmivalli, 2017). More generally, “being different in any way” could make students vulnerable to bullying (Horowitz et al., 2004), since “difference is difficult to accept” (Duncan, 1999). In addition, it more likely takes place in some social context with factors that serve to promote and maintain such behaviors (Swearer & Hymel, 2015). The social context is influenced by the prevailing culture. “Culture is the collective programming of the mind that distinguishes the members of one group or category of people from others” (Hofstede, 2011, p. 3). The influence of peers in this regard have also been suggested, such as the link between being bullied and being less well liked (Spriggs, Iannotti, Nansel, & Haynie, 2007), less accepted and more rejected by peers (Graham, Bellmore, & Juvonen, 2007).

To conclude, high-risk students are those who somehow differ from their peers – especially if these differences relate to vulnerability and dislikes by peers. The risk is higher in contexts or cultures, in which group members rather accept and even reinforce the bullying behaviors. Context factors play the role of moderator variables.

Research questions

Against this background, the focus of this paper is on the *relationship between the frequency of being bullied by peers and student's sense of belonging at school and the moderating effect of the cultural dimension power distance as a moderator variable.*

The students' *sense of belonging at school* is one of the strongest predictors of being frequently bullied according to PISA 2015 data. This construct is measured in PISA 2015 via six indicators addressing different feelings, ranging from feeling well liked by peers to feeling as an outsider at school (OECD, 2017a). On the one hand, it represents the state of being different from the subjective perspective – *feeling different* – no matter what the difference is. Simultaneously, it reflects the subjective perception of peer reactions to these differences – *feeling accepted*. In this regard, our first research question is *which levels of feeling belonging at school by 15-year-old adolescences in Switzerland signify a high risk of being frequently bullied.*

Furthermore, we expect that the risk levels could vary between different language regions (German, French, and Italian) in Switzerland and between countries depending on their different scores in the cultural dimension “Power distance” according to Hofstede (Hofstede, 2001; Hofstede, Hofstede & Minkov, 2010). We assume that the regional/national culture influences the setting of the variables of interest (Hofstede, 2011). The score on the dimension “Power distance” (Power distance index – PDI) refers to the extent to which the less powerful members (those without executive function) of institutions and organizations within a country/language region expect and accept that power is unequally distributed. People in societies with a high PDI accept a hierarchical order in which everyone has his place and do not need any further justification. In societies with a low PDI, people strive to balance the distribution of power and demand the justification of power equality (Hofstede, 2001; Hofstede et al., 2010). Thus, we assume that the risk levels would be lower in societies with higher PDI. Our second research question is therefore *whether students with the same level of feeling belonging at school are more frequently exposing to bullying at school in societies with higher PDI.*

Methodology, methods and sample

The PISA 2015 questionnaire data of Switzerland (5'860 students: 3'531 in German-speaking, 1'307 in French-speaking, 1'022 in Italian-speaking region, 48% female, mean age = 15.8) serve to answer the first question. Data of two scales “Sense of belonging at school” (BEL) and “Frequency of being exposed to bullying by peers” (BULLIED) are relevant for this purpose. The BEL scale contains six items (e.g. “I feel like an outsider”) with four answer options ranging from “strongly agree” (1) to “strongly disagree” (4) and refers to the feeling of the students being a member of the school community. The BULLIED scale is measured by six items as well (e.g. “Other students took away or destroyed things that belonged to me”) with three answer options ranging from “never or almost never” (1) to “at least once a month” (3), which refers to the perception of exposure to bullying out of the victims perspective. The raw data of the twelve items, the official PISA scale scores (*BEL index* and *BULLIED index*, OECD, 2017a), and item parameters of the belonging scale (results based on a generalized partial credit model, OECD, 2017b) are exploited. Two categories signifying high frequency of being bullied based on the BULLIED index are considered to identify corresponding BEL scores (the BEL risk levels): 0.5 standard deviation higher (BULLIED index > 0.5) and one standard deviation higher than OECD-average (BULLIED index > 1). Two statistical methods are applied. First, regression analyses considering possible nonlinear relationship between

BEL index (predictor) and BULLIED index (dependent variable) are used to determine the BEL scores corresponding to the two categories of being frequently bullied. Second, regularized partial correlation network using lasso – implemented in the R-package *glasso* (Epskamp, Cramer, Waldorp, Schmittmann, & Borsboom, 2012) – is exploited to explore the relationships between six BEL indicators with each other and with the frequency of being bullied. On this basis, the direct and indirect predictors of the BULLIED index are identified, which help to interpret the content of the different BEL risk levels.

To answer the second question, the national/regional PDIs according to Hofstede (Hofstede, 2001; Hofstede et al., 2010) are used together with the international PISA 2015 data of the two interested scales. To examine the second hypothesis regarding regional differences within Switzerland, we compare the results of different language regions regarding both their specific risk levels and their PDI. At international level, we study the correlation between countries' PDIs and their country-specific BEL risk levels.

Preliminary results

At the national level in Switzerland, the belonging scores corresponding to the two categories regarding high frequency of being bullied are -0.8 (BULLIED index > 0.5) and -2.7 (BULLIED index > 1). The results of the lasso-network approach suggest that feeling as an outsider at school is the strongest direct predictor of being frequently exposed to bullying at this level.

Similar findings are found for German speaking region, the two risk levels are -0.9 and -3.1 . In French speaking region, they are higher (-0.5 and -1.7). In this region, the strongest direct predictor of BULLIED index is another one: "Other students do not seem to like me". Having the same BEL score, students here have significantly higher predicted value of BULLIED index than students in German speaking region. These results support our hypothesis related to the second research question, knowing that the PDI of the French speaking region is 70, much higher than the PDI of the German speaking region (26; for Italian speaking region the PDI score is unknown).

Analyses based on data of all countries with available Hofstede's PDI and PISA 2015's BULLIED index are still in progress.

Discussion

In Switzerland, students who do not feel belonging to school at all (BEL index ≤ -0.8) – in particular those who strongly feel as an outsider at school – are associated with having high risk of being frequently bullied by peers. The BEL risk level and the most relevant indicator varies between language regions, however. The higher BEL risk level in French speaking region (-0.5) suggests that *not strongly feeling liked* by others is "enough" to face a high risk of being frequently bullied in this region. Being able to identify context specific BEL risk levels – even at school level given available data – would help early recognizing potential victims. The results support our assumption that regions with higher PDI are associated with higher risk of being frequently bullied, even with the same BEL score. In a society with high PDI, people accept their state of being and a hierarchical order, which reflects inherent inequalities. With regard to our topic, it implies the general acceptance of imbalance of power between the bullies and the victims in societies with higher PDIs. Results from further

analyses involving data of all countries with available PDI and PISA data would supply more support for this hypothesis. In this case, this would highlight the necessity to consider the specific social and cultural factors in order to prevent and minimize the prevalence of bullying at school effectively.

References

- Baldry, A. C. (2004). The impact of direct and indirect bullying on the mental and physical health of Italian youngsters. *Aggressive Behavior, 30*, 343–355.
- Drydakis, N. (2014). Bullying at School and Labour Market Outcomes. *International Journal of Manpower, 35*, 1185–1211.
- Duncan, N. (1999). *Sexual Bullying: Gender conflict and pupil culture in secondary schools*. London, England: Routledge.
- Epskamp, S., Cramer, A. O. J., Waldorp, L. J., Schmittmann, V. D., & Borsboom, D. (2012). Qgraph: Network Visualizations of relationships in psychometric data. *Journal of Statistical Software, 48*(4), 1–18.
- Gini, G., & Pozzoli, T. (2013). Bullied children and psychosomatic problems: A meta-analysis. *Pediatrics, 132*, 720–729.
- Graham, S., Bellmore, A., & Juvonen, J. (2007). Peer victimization in middle school: When self- and peer views diverge. In J. E. Zins, M. J. Elias, & C. A. Maher (Eds.), *Bullying, victimization, and peer harassment: A handbook of prevention and intervention* (pp. 121–141). New York, NY: Haworth Press.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA.: Sage Publications.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organizations: Software of the Mind* (3rd ed.). New York, NY: McGraw-Hill.
- Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Psychology and Culture, 2*(1). doi:10.9707/2307-0919.1014
- Horowitz, J. A., Vessey, J. A., Carlson, K. L., Bradley, J. F., Montoya, C., McCullough, B., & David, J. (2004). Teasing and bullying experiences of middle school students. *Journal of the American Psychiatric Nurses Association, 10*(4), 165–172.
- Menesini, E., & Salmivalli, C. (2017). Bullying in schools: the state of knowledge and effective interventions. *Psychology, Health & Medicine, 22*, 1–14.
- OECD. (2017a). *PISA 2015 Results (Volume III): Students' Well-Being*. Paris, France: PISA, OECD Publishing.
- OECD. (2017b). *PISA 2015 Technical Report*. Paris, France: PISA, OECD Publishing. Retrieved from <https://www.oecd.org/pisa/sitedocument/PISA-2015-technical-report-final.pdf>
- Smith, P. K., & Sharp, S. (1994). *School bullying: Insights and perspectives*. London, England: Routledge.
- Spriggs, A. L., Iannotti, R. J., Nansel, T. R., & Haynie, D. L. (2007). Adolescent bullying involvements and perceived family, peer and school relations: commonalities and differences across race/ethnicity. *Journal of Adolescent Health, 41*, 283–293.
- Swearer, S. M., & Hymel, S. (2015). Understanding the Psychology of Bullying – Moving Toward a Social-Ecological Diathesis-Stress Model. *American Psychologist, 70*(4), 344–353.
- Sweeting, H., & West, P. (2010). Being different: correlates of the experience of teasing and bullying at age 11. *Research Papers in Education, 16*(3), 225–246.
- Whitney, I., & Smith, P.K. (1993). A survey of the nature and extent of bullying in junior, middle and secondary Schools. *Educational Research, 35*, 3–25.

Benessere psicologico nella transizione tra scuola primaria e secondaria: un contributo alla validazione italiana della School-Related Well-Being Scale usando il modello di Rasch

Daniela Raccanello¹, Giada Vicentini¹, Kristina Loderer² e Roberto Burro¹

¹ Università di Verona

² Ludwig-Maximilians-Universität München

Introduzione

All'interno dei sistemi educativi, la promozione del benessere è oggi un obiettivo imprescindibile che si aggiunge a quelli tradizionalmente legati all'apprendimento degli allievi (Marcionetti, Castelli & Crescentini, 2017). Il benessere a scuola può essere definito come quella condizione psicologica in cui si verificano una prevalenza di emozioni e cognizioni positive, rispetto a quelle negative, in riferimento alla vita scolastica dei membri che appartengono a tale contesto (Hascher, 2007). In linea con la definizione dell'Organizzazione Mondiale della Sanità (1948), il benessere psicologico risulta legato a una varietà di fattori individuali relativi al dominio emotivo, cognitivo e fisico (Gobbo & Raccanello, 2011; Hascher, 2007).

Coerentemente con un trend emerso per indicatori di tipo motivazionale ed emotivo, sembra che il benessere psicologico diminuisca nella transizione dalla scuola primaria a quella secondaria (es., Bouffard, Boileau, & Vezeau, 2001; Pekrun & Stephens, 2012; Raccanello, Brondino, & De Bernardi, 2013). Alcuni dati relativi ad aspetti di tipo emotivo suggeriscono, inoltre, che il benessere psicologico possa differire in base al genere (maschio, femmina) degli allievi, ma la letteratura su tale questione riporta dati contrastanti (es., Marcionetti et al., 2017). Più contributi, anche di natura longitudinale, documentano l'associazione negativa tra il benessere psicologico degli allievi ed alcuni indicatori di problemi educativi che ostacolano il percorso degli studenti, quali l'alienazione nei confronti della scuola (es., Morinaj & Hascher, 2018).

Conoscere come varia il benessere psicologico nella scuola e quali siano i fattori responsabili di tali variazioni risulta un passo fondamentale per fornire le indicazioni operative per la conduzione di interventi che mirino a promuovere il benessere psicologico stesso allo scopo di orientare le scelte politiche tese a supportarli.

Al fine di monitorare i cambiamenti nel benessere degli allievi, risulta basilare sviluppare dispositivi di misurazione validi ed affidabili. Strumenti quali lo Student Wellbeing Questionnaire (SWQ, Hascher, 2007) permettono una valutazione multi-dimensionale del benessere psicologico, distinguendo componenti positive e negative. Tuttavia, in alcuni contesti il tempo e le risorse da dedicare al monitoraggio del benessere psicologico sono particolarmente ridotti. Alla luce di ciò, è centrale lo sviluppo di test e/o questionari capaci di agevolare la raccolta dei dati, il processo di quantificazione e che possano essere sommini-

strati in modo economico. Un esempio di questionario breve per la misurazione del benessere psicologico a scuola è la School-Related Well-Being Scale (SWBS, Loderer, Vogl, & Pekrun, 2016). Possibili svantaggi legati alla brevità degli strumenti possono, e dovrebbero in realtà sempre, essere compensati dall'utilizzo di metodologie che tengano conto delle proprietà della misurazione fondamentale (Bond & Fox, 2007; Burro, 2016). Mentre le prerogative della misurazione fondamentale sono solitamente rispettate nel campo d'indagine delle scienze fisiche e naturali, non lo sono, di contro, in riferimento alle scienze psico-sociali: la conduzione del modello di Rasch (Andrich, 1988) permette di costruire strumenti che ne tengano conto anche nel caso di quest'ultime, consentendo una quantificazione meno distorta delle dimensioni psicologiche che caratterizzano gli individui.

Domanda di ricerca e obiettivi

Questo contributo si focalizza sulla misurazione del benessere psicologico a scuola per alunni di scuola primaria e secondaria di primo grado. Si propone di studiare: (1) le proprietà psicometriche di una breve scala per la valutazione del benessere psicologico a scuola (SWBS, Loderer et al., 2016), adattata al contesto italiano utilizzando il modello di Rasch; (2) la validità di criterio della scala; (3) possibili differenze nel benessere in base a fascia d'età e genere, ipotizzando un peggioramento con la transizione dalla scuola primaria alla scuola secondaria.

Metodologia, strumenti e campione

Campione

Hanno partecipato 431 studenti del quarto anno di scuola primaria ($M = 9.54$ anni, 8.88-10.93; 44% femmine) e del secondo anno di scuola secondaria di primo grado ($M = 12.50$ anni, 11.81-13.74; 50% femmine), provenienti dal Nord Italia. La partecipazione è stata volontaria e autorizzata dai genitori tramite il modulo per il consenso informato. La ricerca ha ottenuto il parere favorevole del Comitato Etico del Dipartimento di Scienze Umane dell'Università di Verona.

Metodologia e strumenti

Gli studenti hanno compilato, durante il normale orario scolastico, un questionario scritto che includeva due scale sul benessere psicologico. La prima scala è un adattamento italiano (in seguito a back-translation) della SWBS (Loderer et al., 2016) ed è costituita da sei item (es., *Io sto bene a scuola*). Il secondo strumento è una versione a 19 item dello SWQ (Hascher, 2007), che include sei sotto-scale: atteggiamento positivo (tre item, es., *Qualunque cosa accada, la scuola ha qualcosa di buono*), divertimento a scuola (tre item, es., *Ti è successo di essere contento/a a scuola perchè hai potuto fare qualcosa che ti piace?*), concetto di sè accademico (tre item, es., *A scuola non ho problemi a fare quello che mi chiedono*), preoccupazioni a scuola (tre item, es., *Ti sei preoccupato/a per problemi a fare quello che ti chiedono*), lamentele fisiche (quattro item, es., *Ti è capitato di aver mal di pancia per colpa della scuola?*) e problemi sociali (tre item, es., *Ti è capitato di avere problemi con i compagni della tua classe?*). Gli item sono stati valutati su scala Likert a 5 livelli, relativa a frequenza o accordo.

Analisi e risultati

Analisi dei dati

Al fine di trasformare la SWBS in uno strumento di misura che rispecchi le proprietà della misurazione fondamentale, è stata condotta un'analisi di Rasch utilizzando il Partial Credit Model (Wright & Masters, 1982), tramite il software RUMM2030 (versione 5.1, 1997-2019). Tale analisi permette, in considerazione delle assunzioni del modello (i.e., monotonicità, dipendenza locale, unidimensionalità, assenza di differential item functioning, DIF), di trasformare i punteggi grezzi categorici (scala Likert) in punteggi espressi in misure lineari aventi come unità di misura il "logit". L'analisi di Rasch impartisce, se i suoi assunti sono rispettati, alla scala prodotta proprietà misurative 'migliori' che analisi fattoriali esplorative o confermative, da sole, non sono in grado in garantire. Si specifica inoltre che essa ingloba al suo interno un'analisi delle componenti principali; che il numero di item della scala è troppo ridotto per ipotizzare sensatamente la presenza di più d'una dimensione; e che lo strumento originario è stato pensato per misurare un'unica dimensione.

Per l'attendibilità, si sono calcolati il Person Separation Index (PSI) e l'alfa di Cronbach.

In riferimento al secondo e terzo scopo, si sono prodotti modelli lineari su cui è stata poi computata una ANOVA table, utilizzando il software R (R Core Team - versione 3.6.0, 2019). Il livello di significatività è stato $p < .05$.

Modello di Rasch

Abbiamo condotto l'analisi di Rasch a partire dai punteggi grezzi della SWBS. Al fine di massimizzare il fit dei dati rispetto al modello, ossia rispettarne le assunzioni, sono stati ri-scalati i punteggi di due item, mentre un terzo è stato eliminato in quanto marcatamente inadeguato (i.e., *La scuola mi offre quello di cui ho bisogno*). Sono risultate conseguentemente verificate: l'assunzione di monotonicità del modello, l'assenza di dipendenza locale (cioè per tutti gli item la correlazione tra residui era $< .20$), l'unidimensionalità del costrutto misurato (tramite un'analisi delle componenti principali interna al modello) e l'assenza di DIF, che indica che la scala prodotta funziona ugualmente bene per fasce d'età diverse e per maschi e femmine. Il fit complessivo tra il modello ed i dati è risultato adeguato, $\chi^2(30) = 37.26$, $p = .169$, così come il fit dei singoli item e dei singoli soggetti, sempre incluso nel range $-/+2.5$. Le statistiche riassuntive dei residui di item e soggetti erano rispettivamente $M = .49$ ($DS = .53$) e $M = -.31$ ($DS = .96$). È stata, da ultimo, confermata l'attendibilità del modello (PSI = .76; alfa di Cronbach = .77).

Validità di criterio

Sono stati condotti sei modelli lineari con ogni fattore del SWQ come predittore (atteggiamento positivo, divertimento a scuola, concetto di sè accademico, preoccupazioni a scuola, lamentele fisiche, problemi sociali) rispetto al punteggio logit della SWBS calcolato in base al modello di Rasch. È emerso un effetto significativo del predittore considerato per ognuno dei modelli: atteggiamento positivo, $F(1, 404) = 625.30$, $p < .001$; divertimento a scuola, $F(1, 354) = 173.20$, $p < .001$; concetto di sè accademico, $F(1, 404) = 113.70$, $p < .001$; preoccupazioni a scuola, $F(1, 404) = 35.48$, $p < .001$; lamentele fisiche, $F(1, 404) = 9.95$, $p = .002$; e problemi sociali, $F(1, 404) = 19.42$, $p < .001$. In particolare, il punteggio del benessere cresceva all'aumentare dei punteggi delle sotto-scale su atteggiamento positivo, divertimento a scuola e concetto di sè accademico ($r = .78$, $r = .55$ e $r = .47$, rispettivamente) e decresceva all'aumentare dei punteggi delle sotto-scale relative a preoccupazioni a scuola, lamentele fisiche e problemi sociali ($r = -.28$, $r = -.16$ e $r = -.21$).

Differenze di età e genere

È stato condotto un modello lineare con fascia d'età (scuola primaria, secondaria) e genere (maschi, femmine) come fattori fissi ed il punteggio logit della SWBS come variabile dipendente. È emerso un effetto significativo della fascia d'età, $F(1, 402) = 40.64, p < .001$: I punteggi erano maggiori per gli alunni di scuola primaria ($M = 7.35, ES = .07$) rispetto a quelli di scuola secondaria ($M = 6.63, ES = .09$). È emerso, inoltre, un effetto significativo del genere, $F(1, 402) = 24.15, p < .001$: il benessere era maggiore per le femmine ($M = 7.36, ES = .08$) rispetto ai maschi ($M = 6.77, ES = .08$).

Discussione

Il nostro studio ha permesso di confermare la bontà di uno strumento quale la SWBS (Loderer et al., 2016) per il monitoraggio del benessere psicologico a scuola. Tramite il modello di Rasch, tale scala è stata trasformata in uno strumento di misura in grado di rispettare le proprietà della misurazione fondamentale e ne è stata dimostrata la validità di criterio rispetto a un altro strumento per la valutazione del benessere psicologico a scuola (SWQ, Hascher, 2007) che tiene conto della multi-dimensionalità del costrutto in esame. Infine, si sono documentate differenze legate all'età, con un peggioramento del benessere psicologico a scuola nella transizione dalla scuola primaria a quella secondaria, e al genere, a vantaggio delle femmine. Questo lavoro fornisce, quindi, un contributo per la valutazione del benessere sia sul piano metodologico che su quello teorico, da cui trarre utili indicazioni per politiche ed interventi che promuovano il benessere psicologico all'interno dei sistemi educativi.

Bibliografia

- Andrich, D. (1988). *Rasch models for measurement*. Beverly Hills, LA: Sage Publications.
- Bond, T. G., & Fox, C. M. (2007). *Applying the Rasch model: Fundamental measurement in the human sciences* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bouffard, T., Boileau, L., & Vezeau, C. (2001). Students' transition from elementary to high school and changes of the relationship between motivation and academic performance. *European Journal of Psychology of Education, 16*(4), 589–604. doi:10.1007/BF03173199
- Burro, R. (2016). To be objective in Experimental Phenomenology: A Psychophysics application. *Springer-Plus, 5*(1), 1720. doi:10.1186/s40064-016-3418-4
- Gobbo, C., & Raccanello, D. (2011). Personal narratives about states of suffering and well-being: Children's conceptualization in terms of physical and psychological domain. *Applied Cognitive Psychology, 25*(3), 386–394. doi:10.1002/acp.1703
- Hascher, T. (2007). Exploring students' well-being by taking a variety of looks into the classroom. *Hellenic Journal of Psychology, 4*, 331–349.
- Loderer, K., Vogl, E., & Pekrun, R. (2016). *Students' well-being at school revisited: Development and initial validation of a unidimensional self-report scale*. 14th International Conference on Motivation (ICM), Thessaloniki, Greece.
- Marcionetti, J., Castelli, L., & Crescentini, A. (2017). *Well-being in education systems. Conference abstract book*. Firenze, Italia: Hogrefe.
- Morinaj, J., & Hascher, T. (2018). School alienation and student well-being: A cross-lagged longitudinal analysis. *European Journal of Psychology of Education, 34*(2), 273–94. doi:10.1007/s10212-018-0381-1

-
- Organizzazione Mondiale della Sanità. (1948). *World Health Organization Constitution. Basis Documents*. Geneva, Switzerland: World Health Organization.
- Pekrun, R., & Stephens, E. J. (2012). Academic emotions. In K. R. Harris, S. Graham, T. Urdan, S. Graham, J. M. Royer, & M. Zeidner (Eds.), *APA educational psychology handbook: Vol. 2. Individual differences and cultural and contextual factors* (pp. 3–31). Washington, DC: American Psychological Association.
- R Core Team. (2019). *R: A Language and Environment for Statistical Computing*. Wien, Austria: R Foundation for Statistical Computing.
- Raccanello, D., Brondino, M., & De Bernardi, B. (2013). Achievement emotions in elementary, middle, and high school: How do students feel about specific contexts in terms of settings and subject-domains? *Scandinavian Journal of Psychology*, *54*(6), 477–484. doi:10.1111/sjop.12079
- RUMM Laboratory Pty Ltd. (1997–2019). Perth, Australia. Retrieved from www.rummlab.com
- Wright, B. D., & Masters, G. N. (1982). *Rating scale analysis*. Chicago, IL: MESA Press.

Outside the box or in the norm?

Differential aspects of student misbehavior and wellbeing as a potential multi-level outcome

Johannes Strobel¹ and Alexander F. Koch²

¹ University of Missouri

² Pädagogische Hochschule Freiburg

Introduction

In western societies, we value innovation, creativity, “outside the box thinking”, “pushing boundaries”, “challenging paradigms” and “coming up with new solutions” - particularly in STEM education (Hart Research Associates, 2015). And yet when we see these behaviors in our young learners, we try to shut it down (Ripley, 2016). Teachers, for example, value *compliant originality* and conforming behavior over independent thinking (Beghetto, 2010). Kids will defy; the ones who can make productive use of it will become successful and productive members of society. Negative classroom management styles like suspension are often used due to what the teacher interprets as misbehavior (c.f. Lewis, Romi, Katz, & Qui, 2008). Unfortunately, a large number of students, who are defiant and don't have the tools to adopt, do disengage, lose interest and drop out of school. There seems to be a clash between valued STEM attributes and what is considered a good student. Defiance, disturbance, and misbehavior in general are serious issues in every-day schooling: It stresses students and teachers (Aldrup, Klusmann, Lütke, Göllner, & Trautwein, 2018; Aloe, Shisler, Norris, Nickerson, & Rinker, 2014; Kulinna, 2007) and distressed teachers are more likely to interpret behavior as misbehavior (Herman, Hickmon-Rosa, & Reinke, 2018). Most disciplinary classroom management styles lead to negative emotions, impaired wellbeing, impeded learning or negative student-teacher relationships and do not lead to behavior change (Goodboy, Bolkan, & Baker, 2018; Little & Akin-Little, 2008). To further the problem, negative disciplinary actions in an US-context are immoderately applied to non-white children, especially African Americans and Hispanics (Losen, Hodson, Keith, Morrison, & Belway, 2015; Blomberg, 2003; Townsend, 2000). In the US, students of color and underrepresented minorities (URMs) are disproportionately more likely to be suspended and labeled “troublemakers” by their teachers, and thus suffer negative outcomes; In this context, school and teacher variables have been widely neglected in research (Fenning & Rose, 2007; Tajalli & Garba, 2014; Townsend, 2000). But if one wants to increase general wellbeing of students and teachers and generate an engaged and positive emotional atmosphere, URMs participation in schooling and STEM in particular, research needs to better understand the nature of these disparities. When and why are students believed “troublemakers” by teachers, how is a “troublemaker” defined from a teacher and a student perspective, how does the “troublemaker” status and teachers' consequent reaction and behavior impact students and how to positively integrate “troublemakers” into schooling?

Research question and objectives

There are three objectives in this project: (1) Understand sources and indicators of negative emotions of teachers and students during instruction, (2) introduce “troublemakers” research as a way to reframe a conversation on defiance and perceived negative behavior and (3) broadening participation for the underserved group of “troublemakers” (URMs or any other student). With these aims we want to add new perspectives on instruction, behavior and student/teacher wellbeing. In order to achieve this we aim to evaluate teachers’ beliefs about characteristics of “troublemakers” in classrooms, characteristics of innovation in STEM and to investigate teacher attributions of student behavior. By knowing about instructional, professional and attributional beliefs of teachers, we can propose a working definition of “troublemakers” and differentially address the problem of inclusion and participation of underrepresented minorities in ethnically diverse STEM education beyond behavioral management approaches: it allows to better understand the cause of “troublemaking” as perceived by the teacher and opens new paths to implement a culture of STEM innovation that connects school and adds to building a stronger STEM workforce development. In addition to improved instructional beliefs & practices and student outcomes such as wellbeing and engagement the project wants to build on teachers’ capacity to customize instructional approaches by means of empathic and instructional support which is essential in improving STEM learning environments and examine the influence of these instructional approaches on students’ trust of teachers.

We focus on elementary school STEM, because 1) in elementary school student-teacher relationships may affect both teacher and student wellbeing and engagement generally (and not only subject specifically); 2) STEM subjects are taught in an integrative way; 3) research indicates a very high stress level and least developed coping mechanism amongst elementary teachers particularly crucial at a time when students begin to shape their peer status and foundations for future student-teacher relationships (Herman et al., 2018; Henricsson & Rydell, 2004; Adler, Kless, & Adler, 1992). In this proposal we combine broadening participation, improvement of STEM learning environments and wellbeing at elementary school on the teacher and the student level in a mixed-method approach that evaluates the potential effect of socio-emotional STEM education using qualitative and quantitative research methods. We do address a) the teacher perspective (e.g. What are teacher beliefs and attributes about STEM as a profession vs “troublemaker” students’ and their nature of achievement in STEM fields?), b) the student perspective (e.g. Where do students see potential improvements to make themselves more comfortable and motivated during STEM instruction?), and c) the interaction of students and teachers (e.g. How do “trouble” situations change when teachers try to handle problematic situations differently?).

Based on this multi-perspective view on teacher and student behavior our goal is to find dimensions of instruction that support a more inclusive and valuing classroom atmosphere.

Methodology, methods and sample

In the first phase we will conduct semi-structured interviews with teachers and groups of students to assess their perception and treatment of “troublemakers”. The interviews will be accompanied by classroom observations and short ex-post teacher interviews. In a second step, we will employ a design based research approach on teachers’ beliefs about “troublemakers” and their student-oriented/ inclusive STEM teaching. Within the design-based

context, we want to address the teachers' understanding of "troublemakers" and give the opportunity to implement innovative STEM instruction. In the third phase we intend to scale teacher beliefs, attributions, and treatments of "troublemakers" in a quantitative survey and use these as dependent variables in a three year design based research we lay the theoretical and methodological groundwork for an empirical experimental 2x2 factorial design with the independent variables *empathy* and *instruction*, each with two levels: *innovative* and *regular*. *Innovative* includes three half days of teacher training, *regular* equals instruction as usual.

Analyses and results

At the date of proposal submission, the project is still in its initial phase. Six interviews have already been conducted but not analyzed in detail. First results indicate that teachers seem to have a prototypical view on disruptive students as "troublemakers": they are those who disrupt the flow of learning, i.e. "troublemakers" are disciplined when fellow students are hindered in their regular learning activities as perceived by the teacher. In terms of perspective taking this indicates a stronger mental association of the teacher toward the "good" students. Preliminary results also point to a learner centered view of the teacher, because often teachers refer to disrupted learning as opposed to disrupted teaching.

In one case, the teacher gave an example where she was able to re-interpret the student misbehavior and used the student competency as an asset in the instructional process: the student was very knowledgeable in STEM and challenged the teacher often in regular class sessions. One day, the teacher introduced a problem-based self-learning scenario and the "troublemaker" was asked to serve as a specialist consultant for the teacher and students, a method that turned out well for all, the teacher, the class, and the student.

Discussion

The positive re-interpretation of "trouble" behavior and implementing the student as an active participant in the instructional process shows that understanding, perspective taking and establishing a common basis of interaction and collaboration can have a positive effect on the student and his/her "troublemaking". This effect may be extended to a teacher perspective: this means that understanding is not only a matter of cultural synchronization. Teacher instructional beliefs and competences need to be addressed as well. Pane (2010) puts forward the idea that conflicts between teachers and students and exclusionary methods as a result are not consequences of the number of incidents, but a consequence of the interactional expectations. In Pane's view, culturally grounded conflicts are best addressed from a socio-cultural perspective that allows to negotiate about situational interpretations in order to clarify them without the one view dominating the other:

"Viewing disciplinary [...] actions as negotiable social practices among the teacher and African American students in a particular classroom shifts our perspective away from the common reporting how many times something happened mode to a communities of practice view that enables the researcher to discuss and analyse how and why something (in this case, classroom discipline) happens from the participants' perspectives." (Pane, 2010, p. 95)

We want to extend this ethnic view on culture by what we call the biography of culture (or

socialization). If we understand that behavior and instruction are governed by biography, beliefs and contextual factors, we can start to understand these factors and approach teaching and learning from individualistic prerequisites and move classrooms towards inclusive communities of practice and equal participation. One just needs to understand each individual's contribution and uniqueness on both sides, the teacher and the student side.

References

- Adler, P. A., Kless, S. J., & Adler, P. (1992). Socialization to Gender Roles: Popularity among Elementary School Boys and Girls. *Sociology of Education*, 65(3), 169–187.
- Aldrup, K., Klusmann, U., Lüdtke, O., Göllner, R., & Trautwein, U. (2018). Student misbehavior and teacher well-being: Testing the mediating role of the teacher-student relationship. *Learning and Instruction*, 58, 126–136.
- Aloe, A. M., Shisler, S. M., Norris, B. D., Nickerson, A. B., & Rinker, T. W. (2014). A multivariate meta-analysis of student misbehavior and teacher burnout. *Educational Research Review*, 12, 30–44.
- Beghetto, R. A. (2010). Creativity in the Classroom. In J. C. Kaufman & R. J. Sternberg (Eds.), *The Cambridge Handbook of Creativity* (pp. 447–466). Cambridge et al.: CUP.
- Blomberg, N. (2003). Effective Discipline for Misbehavior: In-School versus Out-of-School Suspension. *Concept*, 27.
- Fenning, P., & Rose, J. (2007). Overrepresentation of African American Students in Exclusionary Discipline The Role of School Policy. *Urban Education*, 42(6), 536–559.
- Goodboy, A. K., Bolkan, S., & Baker, J. P. (2018). Instructor misbehaviors impede students' cognitive learning: testing the causal assumption. *Communication Education*, 67(3), 308–329.
- Hart Research Associates. (2015). *Falling Short? College Learning and Career Success*. Washington, DC: Hart Research Associates.
- Henricsson, L., & Rydell, A.-M. (2004). Elementary School Children with Behavior Problems: Teacher-Child Relations and Self-Perception. A Prospective Study. *Merrill-Palmer Quarterly*, 50(2), 111–138.
- Herman, K. C., Hickmon-Rosa, J., & Reinke, W. M. (2018). Empirically Derived Profiles of Teacher Stress, Burnout, Self-Efficacy, and Coping and Associated Student Outcomes. *Journal of Positive Behavior Interventions*, 20(2), 90–100.
- Kulinna, P. H. (2007). Teachers' attributions and strategies for student misbehavior. *The Journal of Classroom Interaction*, 42(2), 21–30.
- Lewis, R., Romi, S., Katz, Y. J., & Qui, X. (2008). Students' reaction to classroom discipline in Australia, Israel, and China. *Teaching and Teacher Education*, 24(3), 715–724. doi:10.1016/j.tate.2007.05.003
- Little, S. G., & Akin-Little, A. (2008). Psychology's contributions to classroom management. *Psychology in the Schools*, 45(3), 227–234.
- Losen, D., Hodson, C., Keith, M. A., Morrison, K., & Belway, S. (2015). *Are We Closing The School Discipline Gap?* Los Angeles, CA: The Center For Civil Rights Remedies.
- Pane, D. M. (2010). Viewing classroom discipline as negotiable social interaction: A communities of practice perspective. *Anthropological Perspectives on Learning and Teaching: Legitimate Peripheral Participation Revisited*, 26(1), 87–97.
- Ripley, A. (2016, November). How America Outlawed Adolescence. *The Atlantic*.

- Tajalli, H., & Garba, H. A. (2014). Discipline or Prejudice? Overrepresentation of Minority Students in Disciplinary Alternative Education Programs. *The Urban Review*, 46(4), 620–631.
- Townsend, B. L. (2000). The Disproportionate Discipline of African American Learners: Reducing School Suspensions and Expulsions. *Exceptional Children*, 66(3), 381–391.

The relevance of time perspective for the eudaimonic well-being in the emerging adulthood

Manuela Zambianchi¹

¹ Università di Bologna

Introduction

The emerging adulthood represents a period of life, lasting from the late teens through the mid-to late twenties (Arnett, 2014), that is characterized by a progressive autonomy for life choice, but where it is prevalent the experimentation in the affective, work and social spheres, without stable commitment to them. This crucial life-phase requests, for the new tasks that are to be faced with special attention for its psychosocial outcomes, and raises the question about how to identify indexes or criteria of its positive development and positive functioning. Hawkins et al. (2009), referring to the theoretical premises of Positive Psychology, discussed the question of successful transition to adulthood from this stage of life proposing a complex and multidimensional model that identifies five competences or skills that concur to accomplish this outcome: civic action and engagement, trust and tolerance of others, trust in authorities and organizations, social competences, life satisfaction (satisfaction with achievement and direction, and satisfaction with personal/social life). The latter competence can be traced to Positive Psychology, being it an area of investigation focused on the facets of individual and social well-being.

Since the emerging adulthood represents a stage of life where people lay the foundations of their life-course, the component of well-being as Eudaimonia, that derives its philosophical foundation in the ancient Greek philosopher Aristotle (384-322 BCE), and in his concept of “*true self*” may be regarded of special importance. As indeed stated by Waterman and colleagues (2008), “Eudaimonia, as a subjective state, refers to the feelings present when one is moving toward self-realization in terms of the developing one’s unique individual potentials and furthering one’s purposes in living” (p.42). Clearly, the conception of Eudaimonia as personal well-being related to self-realization in favor also of the society and community intercepts the developmental tasks of this stage of life. For this reason, the evaluation of the level of eudaimonic well-being (PWB, Ryff, 1989) may be of special relevance, since it could be regarded as an index of positive development.

The emerging adulthood represents a life-stage during which people restructure and integrate their past, present and future time perspective, due to the reaching of a higher level of cognitive abstraction (Ricci Bitti & Zambianchi, 2011). Time perspective, for this reason, may be of interest as relevant individual factor for its potential influence on PWB. Referring to the Field Theory of Lewin introduced the construct of time perspective and defined it as

“the often nonconscious process through which individuals give order and coherence to their experiences” (Zimbardo & Boyd, 1999, p.1271). It is constituted by five dimensions: past positive (a positive view of past that is perceived as bearer of values and constructive experiences); past negative (a past that is remembered for traumatic and painful experiences, not yet elaborated); present hedonistic (living the present enjoying the relationships but also seeking risk and strong emotions); present fatalistic (a hopeless vision of the present that is perceived as out of personal control) and future (a general future orientation where one is striving for future goals). Carelli, Wiberg and Wiberg (2011), arguing that only one dimension of future cannot capture all the cognitive representations, the emotional qualities and nuances of the future, have proposed an extended version of the original questionnaire developed by Zimbardo and Boyd (1999) which comprises two future time dimensions, namely the future positive (that corresponds to the presence of projects and resources-strategies for accomplish them such as planning and delay of gratification) and the future negative (that corresponds to a threatening view of the future that is perceived as anxious and critical). Despite several research has been conducted on the relationship between time perspective and features of well-being, the role of time perspective for the eudaimonic psychological well-being (PWB), constitutes nowadays an understudied area of inquiry in the period of emerging adulthood. Considering that PWB represents a crucial dimension for positive development of emerging adults, it would be useful to examine its relationships with time perspective.

Objectives of the study

- To evaluate the level of eudaimonic well-being and the characteristic of the time perspective of emerging adults.
- To evaluate the presence of differences for gender on time perspective and eudaimonic well-being.
- To evaluate the correlations between time perspective dimensions, overall eudaimonic well-being and its sub-components. It was hypothesized the presence of positive correlations between past positive, present hedonistic, future positive and the overall eudaimonic well-being. On the contrary, negative correlations between past negative, present fatalistic, future negative and overall eudaimonic well-being as well as its sub-components are expected.
- To evaluate the predictive power of time perspective dimensions for overall eudaimonic well-being and its sub-components, after controlling for age and gender as structural variables.

Participants

A sample of 204 emerging adults, (mean age 21.61, $SD = 2.99$; range 19-30; females 85 (49%), males 108; (56%) participated in the study. They were recruited at the University of Bologna and in Companies of Northern Italy. After being briefly informed of the objectives of the study and the anonymity of the questionnaires they gave their consent and filled in the following self-report measures:

- Swedish Zimbardo Time Perspective (Carelli et al., 2011).
- Psychological Well-being Questionnaire (PWB) (Ryff & Keyes, 1995; Ruini, Ottolini, Rafanelli, Ryff, & Fava, 2003).

Statistical analyses

The analyses were run in four steps. Firstly mean, standard deviations, skewness and kurtosis of all variables were calculated. In the second step, MANOVA Models were run for evaluate groups differences (gender) for time perspective and psychological eudaimonic well-being. Subsequent ANOVAs evaluated the differences in a more detailed way. In the third step, a Spearman correlational matrix was calculated. Finally, seven hierarchical regression models evaluated the predictive value of time perspective dimensions on overall PWB and on its specific sub-components.

Results

Gender differences for time perspective and eudaimonic well-being

A first MANOVA model with gender as grouping variable and the six time perspective dimensions as dependent variables resulted statistically significant (Wilk's Lambda = .90; $F(6,159) = 2.80$; $p < .01$), with female being more present fatalistic than males (Males: $M = 2.39$; Females: $M = 2.56$; $F = 4.14$; $p < 0.01$, $\eta = .02$) and with a more pronounced past negative than males (Males: $M = 2.81$; Females: $M = 3.04$; $F = 4.85$; $p < .05$). Females show a higher future positive than males (Males: $M = 3.54$; Females: $M = 3.75$; $F = 7.13$; $p < .01$; $\eta = .04$).

A second MANOVA model with gender as grouping variable, the six eudemonic dimensions and overall PWB as dependent variables resulted statistically significant (Wilk's Lambda = .91; $F(6,168) = 2.44$; $p < .05$). Males reported a slightly higher level of autonomy (Males: $M = 4.11$; Females: $M = 3.93$; $F = 2.93$; $p < .08$; $\eta = .01$) and a lower level of positive relations with others than females (Male: $M = 4.55$; Female: $M = 4.86$; $F = 7.18$; $p < .01$; $\eta = .03$).

Correlations among PWB and Time Perspective

The overall PWB appear to be significantly correlated with all the time perspective dimensions, with the exception of present hedonistic. Past negative, present fatalistic and future negative are negatively correlated with overall PWB (respectively $-.48$, $p < .001$; $-.46$, $p < .001$; $-.44$, $p < .001$) while past positive and future positive show positive correlations with overall PWB (respectively $.35$, $p < .001$; $.35$, $p < .001$). Its sub-components self-acceptance and environmental mastery highlight positive correlations with past positive (respectively $.28$, $p < .01$; $.35$, $p < .001$) and future positive (respectively $.23$, $p < .01$; $.34$, $p < .001$), and negative correlations with past negative (respectively $-.53$, $p < .001$; $-.44$, $p < .001$), present fatalistic (respectively $-.40$, $p < .001$; $-.40$, $p < .001$) and future negative (respectively $-.48$, $p < .001$; $-.50$, $p < .001$). Personal growth appears to be positively correlated with past positive ($.20$, $p < .05$), present hedonistic ($.18$, $p < .05$) and future positive ($.30$, $p < .01$), while purpose in life show positive correlations with positive future only ($.32$, $p < .01$) and negative correlations with present fatalistic ($-.30$, $p < .01$) and future negative ($-.28$, $p < .01$). Positive relations with others appear to be positively correlated with past positive ($.41$, $p < .001$), present hedonistic ($.21$, $p < .01$) and future positive ($.20$, $p < .01$), while is negatively correlated with past negative ($-.23$, $p < .01$) and present fatalistic ($-.22$, $p < .01$).

The predictors of psychological eudaimonic well-being.

A set of seven hierarchical regression models with gender and age as structural independent variables and the six -time perspective dimensions as independent variables were run. Overall PWB. For overall eudaimonic well-being, neither gender, nor age, inserted in the first step, resulted significant. In the second step the six-time perspective dimensions were

added, resulting all significant in predicting well-being. Past negative ($\beta = -.239, p < .01$), present fatalistic ($\beta = -.242, p < .01$), and future negative ($\beta = .272, p < .001$) give a negative contribution to the explained variance, while past positive ($\beta = .272, p < .001$), present hedonistic ($\beta = .232, p < .01$), and future positive ($\beta = .254, p < .001$), give a positive contribution to it. Time perspective contributed to 47% of explained variance for overall eudaimonic well-being (Multiple R = .70; $R^2 = .49$; adj. $R^2 = .47$; $F(8,143) = 17.7$; $p < .001$)

Discussion and implication for interventions

The important role exerted by time perspective on PWB is confirmed by the results of the regression models. The overall PWB is predicted by all the time perspective dimensions, and in the expected direction: negative past experiences, a fatalistic perception of the present, the envisioning of a threatening future together concur to undermine the human tendency towards actualization of own talents and potentials. On the contrary, positive time dimensions such as past positive and the envisioning of a positive future favor the experience of high PWB. Sub components of PWB are related to specific time perspective dimensions, as hypothesized. For time perspective, female appear to be more present fatalistic oriented than males, possessing, at the same time, a higher level of future positive. The first result can be perhaps traced back to the tendency of women to be less agentic, or to perceive for themselves less self-efficacy (Bandura, 1986). On the contrary, a growing equality of opportunities for both sexes opens new windows for self-realization and increasing hope in the future.

The relevance of psychological time could open new windows of opportunities for interventions aimed at improving well-being and psychological functioning through time-based interventions. The time perspective-based temporal interventions offer indeed a relevant opportunity of personalized interventions (Zimbardo, Sword, & Sword, 2012; Boniwell & Osin, 2014). Having established that overall PWB is significantly linked to the totality of time perspective dimensions, it is important to identify effective temporal interventions for reducing the prominence of negative ones and, on the contrary, improving the constructive times frames. For example, having past negative a strong effect on overall PWB, interventions aimed at improving skills and techniques such as the “expressive writing” (Pennebaker, 2004) can help the emerging adult to give meaning, coherence to his/her negative early experiences reducing, at the same time, their over-presence in mind. The ability to identify life priority and objectives, in accordance with personal interests, motivation and talents (the *true self*, as defined by Aristotle) can help the emerging adults in reaching a more broaden, deepen and positive view of the future. At the same time, temporal based-interventions can enhance, or strengthen, the PWB sub-components. Given, for example, the relevance of future negative, as demonstrated by other research (Ronnlund, Astrom, Adolfsson, & Carelli, 2018), it will be a priority to identify strategies for reducing its influence on overall PWB and several its sub-dimensions, such as environmental mastery and purpose in life. Interventions based, e.g. on the improvement and utilization of proactive coping skills (Aspinwall & Taylor, 1999) can increase the perception of mastery and self-efficacy toward the future of the emerging adults. For these reasons, giving the possibility of learning these temporal competencies and strategies it is crucial to identify intervention models and programs aimed at promoting positive temporal dimensions in educational contexts: interventions, e.g. dedicated at developing the capacity for planning and proactive coping at schools during late adolescence could represent a resource that, in the next age the emerging adult, can use

to plan or choose a career, fostering her/his positive future and improving the perception of self-realization. At the same time, mindfulness techniques could enter educational programs for adolescence and also work training projects within companies, with clear beneficial effects for the well-being of emerging adult employees, helping them to develop a more deep personal knowledge, increasing their self-acceptance, and the ability to focus his/her time attention on the present reaching a more inner integration of past, present and future, as recent research evidenced and to reduce the work-related stress, e.g. the time pressure.

References

- Arnett, J. J. (2014). *Emerging Adulthood: The Winding Road from the Late Teens Through the Twenties* (2nd ed.). New York, NY: Oxford University Press.
- Aspinwall, L. G., & Taylor S. E. (1997). A stitch in time: self-regulation and proactive coping. *Psychological Bulletin*, 121, 417-436.
- Boniwell, I., & Oysin, E. (2015). Time Perspective Coaching. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time Perspective Theory; Review, Research and Application: Essays in Honor of Philip G. Zimbardo*. Springer International Publishing Switzerland.
- Carelli, M. G., Wiberg, B., & Wiberg, M. (2011). Development and construct validation of the Swedish Zimbardo Time Perspective Inventory. *European Journal of Psychological Assessment*, 4, 220-227. doi:org710.1027/1015-5759/a000076
- Hawkins, M. T., Lechter, P., Sanson, A., Smart, D., & Tombourou, J. W. (2009). Positive development in emerging adulthood. *Australian Journal of Psychology*, 2, 89-99.
- Pennebaker, J. W. (2004). *Writing to heal. A guided journal for recovering to trauma and emotional upheaval*. Oakland, CA: New Harbinger Press.
- Ricci Bitti, P. E., & Zambianchi, M. (2011). Organizzare la vita quotidiana e progettare il futuro. (organize daily life and planning the future). In A. Palmonari (Ed.), *Manuale di Psicologia dell'adolescenza* (pp. 165-183). Bologna, Italia: Il Mulino.
- Ronnlund, M., Astrom, E., Adolfsson, R., & Carelli, M. G. (2018). Perceived stress in adults aged 65 to 90: relations to facets of time perspective and COMT Val158Met Polymorphism. *Frontiers in Psychology*, 8, 1-10.
- Ruini, C., Ottolini, F., Rafanelli, C., Ryff, C. D., & Fava, G. A. (2003). La validazione italiana delle Psychological Wellbeing Scales (PWB). *Rivista di Psichiatria*, 3, 117-129.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personal and Social Psychology*, 69, 719-727.
- Waterman, A. S., Schwartz, S. J., & Conti, R. (2008). The implications of two conceptions of happiness (hedonic enjoyment and eudaimonia) for the understanding of intrinsic motivation. *Journal of Happiness Studies*, 9, 41-79.
- Zimbardo, P. G., & Boyd, J. N. (1999). Putting Time in Perspective: a valid, reliable individual-differences metric. *Journal of Personality and Social Psychology*, 6, 1271-1288
- Zimbardo, P. G., Sword, R. M., & Sword, R.K. (2012). *The Time Cure. Overcoming PTSD with the new psychology of time perspective therapy*. S. Francisco, CA: Jossey-Bass.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069-1081.

Pennebaker, J. W. (2004). *Writing to heal: A guided journal for recovering from trauma and emotional upheaval*. Oakland, CA: New Harbinger Press.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Burnout and teacher well-being

Work engagement e pratiche didattiche nella scuola dell'obbligo: uno studio sull'insegnamento dei docenti in Ticino

Loredana Addimando¹

¹ Scuola universitaria professionale della Svizzera Italiana

Introduzione

La ricerca scientifica sulle pratiche didattiche a scuola ha dimostrato come pratiche altamente diversificate siano associate a migliori risultati scolastici degli studenti (Hattie, 2012, 2009). Le ricerche longitudinali a livello internazionale mostrano come il miglioramento dell'istruzione ed il successo accademico degli allievi siano strettamente connessi ai processi che hanno luogo quotidianamente in classe (Pianta, Hamre, & Stuhlman, 2003; Pianta & Hamre, 2009). Lo studio delle pratiche didattiche si configura, dunque, come un antecedente degli studi sulla valutazione dell'efficacia dei processi di insegnamento e apprendimento che hanno luogo a scuola. In altri termini, emerge con chiarezza la connessione tra la pratica formativa quotidiana ed i risultati scolastici e di apprendimento degli allievi. In questo contesto, la letteratura scientifica si è concentrata principalmente sulla comprensione delle caratteristiche professionali degli insegnanti, indicative delle loro concezioni e delle loro competenze professionali (Fiorilli, 2009; Park & Oliver, 2008) e sulla valutazione delle competenze apprese dagli studenti, indicative dei loro progressi (si vedano i programmi dell'OCSE per la valutazione internazionale degli studenti – come, ad esempio, l'indagine PISA). La ricerca in quest'ambito è tuttavia ancora limitata, perché richiede l'adozione di prospettive teoriche e impianti metodologici in grado di cogliere quell'intreccio fra pratiche didattiche e processi di apprendimento che è da tempo postulato nella psicologia dell'educazione, ma resta difficile da esplorare empiricamente (Trincherò, 2014). Una buona lezione dovrebbe, infatti, incoraggiare gli allievi a partecipare attivamente e in modo significativo (Molinari & Mameli, 2015; Mercer, 2010; Wells & Arauz, 2006), mentre la capacità, da parte di docenti e allievi, di adattarsi reciprocamente e di sfruttare le opportunità che emergono momento per momento nel flusso interattivo si rivela una strategia cruciale per l'esplorazione e il consolidamento di nuove conoscenze (Myhill, 2006; O'Connor & Michaels, 2007; Roorda, Koomen, Spilt, & Oort, 2011). In questo senso la *Goodness of Fit Theory* (Chess & Thomas, 1984) ha da tempo dimostrato come il processo di insegnamento/apprendimento sia in larga misura influenzato dalla relazione con il docente. La partecipazione degli allievi e l'adattabilità del dispositivo formativo possono riguardare sia gli obiettivi educativi (Saravani & Haddow, 2011), sia l'orientamento interattivo alla competenza, che si riferisce al modo in cui docenti e allievi lavorano insieme su idee e conoscenze o mis-conoscenze (Molinari, Mameli, & Gnisci, 2013). Concentrando l'attenzione sulla figura del docente, la letteratura ha dimostrato che le idee (o concezioni) che i docenti costruiscono e consolidano nel tempo, rispetto alla possibilità di incidere significativamente sull'apprendimento, hanno un'influenza diretta sul

processo didattico (Lerner & Lerner, 2018; Mugny & Carugati, 1989). Tuttavia, minore attenzione è stata dedicata allo studio delle condizioni psicologiche e lavorative che promuovono oppure ostacolano l'adozione di nuove pratiche in classe (Klaeijnsen, Vermeulen, & Martens, 2018). I metodi e le tecniche usati dai docenti in aula rappresentano il bagaglio di pratiche di insegnamento, frutto della formazione e delle concezioni che i docenti maturano nel tempo e basate su obiettivi didattici predeterminati, in grado di facilitare l'apprendimento degli allievi.

La ricerca

La ricerca è finalizzata a stimare le relazioni tra le risorse lavorative personali e contestuali (ad esempio il supporto sociale, il senso di autonomia, la soddisfazione lavorativa), il coinvolgimento nel lavoro (*work engagement*) e la varietà di pratiche adottate in aula. Nello specifico, il presente contributo è finalizzato a identificare un modello capace di dar conto del peso che assumono le risorse personali e contestuali nella possibilità di adottare nuove pratiche didattiche o modificare quelle consolidate.

In particolare, sono state sottoposte a verifica tre differenti ipotesi:

H1: l'autonomia lavorativa percepita, il supporto sociale e la soddisfazione lavorativa sono direttamente e positivamente associati al coinvolgimento lavorativo.

H2: il coinvolgimento lavorativo è positivamente associato all'eterogeneità delle pratiche educative adottate dagli insegnanti in classe.

H3: la percezione di condizioni di lavoro positive e il coinvolgimento nella professione favoriscono l'uso di pratiche didattiche diversificate in classe.

Campione, misure e metodo

Il campione era composto da insegnanti in servizio ($N = 1'370$) reclutati nelle scuole dell'infanzia, elementari e medie delle aree urbane e suburbane del Cantone Ticino (Svizzera). I docenti hanno risposto ad un questionario online somministrato alla popolazione nell'anno 2018. Per la raccolta di dati è stato utilizzato un questionario composto da scale di misura di atteggiamento e scale di frequenza di pratiche di insegnamento, precedentemente validate in letteratura. In questo caso le attività didattiche valutate sono riconosciute in contesti cross-nazionali come "attività pratiche di routine" (CWSEI, Wieman & Gilbert, 2014) e "strategie di insegnamento in classe" (MESI, Moè, Pazzaglia, & Friso, 2010). Per quanto riguarda le caratteristiche dei docenti sono stati misurati alcuni costrutti che la letteratura scientifica ha dimostrato essere correlati alle pratiche. In particolare, sono stati rilevati, i livelli di soddisfazione sul lavoro (TJSS-9, Pepe, Addimando, & Veronese, 2017), l'autonomia percepita degli insegnanti (TA Questionnaire, Ulas & Aksu, 2015), il coinvolgimento lavorativo (UWES-9, Simbula, Guglielmi, & Schaufeli, 2011) e le percezioni di supporto sociale (indagate attraverso item ad hoc su tre domini specifici: supporto da parte di colleghi, supporto da parte della direzione scolastica e supporto da parte dei genitori). I dati raccolti sono stati analizzati tramite il software statistico SPSS-AMOS 25.0 per la verifica di modelli di equazioni strutturali, con la scomposizione degli effetti totali in effetti diretti e indiretti.

I modelli di equazioni strutturali (SEM) sono una tecnica statistica multivariata che consente l'analisi simultanea delle relazioni tra costrutti multipli latenti e dati empirici (Byrne, 2016). La SEM è fondamentalmente un metodo di verifica delle ipotesi che ha il duplice vantaggio di stimare esplicitamente l'errore di misurazione piuttosto che ignorare questo problema, come avviene con altre tecniche tradizionali (Hair, Hult, Ringle, & Sarstedt, 2016) e di permettere la scomposizione degli effetti totali in effetti diretti e indiretti (Kline, 2015).

Risultati

Il modello strutturale ipotizzato ha riportato una buona corrispondenza con i dati empirici (NC = 2.7; RMSEA = .051, NFI = .951, NNFI = .950, CFI = .968). Per quanto riguarda la prima ipotesi (H1), il modello ha confermato l'idea che la valutazione delle "condizioni di lavoro" di base fosse direttamente associata all'impegno lavorativo. In effetti, l'effetto diretto totale è stato positivo, di grandi dimensioni e statisticamente significativo ($\beta = .73, p = .009$; 95% C.I. [1.01-3.25]). In particolare, l'analisi suggerisce che maggiore è la soddisfazione, il supporto e l'autonomia degli insegnanti, maggiori sono i loro punteggi sul coinvolgimento lavorativo. Per quanto riguarda la seconda ipotesi (H2), l'effetto diretto del coinvolgimento lavorativo sulle pratiche degli insegnanti è stato positivo ma di piccola entità e non statisticamente significativo ($\beta = .10, p = .580$; IC al 95% [-0.444 - 0.375]), ciò dunque non permette di confermare l'ipotesi H2. Infine, l'analisi degli effetti totali della valutazione delle "condizioni di lavoro" sulla pratica dell'insegnante è stata positiva, di medie dimensioni e statisticamente significativa ($\beta = .45, p = .005$; IC al 95% [0.776 - 3.94]). La decomposizione dell'effetto totale ha rivelato che le condizioni di lavoro percepite erano sia direttamente ($\beta = .37, p = .005$ IC al 95% [0.418 - 4.39]) che indirettamente ($\beta = .08, p = .032$; IC al 95% [0.575 - 0.925]) associate al repertorio di pratiche. Da questo punto di vista, l'analisi suggerisce che quando gli insegnanti percepiscono il loro ambiente di lavoro come favorevole e soddisfacente (nel senso del soddisfacimento dei bisogni psicologici intrinseci di base), tendono ad essere più coinvolti e utilizzano una gamma più ampia di pratiche didattiche, in particolare, nell'ambito delle attività di differenziazione (effetto indiretto, $\beta = .39, p = .014$; IC 95% [1.48 - 7.22]) e di gestione della classe (effetto indiretto, $\beta = .31, p = .011$; IC 95% [0.837 - 4.14]). I risultati, dunque, confermano pienamente la terza ipotesi (H3).

Discussione

Nel complesso, i risultati hanno fornito alcune evidenze sulla relazione tra ambiente di lavoro e pratiche di insegnamento. I risultati dello studio mostrano come la valutazione dell'ambiente psicologico e delle condizioni di lavoro percepite (in termini di soddisfazione, sostegno sociale e autonomia professionale) sia cruciale nel promuovere la decisione degli insegnanti di adottare pratiche diverse o innovative. Gli insegnanti che sono più soddisfatti e percepiscono un ambiente di lavoro favorevole risultano più coinvolti nella professione e sono più portati a sperimentare una serie più eterogenea di pratiche di insegnamento. Ciò significa che i programmi di intervento volti a incrementare le competenze degli insegnanti e ampliare il loro bagaglio di strumenti per la pratica professionale dovrebbero porre l'attenzione anche sugli aspetti di soddisfazione lavorativa, autonomia e sostegno sociale. In termini organizzativi, ciò implicherebbe un passaggio da un livello micro-sistemico (ad esempio un insegnante in interazione con il proprio studente in classe) a un livello di macrosistema (ad esempio un insegnante in interazione con un sistema organizzativo capace di influenzare le interazioni tra docenti e allievi), ponendo così l'accento sulla necessità per

il professionista di essere supportato, soddisfatto e più indipendente e autonomo. Il contributo riflette sui risultati alla luce delle implicazioni pratiche in termini di formazione professionale.

Bibliografia

- Byrne, B. M. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Oxford, UK: Routledge.
- Chess, S., & Thomas, A. (1984). *Stress in teaching: past, present e future*. London, England: Wurr Publisher.
- Fiorilli, C. (2009). *Gli insegnanti pensano l'intelligenza. Dalle concezioni alle pratiche educative*. Milano, Italia: Unicopli.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. London, England: Sage Publications.
- Hattie, J. (2009). *The argument: Visible teaching and visible learning*. Oxford, England: Routledge.
- Hattie, J. (2012). *Visible Learning for Teachers Maximize Impact on Learning*. New York, NY: Routledge.
- Klaeijnsen, A., Vermeulen, M., & Martens, R. (2018). Teachers' innovative behaviour: The importance of basic psychological need satisfaction, intrinsic motivation, and occupational self-efficacy. *Scandinavian Journal of Educational Research*, 62(5), 769-782.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. London, England: Guilford Publications.
- Lerner, R. M., & Lerner, J. V. (2018). An idiographic approach to adolescent research: theory, method, and application. In L. B. Hendry & M. Kloep (Eds.), *Reframing Adolescent Research* (pp. 39-52). London, England: Routledge.
- Mercer, N. (2010). The analysis of classroom talk: Methods and methodologies. *British Journal of Educational Psychology*, 80(1), 1-14.
- Moè, A., Pazzaglia, F., & Friso, G. (2010). *Mesi. Motivazioni, emozioni, strategie e insegnamento. Questionari metacognitivi per insegnanti*. Trento, Italia: Erickson.
- Molinari, L., & Mameli, C. (2015). *Gestire la classe*. Bologna, Italia: Il Mulino.
- Molinari, L., Mameli, C., & Gnisci, A. (2013). A sequential analysis of classroom discourse in Italian primary schools: The many faces of the IRF pattern. *British Journal of Educational Psychology*, 83(3), 414-430.
- Mugny, G., & Carugati, F. (1989). *Social representations of intelligence*. Cambridge, England: Cambridge University Press.
- Myhill, D. (2006). Talk, talk, talk: Teaching and learning in whole class discourse. *Research Papers in Education*, 21(1), 19-41.
- O'Connor, C., & Michaels, S. (2007). When dialogue is "dialogic". *Human Development*, 50, 135-198.
- Park, S., & Oliver, J. S. (2008). Revisiting the conceptualization of pedagogical content knowledge (PCK): PCK as a conceptual tool to understand teachers as professionals. *Research in Science Education*, 38(3), 261-284.
- Pepe, A., Addimando, L., & Veronese, G. (2017). Measuring teacher job satisfaction: assessing measurement invariance of the Teacher Job Satisfaction Scale (TJSS) across six countries. *Europe's Journal of Psychology*, 3, 1-10.
- Pianta, R. C., Hamre, B., & Stuhlman, M. (2003). Relationships between teachers and children. In I. B. Weiner, W. M. Reynolds, & G. B. Miller (Eds.), *Handbook of Psychology*, Vol.7 (pp.199-234). New York, NY: Routledge.

- Pianta, R. C., & Hamre, B. K. (2009). Measurement and improvement of teacher-child interactions: Implications for policy and accountability frameworks of standardized observation. In G. Sykes, B. Schneider, D. N. Plank, & T. G. Ford (Eds.), *Handbook of education policy research* (pp. 652-660). New York, NY: Routledge.
- Roorda, D. L., Koomen, H. M., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher-student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of educational research*, 81(4), 493-529.
- Saravani, S. J., & Haddow, G. (2011). The mobile library and staff preparedness: Exploring staff competencies using the unified theory of acceptance and use of technology model. *Australian Academic & Research Libraries*, 42(3), 179-190.
- Simbula, S., Guglielmi, D., & Schaufeli, W. B. (2011). A three-wave study of job resources, self-efficacy, and work engagement among Italian schoolteachers. *European Journal of Work and Organizational Psychology*, 20(3), 285-304.
- Trincherò, R. (2014). Evidence Based Education. Per un uso consapevole dell'evidenza empirica in educazione. *Pedagogia e Vita*, 7, 40-56.
- Ulas, J., & Aksu, M. (2015). Development of teacher autonomy scale for Turkish teachers. *Procedia-Social and Behavioral Sciences*, 186, 344-349.
- Wells, G., & Arauz, R. M. (2006). Dialogue in the classroom. *The Journal of the Learning Sciences*, 15(3), 379-428.
- Wieman, C., & Gilbert, S. (2014). The Teaching Practices Inventory: A New Tool for Characterizing College and University Teaching in Mathematics and Science. *CBE-Life Sciences Education*, 13, 552-569.

Health and motivation in school-principals: the gender effect

Ilaria Buonomo¹, Paula Benevene¹ and Caterina Fiorilli¹

¹ Università LUMSA

Introduction

School management exposes principals to cognitive and emotional demands, so that their personal resources are at stake to face them and maintain good health conditions. According to the Job Demand Resources model (Bakker & Demerouti, 2007), job stress and motivation arise from the interaction between risk factors (job demands) and protective factors (personal resources). When risks overcome resources, workers may experience health impairment and exhaustion. Literature addressing school-principals' psychological health already individuated several protective (e.g., social support, self-efficacy, job commitment) and risk factors (e.g., work conditions, psychosocial symptoms) related to stress at work (Beusaert, Froehlich, Devos, & Riley, 2016; Darmody & Smyth, 2015; Friedman, 2002; Nitta, Deguchi, Iwasaki, Kanchika, & Inoue, 2018). At the same time, some authors addressed the consequences of stress on principals' mental and physical health, such as depression and burnout (Friedman, 2002). Studies addressing these topics showed that women are at higher risk than men for experiencing adverse health conditions due to job stress (Friedman, 2002). Despite these findings, women seem to be more resilient in their school management. Consistently, other studies showed that female principals scored higher on instructional and supportive styles of leadership, known to positively affect team building and teachers' well-being (Hallinger, Dongyu, & Wang, 2016; Melero, 2011). Women, indeed, tend to achieve leadership positions at later ages, with more experience and education than men (Roser, Brown, & Kelsey, 2010). Despite this, in US and OECD countries, less than 50% of principals are women, with very slow increasing rates in the recent decades (Hill, Ottem, & DeRoche, 2016; Kruger, 2008; OECD, 2016). It seems that 'women continue to be underrepresented, under-valued, and underutilized as leaders' (Marshall & Wynn, 2012).

Research question and aims

Building on the mentioned literature, we aimed to verify whether and how female and male leaders differ in terms of their psychological health at work. More specifically, our research addressed the gender differences with regard to job stress and burnout, as well as risk and protective factors (namely depressive symptoms, perceived work overload, work meaning, self-efficacy, sense of belonging), in a representative sample of Italian principals.

Methodology and methods

We investigated differences between women and men psychological health and motivation towards their work in a sample of Italian school principals. The sample was recruited by means of the collaboration with the Italian National Association of Principals, that contacted over 1700 principals in the whole Italian territory. For the aims of this study, 860 school-principals (Female = 50%) were involved. Their age ranged from 40 to 66 ($M=55.79$, $SD=5.86$), with females being slightly younger than males ($t_{(858)}=2.255$, $p<.05$). Almost half of the participants (47.2%) worked as a principal in kindergarten or in a primary school, while the other half in a secondary school. Their years of experience ranged from 1 to 46 ($M=29.46$; $SD=8.46$). Principals did not show gender differences in terms of their years of experience ($t_{(856)}=-1.495$, $p=.135$). We collected data by self-report questionnaires using the Copenhagen Psychosocial Questionnaire II – COPSOQ II (Pejtersen, Kristensen, Borg, & Bjorner, 2010), adapted to the cultural and work setting of Italian principals. Selected scales regarded several variables measuring psychological health at work: stress, depressive symptoms, sleep problems, burnout, work overload, self-efficacy, work meaning, sense of belonging (Alpha ranged .796 to .939).

Analyses and results

We ran Student's *t* and Welch's *t* tests (depending on variance equality), to verify gender differences. Analyses were run with IBM SPSS-24 and Jamovi software. Female school principals showed higher risk than men on several dimensions: stress ($t_{(858)}=3.336$, $p=.000$), depressive symptoms ($t_{(858)}=2.220$, $p=.000$), sleep problems (Welch's $t_{(858)}=4.531$, $p=.000$), burnout ($t_{(858)}=4.005$, $p=.000$), and work overload, with higher perceived job requirements (Welch's $t_{(858)}=6.659$, $p=.000$), on a general basis and with regard to cognitive and emotional requests. At the same time, female principals scored higher than male ones on protective variables, namely work meaning ($t_{(858)}=6.013$, $p=.000$), sense of belonging ($t_{(858)}=3.889$, $p=.000$) and self-efficacy ($t_{(858)}=5.674$, $p=.000$). Cohen's *d* values ranged from .151 to .454 showing a small to moderate effect.

Discussion

Our results show that gender makes a difference in school-principals' health and motivation towards their job. On one side, our study confirms that female workers are at higher risk for stress, depression and burnout (as in Friedman, 2002). On the other, it suggests that female leaders may provide a stronger impulse to promote health at school, thanks to the sense of meaning and efficacy they attribute to their role and the sense of belonging they perceive towards their school. Understanding this gender effect, thus, may allow psychologists and educators to use gender differences to schools' advantage. Considered that principals' approach to job influences school climate (Gulsen & Gulenay, 2014), which lesson female school-principals may learn from men colleagues? And vice-versa? The analysis of gender may help to understand principals' health conditions and their specific contribution to school development and well-being. Current studies, indeed, suggest that female principals tend to adopt leadership styles that consistently promote well-being among teachers and students. More specifically, female leaders are known to consult subordinates more often, to better communicate, and to better promote subordinates' growth and health (Meleiro, 2011; Hallinger et al., 2016). Overall, our results are in line with current research on leadership in organizations, which show (taking into account non-educational organizations)

that leadership styles have a main role in promoting workers' satisfaction, commitment and efficacy beliefs (Franklin, Bernhardt, Lopez, Long-Middleton, & Davis, 2015; Rasmussen & Jeppesen, 2006). In this regard, principals' training and psychological support seem to be the high roads to pursue in order to improve positive leadership approaches and prevent leaders from suffering from stress and depression. Recent meta-analyses, indeed, showed that leaders taking part to training programs have better chances to acquire intrapersonal and social abilities that promote well-being in the workplace (Gardner, Avolio, Luthans, May, & Walumbwa, 2005; Ilies, Morgeson, & Nahrgang, 2005). At the same time, several studies grounded in the positive psychology approach show the effectiveness of organizational interventions aimed to prevent burnout and promote well-being at work (Bakker, Oerlemans & Ten Brummelhuis, 2013; Fisher, 2010).

References

- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. doi:10.1108/02683940710733115.
- Bakker, A. B., Oerlemans, W. G., & Ten Brummelhuis, L. L. (2013). Becoming fully engaged in the workplace: What individuals and organizations can do to foster work engagement. In R. J. Burke (Ed.) *The fulfilling workplace: The organization's role in achieving individual and organizational health*, (pp. 55-69). London, England: Routledge.
- Beusaert, S., Froehlich, D. E., Devos, C., & Riley, P. (2016). Effects of support on stress and burnout in school principals. *Educational Research*, 58(4), 347–365. doi:10.1080/00131881.2016.1220810
- Darmody, M., & Smyth, E. (2015). Primary school principals' job satisfaction and occupational stress. *International Journal of Educational Management*, 30(1), 115–128. doi:10.1108/MRR-09-2015-0216
- Fisher, C. D. (2010). Happiness at work. *International journal of management reviews*, 12(4), 384-412.
- Franklin, C. M., Bernhardt, J. M., Lopez, R. P., Long-Middleton, E. R., & Davis, S. (2015). Interprofessional teamwork and collaboration between community health workers and healthcare teams: *An integrative review. Health Services Research and Managerial Epidemiology*, 2, 1–7.
- Friedman, I. A. (2002). Burnout in school principals: Role related antecedents. *Social Psychology of Education*, 5(3), 229–251. doi:10.1023/A:1016321210858
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The leadership quarterly*, 16(3), 343-372.
- Gulsen, C., & Gulenay, G. B. (2014). The Principal and Healthy School Climate. *Social Behavior and Personality*, 42, 93–100. doi:10.2224/sbp.2014.42.0.S93
- Hallinger, P., Dongyu, L., & Wang, W. C. (2016). Gender Differences in Instructional Leadership: A Meta-Analytic Review of Studies Using the Principal Instructional Management Rating Scale. *Educational Administration Quarterly*, 52(4), 567–601. doi:10.1177/0013161X16638430
- Hill, J., Ottem, R., & DeRoche, J. (2016). Trends in Public and Private School Principal Demographics and Qualifications: 1987–88 to 2011–12. Stats in Brief. *National Center for Education Statistics, NCES 2016(189)*.
- Ilies, R., Morgeson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader–follower outcomes. *The leadership quarterly*, 16(3), 373-394.
- Kruger, M. L. (2008). School leadership, sex and gender: Welcome to difference. *International Journal of Leadership in Education*. doi:10.1080/13603120701576266

-
- Marshall, C., & Wynn, S. (2012). Expanding the Conversation: Collaboration, Complexities and the Missing Pieces. *Educational Administration Quarterly*, 48(5), 883-892. doi:10.1177/0013161X12468586
- Melero, E. (2011). Are workplaces with many women in management run differently? *Journal of Business Research*, 64(4), 385-393. doi:10.1016/j.jbusres.2010.01.009
- Nitta, T., Deguchi, Y., Iwasaki, S., Kanchika, M., & Inoue, K. (2018). Depression and occupational stress in Japanese school principals and vice-principals. *Occupational Medicine*, 69(1), 39-46. doi:10.1093/occmed/kqy149
- OECD. (2016). *Education at a glance 2016: OECD Social Indicators - School Principals*. Retrieved from <https://data.oecd.org/eduresource/school-principals.htm>
- Pejtersen, J. H., Kristensen, T. S., Borg, V., & Bjorner, J. B. (2010). The second version of the Copenhagen Psychosocial Questionnaire. *Scandinavian Journal of Public Health*, 38(SUPPL. 3), 8-24. doi:10.1177/1403494809349858
- Rasmussen, T. H., & Jeppesen, H. J. (2006). Teamwork and associated psychological factors: A review. *Work & Stress*, 20(2), 105-128.
- Roser, V., Brown, M. S., & Kelsey, C. L. (2010). Principal gender as related to campus size, level, and academic rating. *Advancing Women in Leadership Journal*, 30(14), 2-12. Retrieved from <http://www.advancingwomen.com/awl/summer2006/Gerdes.html>

Evolution of preservice primary teachers' attitudes towards mathematics and its teaching

Luciana Castelli¹, Pietro Di Martino², Monica Panero¹ e Silvia Sbaragli¹

¹ Scuola universitaria professionale della Svizzera italiana

² Università di Pisa

Introduction

This paper focuses on an ongoing action-research project (September 2017-August 2020) on attitudes towards mathematics and its teaching involving a cohort of students of the bachelor's degree in "Teaching for the primary level" provided at the SUPSI's Dipartimento formazione e apprendimento, in Locarno (Switzerland). The theoretical frame of this research is the three-dimensional model of attitude towards mathematics, developed by Di Martino and Zan (2011), which includes emotional disposition, beliefs, perceived competence and their mutual relationships. The attention for affective factors in mathematics education emerged in the mid-1980 when several studies underlined that the vision of mathematics can influence students' performance in mathematics (Schoenfeld, 1983), teachers' didactic choices (Calderhead, 1996; Hodgen & Askew, 2011; Sbaragli, 2006; Thompson, 1992) and teacher-student interactions (Buehl, Alexander, & Murphy, 2002). In the same period, other studies highlighted the role of other affective factors (emotions and attitudes) in the teaching-learning process of mathematics education (McLeod, 1992): it emerged the need to go beyond the purely cognitive approach in the research field of mathematics education.

These studies have also an impact in the research on teacher professional development: in particular, preservice primary teachers represent an interesting sample for research about affective factors. In fact, several studies (e.g., Hannula, Liljedahl, Kaasila, & Roesken, 2007; Di Martino & Sabena, 2011) show how negative emotions towards mathematics prevail over positive ones and negative attitude towards mathematics can affect future teachers' emotional disposition towards mathematics teaching.

Such results are interesting for teacher educators: affective factors seem to influence how preservice teachers approach the teacher education programme and, consequently, their well-being in this educational context, as well as the development of their identity as mathematics teachers and their future choices in the classroom. In their studies in the Italian context, Coppola, Di Martino, Mollo, Pacelli and Sabena (2013) highlight an interesting phenomenon among future teachers with negative experiences with mathematics: the desire for a "math-redemption", accompanied by positive emotions related to the possibility of redeeming oneself from past experiences by becoming a good teacher.

It appears crucial that any education programme for preservice primary teachers takes these aspects into account, creating the conditions to reinforce or to rebuild a positive relationship with mathematics, with desirable effects on students' well-being.

Research questions and objectives

The project aims at investigating the evolution of preservice primary teachers' attitude towards mathematics and its teaching, and at testing the effects of specific didactic interventions on students' attitude.

Our overall research questions are:

- What is the attitude of preservice mathematics teachers towards mathematics and its teaching at the beginning of the education programme?
- Does their attitude evolve during the teacher education programme in relation to specific didactic interventions?

Methodology, methods and sample

The sample is composed of 72 students. Age varies between 18 and 31, 78% are women and have different school backgrounds. The project develops in three main phases, each accompanied by analysis of the collected data and dissemination of the results.

In the first phase (September 2017-November 2017), a questionnaire was designed and administered to investigate students' attitudes towards mathematics and its teaching at the beginning of the education programme. It was composed of 3 sections, one for each attitude dimension:

- **Emotional disposition** was investigated through open questions such as: "Write the first emotion you associate with the word 'mathematics'. Explain why you associate this emotion with mathematics", "How would you define your relationship with mathematics?" accompanied by the description of a significant episode, and "What emotion do you feel at the idea that one day you will teach mathematics? Explain why you think you feel this emotion".
- Students' **beliefs** about mathematics were explored by asking to indicate a good and a negative aspect of mathematics, with argumentation.
- Regarding the **perceived competence**, we measured the sources of self-efficacy in the specific context of mathematics learning through a validated measure (Ulsher & Pajares, 2009), composed by 24 items, response format on a 5-point Likert scale, ranging from 1 "Totally not true" to 5 "Totally true".

In the second phase (November 2017-May 2019), we designed and implemented specific didactic interventions, integrated into the courses regularly attended by the students, with the aim of promoting and supporting a positive evolution of students' attitude towards mathematics and its teaching. More precisely, in mathematics education courses, students are constantly encouraged to analyse and reflect on their possible choices as mathematics teachers in a metacognitive perspective. In addition, some meetings are devoted to workshops and discussions to make students express their representation of the professional identity as mathematics teachers. To monitor the evolution of attitudes towards the discipline and its teaching, in January 2019 we proposed this open question: "What emotion do you feel when you think back on the mathematical activities you have proposed in your apprenticeship in the classroom? Explain why you feel this emotion", considering that, parallel to university courses, students have a continuous apprenticeship in the classroom.

In the third phase (May 2019-August 2020), designed to investigate students' attitude after two years of education programme, we administered a final questionnaire composed of 3 sections, one for each attitude dimension, as the initial one. Some questions remain the

same in order to facilitate comparison and other ones are specifically centred on the preservice teachers' experience as university students.

Each student is assigned an anonymised identification code to answer the three questionnaires, in order to make longitudinal comparison on the collected data.

Analyses and results

In this section, we present results from the initial questionnaire and some preliminary results from the intermediate questionnaire focusing on emotions towards mathematics and its teaching. The declared emotions are analysed in terms of valence (positive/negative) and activation (activating/deactivating) according to Pekrun and colleagues' research (Pekrun, Frenzel, Goetz, & Perry, 2007; Pekrun, Vogl, Muis, & Sinatra, 2017). These authors identify achievement emotions, which are related to both the activity and the outcomes, and episodic emotions related to the knowledge-generating qualities of cognitive activities.

Emotional disposition – initial questionnaire. With respect to mathematics, we can identify:

- 54% negative emotions: 31 activating (e.g., anxiety); 8 deactivating (e.g., hopelessness);
- 34% positive emotions: 21 activating (e.g., enjoyment); 3 deactivating (e.g., relief);
- 4% intermediate or contrasting emotions (e.g., enjoyment/anxiety);
- 8% non-classifiable answers that do not refer to a specific emotion.

Notice that the recurring negative emotions are strong and activating. They are mainly related to students' outcomes in mathematics or to specific teachers, namely at secondary school.

Concerning the emotions towards the future teaching of mathematics, data are more encouraging:

- 65% positive emotions: 44 activating (e.g., hope); 3 deactivating (namely, calm);
- 7% activating negative emotions (namely, fear and anxiety);
- 24% contrasting or intermediate emotions (e.g. enjoyment/fear);
- 4% non-classifiable answers since they do not refer to a specific emotion.

We deepen this analysis for each student, identifying if and how the valence and activation of the emotions vary with respect to the discipline or to its teaching. We remarked that most of the contrasting or intermediate emotions towards mathematics teaching are declared by students who feel negative emotions towards the discipline. For example, one student who associates anxiety to mathematics ("*[because] I had teachers in high school who made me feel this way every time I entered the classroom*") feels a contrasting emotion thinking about mathematics teaching: "*I feel a bit of anxiety anyway, because of my 'bad' past with this subject, but on the other hand the fact that I will teach in a primary school calms me down, because it is not the mathematics I had difficulty with [...]. However, I am a little bit scared because I want to manage to teach it well, so that my future pupils will not feel as I did (suffering because I did not understand anything)*".

Emotional disposition – intermediate questionnaire. For the students who answered both the initial and the intermediate questionnaires, we can identify a positive trend regarding the emotions towards mathematics teaching.

Among the 32 comparable cases,

- 13 express stable positive emotions;
- 10 shift from a contrasting or negative emotion to a positive one (mainly pride) or from a negative emotion to a contrasting one;

- in 9 non-negligible cases the trend is negative, when anxiety, stress or fatigue, related to time or material issues, influence students' emotional disposition.

Discussion

Our first analyses show a prevalence of negative emotions towards mathematics that can negatively influence the students' attitude towards the discipline and its teaching. Especially students who feel contrasting emotions towards mathematics teaching or those who have had a negative relationship with the discipline needs support to reconcile with it and feel self-confident and positively motivated about their future teaching. They need support not only on the disciplinary and didactic sides, but simultaneously through specific workshops and discussions they should also be helped identify and share the strong and the critical points of their disciplinary and didactic choices.

Preservice primary teachers' preparation, in fact, without a specific work on attitudes, could be undermined as soon as negative emotions, twisted beliefs or a weak sense of self-efficacy prevail. With this action-research project, we expect to intervene significantly, at least at a local level, in the dangerous cycle that transforms students with a negative attitude towards mathematics into future teachers with a negative attitude towards mathematics and its transposition into the classroom, with harmful consequences for their pupils.

We are aware of the limits of this project: our interventions, although ad hoc designed, are limited to sporadic meetings, over two years, and mainly addressed to the whole group of students, while each student has individual needs and evolution patterns. For this reason, a perspective of the study is to collaborate with the educators of the professional accompaniment seminar that is offered by our department, in order to target our interventions by working in smaller groups.

References

- Buehl, M., Alexander, A., & Murphy, P. (2002). Beliefs about schooled knowledge: Domain general or domain specific? *Contemporary Educational Psychology*, 27(3), 415–449.
- Calderhead, J. (1996). Teachers: Beliefs and knowledge. In D. C. Berliner, & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 709–725). New York, NY: Simon & Schuster Macmillan.
- Coppola, C., Di Martino, P., Mollo, M., Pacelli, T., & Sabena, C. (2013). Pre-service primary teachers' emotions: the math-redemption phenomenon. In A. M. Lindmeier & A. Heinze (Eds.), *Proceedings of the 37th Conference of the International Group for the Psychology of Mathematics Education* (pp. 225–232). Kiel, Germany: PME.
- Di Martino, P., & Sabena, C. (2011). Elementary pre-service teachers' emotions: shadows from the past to the future. In K. Kislenko (Ed.), *Current state of research on mathematical beliefs XVI* (pp. 89–105). Tallin, Estonia: Tallinn University.
- Di Martino, P., & Zan, R. (2011). Attitude towards mathematics: A bridge between beliefs and emotions. *ZDM*, 43(4), 471–482.
- Hannula, M. S., Liljedahl, P., Kaasila, R., & Roesken, B. (2007). Researching relief of mathematics anxiety among pre-service elementary school teachers. In J.-H. Woo, H.-C. Lew, K.-S. Park, & D.-Y. Seo (Eds.), *Proceedings of the 31st conference of the International Group for the Psychology of Mathematics Education* (vol. 1, pp. 153–156). Seoul, Korea: PME.

- Hodgen, J., & Askew, M. (2011). Emotion, Identity and Teacher Learning: Becoming a Primary Mathematics Teacher. In C. Day & J. C. K. Lee (Eds.), *New understandings of Teacher's Work: Emotions and Educational Change* (pp. 165–183). London, England: Springer.
- McLeod, D. (1992). Research on affect in mathematics education: a reconceptualization. In D. Grouws (Ed.), *Handbook of Research on Mathematics Learning and Teaching* (pp. 575–596). New York, NY: MacMillan.
- Pekrun, R., Frenzel, A. C., Goetz, T., & Perry, R. P. (2007). The control-value theory of achievement emotions: An integrative approach to emotions in education. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 13–36). Amsterdam, Netherlands: Academic Press.
- Pekrun, R., Vogl, E., Muis, K. R., & Sinatra, G. M. (2017). Measuring emotions during epistemic activities: the Epistemically-Related Emotion Scales. *Cognition and Emotion*, 31(6), 1268–1276.
- Sbaragli, S. (2006). Primary School Teachers' beliefs and change of beliefs on Mathematical Infinity. *Mediterranean Journal for Research in Mathematics Education*, 5(2), 49–76.
- Schoenfeld, A. H. (1983). Beyond the purely cognitive: Beliefs system, social cognition, and metacognition as driving forces in intellectual performance. *Cognitive Science*, 7, 329–363.
- Thompson A. G. (1992). Teachers' Beliefs and Conceptions: a Synthesis of the Research. In D. Grouws (Ed.), *Handbook of Research on Mathematics Learning and Teaching* (pp. 127–145). New York, NY: Macmillan Publishing Company.
- Ulsher, E., L., & Pajares, F. (2009). Sources of self-efficacy in mathematics: A validation study. *Contemporary Educational Psychology*, 34, 89–101. doi:10.1016/j.cedpsych.2008.09.002

Il benessere come garanzia del successo scolastico: quali rappresentazioni e strategie

Valentina Paola Cesarano¹ e Anna Russo¹

¹ Università degli Studi di Napoli Federico II

Introduzione

Il mutamento sociale in atto pone al centro dello sviluppo il nodo della formazione, fattore decisivo nella competizione globale. La scuola del nuovo millennio si configura come palestra di cittadinanza, intrisa di relazioni che vanno da quelle con i pari a quelle con i docenti; luogo in cui i singoli possano realizzare la propria autoefficacia e autorealizzazione. L'Obiettivo 4 evidenzia la necessità di "Fornire un'educazione di qualità, equa ed inclusiva, e opportunità di apprendimento per tutti" (ONU, 2018). Le istituzioni scolastiche sono chiamate ad aprire le porte al territorio per promuovere la creazione di quella che viene definita "comunità educante" in cui le relazioni tra la scuola e la famiglia, la scuola e il mondo del lavoro e le altre agenzie educative riesce a creare una rete di soggetti che condividano la responsabilità della crescita dei giovani, in un'ottica di inclusione e di ottemperamento ai diritti di uguaglianza e dignità, con lo scopo di ridurre le cause della povertà e del divario sociale, per prevenire l'abbandono e la dispersione scolastica assicurando a tutti il diritto allo studio e il successo formativo.

Il benessere in tal senso dipenderà dalle situazioni a cui l'individuo attribuisce valore positivo e dalle possibilità offerte dall'ambiente per soddisfare i bisogni ridefiniti da Sen (1993) come bisogni della più ampia sfera dei diritti della persona. In estrema sintesi, la scuola ha una sfida che si compie nella vita d'aula attraverso la promozione di un'atmosfera che si viene a creare in quello specifico contesto, un clima di classe positivo: esso riflette la vita scolastica e quella socio-emotiva della classe (Moé & De Beni, 2000).

Domanda di ricerca e obiettivi

Quali fattori secondo gli insegnanti promuovono il benessere scolastico?

Quali strategie educative e didattiche adottano gli insegnanti per prevenire le forme disagio?

L'obiettivo dello studio esplorativo qui presentato è volto alla comprensione delle rappresentazioni degli insegnanti in merito al benessere scolastico e alle strategie educative e didattiche da essi adottati per promuovere il benessere scolastico nel contesto campano.

Metodologia, strumenti e campione

Si è scelto di realizzare uno studio empirico-descrittivo. Nello specifico è stata adottato lo

strumento dell' intervista semistrutturata. Sono stati coinvolti 200 insegnanti della scuola dell' infanzia e della scuola primaria della Campania. Le interviste semistrutturate sono state caratterizzate dalla seguente sollecitazione : “Partendo dalla tua esperienza professionale individua quei fattori che promuovono il benessere scolastico”. Nel corso delle interviste, partendo da quanto riportato dai partecipanti sono state approfondite le strategie messe in atto dai partecipanti per prevenire il disagio scolastico durante la loro pratica professionale. Le interviste, della durata di 45 minuti, sono state audio-registrate con il consenso dei partecipanti e successivamente sbobinate e trascritte integralmente parola per parola.

Analisi e risultati

Per quanto riguarda la metodologia di analisi dei dati raccolti si è scelto di adottare la Grounded Theory (Glaser & Strauss, 1967) come paradigma epistemologico e metodologico di riferimento. Si è scelto di analizzare le interviste semistrutturate avvalendosi del supporto del software NVIVO (Richards, 1999).

Da una prima analisi dei risultati emerge come la maggior parte degli insegnanti consideri il benessere come un costrutto complesso e multidimensionale in cui la dimensione dell' apprendimento è fortemente interconnessa alle dimensioni cognitive ed emotive. Emerge tuttavia l' assenza dell' utilizzo di strumenti che permettano di rilevare eventuali situazioni di disagio nel contesto classe, quale punto di partenza per progettare percorsi educativi che abbiano come scopo il benessere in classe. Gli insegnanti sembrano inoltre non riconoscere la presenza nella didattica e attraverso la didattica di risorse che possono promuovere tale benessere. L' alleanza educativa tra genitori ed insegnanti viene considerata quale fattore chiave per prevenire situazioni di disagio scolastico ma al contempo difficile da realizzare. La presenza nel contesto scolastico di psicologi e pedagogisti viene considerata necessaria per la concreta realizzazione di tale benessere, soprattutto per sostenere l' insegnante nella gestione di situazioni conflittuali in classe e mettere in atto progetti di educazione socio-affettiva.

Discussione

L' assenza di una progettazione educativa e di strategie didattiche volte a promuovere il benessere scolastico impone la necessità di ripensare la formazione degli insegnanti su questa tematica specifica affinché essi siano in grado di operationalizzare il costrutto di benessere, declinandolo nella prassi educativa e didattica.

Bibliografia

- Glaser, B. G., & Strauss, A.L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, IL: Aldine Publishing Company.
- Moè, A., & De Beni, R. (2002). Stile attributivo, motivazione ad apprendere ed atteggiamento strategico. Una rassegna. *Psicologia Clinica dello Sviluppo*, 6, 5-35. 10.1449/1180.
- ONU. (2018). *Obiettivi di sviluppo sostenibile*. Disponibile da <https://www.unric.org/it/agenda-2030/30815-obiettivo-4-fornire-une-ducazione-di-qualita-equa-ed-inclusiva-e-opportunita-di-apprendimento-per-tutti>

Richards, L. (1999). *Using NVivo in Qualitative Research*. London, England: Sage.

Sen, A. K. (1993). Capability and well-being. In M. C. Nussbaum & A. K. Sen (Eds.), *The quality of life* (pp. 30-53). Oxford, England: Clarendon Press.

Factors affecting teachers' job satisfaction: does money matter?

Djily Diagne¹

¹ Université de Fribourg

Introduction

The purpose of the present paper is to analyze the relationship between teacher salary and teachers' job satisfaction in OECD countries. More specifically, this paper asks whether teacher salary per se has a positive impact on teacher job satisfaction. Due to the nature of the profession, teacher job satisfaction is a multidimensional construct. Consequently, there exists no universally accepted definition. Snipes, Oswald, LaTour and Armenakis (2005) show that job satisfaction consists of several facets, including satisfaction with the supervisor, work, pay, advancement opportunities, professional collaboration, etc. We adopt the position of Locke (1976) who defined job satisfaction as a positive or pleasant emotional state resulting from a person's appreciation of his or her own job. In sum, job satisfaction refers to the level of fulfillment gained from work (Torres, 2019). We aim to contribute to the large body of evidence on the determinants of teachers' job satisfaction. The latter represents a major issue in the ongoing debate over how to improve the quality of teachers. Research over the past two decades has shown that teacher quality is an important factor determining student achievement (Clotfelter, Ladd, & Vigdor, 2007; Darling-Hammond, 2000; Hattie, 2008). Recent studies also show that the shortage of well-qualified teachers is a significant problem in many countries, among others due to teacher attrition, i.e. the departure of teachers from their teaching jobs. For example, Skaalvik and Skaalvik (2011) found that 25 % of beginning teachers in the US leave teaching before their third year, and almost 40 % leave the profession within the first five years (see also Chang, 2009). The high rate of teacher attrition is also reported in other countries around the world regardless of differences in their educational system, for instance in Australia, China, and England (Hong, 2010; Skaalvik & Skaalvik, 2011). In a similar vein, teacher turnover (teachers moving between schools) is an emergent phenomenon that harms student achievement and discourages educators. Furthermore, the OECD (2014) reports that disadvantaged schools tend to be more likely to suffer from teacher shortages and experience greater difficulties in attracting qualified teachers.

In summary, a substantial body of research has established that job satisfaction is related to teacher attrition and teacher turnover (Ingersoll, 2003; Stockard & Lehman, 2004). Several studies also show that higher turnover reduces student achievement (Darling-Hammond, 2010). Combined, these factors point to a natural focus on the determinants of teachers' job satisfaction and more specifically on the role of teacher salary.

Research question and objectives

The main objective of this research is to shed light on the link between teacher salary and teachers' job satisfaction in OECD countries. With teacher salary, policy makers have an important lever at their disposal that has the potential to improve teacher quality through many mechanisms. For example, higher salaries might attract and retain effective teachers or improve teacher job satisfaction. Furthermore, teachers' remuneration is the biggest cost factor in educational finance. In most countries, it accounts for between half and three fourth of education expenditure. In fact, each country needs to make a policy decision on how much to invest in teacher salary considering the potential amount of returns for improved teaching effectiveness and student achievement. Given the magnitude of the financial investment involved, it is important to analyze the link between these funds and job satisfaction. In other terms, examining the level of teacher salary and its potential impact on teacher satisfaction and student learning will provide useful information for policymakers.

Despite teacher pay have the potential to affect job satisfaction, relatively little attention has been given to identifying such relationships. The existing literature which is mostly based on U.S data shows that low teacher salary often leads to teacher dissatisfaction and higher attrition rates (Akiba, Chiu, Shimizu, & Liang, 2012). In the U.S., empirical studies found that higher salary is associated with lower attrition rates in Wisconsin (Imazeki, 2005), New York State (Brewer, 1996) and Texas (Kirby, Berends, & Naftel, 1999). More specifically, Kelly (2004) found that increasing teacher salary by \$4000 leads to a 3.8% increase in the probability of staying in the same school for at least 10 years. Stockard and Lehman (2004) found that teachers with lower salaries, in small town, and in the West are more likely than others to leave teaching. The relationships among low teacher salary, teacher dissatisfaction and attrition rates have also been found in international studies outside the United States. For example, Webb et al. (2004) found that Finnish teachers reported low salary to be the largest disincentive for remaining in teaching. Davidson (2007) reported that low teacher salary and poor working conditions affected teacher perform teaching responsibilities effectively in Tanzania.

Finally, while there is evidence that increasing salaries can help retain teacher, it is noteworthy that the political reality is that resources available for such increases are limited. Our main research question is as follows: is there a link between teachers' salaries and teachers' job satisfaction?

Methodology, methods and sample

In order to identify the link between teachers' salaries and teachers' job satisfaction, our research will make use of data from the Teaching and Learning International Survey (TALIS). TALIS survey was conducted in 2013 and 2018 by the OECD (the Organization for Economic Cooperation and Development). TALIS is the first international survey programme to focus on the learning environment and the working conditions of teachers in schools. Among 34 participating countries and economies, OECD sampled about 200 schools in each country and about 20 teachers in each school. Since OECD used the probability sampling, the actually achieved samples included about 7'436 schools, which represented about 89'810 schools and 117'876 teachers internationally. TALIS offers unique, detailed (e.g., job satisfaction, teacher demographic characteristics, school leadership, teacher professional development, systems of feedback appraisals) as well as internationally comparable information on learning en-

vironments and the working conditions in schools (Freeman, O'Malley, & Eveleigh, 2014). Finally, note that TALIS-PISA provides a linkage of key information on how teachers work and, on the other hand, characteristics of the students and schools included in PISA survey. Data on teacher' salaries are drawn from the latest OECD annual report *Education at a Glance* (OECD, 2018). Teachers' salaries are the average gross salaries of educational personnel according to official pay scales, before the deduction of taxes, including the employee's contributions for retirement or health care plans, and other contributions or premiums for social insurance or other purposes, but less the employer's contribution to social security and pension. Salaries are shown in USD covering early childhood education teachers, primary and secondary teachers at the beginning of their career, after 15 years, and at the top of the scale.

To investigate the relationship between teacher salary and job satisfaction, we plan to use bivariate correlation for preliminary examination of the pattern of associations between variables. Furthermore, OLS regression analysis will allow us to understand the impact of teacher salary on teacher job satisfaction. Note that teacher job satisfaction in TALIS was operationalized as a multidimensional construct with two components: work satisfaction and professional satisfaction. In order to create an index of job satisfaction (TJOBSATS) the scaled scores of satisfaction with current work environment and satisfaction with profession were simply averaged up as composite scores. (See TALIS technical report 2013). This index will be used as dependent variable in a series of regression while the main independent variable will be teacher salary.

References

- Akiba, M., Chiu, Y., Shimizu, K., & Liang, G. (2012). Teacher salary and national achievement: A cross-national analysis of 30 countries. *International Journal of Educational Research*, 53, 171–181.
- Brewer, D. J. (1996). Career paths and quit decisions: evidence from teaching. *Journal of Labor Economics*, 14(2), 313–339.
- Chang, M.-L. (2009). An Appraisal Perspective of Teacher Burnout: Examining the Emotional Work of Teachers. *Educational Psychology Review*, 21, 193–218.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). Teacher credentials and student achievement: Longitudinal analysis with student fixed effects. *Economics of Education Review*, 26(6), 673–682.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1).
- Darling-Hammond, L. (2010). Teacher Education and the American Future. *Journal of Teacher Education - J TEACH EDUC*, 61, 35–47. doi:10.1177/0022487109348024.
- Davidson, E. (2007). The Pivotal Role of Teacher Motivation in Tanzanian Education. *The Educational Forum*, 71, 57–166, doi:10.1080/00131720708984928
- Freeman, C., O'Malley, K., & Eveleigh, F. (2014). *Australian teachers and the learning environment: An analysis of teacher response to TALIS 2013: Final Report*. Melbourne, Australia: ACER
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Abingdon, England: Routledge.
- Hong, J. Y. (2010). Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and Teacher Education*, 26(8), 1530–1543. doi:10.1016/j.tate.2010.06.003

-
- Imazeki, J. (2005). Teacher salaries and teacher attrition. *Economics of Education Review*, 24, 431-449.
- Ingersoll, R. (2003). *Is There Really a Teacher Shortage?*. Retrieved from https://repository.upenn.edu/gse_pubs/133
- Kelly, S. (2004). An event history analysis of teacher attrition: salary teacher tracking and socially disadvantaged schools. *The Journal of Experimental Education*, 72(3), 195-220.
- Kirby, S. N. M., Berends, M., & Naftel, S. (1999). Supply and demand of minority teachers in Texas: Problems and prospects. *Educational Evaluation and Policy Analysis*, 21(1), 47-66.
- Locke, E. A. (1976). The Nature and Causes of Job Satisfaction. In M. D. Dunnette, *Handbook of Industrial and Organizational Psychology* (1st Ed.) (pp. 1297-1349). Chicago, IL: Rand McNally.
- OECD. (2014). *TALIS 2013 technical report*. Retrieved from <http://www.oecd.org/education/school/TALIS-technical-report-2013.pdf>
- OECD. (2018). *Teachers' salaries (indicator)*. Retrived from https://www.oecd-ilibrary.org/education/teachers-salaries/indicator/english_f689fb91-en
- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27(6), 1029-1038.
- Snipes, R. L., Oswald, S. L., LaTour, M., & Armenakis, A. A. (2005). The effects of specific job satisfaction facets on customer perceptions of service quality: An employee-level analysis. *Journal of Business Research*, 58, 1330-1339.
- Stockard, J., & Lehman, M. B. (2004). Influences on the Satisfaction and Retention of 1st-Year Teachers: The Importance of Effective School Management. *Educational Administration Quarterly*, 40(5), 742-771. doi:10.1177/0013161X04268844
- Torres, D. G. (2019). Distributed leadership, professional collaboration, and teachers' job satisfaction in U.S. schools. *Teaching and Teacher Education*, 79, 111-123.
- Webb, R., Vulliamy, G., Hämäläinen, S., Sarja, A., Kimonen, E., & Nevalainen, R. (2004). Pressures, rewards and teacher retention: a comparative study of primary teaching in England and Finland. *Scandinavian Journal of Educational Research*, 48(2,) 169-188. doi:10.1080/0031383042000198530

Which emotional skills should a teacher develop to last in the long run? Relations between well-being, burnout and emotional intelligence in a sample of 202 primary school teachers

Philippe Gay¹ and Philippe A. Genoud²

¹ Haute Ecole Pédagogique du Valais

² Université de Fribourg

Introduction

Anyone can reach the point of burnout. However, professionals involved in interpersonal relationships (professions in the field of care and education in particular) are probably the most vulnerable (Maslach, Jackson, & Leiter, 1996). Thus, teachers are particularly at risk due to their interactions with students, colleagues, administrators and parents (Chang, 2009). Therefore, Jennings and Greenberg (2009) argue that in school environments, teachers should sharpen their emotional intelligence to cope with the multiple interactions inherent to this profession (e.g., managing difficult situations but also creating levers in teaching/learning processes). Thus, fostering emotional growth in teachers could reduce the high drop-out and burnout rates.

Emotional competencies refer to a wide range of knowledge, skills and dispositions that can be subdivided into two categories (Brasseur, Grégoire, Bourdu, & Mikolajczak, 2013): intrapersonal (e.g., understanding, expressing, regulating emotions) and interpersonal competencies (e.g., identifying, listening, regulating emotions of others). Accurate emotional skills contribute to better mental and physical health, more satisfying social relationships and greater professional success (Mikolajczak, Quoidbach, Kotsou, & Nelis, 2014).

Few studies have examined the impact of emotional skills on teachers' burnout. A recent review (Mérida-López & Extremera, 2017) identified five cross-sectional studies specifically conducted in the school context. Their results indicate that better emotional skills are associated with lower rates of burnout but all these studies assessed emotional competencies with short instruments that identified no more than a maximum of four distinct emotional competencies.

Research question and objectives

While research on teachers' emotions was patchy 10 years ago (Garner, 2010) and is gradually expanding, burnout is well studied in this population. However, there is a need to better understand the relationships between emotional competences and burnout since school is an environment full of intense emotions (Hargreaves, 2000) which strongly influences learning and teaching.

It is also worth noting that the limited research on emotional competences and burnout has not considered the multifaceted nature of both intrapersonal and interpersonal skills. Therefore, the purpose of this study was to examine the associations between the 10 different aspects of emotional competence recently proposed by Brasseur et al. (2013) and the three dimensions of burnout (Maslach et al., 1996). Furthermore, multiple regression analyses examined these relations by controlling the general level of subjective well-being as well as socio-demographic variables (gender and age) in order to determine which part was specifically related to emotional competencies with a similar level of well-being.

Method

Teachers (N=202) in different primary schools in the French-speaking area of Switzerland (176 women; 26 men), aged 21 to 63 years old and with 1 to 49 years of experience ($M = 19.1$, $SD = 11.6$) completed the three following questionnaires:

- The French version of the Maslach Burnout Inventory - Educators Survey (MBI-ES) (Dion & Tessier, 1994), a 22-item questionnaire assessed on a 7-point Likert scale, to measure the three dimensions of burnout (emotional exhaustion, depersonalization and reduced personal achievement). Higher scores indicate higher levels of burnout (in the present study, the internal homogeneity indices, as assessed by Cronbach's alphas, were respectively of .89, .60 and .75).
- The Profile of Emotional Competence (PEC) (Brasseur et al., 2013), a 50-item questionnaire assessed on a 5-point Likert scale, to assess five intrapersonal and five interpersonal emotional competencies: identification, understanding, expression, use and regulation of one's own emotions and emotions of others. Higher scores indicate better skills (Cronbach's alphas were comprised between .64 and .74).
- The French version of the Short Happiness Scale (SHS) (Kotsou & Leys, 2017), a 4-item questionnaire assessed on a 7-point Likert scale, to provide a general well-being score. Higher scores indicate a higher level of well-being (Cronbach's alpha was .80).

Analyses and results

Pearson's correlations showed that each of the 10 emotional skills correlates significantly (in a low to moderate way) with one or more of the dimensions of burnout. More precisely, emotional exhaustion was negatively correlated (between -.14 and -.25) with six dimensions of the PEC: reduced personal achievement was negatively correlated (between -.14 and -.36) with all the dimensions of the PEC, and depersonalization was negatively correlated (between -.18 and -.39) with five dimensions of the PEC. Moreover, general well-being was positively correlated (between .14 and .46) with the 10 dimensions of the PEC. In other words, lower levels of burnout and a higher level of well-being were related to better emotional competences.

Regression analyses specified that (1) only better intrapersonal skills (particularly the understanding of one's own emotions) were associated with lower levels of burnout on the dimensions of depersonalization (standardized beta = $-.40$, $p < .01$; $R^2 = .26$; $F_{(13,188)} = 5.01$, $p < .01$) and loss of personal achievement (standardized beta = $-.25$, $p < .01$; $R^2 = .26$; $F_{(13,188)} = 5.11$, $p < .01$) when all other variables were taken into account; (2) with respect to emotional exhaustion, no relation to emotional skills appeared in the multiple regression model

but general well-being predicted this dimension of burnout (standardized beta = .18, $p < .05$) with a total variance explained by the entire model significant although slightly lower than the two other models ($R^2 = .18$; $F_{(13,188)} = 3.07$, $p < .01$).

Discussion

Teachers experience a wide range of emotions in response to their students' behaviours and outcomes, including frustration, worry, disappointment, hope, enthusiasm and pride (Hargreaves, 2000; Sutton, 2007). Of course, emotions arise from private matters too, like personal concerns and aspects of teaching (e.g., relationships with colleagues and hierarchy). Improving the faculty to identify, understand, express, use and manage these emotions is particularly crucial to ensure the quality of teaching and learning in the classroom (e.g., Jennings & Greenberg, 2009), and to last in a wonderful profession that shows dramatically increasing rates of burnout and drop-out. Teacher education could benefit from a better understanding of emotional intelligence and how to teach emotional competences.

The present study specifies different elements of the relations highlighted in previous studies (Mérida-López & Extremera, 2017) by showing that overall (1) intrapersonal emotional competences seem to be more correlated to burnout than interpersonal skills; and (2) most emotional skills are more specifically positively correlated with a lower reduction in personal achievement, then with less depersonalization and finally with less emotional exhaustion.

In addition, results showed that understanding emotions seems particularly important to reduce depersonalization and loss of personal achievement, even when other emotional competences and socio-demographic variables are controlled for in multiple regression analyses.

Thus - and to the extent that emotional skills seem to play a buffer role between the stress felt and the development of burnout (in its three dimensions) - different concrete ways to approach this theme in training (initial or ongoing) could be mentioned. For instance, since teaching is an emotional undertaking, it is fair to expect the appropriate theoretical training on emotions. Most personal development techniques and therapies emphasise a better understanding of how an emotionally challenged individual functions. The first element to be introduced in training should be the adaptive relevance of emotions and their functions (e.g., anger signals an injustice experienced and aims at reparation, sadness at loss and aims to overcome it).

It is interesting to note that a better understanding of emotions is essential to raise awareness of adaptive (to use) and maladaptive (to avoid) emotion regulation strategies. In this context and according to Scherer's (2005) model of emotions, each one of them is characterised by five components followed by a particular event (e.g., a student refuses to go to work): (1) cognitive assessment by the teacher (e.g., the teacher finds this attitude unfair because he or she has planned this exercise with a lot of enthusiasm); (2) expression (e.g., facial expression of anger on the teacher's face); (3) tendency to action (e.g., a tendency to act on the teacher's face) (e.g., the desire to shake the student); (4) peripheral physiological response (e.g., the teacher's heart rate increases) and (5) subjective feeling (e.g., the teacher becomes aware that he or she is upset and feels disgusted with his profession).

Emotion regulation (in oneself and in others) can be mastered through each of these components. For instance, different methods are effective such as focusing on planning and positive thinking (e.g., thinking about the steps to take and how to manage negative events, thinking about happy and pleasant things instead of negative ones), accepting or positively re-evaluating (e.g., finding a positive meaning to the event in terms of personal development), putting into perspective (e.g., putting into perspective the seriousness of the event with questions such as “will I think about it again tomorrow? and next month? and next year? and on my deathbed?”). Mindfulness-based stress reduction programs have shown beneficial effects in reducing stress and burnout symptoms as well as in increasing effective professional behaviour in teachers (e.g., Roeser et al., 2013).

Teacher education offers a particularly interesting opportunity to develop emotional skills training, to show a higher degree of well-being, both in private and professional lives. Specific strategies can be proposed derived from evidence-based research (e.g., Nelis et al., 2011). Tailored to the teachers’ needs, such interventions should enable them to develop strategies. Thus, they would be better armed against the many stressors to which they are subject to in their professional activity.

References

- Brasseur, S., Grégoire, J., Bourdu, R., & Mikolajczak, M. (2013). The Profile of Emotional Competence (PEC): Development and validation of a self-reported measure that fits dimensions of emotional competence theory. *PLoS ONE*, *8*(5), e62635. doi:10.1371/journal.pone.0062635
- Chang, M.-L. (2009). An Appraisal Perspective of Teacher Burnout: Examining the Emotional Work of Teachers. *Educational Psychology Review*, *21*(3), 193-218. doi:10.1007/s10648-009-9106-y
- Dion, G., & Tessier, R. (1994). Validation de la traduction de l’Inventaire d’épuisement professionnel de Maslach et Jackson. *Canadian Journal of Behavioural Science*, *26*(2), 210-227. doi:10.1037/0008-400X.26.2.210
- Garner, P. W. (2010). Emotional Competence and its Influences on Teaching and Learning. *Educational Psychology Review*, *22*(3), 297-321. doi:10.1007/s10648-010-9129-4
- Hargreaves, A. (2000). Mixed emotions: teachers’ perceptions of their interactions with students. *Teaching and Teacher Education*, *16*(8), 811-826. doi:10.1016/S0742-051X(00)00028-7
- Jennings, P. A., & Greenberg, M. T. (2009). The Prosocial Classroom: Teacher Social and Emotional Competence in Relation to Student and Classroom Outcomes. *Review of Educational Research*, *79*(1), 491-525. doi:10.3102/0034654308325693
- Kotsou, I., & Leys, C. (2017). Echelle de bonheur subjectif (SHS): Propriétés psychométriques de la version française de l’échelle (SHS-F) et ses relations avec le bien-être psychologique, l’affect et la dépression. *Canadian Journal of Behavioural Science*, *49*(1), 1-6. doi:10.1037/cbs0000060
- Maslach, C., Jackson, S. E., & Leiter, M. (1996). *Maslach Burnout Inventory: Manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Mérida-López, S., & Extremera, N. (2017). Emotional intelligence and teacher burnout: A systematic review. *International Journal of Educational Research*, *85*, 121-130. doi:10.1016/j.ijer.2017.07.006
- Mikolajczak, M., Quoidbach, J., Kotsou, I., & Nelis, D. (2014). *Les compétences émotionnelles*. Paris, France: Dunod.

-
- Nelis, D., Kotsou, I., Quoidbach, J., Hansenne, M., Weytens, F., Dupuis, P., & Mikolajczak, M. (2011). Increasing emotional competence improves psychological and physical well-being, social relationships, and employability. *Emotion*, 11(2), 354–366. doi:10.1037/a0021554
- Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., ... Harrison, J. (2013). Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, waitlist-control field trials. *Journal of Educational Psychology*, 105(3), 787–804. doi:10.1037/a0032093
- Scherer, K. R. (2005). What are emotions? And how can they be measured? *Social Science Information*, 44(4), 695–729. doi:10.1177/0539018405058216
- Sutton, R. E. (2007). Teachers' Anger, Frustration, and Self-Regulation. In P.A. Schutz & R. Pekrun (Eds.), *Emotion in Education* (pp. 259–274). San Diego, CA: Academic Press. doi:10.1016/B978-012372545-5/50016-2

Teachers' well-being, self-actualisation and job satisfaction: exploring the realities of early career teachers' experiences through creative writing

Anna Lise Gordon¹

¹ St Mary's University

Introduction

This research inquiry formed part of a wider exploration of the experiences of early career teachers who have considerable influence on the well-being of their students in schools, but face inevitable demands as they work with a variety of colleagues and with children with different and challenging needs. Alongside constant educational change at a local and national level, early career teachers need to balance their own well-being.

In brief, the central aim of this research inquiry was to consider how creative writing during Initial Teacher Education (ITE) provision might encourage early career teachers in their reflective practice as they embrace the realities of teaching. The overarching aim was to foster their resilience, well-being and professional satisfaction as a different approach to reflective practice enlarged their thinking about their experiences. This involved an exploration of how the emotional aspects of teacher well-being might be addressed alongside the more technical-rational framework of Teachers' Standards (Department for Education, 2012) to maximise teacher effectiveness and ensure better outcomes for pupils. Four different creative writing approaches were used throughout the ITE programme to gain deeper insights into the experiences of the early career teachers to inform adjustments to ITE provision.

Research question and objectives

This research complements important work in the field, including Gu and Day (2013) and Johnson et al. (2015), by adopting a wide-ranging and creative approach to gathering evidence from a group of early career teachers.

The overall research inquiry focused on how the confidence of new entrants to the teaching profession is challenged and eroded, but also sustained and nurtured, in the initial year of teacher training and as a newly qualified teacher. For one aspect of this research, the key question was explored through creative writing to consider how this approach might also enhance the reflective skills of early career teachers to support their broader professional development. In essence, this aspect of the inquiry explored more rounded and holistic understandings of developing personal and professional self-efficacy (Bandura, 1982) of the individual early career teacher as lifelong reflective practitioners. Issues around well-being, self-actualisation and job satisfaction emerged as strong themes throughout.

Methodology, methods and sample

Acknowledging that the overriding concern in the choice of methodology is to be able to embrace inevitable complexity of an inquiry at many levels (contextual, social, psychological and educational), bricolage (Lévi-Strauss, 1966) was selected as the methodology for the overall research inquiry. This included a range of methods, including a resilience test, questionnaires, interviews and a range of creative writing approaches; bricolage allows different and complementary understandings of a phenomenon to emerge through the research activities, only ever as a basis for further reflection and investigation (Gordon, 2013). As Wibberley (2012) suggests, “the emergent nature of bricolage allows for bite-sized chunks of research to be carried out that have individual meaning for practice, but which can then be pieced together to create a meaningful whole” (p. 1). In addition to the other data collection methods, the creative writing approaches were “bite-sized chunks” (Wibberley, 2012, p. 1) in the overall research inquiry and afforded rich and complementary insights into the experiences of the early career teachers.

The research captured the perceptions of resilience, self-actualisation and well-being of 50 early career secondary teachers in the United Kingdom, as they engaged with different creative writing activities at four key points in the one-year initial teacher training programme. The four creative writing activities - short free writing, metaphors, haiku poetry and story writing - reflected Van Manen’s (1995) observation that to “write is to measure the depth of things, as well as to come to a sense of one’s own depth” (p. 127). Thematic coding was used to analyse all the creative writing activities.

Analysis and results

Professionals “face complex and unpredictable situations; they need complex and diverse reflective and reflexive processes” (Bolton, 2014, p. 2) and creative writing proved an illuminating and useful reflective tool for the participants and the researcher. The early career teachers used a short free writing activity early in their ITE journey to share their feelings and emotions in a different way to the more factual questionnaire that also formed part of the overall research inquiry. Frequent reference was made to a strong sense of enthusiasm and purpose, often at both a professional and personal level. At this early stage, the range of adjectives was overwhelmingly positive with words like excitement, collaboration, engaging, stimulating, interesting, thrilling, positive, enthusiastic, refreshing and optimistic used by the participants. These responses were in contrast to the responses to the final creative writing activity when participants have encountered more of the realities of teaching.

Following the first school placement, the early career teachers used metaphors as a creative writing approach to describe their experiences. When a concept, an idea or an emotion may be difficult to express, then metaphor, “an offering of perceived resemblances” (Punter, 2007, p. 13), may be a useful form of language to enable us to better understand a particular issue. There was a striking consistency of response from the participants with almost all of their metaphors involving a challenging journey, some form of extreme sport or creative endeavour. Teaching is a profession where the initial year of training involves an assault on the physical, emotional and mental well-being of an individual. The metaphors clearly captured the rollercoaster nature of the experience, with anxious lows and exhilarating highs.

The haiku poetry form was used to gain additional insights into the experiences of the early

career teachers at the mid-point of their second school placement, at the point where many were experiencing the pressure of increased teaching and juggling different priorities. The haiku poet is able to make the obvious seem remarkable and the everyday seem extraordinary and this was clearly reflected in the responses from research participants about their experiences as early career teachers. Issues around workload and the importance of the early career teacher / mentor relationship emerged strongly in their haiku. The haiku below reflects the “professional capital” which Hargreaves and Fullan (2012) promote, particularly striking as the participant’s self-belief is achieved with the mentor’s support and encouragement:

Tired, tears and doubt.
“You can do it”, mentor said.
Self-belief, vital.

Wallace (2010) illustrates the potential for story writing by early career teachers as a way of encouraging greater depth of reflection on professional experiences. Relationships with mentors and the value of support mechanisms emerged as strong themes in the final creative writing activity, particularly when the fairy tale genre was chosen by early career teachers to describe their experiences. For example, one participant describes a particularly challenging phase as a “mentor-filled snow storm”. Participants had experienced a range of mentoring styles, such as: “She met ogres along the way and realised that instead of slaying them, it was more beneficial to be friendly to them; she met kindly giants who helped her with their great wisdom.” As stories are told, the reader is also an active participant in the storytelling process, as s/he also brings experiences to the story and uses these reflections to make sense of assumptions and question previously held beliefs. It is this mutual construction that may unlock the real power of stories, not to identify any supposed truth as such, but rather to raise awareness and broaden perspectives.

Discussion

Coe, Aloisi, Higgins and Major (2014) and Allen and Sims (2018) suggest that teachers’ commitment and effectiveness are particularly challenged at the start of their careers and this may lead to missed opportunities with regard to teacher retention and longer-term impact on learners’ progress. As a result of the creative writing aspect of this research, there are clear implications for a more holistic view of the individual early career teacher. Changes to ITE provision at St Mary’s University have been adopted as a result, including a stronger focus on the emotional aspects of the teacher’s role, and a re-thinking of reflective practice and mentoring as part of transformational learning in the teaching profession.

Questions are raised about the way in which the discourse relating to reflective practice (vide Pollard, 2008; McGregor & Cartwright, 2011) is in danger of being reduced to a rationalistic and mechanistic approach in ITE provision. This is supported by Johnson et al. (2015) who maintain that “teacher resilience is enhanced when early career teachers successfully engage in processes of self-reflection and self-understanding that sustain a coherent sense of personal identity, while at the same time allowing for the emergence of a robust teacher identity” (p.103). I am prompted to consider whether ‘quick-fix’ approaches to reflective practice lessen its perceived value over time; it becomes a systematic activity, ticking off the required lesson evaluations and completing training sheets, without ever really prompting

the early career teacher to re-visit core values and to reflect deeply about why certain practices are deemed better or more appropriate than others. Dewey (1933) describes “a state of doubt, hesitation, perplexity, mental difficulty, in which (reflective) thinking originates, and ... an act of searching, hunting, enquiring, to find material that will resolve the doubt, settle and dispose of the perplexity” (p. 12) and this process is amply demonstrated in the creative writing of the early career teachers.

At a time of considerable challenge with regard to teacher recruitment and retention in England, early career teachers may benefit from encouragement and space to reflect creatively, as they seek deeper insights into their professional development. In some regards, this is counter-cultural in the current educational content, where the focus is on those things which can be measured above all else (Biesta, 2008). However, a more bespoke and personalised approach for early career teachers, through creative writing, may bring enhanced benefits in the longer term. This is in line with Boud and Walker’s (1998) idea that there “are no reflective activities guaranteed to lead to learning, and no learning activities guaranteed to lead to reflection” (p. 193). Several participants in my inquiry commented that the creative writing activities served as an additional, often cathartic, tool for reflection and helped them to make more personal and professional sense of their journey as early career teachers.

References

- Allen, R., & Sims, S. (2018). *The Teacher Gap*. Abingdon, England: Routledge.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Biesta, G. (2008). Good education in an age of measurement: on the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, 21(1), 33-46.
- Bolton, G. (2014). *Reflective Practice* (4th ed.). London, England: Sage.
- Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: the challenge of context. *Studies in Higher Education*, 23(2), 191-206.
- Coe, R., Aloisi, C., Higgins, S., & Major, L. (2014). *What makes great teaching?* London, England: The Sutton Trust.
- Department for Education. (2012). *Teachers’ Standards Effective from 1 September 2012*. Retrieved from <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-00066-2011>
- Dewey, J. (1933). *How We Think: A Re-statement of the Relation of Reflective Thinking in the Educative Process*. Chicago, IL: Henry Regnery.
- Gordon, A. L. (2013). Metaphors for engaging with bricolage. *Research in Education, Brighton: University of Brighton*, 5(2), 8-10.
- Gu, Q., & Day, C. (2013). Challenges to teacher resilience: conditions count. *British Educational Research Journal*, 39(1), 22 - 44.
- Hargreaves, A., & Fullan, M. (2012). *Professional Capital*. Abingdon, England: Routledge.
- Johnson, B., Down, B., Le Cornu, R., Peters, J., Sullivan, A., Pearce, J., & Hunter, J. (2015). *Early Career Teachers Stories of Resilience*. Perth, Australia: SpringerBriefs in Education.
- Lévi-Strauss, C. (1962, English translation 1966). *The Savage Mind*, London, England: Weidenfeld and Nicholson.

- McGregor, D., & Cartwright, L. (2011). *Developing reflective practice: a guide for beginning teachers*. Maidenhead, England: Open University Press.
- Pollard, A. (2008). *Reflective Teaching*. London, England: Continuum.
- Punter, D. (2007). *Metaphor*. Abingdon, England: Routledge.
- Van Manen, M. (1995). On the epistemology of reflective practice. *Teachers and Teaching: Theory and Practice*, 1(1), 33-49.
- Wallace, S. (2010). Joining the Goblins. *Education Action Research*, 18(4), 467 – 479.
- Wibberley, C. (2012). Getting to Grips with Bricolage: A Personal Account. *The Qualitative Report*, 17(50), 1-8.
Retrieved from <http://www.nova.edu/ssss/QR/QR17/wibberley.pdf>

Percezione degli studenti del burnout lavorativo dei docenti: validazione della scala

Ilaria Iorio¹ e Alice Ambrosetti²

¹ Università degli Studi di Napoli Federico II

² Scuola universitaria professionale della Svizzera italiana

Introduzione

Considerando la profonda incidenza della scuola sullo sviluppo emotivo, affettivo e relazionale degli studenti, conoscere il “disagio scolastico” significa innanzitutto avere gli strumenti per promuovere il benessere psichico di chi è in una fase delicata del proprio sviluppo. Se il costrutto di burnout è stato molto indagato nei docenti (Maslach, 1982; Lodolo D’Oria, 2010) più di recente esso è stato utilizzato anche per gli studenti. Il burnout degli studenti comprende un esaurimento dovuto alle richieste scolastiche, un atteggiamento cinico e distaccato verso la scuola, sentimenti di inadeguatezza in qualità di studente e mancanza di motivazione (Salmela Aro, Kiuru, Leskinen, & Nurmi, 2009). Il burnout dei docenti e il burnout degli studenti sono stati perlopiù investigati come costrutti separati. Solo alcuni studi hanno investigato, ad esempio, la percezione che gli alunni hanno del livello di burnout dei docenti, evidenziando come l’esaurimento emotivo sia considerato una delle caratteristiche più rilevanti (Tatar & Yahav, 1999).

Domanda di ricerca e obiettivi

Partendo dall’ipotesi che a scuola si sta bene o male ‘insieme’, l’obiettivo principale di questo studio è quello di raccogliere le percezioni degli studenti rispetto alla condizione di salute dei loro docenti, in quanto testimoni privilegiati, al fine di definire meglio il fenomeno del burnout dei docenti. A questo scopo è stato loro somministrato il Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1986) in una versione adattata per raccogliere la loro percezione rispetto ai livelli di burnout dei docenti. I singoli item della scala MBI sono stati per questo motivo rovesciati (Tatar & Yahav, 1999) e ne è stata verificata la struttura fattoriale. Obiettivo del contributo è quello di mostrare i risultati della validazione preliminare della scala rovesciata che mira valutare la percezione degli studenti del burnout dei loro docenti; l’uso di questo strumento permetterà da un lato, di capire come gli studenti percepiscono lo stato di salute dei loro docenti, e dall’altro, grazie ad analisi multivariate con altri costrutti (quali ad esempio, il burnout degli studenti stessi), di capire se queste percezioni rispecchiano la realtà o uno stato d’animo dello studente.

Metodologia, strumenti e campione

Per validare la scala sono stati usati i dati raccolti tramite questionario cartaceo in diverse

scuole di Napoli. Il Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1986) nella versione per insegnanti è costituito da 22 item valutati su una scala a 7 punti (0=mai; 6=tutti i giorni) attraverso i quali gli insegnanti indicano la frequenza con la quale sperimentano delle situazioni proposte. Gli item sono volti a rilevare le 3 dimensioni del burnout: Esaurimento emotivo, Depersonalizzazione e Realizzazione lavorativa. In questo caso è stato adattato agli studenti rovesciando gli item (Tatar & Yahav, 1999). Un esempio di item nella sotto-scala dell'Esaurimento emotivo è "È stressante per i miei docenti lavorare tutto il giorno con le persone"; un esempio di item rispetto alla sotto-scala della Realizzazione lavorativa è "I miei docenti riescono facilmente a creare un'atmosfera rilassata con gli alunni"; infine un esempio di item rispetto alla sotto-scala della Depersonalizzazione è "In realtà ai miei docenti non importa di ciò che succede ai loro alunni".

Hanno partecipato allo studio 949 studenti della regione Campania, prevalentemente di sesso femminile (59.3%) e con un'età media di 13 anni ($DS = 0.74$); il 31.7% frequenta scuole secondarie di I grado, il 68.3% scuole secondarie di II grado; rispetto alla scuola secondaria di II grado, il 27.0% frequenta istituti tecnico-professionali mentre il 73.0% licei. Rispetto al territorio in cui è inserita la scuola, il 14.5% del campione frequenta scuole della periferia est di Napoli.

Riguardo al metodo, innanzitutto è stato controllato che la matrice di correlazione fosse fattorizzabile. Secondariamente, è stata fatta un'analisi fattoriale esplorativa seguita da un'analisi confermativa tramite il software R e il pacchetto *Lavaan* (Rosseel, 2012). Nella tappa finale della validazione, è stato controllato se vi fosse *measurement invariance* tra maschi e femmine.

Analisi e risultati

Dalla matrice di correlazione tra i 22 item si evince che le correlazioni di Pearson sono per la gran parte significative e la loro forza è tra debole e moderata (da un minimo di .07 e un massimo di .63).

Diversi test hanno permesso di valutare se la matrice di correlazione fosse fattorizzabile; il determinante della matrice di correlazione risulta di 0.001, il test di sfericità di Bartlett risulta significativo (7452.47, $p.value = .000$), mentre il coefficiente Kaiser-Meyer-Olkin (KMO) è di .914; riguardo quest'ultimo indice, "una matrice adatta per la fattorizzazione ottiene valori non inferiori a .80" (Chiorri, 2011, p. 212). Ci sono quindi i presupposti per proseguire con un'analisi fattoriale esplorativa.

Per l'analisi fattoriale esplorativa è stato usato il metodo di estrazione "fattorizzazione dell'asse principale" e la rotazione *varimax*; è stato scelto questo metodo in quanto è quello utilizzato per la validazione dell'MBI originale (Maslach & Jackson, 1986).

Da queste analisi, risultano 3 fattori con autovalore superiore a 1 composti da 8, 8 e 6 items ciascuno; tutti i factor loading sono superiori a .40. I tre fattori spiegano cumulativamente il 51.15 % della varianza totale. Gli item che si ritrovano in ogni fattore corrispondono quasi tutti a quelli che si trovano nelle sotto-scale originali dell'MBI e si è dunque deciso di nominare i tre fattori come le sotto-scale originali: Percezione dell'esaurimento emotivo, Percezione della depersonalizzazione e Percezione della realizzazione lavorativa. Vi è pertanto

un'eccezione; l'item 22 ("Lavorare direttamente a contatto con la gente crea troppa tensione ai miei docenti") satura maggiormente (.605) con il fattore 3 (Percezione della depersonalizzazione) mentre nella scala originale appartiene alla sotto-scala Esaurimento emotivo. Vista l'impossibilità di supportare teoricamente la scelta di integrare l'item 22 nella sotto-scala della Percezione della depersonalizzazione, è stato deciso di togliere questo item da tutte le analisi.

Rifacendo l'analisi esplorativa senza l'item 22, la varianza spiegata totale è di 51.54 % e tutti gli item hanno il loading maggiore nella rispettiva dimensione come nella scala originale dell'MBI (Maslach & Jackson, 1986).

In seguito, sono stati testati diversi modelli a partire dal modello principale che deriva dalla CFA e che rispecchia la struttura dell'MBI; al fine di avere una scala consistente e con buoni valori di fit è stata permessa la correlazione tra gli errori residui degli item 4 e 5 ("I miei docenti si sentono frustrati dal loro lavoro" e "I miei docenti sentono di non farcela più") ed è stato tolto l'item 13 ("I miei docenti si sentono sfiniti alla fine della giornata lavorativa") dalla Percezione dell'esaurimento in quanto aveva una forte correlazione anche con la scala della Percezione della depersonalizzazione ($MI=68.98$). È stato eliminato anche l'item 21 dalla scala della Percezione della depersonalizzazione ("Mi pare di trattare alcuni alunni come se fossero oggetti") in quanto correlava fortemente con la sotto-scala della Realizzazione alla quale non dovrebbe appartenere secondo il modello teorico ($MI=67.80$).

La scala risultante definitiva è dunque composta da 19 item, di cui 7 nella sotto-scala della Percezione dell'esaurimento, 4 in quella della Depersonalizzazione e 8 in quella della Realizzazione lavorativa. Gli indici di fit del modello finale sono buoni: $X^2(42) = 609.73$, $p < .001$, $TLI = .915$, $CFI = .926$, $SRMR = .05$ e $RMSEA = .057$. Tutti i factor loading standardizzati erano superiore a 0.77 e il valore Omega (McDonald, 1999) è di .85 per la scala della Realizzazione, di 0.83 per la scala dell'Esaurimento e di 0.66 per quella della Depersonalizzazione.

Per quel che riguarda l'invarianza tra gruppi, il confronto tra i modelli ha permesso di confermare un'invarianza forte tra i due gruppi (*strong invariance*): la differenza nel X^2 non era statisticamente significativa a un livello di 0.05 ($p = .47$, $\Delta X^2=15.75$) e il delta negli indici di fit è di $\Delta RMSEA = .001$ e $\Delta CFI = .001$.

Discussione

Dai risultati dello studio risulta che la scala dell'MBI rovesciato è uno strumento valido per misurare la percezione che gli studenti hanno del burnout dei loro docenti (Tatar & Yahav, 1999; Evers & Tomic, 2003). La scala risultante di 19 item, e le sotto-scale rispettive, presentano tutti dei buoni valori di fit e rispecchiano il modello teorico alla base; si può dunque concludere che per misurare la percezione del burnout dei docenti da parte degli studenti questo sia uno strumento robusto. Inoltre, è stato appurato che la scala misura lo stesso costruito per le ragazze e per i ragazzi; ciò è un'ulteriore conferma della validità della scala e conferma la possibilità di confrontare le medie delle percezioni tra ragazzi e ragazze.

La scala validata rappresenta uno strumento estremamente interessante qualora si volesse studiare il benessere a scuola, in un'ottica *ecologica*: in effetti, il benessere è il risultato dell'incontro dei diversi attori e della loro interazione (Ligorio & Pontecorvo, 2010). Questa

scala permette dunque di approcciare sia il tema del benessere dei docenti, ma anche la percezione che ne hanno gli studenti. Un possibile sviluppo, estremamente interessante per definire meglio questa visione del benessere, è quello di confrontare le percezioni dello stato di salute dei docenti con la situazione effettiva dello stato di salute dei docenti.

Inoltre, le percezioni solo in parte dipendono dallo stato reale delle cose ma vi è probabilmente un effetto delle caratteristiche proprie dello studente (quali il suo benessere personale) le quali influenzano questa percezione; degli studi futuri dovrebbero interessarsi a quali sono i meccanismi che definiscono queste percezioni e, se esse, influenzano il benessere proprio dello studente e del docente.

Per quel che riguarda i limiti dello studio, va segnalato che questa validazione ha preso in riferimento un solo campione; è raccomandabile avere un altro campione per svolgere una validazione definitiva della scala. Inoltre, la validazione di una scala richiede in generale anche di controllare la validità concorrente e discriminante, o in altre parole di controllare se la scala ideata correla con altri fattori che in letteratura sono stati individuati come correlati al burnout e alla percezione di esso. In questo studio non è stato possibile eseguire quest'analisi ma futuri sviluppi andranno nella direzione di compiere analisi incrociate con variabili quali ad esempio: il burnout dello studente, la soddisfazione lavorativa (Alarcon, 2011) o ancora il senso di appartenenza alla classe (McCarthy, Pretty, & Catano, 1990).

Bibliografia

- Alarcon, G. M. (2011). A meta-analysis of burnout with job demands, resources, and attitudes. *Journal of Vocational Behavior*, 79(2), 549-562. doi:10.1016/j.jvb.2011.03.007
- Chiorri, C. (2011). *Teoria e tecnica psicometrica - Costruire un test psicologico*. New York, NY: McGraw-Hill.
- Evers, W., & Tomic, W. (2003). Students' perceptions of the incidence of burn-out among their teachers. *Research in Education*, 69, 1-16.
- Ligorio, M. B., & Pontecorvo, C. (a cura di). (2010). *La scuola come contesto: prospettive psicologico-culturali*. Roma, Italia: Carocci.
- Lodolo D'Oria, V. (2010). Pazzi per la scuola. *Il burnout degli insegnanti a 360: Prevenzione e gestione in 125 casi*. Roma, Italia: Alpes Italia.
- Maslach, C. (1982). *Burnout: The cost of caring*. New York, NY: Prentice Hall.
- Maslach, C., & Jackson, S. E. (1986). *Maslach Burnout Inventory* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- McCarthy, M., Pretty, G. M., & Catano, V. (1990). Psychological sense of community and burnout. *Journal of College Student Development*, 31, 211-216.
- McDonald, R. P. (1999). *Test Theory: A Unified Treatment*. Hillsdale, NJ: Erlbaum.
- Rossee, Y. (2012). *lavaan: An R Package for Structural Equation Modeling*. *Journal of Statistical Software*, 48(2), 1-36. Disponibile da: <http://www.jstatsoft.org/v48/i02/>.
- Salmela-Aro, K., Kiuru, N., Leskinen, E., & Nurmi, J.-E. (2009). School Burnout Inventory (SBI): Reliability and validity. *European Journal of Psychological Assessment*, 25(1), 48-57.
- Tatar, M., & Yahav, V. (1999). Secondary School Pupils' Perceptions of Burnout Among Teachers. *British Journal of Educational Psychology*, 69, 457-68.

The association between teachers' perceived time pressure and emotional exhaustion and the role of school leaders' social support: findings of a longitudinal study

Jasper Maas¹, Simone Schoch¹, Urte Scholz², Pamela Rackow³, Julia Schüler⁴,
Mirko Wegner⁵ and Roger Keller¹

¹ Pädagogische Hochschule Zürich

² Universität Zürich

³ University of Stirling

⁴ Universität Konstanz

⁵ Humboldt-Universität zu Berlin

Introduction

The Job Demands-Resources model (JD-R; Bakker & Demerouti, 2017) aims to explain occupational health with a process in which job demands (e.g., workload and time pressure) lead to strain and health complaints, described as the health impairment process. Further research extended the health impairment process with a reversed pathway through which strain and health complaints predict increased job demands (Bakker & Demerouti, 2017). This process is characterized as self-undermining (Bakker & Costa, 2014). Because of high strain and impaired health, employees may hinder their own performance by perceiving and creating more job demands.

Time pressure is a central job demand in predicting burnout among teachers, especially emotional exhaustion (Skaalvik & Skaalvik, 2017). Not only is emotional exhaustion examined as a result of job demands, research also supports the reversed pathway. Demerouti and colleagues (2004) showed reciprocal relationships between work pressure and emotional exhaustion. Ten Brummelhuis and colleagues (2011) supported this by presenting reciprocal relationships between an aggregated measure of work overload, work hours, and work-home barriers and emotional exhaustion and depersonalization. However, these findings are based on research designs that may not reflect changes within persons, but differences between persons. Therefore, to draw conclusions at the appropriate analytical level, it is crucial to apply research designs that discriminate between within- and between-person effects (Curran & Bauer, 2011).

Furthermore, the JD-R model proposes that job resources can buffer the effect from job demands on health (Bakker & Demerouti, 2017). Various studies demonstrated the buffering effect of social support (e.g., Bakker, Demerouti, & Euwema, 2005). Yet, different measures and functions of social support may differ in their contribution to teachers' health well-being. Whereas perceived support has almost solely favourable effects (Cohen, 2004), research on received support demonstrates mixed results including negative effects on health and well-being (e.g., Beehr, Bowling, & Bennett, 2010). The buffering effects of emotional and instrumental support may also differ. According to the matching hypothesis (Cutrona, 1990), emotional support primarily buffers the effect of uncontrollable stressors, whereas instrumental support buffers the effect of controllable stressors. Time pressure may be considered controllable, because the ratio between available time and workload can be influenced to a

certain extent. But emotional exhaustion may be less changeable and controllable, because it is suggested to be related to personality traits (e.g., Kokkinos, 2007).

Research questions and objectives

By separating within- and between-person effects and taking the theoretical differentiation of social support in account we aim to advance the understanding of the reciprocity of the association between time pressure and emotional exhaustion and to what extent received social support can weaken this association.

We hypothesize that received instrumental social support primarily weakens the effect of time pressure on emotional exhaustion, whereas emotional social support primarily weakens the reversed effect from emotional exhaustion on time pressure.

Methodology, methods and sample

Data for these analyses were collected as a longitudinal online survey among a sample of teachers at compulsory school level in the German-speaking part of Switzerland. Participants received an online questionnaire by e-mail in the school year 2017/2018 at intervals of approximately 4 months in September, January, and May. The sample consists of 1071 teachers, 79.5% female and 18.3% male teachers (2.1% persons did not report gender). Age varies between 22 and 65 years, with a mean of 42.8 years. The mean teaching experience is 17.3 years, and the mean workload is 80.8% of a full-time equivalent.

Teachers' perceived time pressure was assessed using the 3-item scale of Nübling and colleagues (2008). Emotional exhaustion was measured with the 9-item subscale of the German version of the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1997; Schwarzer & Jerusalem, 1999). For measuring received social support from the school leader we used an adapted version of the Berlin Social Support Scales (Schulz & Schwarzer, 2003). The scale consists of the subscales emotional support (6 items) and instrumental support (4 items).

Analyses and results

To examine reciprocity between time pressure and emotional exhaustion and model between-person and within-person effects, we applied the random intercept cross-lagged panel model (RI-CLPM; Hamaker, Kuiper, & Grasman, 2015). With this model time-invariant, trait-like stability on the between-person level is separated from temporal stability on the within-person level to detect changes within persons.

Buffering effects of social support were tested as latent interactions with the unconstrained product indicator approach (Marsh, Wen, & Hau, 2004). Construction of the product indicators was done according to the matched-pair strategy (Marsh et al., 2004). If the number of items differed between predictors, items from the predictor with the highest number of items were omitted to match the number of items of the other predictor (Wu, Wen, Marsh, & Hau, 2013).

For every latent interaction we specified a RI-CLPM separately. Structural equation modeling resulted in an adequate model fit of all models. At the between-person level the stable

time-invariant components of time pressure and emotional exhaustion are strongly related ($\beta = .63, p < .001$). Similarly, emotional and instrumental support are negatively related with time pressure and emotional exhaustion, ranging between $\beta = -.29$ and $-.16$ ($p < .001$). The latent interactions did not reach statistical significance. At the within-person level the autoregressive as well as crossed-lagged effects are non-significant. Yet, cross-sectional, time pressure and emotional exhaustion are strongly related, ranging between $\beta = .62$ and $.80$ ($p < .001$). Also, cross-sectional, emotional exhaustion and emotional support are moderately related, ranging between $\beta = -.17$ and $-.11$ ($p < .05$).

Discussion

This research examined the reciprocal relationship between time pressure and emotional exhaustion and to what extent social support buffers this relationship. Separating the between-person from the within-person level shows that across one school year time-invariant, trait-like components of teachers' perceived time pressure and emotional exhaustion are strongly related to each other. Moreover, cross-sectional relationships at the within-person level appear to be strong, whereas reciprocal effects over time between time pressure and emotional exhaustion cannot be demonstrated. This suggests that teachers' time pressure and emotional exhaustion do not lead to reciprocal changes within a timeframe of approximately 4 months, but possibly over a longer period.

Our results also show that at the between-person level, received emotional and instrumental support have a direct negative association with time pressure and emotional exhaustion and do not buffer the relationship between these variables. At the within-person level a cross-sectional relationship between emotional support and emotional exhaustion is demonstrated. This suggests that school leaders' social support may take favourable effects over a longer period than the timeframe of approximately 4 months.

These findings however have the limitation that the study sample is quite healthy and experience relatively little strain in their work. The levels of time pressure and emotional exhaustion across all three measurement points were on average considerable low. This reduced the possibility to detect buffering effects, as they need a certain strain level to occur.

In sum, the present study contributes to the understanding of the health impairment process as proposed by the JD-R model. To what extent this process is reciprocal remains a question for future research. Besides that, the results demonstrate the role of social support in the strong relationship between time pressure and emotional exhaustion. Rather than weakening this relationship, social support from school leaders can directly reduce the time pressure and emotional exhaustion that teachers experience. This makes school leaders that provide emotional as well as instrumental support a valuable resource for teachers.

References

- Bakker, A. B., & Costa, P. L. (2014). Chronic job burnout and daily functioning: A theoretical analysis. *Burnout Research, 1*(3), 112–119.
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology, 22*(3), 273–285.

- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology, 10*(2), 170–180.
- Beehr, T. A., Bowling, N. A., & Bennett, M. M. (2010). Occupational stress and failures of social support: When helping hurts. *Journal of Occupational Health Psychology, 15*(1), 45–59.
- Cohen, S. (2004). Social relationships and health. *American Psychologist, 59*(8), 676–684.
- Curran, P. J., & Bauer, D. J. (2011). The disaggregation of within-person and between-person effects in longitudinal models of change. *Annual Review of Psychology, 62*(1), 583–619.
- Cutrona, C. E. (1990). Stress and social support - In search of optimal matching. *Journal of Social and Clinical Psychology, 9*(1), 3–14.
- Demerouti, E., Bakker, A. B., & Bulters, A. J. (2004). The loss spiral of work pressure, work-home interference and exhaustion: reciprocal relations in a three-wave study. *Journal of Vocational Behavior, 64*(1), 131–149.
- Hamaker, E. L., Kuiper, R. M., & Grasman, R. P. P. P. (2015). A critique of the cross-lagged panel model. *Psychological Methods, 20*(1), 102–116.
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology, 77*(1), 229–243.
- Marsh, H. W., Wen, Z., & Hau, K.T. (2004). Structural equation models of latent interactions: evaluation of alternative estimation strategies and indicator construction. *Psychological Methods, 9*(3), 275–300.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach Burnout Inventory. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 191–218). Lanham, MD: Scarecrow Press.
- Nübling, M., Wirtz, M., Neuner, R., & Krause, A. (2008). Ermittlung psychischer Belastungen bei Lehrkräften — Entwicklung eines Instruments für die Vollerhebung in Baden-Württemberg [Determination of psychological stress among teachers - development of an instrument for the complete survey in Baden-Württemberg]. *Zentralblatt Für Arbeitsmedizin, Arbeitsschutz Und Ergonomie, 58*(10), 312–313.
- Schulz, U., & Schwarzer, R. (2003). Soziale Unterstützung bei der Krankheitsbewältigung: Die Berliner Social Support Skalen (BSSS) [Social support in coping with illness: The Berlin Social Support Scales (BSSS)]. *Diagnostica, 49*(2), 73–82.
- Schwarzer, R., & Jerusalem, M. (1999). *Skalen zur Erfassung von Lehrer- und Schülermerkmalen. Dokumentation der psychometrischen Verfahren im Rahmen der Wissenschaftlichen Begleitung des Modellversuchs Selbstwirksame Schulen* [Scales for the assessment of teacher and student characteristics. Documentation of the psychometric instrument during the pilot study self-efficient schools]. Berlin, Germany: Freie Universität Berlin.
- Skaalvik, E. M., & Skaalvik, S. (2017). Dimensions of teacher burnout: relations with potential stressors at school. *Social Psychology of Education, 20*(4), 775–790.
- Ten Brummelhuis, L. L., ter Hoeven, C. L., Bakker, A. B., & Peper, B. (2011). Breaking through the loss cycle of burnout: The role of motivation. *Journal of Occupational and Organizational Psychology, 84*(2), 268–287.
- Wu, Y., Wen, Z., Marsh, H. W., & Hau, K.T. (2013). A comparison of strategies for forming product indicators for unequal numbers of items in structural equation models of latent interactions. *Structural Equation Modeling: A Multidisciplinary Journal, 20*(4), 551–567.

Collaborative practice between occupational therapists and teachers in elementary schools in Southern Switzerland

Lia Mariotta¹

¹ Scuola universitaria professionale della Svizzera italiana

Introduction

The best education systems are those which are able to combine quality and equity. In such systems the great majority of students are able to reach high levels of competence and knowledge (Organization for Economic Cooperation and Development [OECD], 2012). The school-based practice is an approach aimed at helping and supporting school children, with the objective of providing them with the instruments to have better success at school. The role of the occupational therapist consists of helping those children with or without any limits, to carry out school activities in a way that all the children will reach higher level of participation as possible in scholastic and extra-curriculum activities. Teachers have been identified as key components for the integration of occupational therapy inside the classroom (Benson, Szucs, & Mejasic, 2016). Occupational therapists who work at school have recognized the need to go from just being a supplier of direct services to a more collaborative approach, depending on the class (Campbell, Missiuna, Rivard, & Pollock, 2012). They can provide the teachers with advice on how the class composition can influence the children's attention, because children behave in an inappropriate manner in certain moments, and where to position a child based on his style of learning or other needs (AOTA, n.d.). Scholastic occupational therapists use specific activities or tasks to help children and young students to participate in those activities which they need and want to do, in order to promote physical and mental health as well as general well-being. It is more useful for the students to experience challenges when they are being carried out during the natural routine of a school day (AOTA, 2017).

For the moment, in Switzerland, occupational therapist often works outside the scholastic setting and their scope is just to help children to carry out daily activities. If support is not carried out in a scholastic environment, it can prove more difficult to get the results needed (Kaelin, Kocher, Schulze, Echsel, Ray-Kaesler, & Santinelli, 2015).

Research question and objectives

Although there is growing empirical evidence and much anecdotal support for collaboration between health professionals, research describing collaboration between occupational therapists and teachers are limited (Kennedy & Stewart, 2011). So far, in the Ticinese area, there has been no specific research on how and in which way occupational therapists and teach-

ers collaborate inside the classroom. The objective of this work therefore, was to understand and explain the current situation in Ticino, regarding the processes of interprofessional collaboration between elementary school teachers and occupational therapists. In order to do this, experiences and visions of collaboration which came out in the interviews were compared. One of the objectives was to highlight the resources and difficulties of each of the collaborating figures and to be able to develop the knowledge that can be useful, actual and actionable on a professional level.

Methodology, methods and sample

The work was structured around a qualitative design and as a method of collecting data, a semi-structured interview was used. Two styles of interview using similar questions were adapted according to the two professions. The research aimed to understand the collaboration using a complex and broad approach, which therefore needed the creation of an instrument of measure, contextualized to the territorial area and the participants. In order to do this, I used the model "Occupational Therapy Process" drafted by Creek (2003). In fact, the various stages allowed me to give a structure to the interviews and to create targeted questions for each stage. Each macro-category, which represents a stage of the process, was composed of several sub-questions.

The interviews took place, with participants' consent, between the beginning of March 2019 and end of April 2019, using audio recordings, in order to be able to increase the quantity and quality of the data available for further analysis and to be able to provide verification of the accuracy of the data. In the cases where participants did not consent to be recorded, data were collected only by writing on the document during the interview.

As the research directly implies the opinion of the interviewed subjects, ethical standards were respected and the necessary documents were drawn up in a way to obtain the written consent from the participants of the study. Professionals from both sectors, working in the Ticinese area, were taken into consideration. Teachers had to have had at least an experience of collaboration with the occupational therapy field, equally occupational therapists had to have had at least an experience collaborating with a teacher; both of which had to have taken place in the context of the elementary school. The elementary schools present in the Ticinese area were found on the website of the Department of Education, Culture and Sport, Dipartimento dell'Educazione, della Cultura e dello Sport (DECS). In total, 124 elementary schools were identified. The occupational therapy practices which work within the pediatric field were found on the Swiss Association of Occupational Therapists website (ASE), and 34 were identified under the "Ticino" section. The requests to participate were sent by e-mail to the respective offices and occupational therapy centers. Out of the 124 structures and 34 occupational therapy practices, four teachers and five occupational therapists participated.

Analysis and results

Thematic analysis was used to analyze the interviews and I referred to the six main phases, drawn up by Braun and Clark (2006). Initially, the interviews were transcribed by listening again to the recordings and with the support of the notes taken in their development. The interviews of the two different professions were coded and analyzed separately, identifying

themes and sub-themes and finally the data were transcribed in the form of narrative text. At each stage and level of analysis, particular attention was paid to the influence of personal opinions and interpretations, trying to maintain neutrality as much as possible.

The four main themes that emerged from the interviews, in response to the objectives of the work are: the process of collaboration, the strategies of collaboration, the location of the occupational therapist in relation to the school and the strategies of promotion of occupational therapy. The process of collaboration was divided into the following categories: (a) means and methods of contact, (b) reporting of the child, (c) formulation of objectives, (d) planning of the class visit with the teacher, (e) role of the occupational therapist in the classroom, (f) occupational areas of intervention, (g) aids and strategies, (h) inter-professional collaboration for the achievement of objectives, (i) benefits of the child and (j) reactions of the child and the class in the presence of the occupational therapist. In the second theme, the strategies of collaboration, the following categories have been identified: (a) communication, (b) need for regular meetings and (c) understanding of the occupational therapy role. The third theme, the location of the occupational therapist in relation to the school, was divided into sub-themes: (a) advantage in the intervention as an external occupational therapist in the classroom, (b) limits of the intervention as an external occupational therapist in the classroom, (c) advantages and limits of the internal occupational therapist in the school and (d) institutional limits. Finally, for the fourth theme, the strategies for the promotion of occupational therapy, the following strategies have been identified: (a) presentations and information, (b) field work and (c) education.

Discussion

The advantages of good collaboration are improved student progress, professional development and greater team cohesion. Successful collaboration is determined by various factors, including interpersonal factors, organizational factors, motivation and the influence of past experiences that influence the way in which the two professions choose to collaborate.

Organizational factors are in turn determined by the structure, philosophy, resources and support provided by the work environment. Insufficient time to meet and plan as a result of working hours and workloads is one of the predominant organizational barriers (Kennedy & Stewart, 2011).

Successful interventions are characterized by good communication between the teacher and the occupational therapist. An accurate explanation of the purpose of the intervention and the appropriate use in the classroom, maintaining an interactive relationship and effective communication that expresses the needs of both professionals, has a good chance of achieving positive results (Huang, Peyton, Hoffman, & Pascua, 2011).

Specific strategies to promote collaboration are much less documented in the literature. Suggestions identified the following needs: more time for collaborative planning meetings, more therapists in school and in the classroom, more information and education for collaboration, and inter-professional training in professional education. With reference to this last aspect, the Swiss and Ticino territory offers opportunities for theoretical and increasingly practical interprofessional collaboration.

In response to the research question, it can be defined that in the processes of collaboration between teachers and occupational therapist who participated in the interviews, there are characteristics in common, even if there is no structured or defined way of working together. Good communication and the need for meetings were found to be favorable characteristics for the development of a solid collaboration, in accordance with what is reported in the literature. The main needs of the respective professions coincide, even if with different levels of intensity. These differences can be due to different factors, such as the different difficulties faced by the children, the school environment, the previous knowledge of the respective professions or the quality and quantity of previous collaborative experiences for both professions. The lack of information about the professional profile of occupational therapists is one of the biggest limits for the practice in schools, in fact a better understanding of the role of occupational therapists has emerged as a need in both professions. Nevertheless, it emerged that there is increasing openness and interest in collaboration. This can be an indicator of the need for more support and a broader view of the increasingly complex needs of students, in order to provide as equal as possible learning.

References

- American Occupational Therapy Association (AOTA). (2017). *What is the Role of the School Based Occupational Therapy Practitioner?* Retrieved from <https://www.aota.org/-/media/corporate/files/practice/children/school-administrator-brochure.pdf>
- American Occupational Therapy Association (AOTA). (n.d.). *What Parents Need to Know About School Based Occupational Therapy*. Retrieved from <https://www.aota.org/About-Occupational-Therapy/Professionals/CY/Articles/Schoolconsumer.aspx>
- Benson, J. D., Szucs, K. A., & Mejasic, J. J. (2016). Teachers' perceptions of the role of occupational therapist in schools. *Journal of Occupational Therapy, Schools, & Early Intervention*, 9(3), 290-30. doi:10.1080/19411243.2016.1183158
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Campbell, W. N., Missiuna, C. A., Rivard, L. M., & Pollock, N. A. (2012). «Support for everyone»: Experiences of occupational therapists delivering a new model of school-based service. *Canadian Journal of Occupational Therapy*, 79(1), 51-59. doi:10.2182/cjot.2012.79.1.7
- Creek, J. (2003). *Occupational Therapy defined as a complex intervention*. London, England: College of Occupational Therapist
- Huang, Y.-H, Peyton, C. G., Hoffman, M., & Pascua, M. (2011). Teacher Perspective on Collaboration with Occupational Therapist in Inclusive Classroom: A Pilot Study. *Journal of Occupational Therapy, Schools, & Early Intervention*, 4(1), 71-89. doi:10.1080/19411243.2011.581018
- Kaelin, V., Kocher, C., Schulze, C., Echsel, A., Ray-Kaesler S., & Santinelli, L. (2015). *Team di progetto «Ergoterapia nel setting scolastico»*.
- Kennedy, S., & Stewart, H. (2011). Collaboration between occupational therapists and teachers: Definitions, implementation and efficacy. *Australian Occupational Therapy Journal*, 58(3), 209-214. doi:10.1111/j.1440-1630.2011.00934.x
- Organisation for Economic Cooperation and Development (OECD). (2012). *Equity and Quality in Education-Supporting Disadvantaged Students and Schools*. Paris. Retrieved from <https://www.oecd.org/education/school/50293148.pdf>

Il Teatro Forum come strumento per sostenere il benessere degli insegnanti: uno studio esplorativo ticinese

Viviana Sappa¹, Paola Maeusli-Pellegatta² e Carlotta Vieceli²

¹ Istituto Universitario Federale per la Formazione Professionale

² Dipartimento dell'Educazione, della Cultura e dello Sport, Cantone Ticino

Introduzione

Esistono diverse evidenze scientifiche sulle potenzialità del teatro per promuovere il benessere e lo sviluppo professionale (Burton, Lepp, Morrison, & O'Toole, 2015; Chemi & Du, 2017). In particolare, la tecnica del Teatro Forum, basata sul Teatro dell'Oppresso di Boal (1979), è da anni utilizzata con successo in vari ambiti professionali, inclusi quello dell'insegnamento (vedi ad esempio Desai, 2017; Souto-Manning, 2011). Il Teatro Forum offre la possibilità di lavorare su dinamiche relazionali complesse e oppressive che possono minare il benessere organizzativo e individuale sino a portare a situazioni di *burnout* (Van Dick & Wagner, 2001). Favorendo un processo di immedesimazione dalla forte connotazione emotiva, la tecnica del Teatro Forum intende sollecitare gli spettatori a reagire alle dinamiche di oppressione rappresentate sul palco, trasformandosi loro stessi in attori che mettono in scena una possibile risoluzione alla situazione conflittuale. Grazie a tale meccanismo il Teatro Forum è considerato un buon strumento di *empowerment* individuale e collettivo. In tema di benessere, il Teatro Forum può supportare i partecipanti ad ampliare il proprio spettro di strategie per fronteggiare le difficoltà relazionali (strategie di *coping*), incoraggiando in particolare quelle di tipo proattivo (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). L'esperienza del Teatro Forum può inoltre favorire una maggiore consapevolezza delle problematiche legate alle difficoltà relazionali attivando una riflessione individuale e collettiva sul tema. La sua realizzazione all'interno di contesti organizzativi può infine favorire uno slittamento progressivo da una discussione collettiva sui conflitti rappresentati in scena e quelli realmente vissuti all'interno dell'organizzazione stessa.

Il presente studio illustra l'utilizzo del Teatro Forum all'interno di una mezza giornata di formazione continua per insegnanti ideata e realizzata dal Servizio Linea¹, servizio a supporto del benessere degli insegnanti finanziato dal Dipartimento dell'Educazione, della Cultura e dello Sport (DECS) del Canton Ticino. Lo spettacolo interattivo proposto portava il titolo "Per chi suona il campanello" ed è stato sviluppato dal team del Progetto Linea in collaborazione con una compagnia di attori esperti nella tecnica del Teatro Forum. La formazione si è svolta all'interno di diverse scuole ticinesi coinvolgendo l'intero corpo insegnanti e la direzione di tali scuole. In linea con la tecnica del Teatro Forum, la formazione prevedeva tre fasi: a) in un primo momento i partecipanti erano invitati ad assistere passivamente ad

1. <https://www4.ti.ch/decs/linea/linea/>

una rappresentazione teatrale recitata da attori professionisti in cui si mettevano in scena alcune situazioni conflittuali tipiche dei contesti scolastici; b) in una seconda fase le scene venivano ripetute e gli spettatori erano invitati ad interrompere le scene quando notavano qualcosa di disturbante che volevano modificare e a sostituire un attore sul palco per proporre un cambiamento nella scena; c) una terza fase di riflessione e confronto sulle scene e sull'esperienza svolta.

La formazione è stata realizzata sino ad ora in numerose scuole ticinesi, di cui quattro sono state oggetto di valutazione. Il presente contributo riporta parte dei dati di tale valutazione.

Domande di ricerca e obiettivi

Lo studio qui presentato intende rispondere alle seguenti domande di ricerca:

- Il Teatro Forum ha saputo sollecitare l'attivazione di strategie di *coping proattivo* nei partecipanti?
- Cosa hanno appreso i partecipanti da questa esperienza in merito alle situazioni conflittuali a scuola e alle strategie di *coping* per fronteggiarle?
- Qual è l'impatto a medio termine percepito dai partecipanti in termini di benessere individuale e collettivo?

Metodologia, metodi e campione

Strumenti di raccolta dati

I dati sono stati raccolti attraverso la tecnica dell'osservazione partecipata, del questionario autosomministrato e dell'intervista semi-strutturata (per ulteriori dettagli vedi Sappa & Barabasch, 2019, in press).

L'*osservazione partecipata* è stata utilizzata per rilevare le strategie di *coping* proposte nel corso della fase interattiva del teatro. L'osservatore compilava una griglia di osservazione in cui era richiesto di descrivere, nel modo più fedele possibile la strategia di *coping* proposta dal partecipante, distinguendo tra strategie rivolte all'oppresso, strategie rivolte all'oppressore e strategie rivolte a terzi personaggi presenti sulla scena nel corso della dinamica conflittuale. In riferimento alla prima domanda di ricerca l'ipotesi era di rilevare un progressivo incremento di strategie focalizzate sull'oppressore o su altri personaggi a testimonianza di un approccio proattivo in contrapposizione ad uno attendista e passivo, fondato sull'attesa che sia l'oppressore a modificare il proprio atteggiamento.

Il *questionario autosomministrato* ha permesso di raccogliere dati sull'apprendimento percepito. Ai partecipanti è stato chiesto a fine incontro di indicare cosa avessero appreso dall'esperienza svolta. In riferimento alla seconda domanda di ricerca, le analisi si sono concentrate sugli apprendimenti in termini di comprensione delle dinamiche conflittuali e di strategie di *coping* acquisite.

L'*intervista semi-strutturata* è stata svolta individualmente con un sottogruppo di partecipanti ad 1- 5 mesi dopo la realizzazione dell'attività di formazione. Obiettivo dell'intervista era raccogliere l'impatto percepito in termini di benessere. Gli intervistati erano liberi di descrivere gli impatti per loro più significativi.

Su tutti gli strumenti è stata applicata l'analisi dell'accordo inter-osservatore come procedura di validazione.

Campione

Sono stati coinvolti nello studio 230 docenti afferenti a quattro scuole professionali del Canton Ticino (bilanciati sia per genere che per fase di carriera). In una scuola, data la numerosità del corpo insegnante, sono state previste due sessioni formative. Il presente studio considera quindi un totale di cinque edizioni della formazione continua basata sul Teatro Forum.

L'intervista semi-strutturata è stata condotta con un sottogruppo di 11 partecipanti (cinque femmine, sei maschi), selezionati su base volontaria. Tra gli intervistati erano inclusi anche i direttori delle diverse sedi scolastiche coinvolte. La decisione di includere i direttori nelle interviste era sostenuta da due principali motivazioni. In primo luogo sono stati considerati in quanto partecipanti della sessione di Teatro Forum relativa alle loro scuole. In secondo luogo il loro percepito ci è sembrato particolarmente utile in quanto permetteva di considerare più nello specifico il possibile impatto dell'intervento formativo a livello di benessere collettivo. La loro funzione amministrativa-manageriale permetteva infatti uno sguardo più globale sull'organizzazione, complementare a quello dei singoli docenti.

Analisi e risultati

Per rispondere alla prima domanda di ricerca si sono analizzati i dati raccolti tramite osservazione. Applicando un'analisi categoriale deduttiva (Krippendorff, 2018) sono stati codificati tutti gli interventi dei partecipanti nel corso della fase interattiva ($N=64$), distinguendo tra: a) strategie proattive focalizzate sull'oppresso (es. l'oppresso cerca aiuto attivamente, assume un atteggiamento assertivo di fronte all'oppressore) (40%); b) strategie centrate sull'oppressore senza alcun contributo attivo da parte dell'oppresso o di altri personaggi (es. l'oppressore modifica il suo atteggiamento) (39%) e; c) strategie focalizzate su altri personaggi presenti sulla scena (es. offrendo supporto emotivo all'oppresso) (20%). Calcolato il numero di interventi per ogni tipologia se ne è poi analizzata la distribuzione nel tempo, distinguendo la fase interattiva in 3 sezioni di tempo omogenee ($1/3$ del tempo per ognuna delle sezioni corrispondenti a circa 20 minuti ciascuna). I risultati rivelano uno spostamento significativo di focus dall'oppressore verso l'oppresso nel corso del tempo ($\chi^2 = 17.483, p < .005, N=64$). In particolare le strategie attendiste focalizzate su un cambiamento dell'oppressore passano dal 60% della prima fase al 10% della fase finale, mentre quelle proattive focalizzate sull'oppresso incrementano dal 30% al 60%. Le strategie focalizzate sull'intervento dei testimoni sono inizialmente nulle per coprire nella fase finale il 30% degli interventi proposti totali.

Per rispondere alla seconda domanda di ricerca è stata applicata una analisi categoriale deduttiva di contenuto alle risposte raccolte tramite questionario. Sono stati raccolti 245 riferimenti ad apprendimenti percepiti, di cui il 35.5% può essere ricondotto alla categoria "capacità di interpretare in modo più complesso e pertinente le situazioni conflittuali", il 47% riferisce di "nuove strategie per fronteggiare i conflitti", l'11% ad "altri apprendimenti" e il 6.2% alla sensazione di "non aver appreso nulla". In particolare, in termini di conoscenza e consapevolezza, l'esperienza è parsa molto utile per comprendere la molteplicità di prospettive interpretative di un conflitto, per attivare una riflessione profonda su tali temi, per realizzare la rilevanza del mettersi in discussione e dell'auto-osservarsi, per diventare consapevoli di come piccole cose possano fare la differenza per la risoluzione di un conflitto, per

comprende meglio il proprio contesto di lavoro da un punto di vista relazionale e per divenire consapevoli della molteplicità di azioni che si possono intraprendere per risolvere una situazione opprimente da un punto di vista relazionale. Tra le strategie di *coping* acquisite i partecipanti menzionano l'importanza di stabilire pratiche di reciproco dialogo a scuola, di assumere un atteggiamento proattivo di fronte alle situazioni opprimenti, di richiedere aiuto. Le diverse sottocategorie identificate verranno illustrate più nel dettaglio nel corso della presentazione.

Per rispondere alla terza domanda di ricerca è stata applicata una analisi tematica (Braun & Clarke, 2006). I risultati evidenziano sette temi principali relativi all'impatto percepito, di cui tre di natura emotiva (l'attivazione di un senso di empatia e pieno riconoscimento nelle scene presentate, la promozione di una visione umoristica dei conflitti; un vissuto di dissonanza emotiva verso la dinamica conflittuale), due di natura cognitiva (una maggiore consapevolezza delle dinamiche conflittuali a scuola; l'attivazione di un'auto-riflessione) e due di natura sociale (la possibilità di ridere insieme dei conflitti in cui si è spesso coinvolti; l'incremento di una conoscenza reciproca tra colleghi).

Discussione

Pur nella sua natura esplorativa lo studio conferma le potenzialità del Teatro Forum a supporto del benessere. In particolare il Teatro Forum è stata occasione per i partecipanti per avviare una riflessione collettiva su dinamiche conflittuali di cui spesso si evita di parlare. In questo senso è stata cruciale la capacità del medium teatrale di raggiungere il giusto equilibrio tra immedesimazione nei vissuti oppressivi rappresentati e visione umoristica di tali dinamiche. L'iniziativa di formazione ha inoltre favorito una maggiore consapevolezza tra i partecipanti sulle dinamiche conflittuali e su possibili risoluzioni. I partecipanti affermano inoltre di aver identificato nuove strategie per fronteggiare tali problemi conflittuali. Nel corso della stessa rappresentazione interattiva gli spettatori hanno infine esercitato, come singoli e come gruppo, le loro capacità di agire in modo proattivo a fronte delle situazioni oppressive, ponendosi nei panni di personaggi oppressi.

Lo studio presenta indubbiamente vari limiti², tra cui principalmente il fatto di non far uso di scale standardizzate per valutare l'impatto effettivo in termini di benessere. Inoltre, l'adesione volontaria alle interviste non permette di considerare il sotto campione intervistato rappresentativo dell'intera popolazione di partecipanti. Nel suo complesso, tuttavia, il materiale narrativo raccolto evidenzia aspetti di impatto percepiti rilevanti in tema di benessere, incoraggiando un utilizzo più diffuso del Teatro Forum in iniziative che mirano al suo sviluppo.

Bibliografia

Boal, A. (1979). *Theater of the oppressed*. London, UK: Pluto Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

2. Nel corso del congresso verranno dettagliati i vari risultati evidenziando anche aspetti di possibile miglioramento dell'iniziativa.

- Burton, B., Lepp, M., Morrison, M., & O'Toole, J. (2015). Drama for learning in professional development contexts: A global perspective. In B. Burton, M. Lepp, M. Morrison, & J. O'Toole (Eds.), *Acting to manage conflict and bullying through evidence-based strategies* (pp. 119-141). Cham, Switzerland: Springer
- Chemi, T., & Du, X. (Eds). (2017). *Arts-based methods and organizational learning: Higher education around the world*. Cham, Switzerland: Springer.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127(1), 87.
- Desai, S. R. (2017). Utilizing theatre of the oppressed within teacher education to create emancipatory teachers. *Multicultural Perspectives*, 19(4), 229–233.
- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. London, England: Sage publications.
- Sappa, V., & Barabasch, A. (2019). Forum-theatre technique to foster creative and active problem solving: A resilience-building intervention among in-service teachers. *Journal of Adult and Continuing Education*. doi:10.1177/1477971419842884
- Sappa, V., & Barabasch, A. (in press). Empowering In-service Teachers: A Resilience-Building Intervention Based on the Forum Theatre Technique. In L. McKay, G. Barton, S. Garvis and V. Sappa (Eds.), *Arts-based research, resilience and well-being across the lifespan*. Basinkstoke, England: Palgrave Macmillan.
- Souto-Manning, M. (2011). Playing with power and privilege: Theatre games in teacher education. *Teaching and Teacher Education*, 27(6), 997–1007.
- Van Dick, R., & Wagner, U. (2001). Stress and strain in teaching: A structural equation approach. *British journal of educational psychology*, 71(2), 243-259.

The teacher burnout illusion – Can schools actually do something to help?

Filip Van Droogenbroeck¹ and Bram Spruyt¹

¹ Vrije Universiteit Brussel

Introduction

Schools are complex organizations. Teachers are embedded within schools which are themselves entrenched within the institutional context. There exists a lot of high quality research which identifies problematic working conditions within the teaching profession (e.g., (Borman & Dowling, 2008; Byrne, 1991; Skaalvik & Skaalvik, 2010). Burnout and an early exit from the teaching profession can be considered the most detrimental outcomes and the end result of a malfunctioning organization of work (Van Droogenbroeck & Spruyt, 2014). Based on our previous research (see Van Droogenbroeck, Spruyt, & Vanroelen, 2014; Van Droogenbroeck, 2016) several missing links in teacher burnout research can be identified which could improve our understanding and help prevent burnout among teachers. Because burnout is expected to be closely related with how work is organized within schools it would be extremely valuable to investigate differences in burnout between schools. Such analyzes could identify to what extent teachers from the same school report similar levels of burnout (see for example González-Morales, Peiró, Rodríguez, & Bliese, 2011 or Van Maele & Van Houtte, 2015). In other words, can burnout be considered as a collective characteristic of the schools or does it have to be considered as a specific characteristic of individual teachers? In our previous study we found that school organization characteristics such as the relationships with the supervisor, with students and colleagues, perceived autonomy, support with policy changes and teaching-related and non-teaching-related-workload influenced the experience of burnout among teachers. More specifically we illustrated how supervisors play a crucial role in providing teachers with more autonomy and involving them in school-policy decisions. More involvement in school-policy decisions helps teachers to better cope with teaching-related and non-teaching-related workload, such as paperwork and accountability demands and therefore reduces burnout. Based on these findings differences between schools should be found and it is expected that teachers in schools with a low level of perceived autonomy, support by the supervisor, high workload and a higher proportion of students with problematic behavior will report more burnout. In addition, schools which are characterized by supervisors which involve their teachers more in school policy decisions are expected to have less problems with teaching-related and non-teaching-related workload. Such research would allow us to identify good practice schools which are characterized by low levels of burnout. In this way key determinants of school organization and how they influence burnout can be identified. Do such schools differ in factors, such as, involving teachers in school-policy decisions, collaboration between teachers, student

population, or administrative workload? Which problems do both types of schools share? In this context it would also be worthwhile to study the relationship between the level of burnout in schools and schools' student composition (e.g. the general level of deprivation of the students) and the possible mediating role of school policy in this matter. This research would yield more specific suggestions to counter burnout and school organization problems at a meso and macro level. In 40 years of teacher burnout, research surprisingly little attention has been given to investigate burnout from a multilevel perspective which can take the individual and school-context simultaneously into account.

Data and methodology

Our sample exists out of 2300 primary (183 schools) and 2700 lower secondary (190 schools) teachers in Flanders (Belgium) using data from the Teaching And Learning International Survey (TALIS) 2018. School-level data were collected among principals in the participating schools.

Multilevel hierarchical regression analysis was used to assess the determinants of emotional exhaustion, cynical depersonalization, and personal accomplishment at the individual and school-level.

Discussion and conclusion

40 years of teacher burnout research has revealed that teachers suffering from burnout report severe negative consequences at all stages of the career with the end result of leaving the profession completely or retiring early. Policy makers and schools are looking for ways to prevent burnout and increase teacher well-being. Although teacher burnout studies often formulate suggestions related to school organization to prevent burnout (e.g., increasing autonomy for teachers, creating collaborative school cultures, etc.) it is surprising that in the 40 years of teacher burnout research almost no research is available which actually takes the school-level into account through multilevel analysis. For this reason, we tested if and how burnout is related to the school context using a large high quality dataset. Our findings show that the three dimensions of burnout are mainly unrelated to the school context ($ICC < 5\%$). This implies that teachers working in more challenging school contexts - e.g., schools characterized by more students from lower social economic backgrounds, more violence, less social support between teachers, less teacher autonomy - do not necessarily experience more burnout. This suggests that burnout is predominately an individual-level related phenomenon. If policy makers and schools wish to prevent burnout they should do so by focusing on how individual teachers deal with burnout and less on the surrounding school context.

References

- Borman, G. D., & Dowling, N. M. (2008). Teacher Attrition and Retention: A Meta-Analytic and Narrative Review of the Research. *Review of Educational Research*, 78(3), 367–409.
- Byrne, B. M. (1991). Burnout: Investigating the impact of background variables for elementary, intermediate, secondary, and university educators. *Teaching and Teacher Education*, 7(2), 197–209.
- González-Morales, M. G., Peiró, J. M., Rodríguez, I., & Bliese, P. D. (2011). Perceived collective burnout: a multilevel explanation of burnout. *Anxiety, Stress & Coping*, 25(1), 43–61.

-
- Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education, 26*(4), 1059–1069.
- Van Droogenbroeck, F. (2016). *Too tired to teach? Key determinants of mental health and early retirement among senior teachers: a comparative and teacher-specific perspective*. Brussel, Belgium: Vrije Universiteit Brussel.
- Van Droogenbroeck, F., & Spruyt, B. (2014). To Stop or Not to Stop An Empirical Assessment of the Determinants of Early Retirement Among Active and Retired Senior Teachers. *Research on Aging, 36*(6), 753–777.
- Van Droogenbroeck, F., Spruyt, B., & Vanroelen, C. (2014). Burnout among senior teachers: Investigating the role of workload and interpersonal relationships at work. *Teaching and Teacher Education, 43*, 99–109.
- Van Maele, D., & Van Houtte, M. (2015). Trust in school: a pathway to inhibit teacher burnout? *Journal of Educational Administration, 53*(1), 93–115.

Well-being promotion

Examining the effectiveness of peer-led heartfulness meditation on secondary school students' mental well-being, emotion regulation and mindfulness

Hazel Barrett¹, David Hevey² and Hester O'Connor³

¹ Health Service Executive

² Trinity College Dublin

³ Dublin south west/Kildare west Wicklow, Health Service Executive

Aim

Age-related stressors place adolescents at heightened risk for mental health problems. Meditation interventions for children and adolescents are becoming increasingly popular. Schools are in a unique position to promote positive mental health and provide young people with coping skills to foster their well-being, however finding the most effective intervention remains a challenge. Heartfulness can be traced back to India in the late 1800's and it aims to help individuals to connect to themselves and find inner peace while meditating (Maurits-Kwee, 2015). Although research is in its early days, initial results are promising. In their study, Thimmapuram and others (2017) examined the effects of a 12-week Heartfulness meditation programme on healthcare professionals and found that those in the intervention group had statistically significant improvement in measures of burnout and emotional-wellness post-intervention. Interestingly, the authors also found a significant increase in telomere length in younger meditators, aged twenty-four to thirty-three years, compared to age-matched controls. No significant increase was found for older participants, aged thirty plus, which may indicate a special benefit of Heartfulness meditation in younger samples. However, to the best of our knowledge research with adolescents remains unexplored. A randomized controlled trial was used to examine the effects of a pilot 4-week, peer-led Heartfulness meditation intervention on mental well-being, emotion regulation and mindfulness in an all-boys secondary school in Dublin, Ireland.

Method

Transition Years students were trained in the meditation by a person experienced in instructing and practicing Heartfulness. First and second year students were randomly assigned to research ($n = 59$) and control groups ($n = 11$). The research group (M age = 12.85, $SD = .67$) were taught the Heartfulness Meditation by their 4th year peers, twice a week, over a 4-week period. The control group ($M = 12.60$, $SD = .68$) did not receive training. Both the research and control groups completed The Beck Youth Inventory-2 (BYI-II; Beck, Beck, Jolly, & Steer, 2005), The Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) and the Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) at baseline, post-intervention (4-weeks), and at follow-up (6-months).

Results

Mental well-being

A mixed between-within subjects analysis of variance was conducted to assess the impact of group (Heartfulness, Control) on participants' scores on the BYI-II, across three-time periods (baseline, post-intervention and 6-month follow-up). There was no significant interaction between group and time, Wilks' Lambda = .986, $F(2, 136) = .409$, $p = .665$, $\eta_p^2 = .006$. There was no main effect of time of assessment on BYI-II scores, $F(2, 136) = 1.441$, $p = .240$, $\eta_p^2 = .021$. The main effect comparing the two groups was not significant, $F(1, 68) = .049$, $p = .825$, $\eta_p^2 = .001$.

Emotion Regulation

A mixed between-within subjects analysis of variance was conducted to assess the impact of group (Heartfulness, Control) on participants' scores on the DERS, across three-time periods (baseline, post-intervention and 6-month follow-up). There was a significant interaction between group and time, Wilks' Lambda = .986, $F(2, 146) = 4.414$, $p = .014$, $\eta_p^2 = .057$. Tests of within-subjects contrasts and inspection of plots showed that this was a crossover interaction effect, significant for baseline versus time 2 scores, $F(1, 73) = 10.216$, $p = .002$, $\eta_p^2 = .123$; the control group had higher DERS scores at baseline, but the intervention group had higher scores at time 2.

There was a substantial main effect for time of assessment on DERS scores, Wilks' Lambda = .893, $F(2, 146) = 3.830$, $p = .024$, $\eta_p^2 = .050$. Tests of within-subjects contrasts showed that there was a significant difference between baseline and time 2 DERS scores, $F(1, 73) = 6.674$, $p = .012$, $\eta_p^2 = .084$, but not baseline and time 3, $F(1, 73) = .000$, $p = .993$, $\eta_p^2 = .000$. There was no significant main effect for group, $F(1, 73) = .191$, $p = .664$, $\eta_p^2 = .003$.

Mindfulness

A mixed between-within subjects analysis of variance was conducted to assess the impact of group (Heartfulness, Control) on participants' scores on the FFMQ, across three-time periods (baseline, post-intervention and 6-month follow-up). There was no significant interaction between group and time, $F(2, 144) = 2.152$, $p = .120$, $\eta_p^2 = .029$. No substantial main effect of time of assessment on FFMQ scores was found, $F(2, 144) = 1.507$, $p = .225$, $\eta_p^2 = .021$. The main effect comparing the two types of intervention was not significant, $F(1, 72) = .021$, $p = .886$, $\eta_p^2 = .000$.

Discussion

The current study aimed to address whether the Heartfulness meditation intervention was effective in improving mental well-being, emotion regulation and increasing mindfulness in secondary school students. In spite of recent studies reporting positive indicators of meditation programmes in school on mental well-being (Kuyken et al., 2013; Raes, Griffith, Van der Gucht, & Williams, 2014; Sibinga et al., 2013), no significant improvements were found between BYI-II scores at baseline, post-intervention or at 6 month follow-up following the Heartfulness intervention. Likewise, no significant improvements were found between FFMQ scores at baseline, post-intervention and at follow-up. There was no real overall difference between the control and intervention group on DERS scores however, groups aside, there was a difference between baseline and T2 scores. Although the intervention group had slightly improved scores at post-intervention, this must be interpreted in light of the interaction. At time 2 there was a significant crossover. The control group had higher DERS

scores at baseline, but the intervention group had higher scores at post-intervention. The hypotheses that the Heartfulness intervention would improve mental well-being, emotion regulation and increase mindfulness are unsupported.

Several explanations for these results are possible. Firstly, previous positive effects of Heartfulness meditation in adult samples (Thimmapuram et al., 2017) in comparison to these results may indicate that Heartfulness meditation must be adapted to better suit the developmental stage of adolescents and their attentional capacity. Secondly, the present study hoped to minimize class and school curricula disruption by using a brief intervention, two days a week over a 4-week period, which is relatively smaller in duration than previous research (e.g. Kuyken et al., 2013). It has been suggested that meditation programmes can be made more effective by increasing programme duration and by encouraging twice daily (or more) meditation (Waters, Barsky, Ridd, & Allen, 2015), and it is possible that the current intervention was too short to produce change.

Limitations of the study must be discussed in relation to the lack of significant findings found in the current study and include the use of only male participants, the use of self-report measures and the high level of participant attrition with over 15% of participants missing one or more measurement occasions due to absence on the day. This was a particular problem given that there was a greater amount of data missing for control participants, thus making the inequality of group numbers across the two groups quite substantial. Future research should endeavour to include groups that exhibit greater equality with regards to numbers, age, and gender.

The competent delivery of the mindfulness program may also be a limiting factor, in particular the level of competence of the peer instructors. Best efforts were made to give the peer instructors as much instruction on delivering Heartfulness as possible from an experienced facilitator within the specific timeframe. Positive improvements have been found previously for peer-led mindfulness programmes with adolescents (Jennings & Jennings, 2013), however contrary to these results, no such improvements were identified in the current study. It remains unknown however, whether outcomes may have differed had the training been delivered by a teacher or another experienced adult. It has been argued that competency of the instructor is critical to obtaining significant improvements in mindfulness-based interventions (Atkinson & Wade, 2015) and so the same might apply for Heartfulness meditation. This raises important questions about who is suitably competent to teach Heartfulness meditation and highlights an important area for future research.

References

- Atkinson, M. J., & Wade, T. D. (2015). Mindfulness-based prevention for eating disorders: A school-based cluster randomized controlled study. *International Journal of Eating Disorders*, 48(7), 1024–1037. doi:10.1002/eat.22416
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). *Five Facet Mindfulness Questionnaire*. PscyTESTS Dataset. doi:10.1037/t05514-000
- Beck, J. S., Beck, A. T., Jolly, J. B., & Steer, R. A. (2005). *Beck Youth Inventories manual (2nd ed.)*. San Antonio, TX: Psychological Corporation.

- Gratz, K. L., & Roemer, L. (2004). Difficulties in Emotion Regulation Scale. *PsycTESTS Dataset*, 16(2) 141-170 doi:10.1037/t01029-000
- Jennings, S. J., & Jennings, J. L. (2013). Peer-directed, brief mindfulness training with adolescents: A pilot study. *International Journal of Behavioral Consultation and Therapy*, 8(2), 23–25. doi:10.1037/h0100972
- Kuyken, W., Weare, K., Ukoumunne, O. C., Vicary, R., Motton, N., Burnett, R., & Huppert, F. (2013). Effectiveness of the Mindfulness in Schools Programme: non-randomised controlled feasibility study. *The British Journal of Psychiatry*, 203(2), 126–131. doi:10.1192/bjp.bp.113.126649
- Maurits Kwee, G. T. (2015). Pristine Mindfulness: Heartfulness and Beyond. In E. Shonin, W. Van Gordon, & N. N. Singh (Eds.) *Buddhist Foundations of Mindfulness*, (pp. 339–362). New York, NY: Springer. doi: 10.1007/978-3-319-18591-0_16
- Raes, F., Griffith, J. W., Van der Gucht, K., & Williams, J. M. G. (2013). School-Based Prevention and Reduction of Depression in Adolescents: a Cluster-Randomized Controlled Trial of a Mindfulness Group Program. *Mindfulness*, 5(5), 477–486. doi:10.1007/s12671-013-0202-1
- Sibinga, E. M. S., Perry-Parrish, C., Chung, S., Johnson, S. B., Smith, M., & Ellen, J. M. (2013). School-based mindfulness instruction for urban male youth: A small randomized controlled trial. *Preventive Medicine*, 57(6), 799–801. doi:10.1016/j.ypmed.2013.08.027
- Thimmapuram, J., Pargament, R., Sibliss, K., Grim, R., Risques, R., & Toorens, E. (2017). Effect of heartfulness meditation on burnout, emotional wellness, and telomere length in health care professionals. *Journal of Community Hospital Internal Medicine Perspectives*, 7(1), 21–27. doi:10.1080/20009666.2016.1270806
- Waters, L., Barsky, A., Ridd, A., & Allen, K. (2014). Contemplative Education: A Systematic, Evidence-Based Review of the effect of Meditation Interventions in Schools. *Educational Psychology Review*, 27(1), 103–134. doi:10.1007/s10648-014-9258-2

La terapia dell'avventura a bordo di Nave Italia

Alessandra Basso¹ e Paolo Cornaglia Ferraris¹

¹ Tender to Nave Italia

Introduzione

Gli alti tassi di disagio familiare, sociale, psicologico o di vera e propria disabilità o malattia cronica segnalati tra i bambini, adolescenti, adulti e anziani rappresentano uno stimolo allo sviluppo e alla valutazione di nuove iniziative (Cornaglia Ferraris, 2018). Negli ultimi anni, negli Stati Uniti così come in Europa si sta diffondendo una nuova forma di terapia, la Terapia dell'Avventura (TdA), che si realizza in contesti naturali, attraverso la navigazione a vela, il trekking in montagna o altre attività outdoor e si sta rivelando una strategia efficace per elevare il benessere dei beneficiari, implementarne autostima, autonomia e capacità relazionali. Questa si sta rivelando come estremamente utile per tutti quei giovani che mostrano bassi o alti gradi di disagio sociale e che sono refrattari agli interventi di sostegno tradizionali. La TdA, in questo caso, ha l'obiettivo di migliorare la loro qualità della vita, aiutandoli a sviluppare un maggiore benessere emotivo, indipendenza e comprensione sociale. Ciò può essere importante per ottenere nei partecipanti un benessere come strumento di equità e inclusione e come prerequisito per raggiungere obiettivi educativi. Quando si parla di Terapia dell'Avventura è importante sottolineare che non si tratta di programmi avventurosi ed entusiasmanti fini a se stessi ma l'obiettivo finale è quello di aiutare i partecipanti a sviluppare importanti abilità di vita di cui potranno beneficiare nella loro quotidianità. Trascorrere tempo all'aria aperta può essere divertente, eccitante e stimolante: è un ottimo modo per imparare e praticare nuovi comportamenti, per migliorare le capacità interpersonali, per affrontare le paure, per provare nuove emozioni. Già negli anni '80, alcuni studi hanno dimostrato che la Terapia dell'Avventura aiuta ad aumentare l'autostima degli studenti delle scuole elementari, medie e superiori (Wright, 1983), altri ancora hanno documentato effetti positivi significativi sul locus of control e sulla socialità (Steinberg & Morris 2001). La letteratura suggerisce che, nel complesso, gli adolescenti con varie diagnosi traggono beneficio dalla partecipazione a programmi di attività nella natura aumentando il loro benessere (Autry, 2001; Keats, Courneya, Danielsen, & Whitsett, 1999; Russell & Philips-Miller, 2002).

In quest'ottica, diversi servizi italiani di Sanità pubblica e privata hanno realizzato un progetto unico di TdA con la Fondazione Tender To Nave ITALIA ONLUS (TTNI), un'organizzazione no-profit fondata dallo Yachting Club Italiano (YCI) e dalla Marina Militare Italiana (MM), nata con lo scopo di promuovere la cultura del mare e della navigazione come strumenti per l'istruzione, la formazione e la riabilitazione per ospedali e organizzazioni no-

profit di tutta Europa. La TdA si è mostrata efficace anche come strumento di prevenzione primaria.

TTNI ha come strumento principe della sua straordinaria metodologia un veliero brigantino di 61 metri, Nave ITALIA, condotto da un equipaggio della MM. I partecipanti entrano a far parte dell'equipaggio militare, rispettandone i ruoli, i tempi, le mansioni: il rigido sistema di regole, avere punti di riferimento e un insieme di regole fisse e immutabili, per chi vive un disagio o una disabilità, che lo rende instabile e dipendente, è fondamentale. A bordo le attività si susseguono e si alternano per tutta la settimana a bordo, tra attività avventurose (salita a riva sull'albero a 15 m di altezza, salto nel blu, ...), attività di riflessione e sedimentazione, colloqui di confronto, attività ludiche.

Domanda di ricerca e obiettivi

Numerosi studi internazionali hanno dimostrato che la Terapia dell'Avventura (TdA) tende a migliorare le abilità personali e le relazioni interpersonali attraverso attività che comportano processi di *problem solving* e sfide individuali e di gruppo (Zachor et al., 2016).

Proprio su queste solide basi scientifiche si è strutturata la metodologia di Tender to Nave ITALIA ONLUS (TTNI) che dal 2007 realizza progetti, in collaborazione con centinaia di ONLUS, ospedali e scuole italiane ed europee, a bordo di un veliero della Marina Militare Italiana che si stanno dimostrando come un potente strumento di riabilitazione. La metodologia TTNI si basa sull'apprendimento esperienziale, sulla formazione outdoor e sulla terapia dell'avventura (Capurso & Borsci, 2013, 2014; Coranglia, 2018). In particolare, comprende una vasta gamma di attività educative, finalizzate a migliorare le capacità personali e di squadra attraverso il contatto con l'ambiente naturale: la Terapia dell'Avventura su Nave ITALIA consente ai partecipanti di sperimentarsi in un ambiente sicuro, con il supporto di un team multidisciplinare.

L'obiettivo dello studio pilota presentato è quello di indagare l'impatto della TdA in un gruppo di 30 partecipanti adolescenti afferenti alla macro categoria di Disagio Sociale. In particolare abbiamo voluto indagare il costrutto dell'autostima, costruito già studiato in letteratura americana ma non ancora studiato con un campione italiano. Il concetto di autostima può essere qui inteso come uno stile di auto-valutazione appreso dall'individuo sulla base delle sue esperienze e comportamenti passati, che consente di predirne i comportamenti futuri.

Metodologia

Come strumento di valutazione è stato utilizzato il Test di Valutazione Multidimensionale dell'Autostima (TMA) di Bracken (1992, versione breve adattamento italiano di Manna, Mirisola, & Boca 2005), somministrato al gruppo in due fasi, nella fase pre imbarco (T₀) e dopo 3 mesi dallo sbarco (T₁). La somministrazione è individuale ed è stata effettuata alla presenza dell'equipè psico-educativa dei partecipanti. Il TMA è consente una precisa misurazione dell'autostima in età evolutiva, nelle sue molteplici dimensioni. Lo schema interpretativo del TMA si basa sull'importanza delle sue sei dimensioni riferite a specifici contesti: interpersonale, della competenza di controllo dell'ambiente, dell'emotività, del successo scolastico, della vita familiare e del vissuto corporeo. Per l'analisi dei dati è stato utilizzato un modello lineare al fine di indagare l'effetto dell'imbarco, controllando l'effetto dell'apparte-

nenza al gruppo e gli eventuali effetti di interazione. In questo studio pilota non è presente il gruppo di controllo.

Studio pilota e risultati

I dati scientifici della Fondazione Tender to Nave ITALIA ONLUS sono in fase iniziale, quindi ad oggi non siamo ancora in grado di produrre una valutazione statistica che riveli la significatività di ciascuno dei processi e dei laboratori praticati a bordo e possiamo presentare solo alcuni studi pilota.

In questo lavoro vogliamo rendere noti alcuni dati ottenuti con due diversi progetti afferenti alla macro categoria di Disagio Sociale. I partecipanti dello studio afferiscono a due diversi progetti imbarcati nel 2017 a bordo di Nave ITALIA: il primo gruppo è composto da 14 partecipanti (minori allontanati dalle famiglie) e il secondo da 16 partecipanti (minori con disagio scolastico e familiare ma non allontanati).

In totale quindi i partecipanti di questo studio pilota sono 30 ($F = 56.7\%$), di un'età compresa tra i 10 e i 21 anni ($M = 15.23$, $SD = 2.80$).

Il test si è rivelato significativo nella scala del Vissuto Corporeo ($F(1,28) = 5.604$, $p < .05$) dove il punteggio medio alla scala a T1 risulta significativamente maggiore rispetto a T0.

Tale dato ci spinge a riflettere sul ruolo del vissuto corporeo in adolescenza, in particolare per tutti quei minori che vivono nella loro quotidianità una situazione di disagio sociale che va a minare in modo marcato e duraturo la loro autostima. La Terapia dell'Avventura a bordo di Nave ITALIA si mostra come un'importante possibilità per riscoprirsi "capace di fare" e quindi modificare la percezione di se stessi. A bordo, infatti, i partecipanti sperimentano il corpo con diverse funzioni: lavorano, navigano, si tuffano, provano nuovi equilibri, convivono in spazi stretti, fanno i nodi e alzano le vele. Il confronto continuo con gli altri, con i propri limiti e con le proprie certezze, in un contesto avventuroso ed emozionante, migliora la percezione che i giovani hanno del proprio corpo. Autostima e sicurezza in se stessi giocano un ruolo importante nella ristrutturazione della personalità in adolescenza e la Terapia dell'Avventura si è mostrata come una buona risorsa per lavorare con adolescenti con disagio sociale e familiare, i quali hanno forte necessità di sperimentarsi come abili e capaci.

I progetti di Nave ITALIA non si esauriscono con la fase a bordo ma continuano con un'importante fase post imbarco che prevede il consolidamento di quanto sperimentato nella fase durante. Questa precisazione è fondamentale perché quanto ci viene detto dal test è che i ragazzi hanno sperimentato punteggi maggiori a tre mesi dall'imbarco e che quindi quanto appreso a bordo è stato poi riportato nella propria quotidianità.

Altre scale hanno avuto valori significativi quali l'emotività e le relazioni interpersonali ma è necessario ampliare la numerosità campionaria al fine di avere dati significativi.

Conclusioni

Il termine "terapia", nella sua forma usuale, porta uno stigma soprattutto tra gli adolescenti e i giovani adulti, perché implica il concetto di "malattia"; associarlo invece a quello di

“avventura” consente di rimuoverlo e rendere più interessante la proposta di sostegno. La metodologia TTNI quindi si rivela come innovativa e diversificata per fornire una soluzione terapeutica più efficace per quelle persone per le quali un ambiente naturale e avventuroso offre un’opportunità più autentica per creare cambiamenti comportamentali positivi e duraturi.

Il “Disagio Sociale”, dal punto di vista psicologico, può essere definito come varie forme di inadeguatezza dell’individuo rispetto al sistema sociale in cui vive, che lo portano ad uno stato di sofferenza o di assenza di benessere. Questo in certi casi può dare luogo a comportamenti di devianza o ribellione, isolamento, pensieri aggressivi e autodistruttivi, provare un senso di inferiorità e scarsa fiducia in se stessi.

Il progetto realizzato a bordo di Nave ITALIA può infatti essere l’inizio e la motivazione per promuovere un cambiamento positivo di crescita personale e sociale.

Quando si sale sulla nave ogni stigma o etichetta scompare per lasciare spazio alla “persona” che entrerà a fare parte del nuovo equipaggio. Ognuno con le proprie potenzialità ed i propri limiti ha l’occasione per confrontarsi con se stesso e con gli altri.

Un ruolo fondamentale lo ha l’equipaggio della Marina Militare italiana, con le sue regole e il suo inquadramento militare. Per chi vive, infatti, questo tipo di disagio o difficoltà, che lo rende instabile, estremamente dipendente o al contrario ribelle alle regole convenzionali, avere punti di riferimento precisi, un insieme di regole fisse e immutabili e ruoli definiti è fondamentale. Nonostante i pochi giorni a bordo, s’impara a essere i protagonisti dentro queste regole, capendo che senza di esse non è possibile navigare. Infatti, subito si capisce che c’è crescita, azione e movimento all’interno delle regole, senza questi confini la navigazione diventerebbe confusa, priva di tutele e il gruppo non funzionale. Facilitare, attraverso regole e disciplina militare, la gestione del cambiamento e stabilire parametri di riferimento certi aiuta a gestire gli stimoli esterni e le reazioni emotive che ne conseguono e di migliorare la propria capacità di fare e interagire.

I risultati preliminari spingono nella direzione di ampliare la numerosità campionaria e aggiungere un campione di controllo per valutare in modo più controllato l’impatto della Terapia dell’Avventura in aggiunta alle metodologie tradizionali.

Bibliografia

- Autry, C. E. (2001). Adventure therapy with girls at-risk: Responses to outdoor experiential activities. *Therapeutic Recreation Journal*, 35(4), 289-306.
- Bracken, B. A. (1992). *Test Multidimensionale dell’Autostima*. Trento, Italia: Erickson.
- Capurso, M., & Borsci, S. (2013). Effects of a tall ship sail training experience on adolescents’ self-concept. *Intern J. Educat. Res.*, 58, 15-24.
- Capurso, M., & Borsci, S. (2014). Integrazione e sviluppo a bordo di un veliero. L’integrazione scolastica e sociale. *Erickson*, 13, 43-59.
- Cornaglia Ferraris, P. (2018). Teoria dell’avventura: principi, pratica, prospettive. *Recenti progressi in Medicina*, 109, 487-493.

-
- Keats, M., Courneya, K. S., Danielsen, S., & Whitsett, S. F. (2001). Leisure-time physical activity and psychosocial well-being in adolescents after cancer diagnosis. *Rehabilitation Oncology, 19*(32). doi:10.1097/01893697-200119020-00036.
- Manna, G., Mirisola, A., & Boca, S. (2005). Una misura breve del test multidimensionale dell'autostima di Bracken. *Testing Psicometria Metodologia, 12*, 277-299.
- Russell, K. C., & Phillips-Miller, D. (2002). Perspectives on the Wilderness Therapy Process and Its Relation to Outcome. *Child and Youth Care Forum, 31*(6), 415-437. doi:10.1023/A:1021110417119
- Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Journal of Cognitive Education and Psychology, 2*, 55-87.
- Wright, B. A. (1983). *Physical disability - a psychosocial approach* (2nd ed.). New York, NY: HarperCollins Publishers.
- Zachor, D. A., Vardi, S., Baron-Eitan, S., Brodai-Meir, I., Ginossar, N., & Ben-Itzhak, E. (2017). The effectiveness of an outdoor adventure programme for young children with autism spectrum disorder: a controlled study. *Developmental Medicine & Child Neurology, 59*(5), 550-556.

La promozione del benessere scolastico e l'empowerment cognitivo degli studenti attraverso la lettura ad alta voce: una sperimentazione nazionale

Federico Batini¹ e Marco Bartolucci¹

¹ Università degli Studi di Perugia

Introduzione

La lettura delle storie innesca meccanismi diversi a livello cognitivo (Mar, 2004). I lettori rappresentano ciò che il testo descrive attraverso immagini mentali che ne supportano la comprensione. La comprensione viene supportata anche dalle attivazioni motorie che si producono durante la lettura (o l'ascolto della lettura) producendo una sorta di esperienza vicaria, rispetto all'esperienza dei personaggi delle storie incontrate. Le attivazioni motorie paiono infatti coerenti con le azioni che sta compiendo il protagonista (Speer, Reynolds, Swallow, & Zacks, 2009). Le rappresentazioni prodotte dal lettore/ascoltatore durante l'esperienza di lettura sono anche conosciute come "modelli situazionali" e incorporano informazioni su spazio, tempo, relazioni causali, personaggi (Zwaan & Radvansky, 1998). Le regioni cerebrali coinvolte nella comprensione del testo sono necessariamente varie e non solo strettamente linguistiche: probabilmente, qualsiasi rete che supporta il linguaggio, la memoria e persino la percezione gioca un ruolo in questo processo (Mar 2004). In generale, la lettura attiva, a livello cerebrale, una vasta rete di aree (Bartolucci & Batini, 2018; Batini, Toti, & Bartolucci, 2016), operanti a diversi livelli cognitivi costituendo una vera e propria "palestra" per le funzioni cognitive (Batini, 2018; Batini, Bartolucci, & Timpone, 2018), come per le funzioni mnestiche e per quelle emotive (Billington, Carroll, David, Healey, & Kinderman, 2012), per le funzioni esecutive e per la velocità di elaborazione delle informazioni (Uchida & Kawashima, 2008).

L'esposizione sistematica a momenti di lettura ad alta voce può rafforzare lo sviluppo di molte delle competenze richieste nei primi anni di scuola (Batini et al., 2018). Molti studi in letteratura hanno permesso di registrare un incremento sia del vocabolario "attivo", i termini usati nel linguaggio quotidiano, che di quello "passivo", tutti i termini di cui conosciamo il significato e che siamo in grado di inserire correttamente in una frase (Duursma, Augustyn, & Zuckerman, 2008).

Le abilità di comprensione del testo costituiscono un fattore influente per lo sviluppo nei bambini e delle loro strategie di apprendimento e di studio. Durante l'età evolutiva i metodi di studio diventano un mezzo importantissimo per raggiungere risultati scolastici significativi, anche perché proseguendo nei percorsi scolastici, l'impegno richiesto diventa sempre maggiore. Ci sono però due variabili a cui prestare una particolare attenzione: la metacognizione e l'abilità di comprensione della lettura. Durante la lettura di un testo, oltre al

compito di decodifica del linguaggio scritto, lo studente deve anche attribuirgli significato, ovvero selezionare le informazioni più rilevanti, inserirle in un “contesto” complessivo di senso oltre a dare significato a ogni termine. La lettura è in grado di promuovere e allenare le abilità attraverso le quali comprendiamo un testo e gli attribuiamo senso e significato e contribuisce allo sviluppo di capacità metacognitive.

Domanda di ricerca ed obiettivi

In questo contributo quindi, nell’ottica della promozione di buone pratiche didattiche, tese a produrre risultati rilevanti in termini di apprendimento e potenziamento degli studenti, ma capaci, al tempo stesso, di promuoverne l’agio e il benessere nel contesto scolastico, presentiamo i risultati di una sperimentazione nazionale, promossa da Giunti Scuola e svolta dal gruppo di ricerca della cattedra di Pedagogia Sperimentale dell’Università degli Studi di Perugia. La ricerca, svolta in differenti scuole primarie e secondarie di primo grado, del nord, centro e sud Italia, ha previsto l’implementazione di training intensivi di lettura ad alta voce di testi narrativi (da piccole storie a romanzi), allo scopo di verificare gli effetti di tali training sugli studenti, in termini di empowerment dei processi cognitivi deputati alla gestione delle informazioni, nonché di quelli reputati necessari all’acquisizione degli apprendimenti a scuola. Contemporaneamente si è voluto indagare, dal punto di vista qualitativo, quali percezioni del percorso avessero gli studenti partecipanti e come e se questo percorso avesse contribuito al loro benessere nel contesto scolastico.

La scelta dell’ambiente naturale, la classe, non è neutrale. Lo scopo della ricerca è infatti quello di promuovere la pratica della lettura ad alta voce nel contesto scolastico e di mostrarne, a questo fine, gli effetti, confrontati con quelli delle pratiche didattiche quotidiane e routinarie: le classi di controllo, pertanto, hanno proseguito, durante il training delle classi sperimentali, il loro normale percorso didattico.

Metodologia, strumenti e campione

Le scuole partecipanti sono state localizzate in tre città al fine di avere una rappresentazione del nord, centro e sud italiani. Hanno partecipato alla ricerca: due scuole di Torino, cinque scuole di Modena e due scuole di Lecce, per un totale di 60 classi coinvolte e oltre 1100 studenti partecipanti. Le classi sono divise in 2 classi sperimentali e due di controllo per quel che riguarda la prima primaria, 6 sperimentali e sei di controllo per la seconda primaria, 5 sperimentali e 5 di controllo per la terza primaria, 4 sperimentali e 4 di controllo per la quarta primaria ed infine 6 sperimentali e 6 di controllo per la quinta primaria. Nella secondaria di primo grado le classi che hanno partecipato sono 2 sperimentali e 2 controllo per la prima, 3 sperimentali e 3 di controllo per la seconda e 2 sperimentali e 2 controllo per la terza.

Gruppi sperimentali e di controllo, per ogni scuola, sono stati scelti in relazione alle classi “parallele” che condividono obiettivi formativi, curricoli e modalità didattiche. Per ogni coppia di classi parallele una è andata a comporre il gruppo sperimentale e l’altra il gruppo di controllo.

Prima e dopo il training, ai gruppi sono stati somministrati i test della batteria CAS (Cognitive Assessment System - Das & Naglieri; Naglieri, 2005) che va ad investigare le funzioni cognitive che sono alla base dell’acquisizione di nuovi apprendimenti, le prove MT per la

comprensione del testo ed un'intervista aperta agli studenti dove veniva chiesto di raccontare l'esperienza. Come ulteriore forma di controllo è stato somministrato un questionario sull'esperienza agli insegnanti. Il training si è composto di 100 incontri complessivi, con un'ora al giorno di lettura, per 5 giorni alla settimana. Ogni classe seguiva un protocollo di letture definito. All'inizio sono stati proposti soltanto testi caratterizzati da brevità generale, da strutture del periodo e linguaggio semplici, da un'articolazione strutturata attorno a frasi brevi. Progressivamente sono stati inseriti testi caratterizzati da unità semantiche più lunghe e maggiore durata complessiva. Abbiamo proceduto in modo simile per quanto riguarda il livello di difficoltà linguistica. Inoltre con il procedere del training sono stati proposti testi che non si esaurivano in un solo giorno di lettura, richiedendo quindi agli studenti di ricordare i contenuti del "precedente episodio". I momenti di debriefing sono stati incoraggiati specie se spontanei. A seguito di molte tra le letture proposte si sono svolte discussioni e individuazione di collegamenti di quanto letto alla propria esperienza, di effettuare previsioni sullo svolgimento successivo del testo, di attribuzione di stati emotivi ai personaggi della narrazione, di identificare le proprie emozioni in connessione agli eventi del testo, di ricostruire e restituire gli accadimenti ritenuti più importanti della storia letta. Il protocollo escludeva invece il legame di attività tradizionali come riassunti, schede didattiche, analisi logiche o grammaticali.

Analisi e risultati

Vengono presentati i dati relativi alle classi della scuola primaria. I dati relativi alla batteria neuropsicologica mostrano un incremento statisticamente significativo per i gruppi sperimentali in confronto a quelli di controllo (ANOVA 2X2 Time X group), suggerendo che tale tipo di training ha avuto un impatto e sviluppato un potenziamento delle funzioni cognitive degli studenti. Nello specifico i risultati riportano un incremento significativo per il gruppo sperimentale nella scala totale che comprende la combinazione dei processi di pianificazione, attenzione, simultaneità e successione. A fianco di questi risultati, l'affondo qualitativo attraverso le interviste dei ragazzi ha mostrato come il training abbia aumentato il benessere degli studenti sia in termini individuali, rubricando una serie di acquisizioni avvertite dai partecipanti, sia in termini collettivi come risulta evidente sia dalle notazioni relazionali degli studenti, sia dai commenti degli insegnanti. Il materiale qualitativo è stato indagato attraverso l'analisi delle ricorrenze e la costruzione di categorie ex post, quantificandole secondo le frequenze di risposta dei soggetti.

Discussione

Utilizzando lo strumento CAS, è stato possibile rilevare un aumento delle prestazioni sulla scala totale, che consiste in tutte le sottoscale che studiano in modo specifico i processi di pianificazione - che sono essenziali per la ricerca e la codifica dei piani di azione - e i processi di rivalutazione di questi piani in seguito a modifiche o variabili esterne che intervengono. In più vengono esaminati anche i processi di simultaneità e successione: il primo consente la sintesi di elementi separati in un gruppo interrelato, mentre il secondo consente la conservazione o la comprensione di un'organizzazione seriale di eventi. Anche l'attenzione, cioè la capacità di concentrarsi su un compito: insieme con le altre tre abilità, è essenziale per la gestione, la manipolazione e la comprensione delle informazioni in generale o in un testo. Questi risultati suggeriscono come la pratica della lettura, attuata nei curricula scolastici e con un'alta frequenza e intensità, possa portare notevoli benefici non solo, come

già osservato in studi precedenti, su facoltà come il riconoscimento emotivo e la teoria della mente in generale (Batini et al., 2018), ma anche per quanto riguarda la comprensione del testo e delle componenti cognitive di base che implicano questa e altre abilità, inducendo un beneficio a livello di capacità cognitiva trasversale e trasferibile.

Il livello di benessere percepito durante il training è davvero notevole ed è stato in grado di sollecitare la motivazione dei ragazzi a partecipare attivamente nel contesto scolastico oltre a produrre, attraverso la condivisione di emozioni, sentimenti, situazioni, incontrate nelle storie ascoltate, un indubbio vantaggio relazionale per l'intero gruppo classe.

Bibliografia

- Bartolucci, M., & Batini, F. (2018). The effect of a narrative intervention program for people living with dementia. *Psychology & Neuroscience*, 12(2), 307-316.
- Batini, F., Toti, G., & Bartolucci, M. (2016). Neuropsychological benefits of a narrative cognitive training program for people living with dementia: A pilot study. *DEMENTIA & NEUROPSYCHOLOGIA*, 10(2), 127-133.
- Batini, F., Bartolucci, M., & Timpone, A. (2018). The effects of Reading Aloud in the Primary School. *PSYCHOLOGY AND EDUCATION*, 55, 1-2.
- Batini, F. (2018). *Leggimi ancora. Lettura ad alta voce e life skills*. Firenze, Italia: Giunti scuola.
- Billington, J., Carroll, J., Davis, P., Healey, C., & Kinderman, P. (2012). A literature-Based Intervention for Older People Living with Dementia. *Perspect Public Health*, 133(3), 165-73.
- Duursma, E., Augustyn, M., & Zuckerman, B. (2008). Reading aloud to children: the evidence. *Archives of disease in childhood*, 7, 554-557.
- Mar, R. A. (2004). The neuropsychology of narrative: Story comprehension, story production and their interrelation. *Neuropsychologia*, 42(10), 1414-1434.
- Naglieri, J. A. (2005). *The cognitive assessment system*. New York, NY: Guilford Press.
- Speer, N. K., Reynolds, J. R., Swallow, K. M., & Zacks, J. M. (2009). Reading stories activates neural representations of visual and motor experiences. *Psychological science*, 20(8), 989-999.
- Uchida, S., & Kawashima, R. (2008). Reading and solving arithmetic problems improves cognitive functions of normal aged people: a randomized controlled study. *Age*, 30(1), 21-29.
- Zwaan, R. A., & Radvansky, G. A. (1998). Situation models in language comprehension and memory. *Psychological bulletin*, 123(2), 162.

“The only class that has prepared me to live a better life”: the impact of a credit-bearing well-being course at a diverse American university

Leah Goodman¹ and Michelle Manno¹

¹ University of Illinois at Chicago

Introduction

With increasing numbers of minority students, students with disabilities and students with mental illnesses being admitted to college, universities have inherited the responsibility of meeting the needs of this changing population. As rates of anxiety, depression, stress, and suicide rise for college students internationally (American College Health Association, 2016; Auerbach et al., 2018; Ibrahim, Kelly, Adams, & Glazebrook, 2013; January et al., 2018), universities recognize the strong need for innovative services and programming that cultivate well-being and inclusivity, and holistically prepare students to lead healthy, successful lives. Universities across the globe are struggling to equitably meet the social, emotional and academic needs of the growing population of diverse students (Bensimon & Malcolm, 2012; Bowen, Chingos, & McPherson, 2011; Byrd & McKinney, 2012; Lipson et al., 2018; Subotnik & Edmiston, 2012). Burgeoning literature on campus mental health needs supports the value of integrating well-being into higher education contexts. However, universities have not universally implemented successful well-being initiatives to support equitable outcomes for students, particularly those from underrepresented backgrounds. While higher education seeks to educate future thought leaders, the current policies and infrastructures do not unanimously prioritize mental health and well-being; thus, it cannot fully meet the holistic needs of students and struggles to uphold its central mission.

The intersection between student well-being and academic success is highly supported in the literature. Universities that invest in innovative mental health and well-being initiatives demonstrate higher retention, increased graduation rates, and greater financial gain (Ashwood et al., 2015; Eisenberg et al., 2009; Fink, 2014; Goodman, 2017; Kreider, Bendixen, & Lutz, 2015; White & Kern, 2018). We assert that equitable student success is promoted on campuses that respond to and prioritize the holistic needs of students, invest in the development of robust interdisciplinary mental health and well-being initiatives, deliver inclusive and relevant curricula, and encourage positive student-faculty relationships.

This project conceptualizes well-being as an *equity* issue. We know that students are coming to our colleges and universities with vastly different lived experiences based on their identities and the larger structures of inequity that shape our societies. Supporting students equitably requires acknowledging these realities and adapting how we structure our classrooms and campuses to address students' needs, beyond traditional academic models and stand-

ard approaches (e.g. counseling centers). Ultimately, we argue that equitably supporting student success requires 1) prioritizing mental health and well-being as an *academic* matter (i.e. connected to measurable outcomes of success, such as retention and graduation) and 2) viewing students' academic exploration of well-being as a worthwhile intellectual pursuit.

While some universities have integrated wellness and social-emotional learning into the classroom, there is a paucity of literature on the impact of well-being curricula on student mental health and academic performance. Using quantitative and qualitative methods, this research project explores the impact of a curricular-approach to student well-being at the University of Illinois at Chicago (UIC), a federally-designated minority serving institution with one of the most diverse undergraduate student bodies in the U.S. We assert that by offering credit-bearing courses in which students can expand their knowledge and develop skills for promoting their own mental health and well-being, universities can communicate a genuine message of care for the whole student. The skills learned in well-being courses will serve students while at university and in their future careers in a rapidly changing, global society.

Research question and objectives

While this study exists in a larger context of exploring innovative well-being initiatives on college campuses, the primary research objective is to: assess the efficacy of a credit-bearing well-being course at a diverse American university on the acquisition of skills to promote student mental health and enhanced confidence in managing well-being and student success. The objectives of the larger project are to: 1) reflect on the student experience of participating in a well-being course, 2) measure the impact of a well-being course on students' self-efficacy and confidence, health behaviors, and perceived well-being, and 3) bolster the inclusion of well-being curricula to supplement counseling and other traditional mental health services on university campuses.

Methodology, methods and sample

This study employed a mixed method design to critically assess the research question and objectives. Students from all colleges, departments, and majors at UIC were able to enroll in the course and participation in the research component was optional for enrolled students.

Qualitative data was collected from 166 students over the course of three semesters from eight separate class sections. Qualitative data was extracted from: 1) formal anonymous course evaluations, 2) student assignment submissions, 3) an anonymous qualitative feedback form, and 4) a semi-structured focus group. The qualitative measures were analyzed using a constant comparative approach to identify common themes of experience (Glaser, 1965). The primary investigator conducted thematic analysis on one third of the data to identify an initial code scheme, and the research team then employed an iterative coding process for the remainder of the data (Braun & Clarke, 2006). The focus group also served as a means of member checking the validity of the representation of the participants' experience (Creswell & Miller, 2000).

Quantitative data from 74 students is included in the initial analysis. Race-specific analyses were conducted using data from 49 participants, and will include up to 74 participants upon

completion (September 2019)¹. Participants' self-reported demographics were grouped as either White, Underrepresented Racial Minority (URM; Black, Latin and Native American), or Asian. Quantitative data was assessed using pre-post measures from: 1) a self-report rating of physical and emotional health, 2) a validated Healthy Lifestyle Beliefs and Behaviors Scale (Melnyk, 2003; Melnyk & Small, 2003), 3) a 19-item confidence in self-management scale related to course objectives, 4) a validated 8-item Perceived Academic Control Scale (Ruthing, Haynes, Stupinsky, & Raymond, 2009), 5) a 14-item confidence in academic management scale, and 6) a 3-item self-report comparison of confidence in ability to implement effective strategies to manage emotional, physical and academic well-being. Paired t-tests were conducted to assess the statistical significance of changes in the means for each indicator, and to evaluate race-specific data.

These indicators were selected to capture more than symptomatic changes in mental health and well-being, particularly addressing course objectives related to skill acquisition and the implementation of strategies to maintain mental health and well-being. Self-efficacy is strongly supported in the literature as a critical component of well-being and academic success for college students (Bandura, 2004; Garza, Bain, & Kupczynski, 2014; Jenson, Petri, Day, Truman, & Duffy, 2010; Krumrei-Mancuso, Newton, Kim, & Wilcox, 2013). The course aims to impact students' confidence in their ability to self-manage their well-being and academic success; therefore, data measures sought to evaluate changes in students' self-efficacy of managing mental health within the academic context, rather than measuring the presence of symptoms out of context.

Student participants are characteristic of the greater campus population, representing a diverse range of race, gender identity, age, and year and course of study.

Analyses and results

Qualitative analyses and results

The initial thematic analysis revealed five primary themes: skill acquisition, enhanced confidence and personal control, prioritization of personal mental health and well-being, academic performance, and social and peer support. The iterative process necessitated designation of two additional themes: cultivating an inclusive classroom and development of additional courses. Students reported the positive impact of the course on both their overall well-being and their ability to implement skills to manage their mental health.

A sample of qualitative data to represent three of the identified themes are outlined below:

Skill acquisition – “I believe that this course contributed to the development of skills to support my well-being as a college student...I feel like I now have the tools to better succeed emotionally, physically, and academically.”

Prioritization of personal mental health and well-being – “This class made me actually set time aside in order to improve my well-being and mental health. I started to take care of myself and realize how important my mental life is and how much it affects what I do every day.”

1. Quantitative data from the subsequent semester is currently being analyzed and will be completed prior to conference.

Academic performance – *“Without this class I feel like I would be a mess right now – but instead I am SO on top of everything. I have all A’s in my classes and think I was able to do this because of how I took time out of my day to relax and not become overwhelmed by my life.”*

Quantitative analyses and results

Preliminary quantitative findings reveal significant impact of the course on enhancing students’ self-efficacy in managing mental health, well-being and academic performance.

All 39 indicators showed statistically significant increases from pre to post assessment. This significant increase in self-reported confidence and skills was particularly evident for measures of: self-management of stress, practicing mindfulness, creating specific and realistic goals, accomplishing goals, developing social support networks, and utilizing student counseling services.

Race-specific analyses revealed that URM students self-reported lower pre-scores than White and Asian students for 66.7% of the indicators. Asian students scored lower than White and URM students for 38.5% of the indicators. For 14 of the indicators, URM students had initial scores that were lower than White and Asian students, but increased to higher than White and Asian students on the post assessment. The indicators that demonstrated significant increases in post-assessment for URM students were related to: prioritizing health and wellness, engaging in self-care activities, practicing mindfulness, problem solve solutions to difficult problems, implement strategies to cope with high stress, create and follow through with goals, develop social support networks, handle conflict productively, interact non-judgmentally, implement strategies to cope with crises and emergencies, and utilize student counseling and student recreation services.

Discussion

Taken together, these findings demonstrate that students had positive and impactful experiences while engaging in an intentionally-designed well-being course. The rich sample illustrates the critical need, and the specific and distinct value, of delivering skills-based mental health and well-being content in the classroom, and of integrating well-being topics into academic contexts more broadly. A powerful statement by one student — “This class provided me with the knowledge regarding mental and academic success that I would’ve never had. This is honestly the only class that has prepared me to live a better life”— suggests that well-being courses may contribute to enhancement of students’ overall well-being while also supporting more traditional measures of academic success such as retention and graduation, particularly for underrepresented minority students. Ultimately, these findings demonstrate the promising potential of credit-bearing well-being courses to assist universities in fulfilling their missions by cultivating campuses that holistically, equitably, and sustainably support diverse groups of students.

References

American College Health Association. (2016). *American College Health Association-National College Health Assessment II: Graduate/Professional Student Reference Group Executive Summary Spring 2016*. Hanover, MD.

- Ashwood, J. S., Stein, B. D., Briscoombe, B., Sontag-Padilla, L. M., Woodbridge, M. W., May, E., ... Burnam, M. A. (2015). *Payoffs for California college students and taxpayers from investing in student mental health*. Retrieved from https://www.rand.org/pubs/research_reports/RR1370.html.
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Upc-kul, L., Gasthuisberg, C., Alonso, J., ... Kessler, R. C. (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and Distribution of Mental Disorders. *J Abnorm Psychol.*, 127(7), 623–638.
- Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior*, 31(2), 143–164. doi:10.1177/1090198104263660.A.Health
- Bensimon, E. M., & Malcolm, L. (2012). *Confronting Equity Issues on Campus: Implementing the Equity Scorecard in Theory and Practice*. Sterling, VA: Stylus Publishing.
- Bowen, W., Chingos, M., & McPherson, M. (2011). *Crossing the Finish Line: Completing College at America's Public Universities*. New Jersey, NJ: Princeton.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. doi:10.1191/1478088706qp063oa
- Byrd, D. R., & McKinney, K. J. (2012). Individual, interpersonal, and institutional level factors associated with the mental health of college students. *Journal of American College Health*, 60(3), 185–193. doi:10.1080/07448481.2011.584334
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice*, 39(3), 124–130.
- Eisenberg, D., Golberstein, E., Hunt, J. B., Eisenberg, D., Golberstein, E., & Hunt, J. B. (2009). Mental Health and Academic Success in College. The B . E . *Journal of Economic Analysis & Policy Contributions College College*, 9(1), 1–35. doi:10.2202/1935-1682.2191
- Fink, J. E. (2014). Flourishing: Exploring Predictors of Mental Health Within the College Environment. *Journal of American College Health: J of ACH*, 62(May), 37–41. doi:10.1080/07448481.2014.917647
- Garza, K. K., Bain, S. F., & Kupczynski, L. (2014). Resiliency, self-efficacy, and persistence of college seniors in higher education. *Research in Higher Education Journal*, 26, 1–19. Retrieved from http://psu.summon.serialssolutions.com/2.0.0/link/0/eLvHcXmwrV3LTsMwEFyhnrjwfvj_kDyCQxHaSHhBCiI-oLEiDulWNvRaTIKTU98Pd4E_tC6Y1jlmJkC3YzHs8A8Pw6TX5hgqjztBrLUuvaS11a-jpnfOnFTGid-6jquHgtyqBjhCp52BMkeuU2niTS_8Y2E_zaKqijv5p8JxUjRdGvM1FAha8HcZjyTtBiYp2OSfD2nLxG-pi6I
- Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social Problems*, 12(4), 436–445.
- Goodman, L. (2017). Mental Health on University Campuses and the Needs of Students They Seek to Serve. *Building Healthy Academic Communities Journal*, 1(2). doi:10.18061/bhac.v1i2.6056
- Ibrahim, A. K., Kelly, S. J., Adams, C. E., & Glazebrook, C. (2013). A systematic review of studies of depression prevalence in university students. *Journal of Psychiatric Research*, 47(3), 391–400. doi:10.1016/j.jpsychires.2012.11.015
- January, J., Madhombiro, M., Chipamaunga, S., Ray, S., Chingono, A., & Abas, M. (2018). Prevalence of depression and anxiety among undergraduate university students in low- and middle-income countries: a systematic review protocol. *Systematic Reviews*, 7(57), 1–5.
- Jenson, R. J., Petri, A. N., Day, A. D., Truman, K. Z., & Duffy, K. (2010). Perceptions of Self-Efficacy among STEM Students with Disabilities. *Journal of Postsecondary Education and Disability*, 24(4), 269–283. Retrieved from <http://eric.ed.gov/?id=EJ966129>

- Kreider, C. M., Bendixen, R. M., & Lutz, B. J. (2015). Holistic needs of university students with invisible disabilities: a qualitative study. *Physical and Occupational Therapy in Pediatrics, 35*(4), 426–441. doi:10.1002/aur.1474.Replication
- Krumrei-Mancuso, E. J., Newton, F. B., Kim, E., & Wilcox, D. (2013). Psychosocial factors predicting first-year college student success. *Journal of College Student Development, 54*. doi:10.1353/csd.2013.0034
- Lipson, S. K., Ph, D., Ed, M., Kern, A., Eisenberg, D., Ph, D., ... Sc, M. H. (2018). Mental Health Disparities Among College Students of Color. *J Adolesc Health, 63*(3), 348-356. doi:10.1016/j.jadohealth.2018.04.014
- Melnyk, B. (2003). *Healthy lifestyles behavior scale*. Hammondsport, NY: COPE for HOPE, INC.
- Melnyk, B., & Small, L. (2003). *Healthy Lifestyles Attitude Scale*. Phoenix, AZ: Unpublished work, Arizona State University.
- Ruthing, J., Haynes, T. L., Stupinsky, R. H., & Raymond, P. (2009). Perceived academic control: mediating the effects of optimism and social support on college students' psychological health. *Social Psychology of Education, 12*(2), 2009.
- Subotnik, R., & Edmiston, A. (2012). *Ethnic and Racial Disparities in Education: Psychology 's Contributions to Understanding and Reducing Disparities*. Retrieved from <https://www.apa.org/ed/resources/racial-disparities.pdf>
- White, M., & Kern, M. L. (2018). Positive education: Learning and teaching for wellbeing and academic mastery. *International Journal of Wellbeing, 8*, 1–17. doi:10.5502/ijw.v8i1.588

Centri di integrazione nelle scuole della periferia romana

Rosanna Labalestra¹, Enrico Marani¹, Giorgio Quintiliani¹ e Carla Ghezzi¹

¹ Università La Sapienza - Roma

Introduzione

La condizione di espansione incontrollata di numerose aree urbane nel nostro Paese ha prodotto una quantità di trasformazioni incapaci di garantire lo sviluppo virtuoso della città. Soprattutto l'assenza di progettualità legata ai luoghi e l'incapacità di gestire la crescita dei sistemi urbani determina una conseguente marginalità relativa di queste aree ed è alla base di condizioni sempre più critiche dell'abitare (Ronconi, 2001). È proprio il benessere degli individui che le abitano ciò che appare maggiormente negato. Lo studio che il gruppo di lavoro sta sviluppando nell'ambito del dottorato di ricerca, intende affrontare la questione complessa delle aree marginali, a partire dall'individuazione delle particolari opportunità che possono offrire le istituzioni collettive, nello specifico si intende analizzare il rapporto circolare tra scuola e città (Leschiutta, 1989).

Il motto potrebbe essere: dalla scuola alla città e dalla città alla scuola.

La Scuola è l'istituzione collettiva fondativa di una società e assume un particolare significato in questo studio multidisciplinare, nel quale si esplorano le possibilità di rendere le strutture scolastiche periferiche come altrettanti "irradiatori urbani" per i quartieri. Come poli generatori e catalizzatori insieme della vitalità di un ambiente urbano, le scuole possono rappresentare consolidati e rinnovati luoghi d'incontro sociale "offrendosi alla comunità locale e al territorio: la scuola si configura come *civic center* in grado di fungere da motore del territorio in grado di valorizzare istanze sociali, formative e culturali" (MIUR, 2013, p. 2). La ricerca si attesta su alcuni concetti chiave: - inclusività come assunto costitutivo dell'istituto scolastico; - inter-generazionalità che configura la scuola come micro-comunità nella quale dialogano differenti generazioni; - crescita della comunità e delle persone in un ambiente in cui la narrazione collettiva che identifica i luoghi, possa manifestarsi nella maniera più aperta, equa e dialogica; - spazio come scena attiva delle relazioni collettive in cui la comunità può identificarsi e riconoscersi. Nello spazio si possono realizzare sia il benessere fisico, legato alla salubrità degli ambienti e al loro corretto funzionamento, sia il benessere che deriva dalla percezione dello spazio a un livello più complesso (Weyland & Attia, 2015).

Il caso studio oggetto della ricerca è definito all'interno del territorio romano, poiché la città di Roma risulta particolarmente significativa per il tema di ricerca. Infatti, all'interno del confine fisico rappresentato dal suo raccordo anulare, la connotazione della periferia romana non è solo determinata dalla condizione di distanza dal centro storico, quanto dall'in-

capacità di assimilazione di intere porzioni urbane in un'ipotetica unitarietà della città. Questo stato di cose determina sacche di degrado sociale in quartieri che, seppure densamente popolati, sono carenti o addirittura privi di servizi e spazi per la comunità e trovano raramente la possibilità di riconoscersi nel proprio contesto e esprimersi in un'identità collettiva.

L'obiettivo principale è dunque, a partire dal caso studio, di identificare azioni efficaci e plurali, finalizzate alla realizzazione degli assunti di ricerca che possano coinvolgere le strutture scolastiche esistenti con un grado elevato di complessità. L'azione è indubbiamente interdisciplinare sia nel procedimento di osservazione della realtà esistente, sia in quello di elaborazione di soluzioni specifiche rispetto alle problematiche.

Nella riflessione che intendiamo proporre confluiscono la ricerca socio-pedagogica che ormai da qualche anno si concentra sul tema dell'integrazione, della complementarità, della flessibilità e della polivalenza degli ambienti di apprendimento, e la ricerca architettonica come collaborante alla definizione di nuovi e migliori spazi di apprendimento, tenendo conto delle questioni ancora attuali delineate nel "Memorandum sull'istruzione e la formazione permanente" varato dalla Commissione delle Comunità Europee nel 2000 (Commissione delle Comunità Europee, 2000). La nuova scuola dovrebbe essere attenta alla sostenibilità ambientale, energetica ed economica, alla rapidità di costruzione, alla riciclabilità dei componenti e dei materiali di base, con alte prestazioni energetiche, utilizzo di fonti rinnovabili, facilità di manutenzione. La presenza di spazi verdi fruibili in un'ottica di ambiente educativo integrato non solo arricchirebbe l'abitabilità del luogo, ma diventerebbe anche fonte inesauribile di apprendimento. La scuola del futuro dev'essere aperta al territorio, diventando luogo di riferimento per la comunità. La scuola innovativa è fatta per i ragazzi, ma deve avere un'attenzione speciale per gli insegnanti, con spazi per la collaborazione professionale e il lavoro individuale dei docenti. Fondamentale la presenza di spazi dedicati alla ricerca, alla lettura e alla documentazione, con particolare riguardo alle possibilità di utilizzo di dispositivi tecnologici digitali individuali o di gruppo e alle potenzialità offerte dalla connettività diffusa. Non solo biblioteche, ma anche sapere in rete. L'edificio insomma è il risultato di diversi tessuti che a volte interagiscono tra loro: quello delle informazioni, delle relazioni, degli spazi e dei componenti architettonici, dei materiali.

Nella ricerca inoltre sono tenute in conto infatti le riflessioni della sociomaterialità (Latour, 2005) secondo cui nello spazio scolastico, considerato nelle due accezioni macro (edificio) e micro (aule), elementi umani e non umani creano relazioni e connessioni da cui dipendono le azioni e le performance degli attori sociali, concorrono alla definizione di un "sistema - scuola integrato". D'altra parte anche la ricerca architettonica ha assunto come fondamentali gli studi sullo spazio e sulla disposizione e le relazioni tra le differenti parti della scuola e con l'intorno. Si terranno senz'altro in considerazione i criteri che sono alla base degli studi condotti dall'OCSE per la realizzazione degli ambienti di apprendimento e che partono da cinque prospettive che rappresentano allo stesso tempo delle opportunità per docenti, studenti e territorio (Manninen et al., 2007):

1. la configurazione dello spazio fisico della scuola può rappresentare per insegnanti e studenti l'opportunità di svolgere attività didattiche utilizzando diverse modalità organizzative come ad esempio lavorare in gruppo, in maniera individuale o comunque lasciare all'insegnante la possibilità di identificare l'organizzazione più opportuna per raggiungere gli obiettivi didattici prefissati;

2. gli aspetti sociali dell'ambiente di apprendimento, che sono rappresentati dalla complessa relazione insegnante-studente;
3. gli strumenti tecnologici presenti nell'ambiente, che integrati nel processo di apprendimento costituiscono un supporto alla costruzione della conoscenza;
4. il contesto locale, ovvero quando il territorio fa scuola e quale rapporto tra gli spazi della scuola e le istituzioni del territorio (musei, biblioteche o altri spazi pubblici);
5. gli spazi didattici veri e propri, come la configurazione spaziale può rappresentare uno strumento pedagogico, in questo caso lo spazio diventa strumento didattico.

Domanda e ricerca degli obiettivi

La ricerca parte dall'intuizione del valore e delle potenzialità delle strutture scolastiche nella riqualificazione ambientale dei luoghi marginali e degradati sempre più numerosi nelle nostre città. La domanda sintetica è: possono le scuole innestare processi virtuosi di trasformazione urbana? E in che modo?

Gli obiettivi sono di due tipi: il primo riguarda la messa a punto di strumenti disciplinari e interdisciplinari di studio sulla problematica relativa alla marginalità e al degrado urbano identificati come significativi nei territori periferici; il secondo riguarda l'elaborazione di soluzioni progettuali su casi campione che possano diventare esemplari. L'ambito preminente di osservazione sono le periferie, nelle quali le scuole assumono un ruolo sociale fondamentale per l'integrazione e la costituzione di comunità attive. Le scuole della periferia sono baricentro e crocevia di un pluralismo culturale, coerente con la composizione socio-urbanistica del contesto in cui sono inserite, scuole che possano aprirsi al territorio, diventando un luogo di riferimento per la comunità, diventando così una nuova *centralità urbana* (Borri, 2016).

Analizzate con gli strumenti delle due discipline, avendo come obiettivo la possibilità di trasformarle, le scuole individuate da una ricognizione sul campo, diventano negli obiettivi di progetto i poli d'integrazione dei quartieri, scelti per condizioni di marginalità e esclusione.

Metodologia

Sul piano dell'analisi socio-pedagogica, gli strumenti metodologici che si intendono utilizzare sono gli stessi della ricerca valutativa che è essa stessa ricerca sociale finalizzata a "costruire una conoscenza del valore dei programmi sociali che possa essere usata per migliorare i problemi sociali" (Shadish et al., 1991). Nel caso specifico l'oggetto da valutare, inteso come programma di interventi sociali, riguarda l'influenza che una riqualificazione architettonica di un'area adibita ad edificio scolastico nella periferia di Roma possa avere sia sui destinatari diretti (alunni, docenti e personale scolastico), sia su quelli indiretti (famiglie, giovani e associazioni del quartiere). Occorrerà pertanto rilevare *ex ante* i bisogni, le criticità e gli stili di vita degli interessati attraverso sia strumenti di indagine quantitativa (questionari, schede di rilevazione, check-list), sia tecniche di tipo qualitativo (focus group, interviste in profondità) utili a indagare più in profondità il contesto sociale che rappresenta evidentemente la variabile più significativa per la riuscita del progetto. Questi strumenti metodologici forniranno gli indicatori di contesto e di bisogni sociali utili per l'elaborazione e la definizione del progetto. La complessità della realtà sociale, in particolare modo nei quartieri periferici, richiede una più forte adesione degli obiettivi strategici del programma con i bisogni di tutti gli stakeholder, una complessità che va ridotta sempre più in indica-

tori operativi che rappresenteranno anche in fase di monitoraggio del progetto la bussola per riorientare e migliorare le azioni. La valutazione di un progetto partito dai bisogni del contesto e a questo indirizzato può rappresentare a nostro avviso la strada migliore per “sostenere gli sviluppi innovativi che guidano l’adattamento a realtà dinamiche ed emergenti in ambienti complessi” (Patton, 2011).

Nella ricerca saranno presentati una selezione di casi studio, di scuole della periferia di Roma, utile contemporaneamente alla messa in evidenza delle interconnessioni tra sociologia, pedagogia e architettura al fine di determinare modi e forme di questo dialogo disciplinare, e dall’altra per delineare un percorso metodologico di intervento sull’ambiente scolastico, relativamente re-iterabile.

Nell’ambito dell’impostazione delineata precedentemente, è stato impostato un disegno di ricerca in grado di coniugare finalità e metodi della ricerca sociale con quelli della scienza tipologica architettonica. Le azioni previste e in parte realizzate sono le seguenti:

- Individuazione dell’area socio-territoriale periferica della città di Roma su cui insiste un Istituto Scolastico del primo ciclo (gennaio – marzo 2019).
- Osservazione sul campo e intervista partecipata ad alcuni insegnanti dell’Istituto scolastico e prima ipotetica bozza di progettazione architettonica (aprile 2019).
- Somministrazione di un questionario (web survey) rivolto al personale dell’istituto (docenti, personale Ata) e alle famiglie utile a rilevare carenze funzionali-relazionali dell’attuale edificio scolastico e ipotesi di cambiamento. Successiva analisi dei dati supportata da eventuali interviste cognitive per migliorare la comprensione dei dati raccolti e per approfondire alcune risposte particolarmente significative (settembre – novembre 2019).
- Definizione del progetto architettonico (gennaio 2019).

Analisi

La ricerca architettonica ha assunto come fondamentali gli studi sullo spazio e sulla disposizione e le relazioni tra le differenti parti della scuola e con l’intorno.

Inoltre particolare attenzione è stata data alle relazioni “scuola - quartiere”, l’osservazione è avvenuta direttamente attraverso l’ascolto degli abitanti, delle associazioni e di tutti coloro i quali “vivono” la scuola.

L’intervento a scala architettonica è preceduto dall’identificazione di quelle parti della città che presentano quei caratteri di marginalità e degrado all’interno delle quali, poi selezionare gli edifici scolastici che possano rendersi capaci di azioni di riqualificazione.

I campioni vengono individuati sulla base di una serie di prerequisiti che implicino correttezza tipologica, una complessiva qualità architettonica, uno stato di conservazione adeguato, la posizione e la capacità di relazionarsi con il territorio oltre a ulteriori criticità e potenzialità rilevate. Secondo questi criteri sono stati individuati una selezione di ventisette casi adeguati a validare l’applicabilità della ricerca. Successivamente per ogni edificio così individuato si procede ad un’operazione di schedatura che completa l’analisi e precede il progetto, in cui si raccolgono i dati essenziali: elaborati grafici e fotografici, dati storico-anagrafici, l’inquadramento tipologico e distributivo, dati tecnici sintetici, descrizione degli

spazi della scuola secondo un criterio funzionale e misurati nella loro consistenza e una descrizione del contesto urbano corredata dagli opportuni rilievi.

Nella successiva fase di progettazione vengono operate le scelte strategiche inerenti il manufatto riportate in un quadro logico utile a chiarire le modalità di intervento e a definire gli obiettivi da raggiungere.

Discussione

L'obiettivo finale è immaginare nuovamente gli ambienti per l'apprendimento in cui tutti gli attori coinvolti (alunni, insegnanti, famiglie e abitanti del quartiere) possano acquisire non più e non solo conoscenze, ma quelle nuove competenze di cittadinanza attiva richieste dall'UE nell'Agenda 2030. Crediamo che il raggiungimento di questo obiettivo coinvolga gli abitanti e le istituzioni per i quali l'architettura riesce a costruire spazi accoglienti e inclusivi.

Bibliografia

- Borri, S. (Ed.). (2016). *Spazi educativi e architetture scolastiche: linee e indirizzi internazionali*. Firenze, Italia: Indire.
- Commissione delle Comunità Europee. (2000). *Memorandum sull'istruzione e la formazione permanente*. Disponibile in https://archivio.pubblica.istruzione.it/dg_postsecondaria/memorandum.pdf
- Latour, B. (2005). *Reassembling the social. An introduction to Actor-Network Theory*. Oxford, England: OUP.
- Leschiutta, F. E. (1989). *Frammenti di scuola. L'edilizia scolastica del prossimo decennio*. Roma, Italia: Kappa.
- Manninen, J., Burman, A., Koivunen, A., Kuittinen, S., Luukanne, S., Passi, S., & Särkkä. (2007). *Environments that support learning: an introduction to the learning environments approach*. Helsinki, Finland: Finnish National Board of Education.
- MIUR. (2013). *Norme tecniche-quadro. Linee guida*. Disponibile in http://www.indire.it/wp-content/uploads/2018/01/cs110413_all1.pdf
- Patton, M. Q. (2011). *Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use*. New York, NY: Guilford Press.
- Ronzoni, M. R. (2001). *Il senso della periferia. Tecniche di riqualificazione ambientale*. Firenze, Italia: Alinea.
- Shadish, W. R., Cook, T. D., & Leviton, L. C. (1991). *Foundations of program evaluation: Theory of practice*. New York, NY: Sage publications.
- Weyland, B., & Attia, S. (2015). *Progettare scuole. Tra pedagogia e architettura*. Milano, Italia: Guerini scientifica.

High school swiss students' perception of five minutes' mindfulness meditations at the beginning of their 45 minutes' lesson

Elena Lucciarini¹, Philippe Gay¹ and Nicolas Bressoud¹

¹ Haute Ecole Pédagogique Valais

Introduction

Mindfulness is a growing, fashionable business and seems very fashionable. Thus, typing it on Google will result in more than 200 million entries. It is found today in a great variety of fields: from neurology to coaching, sports, psychology and of course, education. As for the latter, it will show six billion entries on Google. Quite interestingly, education and mindfulness go quite well together (Hyland, 2014). The impact of mindfulness meditation on students has been demonstrated by many authors: on the one hand, it increases well-being (Black, 2015), on the other hand, it improves academic results (Lu, Huang, & Rios, 2017). Moreover, it has a direct effect on executive functions, related to learning skills (Jha, Stanley, Kiyonaga, Wong, & Gelfand 2010). Finally, research emphasised that even short sessions show beneficial effects (Calma-Biring & Gurung, 2017).

However, few studies have focused on teenagers' perspective on mindfulness in a school context. Thus, the present study investigates the impact of a short practise at the beginning of a lesson, two or three times a week, through a self-reported questionnaire addressing students' perceptions on how mindfulness influenced their learning abilities, their well-being and their mindfulness skills.

Objectives

With projects like Mindfulschools, Smiling Mind or Mindfulness in School Project, Mindfulness is a big phenomenon in many schools around the Anglo-Saxon world. It is even encouraged by the NHS (National Health Service, 2018) and the British Government. Indeed, 370 schools are going to take part in one of the largest trial in the world. Until 2021, pupils will benefit from mindfulness actions (British Government, 2019).

Studies on teenagers and mindfulness are lacking. The very first meta-analysis on mindfulness interventions with young people from age 6 to age 21, was published in 2015 by Zoogman and colleagues. Nevertheless, the latter does not focus on teens specifically or on the impact of mindfulness in schools. Moreover, few studies have yet analysed how mindfulness meditation impacts class management and teaching from a student's perspective. As such, the main goal of the present study is to determine students' perceptions of a five minutes' mindfulness meditation at the beginning of a 45 minutes' lesson, twice or three

times a week. More precisely, questions at the end of a six-month intervention targeted the impact on the students' learning skills, their well-being and their mindfulness skills.

Methodology

The project started on January 29, 2018 and ended on June 19, 2018 in a secondary school (ECCG Martigny). Three classes of 15 to 22 years old students (N=65, 89% female) answered 14 questions on a Likert scale organised into 5 categories: 0= strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree. The 14 items evaluated (1) knowledge and understanding of the purpose of mindfulness in and out the classroom, (2) meditation's contribution to well-being, (3) positive impact of such practice on attention and (4) the development of mindfulness skills such as observation. One closed-ended question and seven opened-ended questions completed the self-report questionnaire.

Results

Mindfulness and school

On average, six students out of ten had never meditated before and only 46% had never heard about mindfulness before. Most students seemed to agree that mindfulness is useful at school with 76% answers 3, 4 or 5 on the Likert Scale; 23% agreed to come after class to meditate; 60% felt more focused during the following lesson and only 14% could not see any impact on their attention.

Mindfulness and well-being

Meditation was enjoyed by 80% of the sample and 12% was neutral about it. Roughly the same results were found when they were asked if the students felt more relaxed after the practice. Nine students out of ten agreed that the teacher was calmer after guiding them. Almost 80% of the teenagers observed that if the teacher was less stressed, so were they.

Mindfulness skills

More than 60% could see when their minds wandered, were more aware of their bodily sensations, and could come back to their breathing when losing focus; 53% said they could pinpoint the emotions affecting them. Meditation at school motivated 17% of the sample to do it at home and 24% talked about mindfulness at home and recommended it.

Open-ended questions

When the students had to define mindfulness, most of them talked about being self-aware, aware of their ideas, bodies or emotions, relaxing, focusing, developing the brain, taking some time out, getting ready to learn. Three students said they did not know what it was. After practising in the classroom, they noticed being more efficient at school, calmer, more relaxed, less anxious, more focused during the following classes, happier, more motivated. They also noticed a quieter class, a better motivation and connection with inner-self. Some students said they could identify their emotions and deal with them. Three students said they did not know.

One student out of four did not perceive any impact on his private lives. Two already meditated. As for the others, they acknowledged emotion regulation, focusing, serenity, improvement of sports skills, calm, better sleep and the ability to take a break during the day.

Discussion

Mindfulness and school

Half of the students agreed that meditation is useful in the classroom. The fact that mindfulness and meditation go well together was shown by several researchers (Hyland, 2014; Kuyken et al., 2013; Felver, Celis-de Hoyos, Tezanos, & Singh, 2016). Only one student thought teacher was not more relaxed after leading the mindfulness session in the classroom. 89% felt more relaxed if the teacher was more relaxed. This fact recalls Oberle and Schonert-Reichl's findings (2016). According to them, the teacher's stress is contagious. As such, it can be hypothesised that if a teacher is calm (and perceived as such), students will be calmer too. As for their attention capacity, only nine students said they did not see any difference with or without mindfulness. This is similar to what was found in studies (Jha, Krompinger, & Baime, 2007; Norris, Creem, Hendler, & Kober, 2008; Moore & Malinowski, 2008).

Mindfulness and well-being

Eight students out of ten enjoyed meditating, 75% acknowledged more tranquillity, and 20% said they were willing to meditate after class. Open-ended questions also revealed that they acknowledged serenity and better sleep. Meditation apparently brings well-being to the students. Researchers, including Baer and Lykins (2011), found similar results.

Mindfulness skills

About 80% of the students claimed to be more aware of their emotions, able to focus on their breathing when the mind wandered and could have a greater body perception. These results are similar to what was already found (Baer & Lykins, 2011; Silverstein, Brown, Roth, & Britton, 2011). These results suggest that even within a short period and with short sessions, students can develop mindfulness skills.

Limits

These results have to be taken with caution. Firstly, the only assessment tool used in the present study is retrospective self-report. Given the potential impacts, a randomized research with a larger sample size would be necessary.

Conclusion

In her introduction to mindfulness, Estelle Fall (2016) does not understand why there are so few empirical data on mindfulness meditation impact on students. Data on meditation and teenagers are even fewer. Thus, every new evidence is crucial and it is important to concretely study this phenomenon in secondary schools. The results found here are encouraging: the students felt happier, more relaxed, more focused and more self-aware. Even though some researchers have not found significant links between mindfulness and health (Chiesa & Serreti, 2009), many studies show similar impacts (Grossma, Niemann, Schmidt, & Walach, 2004; Khoury et al., 2013; Zoogman, Hoyt, Goldber, & Miller, 2014).

The British example with the Mindfulness Initiative (The Mindfulness Initiative, 2018), the NHS and many evidence-based data including this study should be considered by the Swiss Government. Indeed, the fact that mindfulness helps the class being calmer, and influences both subjective well-being and learning skills, should trigger a greater implementation of

mindfulness in schools. Thus, it could be brought through teacher education or through mindfulness professionals coming to schools. An easier way could be to use an app (Head-space, Petit Bambou, etc.) or other mean, and have the students meditate for a short moment.

References

- Baer, R. A., & Lykins, E. L. (2011). Mindfulness and positive psychological functioning. In K. M. Sheldon, T. B. Kashden, & M. F. Steger (Eds.), *Designing positive psychology: Taking stock and moving forward*, (pp. 335-348). New York, NY: Oxford University Press.
- Black, D. S. (2015). Mindfulness Training for Children and adolescents. *Handbook of mindfulness: Theory, research, and practice*, 283, 246-263.
- British Government. (2019). *News and Communication. One of the Largest Mental Health Trials Launches in Schools*. Retrieved from <https://www.gov.uk/government/news/one-of-the-largest-mental-health-trials-launches-in-schools>
- Calma-Birling, D., & Gurung, R. A. (2017). Does A Brief Mindfulness Intervention Impact Quiz Performance?. *Psychology Learning & Teaching*, 16(3), 323-335.
- Chiesa, A., & Serretti, A. (2009). Mindfulness-based stress reduction for stress management in healthy people: a review and meta-analysis. *The journal of alternative and complementary medicine*, 15(5), 593-600.
- Fall, E. (2016). *Introduction à la pleine conscience*. Paris, France: Dunod.
- Felver, J. C., Celis-de Hoyos, C. E., Tezanos, K., & Singh, N. N. (2016). A systematic review of mindfulness-based interventions for youth in school settings. *Mindfulness*, 7(1), 34-45.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of psychosomatic research*, 57(1), 35-43.
- Hyland, T. (2014). Mindfulness-based interventions and the affective domain of education. *Educational Studies*, 40(3), 277-291.
- Jha, A. P., Krompinger, J., & Baime, M. J. (2007). Mindfulness training modifies subsystems of attention. *Cognitive, Affective, & Behavioral Neuroscience*, 7(2), 109-119.
- Jha, A. P., Stanley, E. A., Kiyonaga, A., Wong, L., & Gelfand, L. (2010). Examining the protective effects of mindfulness training on working memory capacity and affective experience. *Emotion*, 10(1), 54.
- Khoury, B., Lecomte, T., Fortin, G., Masse, M., Therien, P., Bouchard, V., ... Hofmann, S. G. (2013). Mindfulness-based therapy: a comprehensive meta-analysis. *Clinical psychology review*, 33(6), 763-771.
- Kuyken, W., Weare, K., Ukoumunne, O. C., Vicary, R., Motton, N., Burnett, R., ... Huppert, F. (2013). Effectiveness of the Mindfulness in Schools Programme: non-randomised controlled feasibility study. *The British Journal of Psychiatry*, 203(2), 126-131.
- Lu, S., Huang, C. C., & Rios, J. (2017). Mindfulness and academic performance: An example of migrant children in China. *Children and Youth Services Review*, 82, 53-59
- Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and cognition*, 18(1), 176-186.
- National Health Service. (2018). *Mindfulness*. Retrieved from <https://www.nhs.uk/conditions/stress-anxiety-depression/mindfulness/>
- Norris, C. J., Creem, D., Hendler, R., & Kober, H. (2018). Brief mindfulness meditation improves attention in novices: evidence from ERPs and moderation by neuroticism. *Frontiers in human neuroscience*, 12, 315.

- Oberle, E., & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science & Medicine*, 159, 30-37.
- Silverstein, R. G., Brown, A. C. H., Roth, H. D., & Britton, W. B. (2011). Effects of mindfulness training on body awareness to sexual stimuli: implications for female sexual dysfunction. *Psychosomatic medicine*, 73(9), 817.
- The Mindfulness Initiative. (2018). *Home*. Retrived from <https://www.themindfulnessinitiative.org.uk/>
- Zoogman, S., Goldberg, S. B., Hoyt, W. T., & Miller, L. (2015). Mindfulness interventions with youth: A meta-analysis. *Mindfulness*, 6(2), 290-302.

Differentiation for inclusion: promoting educational well-being for every student. An Italian case study

Silvia Maggiolini¹ and Elena Zanfroni¹

¹ Università Cattolica del Sacro Cuore – Milano

Introduction

The Italian model of school inclusion for individuals with disabilities (legislation 118/1971 and 517/1977) is based on over thirty years of ground-breaking experimental work – both theoretical and applied. Drawing on pioneering pedagogical values, which are now internationally recognized, Italy has been one of the first countries in the world to promote the integration of disabled students into traditional education routes (Association TreeLLLe, Caritas Italiana and Fondazione Giovanni Agnelli, 2011).

There have been remarkable successes and achievements in the last few years (Ianes, 2006). The path to integration has contributed to profoundly modifying the Italian education system, promoting significant changes in the pedagogical and cultural field: methodological and teaching innovation; enhancement of teachers' role and status; development of new skills; flourishing of a new culture revolving around the values of welcoming, opening and valuing differences. Nowadays, we are witnessing increasing complexity within school classes of our educational system. In fact, in every school order there are pupils who have specific needs (e.g. children with disabilities or children with specific learning disabilities), but also pupils who can't learn, although they do not have a recognized condition of difficulty.

How can the school system respond to this growing complexity, guaranteeing each pupil the right to learn and the possibility of educational success? Based on these assumptions, CeDisMa (Research Center on Disability and Marginality, Catholic University of Sacred Heart, Milan) research group implemented a training and transformative research project, involving a sample of teachers belonging to 25 classes of all levels, in order to promote good educational practices and to concretely respond to the plurality of pupils' needs.

Research question and aims

The scientific roots of differentiation are to be found in the thought and multi-year work of Carol Ann Tomlinson (1999) responding to the needs of all learners, promoted a new educational paradigm, based on the consideration that all pupils present in classes have specific and different ways of learning that need to be respected.

Specifically, according to the model promoted by the American researcher, it is important, in teaching practice, to start from a thorough knowledge of the student, not only with re-

spect to needs but also with respect to interests, readiness and learning profile. Such a specific response requires, in particular, action in three areas: 1. content; 2. process; 3. product.

As a consequence, the educational proposal cannot therefore be unique, but can provide for: specific tasks; individual or shared activities in small/large groups; flexible class spaces; resources and materials of various kinds.

This approach allows, therefore, to reach all students in the classroom, promoting a context of cooperation and mutual help and supporting a continuous dimension of inclusion.

The research project has been developed around the following objectives:

- to encourage the participants to reflect on the problematic nodes of didactic differentiation;
- to provide strategies and operational tools for understanding the relational dynamics within the school and the possible lines of action;
- to offer the possibility to experiment, through training and consultancy, the implementation of functional strategies;
- to consolidate the teachers' work with the internal and external networks of the school in order to favor the sharing of problems and possible answers;
- to arrive at the definition of good educational practices.

Methodology and methods

The research project was developed according to the action-research methodology. This methodology is often used for qualitative analysis in the field of educational research. Action-research's conditions include a) the relationship of collaboration between the various actors involved, both in the definition of the problem and in the management of concrete research - evaluation activities; b) the idea that research should not be "neutral", but should become an agent of change and social empowerment agent; c) attention to the research's educational dimension. So, action-research is a way of questioning your own practice and changing it as a result of the study.

Furthermore, it is important to point out that the objective of this research has not been to reach a validation of this approach, but to experiment, in various school orders, operating and functional modes, responding to a logic of differentiated teaching, and to identify best practices.

The research tools used were designed to give the teacher the opportunity to proceed following an orderly structure that, starting from the observation of the class (first form), makes it possible to design tasks (second form) and, subsequently, evaluate the acquired learning (third form).

Specifically, the observation form was designed to help the teacher to detect weaknesses, but especially strengths, within the single class context. The aim is to promote reflection around contextual elements and opportunities in the classroom (laboratories, class group, spaces for other activities, etc.). These aspects facilitate the design work, increase the awareness of possible difficulties and support a work of prevention with respect to certain negative effects, which could affect the outcome of differentiated activities.

The design form identifies competences, knowledge, skills and attitudes promoted by the specific differentiated learning unit. The evaluation form is structured around the description of the levels of mastery achieved by the pupils in the individual competences identified. The research project has involved 25 educational teams, selected on criteria shared by CeDis-Ma researchers with each headmaster.

The research sample is composed by 3 kindergartens, 8 primary schools, 8 first level secondary schools and 6 secondary schools of II level.

The 206 participating teachers are divided as follows: 16 kindergarten teachers, 51 primary teachers, 74 first grade teachers and 65 second grade teachers. The pupils involved are a total of 651.

Of the total, 180 pupils have Special Educational Needs (SEN); of these, 21% have a certified disability, 23% a SEN 3% have recently arrived in Italy. A significantly high figure (53%) is related to the presence of students not reported, but who need, according to the teachers, a specific educational / didactical attention.

Analyses and results

The research process began in December 2017 and ended in May 2018. Some elements collected for each school order can be summarized here.

Kindergarten: from the surveys carried out and from the discussions with participants, a general satisfaction emerged both for the process activated and for the products made by the teams. In particular, the increase in collaboration was a key point strongly shared by the working groups: this element, certainly the end point of a process activated by research, is also considered an essential condition for promoting a new vision of teaching. The research worth is to have given centrality to the classroom observation process and to the students' peculiarities through the instrument of the observation card.

Primary school: there are some positive points in common with kindergarten, such as increasing awareness of the strategies in use, paying greater attention to the knowledge and observation of the class group and increasing collaboration in the team. Moreover, the teachers added the possibility of facilitating the didactic flexibility and the sharing of materials between teams, widening the possibilities of differentiation also for the added value and the more functional use of all the human resources active in the classroom, including the support teacher.

Secondary School I and II level: didactic differentiation has undoubtedly represented an interesting and stimulating challenge: on one hand it has raised critical issues related to the objective difficulties of managing timetables and co-presences; on the other it has opened new horizons of perspective related to the increased teachers' need to plan in a different way and to adopt more functional educational and relational strategies in order to intercept and respond to the training needs of each individual student.

Discussion

As a preliminary step, it is important to highlight the innovative dimension that underlies this research and that has made possible the creation of a significant experience, both for the many teachers participating in the experimentation and - in the broadest meaning - all

the actors involved. The result was a wide and articulated work from which, in the final phase, some points of reflection can be deduced, which can be summarized in different areas: a) the organization; b) the teacher's professional identity; c) the sharing of good practices.

On the organizational level, it has emerged in an increasingly predominant way, the awareness that it is necessary that the class team/council has some prerequisites in order to make didactic differentiation. Those prerequisites are: believing in inclusion, knowing how to work in a team, being motivated and flexible and having consolidated didactic and educational skills. The priority condition that can be seen as an essential condition of research is the presence of a teaching staff that knows how to recognize itself as an authentic "team" and, as a result, that is able to co-build a class group with a strong identity. Collegial work, progressing in the different orders and school degrees, seems to be on the one hand a chimera, on the other a real cultural achievement, possible only thanks to a constant and systematic exercise of the involved parts.

On the teachers' professional identity level, it can be said that the work carried out has helped to encourage each participant to reflect more deeply on their role and on the characteristics of the learning and teaching process. It has also facilitated the consolidation of the methodological skills necessary to deal with the complexity of the school and its various needs. The educational success of the teacher is therefore the result of several factors, such as his personality, his authority and the competence developed over time.

At the level good practices, the conducted research seems to have reconfirmed the urgent need of thinking at increasingly innovative ways to collect in a systematic and strategic way the huge amount of materials produced by daily work in class, and, consequently, to enhance the experience of teachers, as an authentic resource available to teaching. In this way, the "directors" of the teaching and learning processes - the teachers - would have the opportunity to reinterpret and make use of the contents learned over the years from the attendance of countless training courses. Starting from the knowledge acquired, the experiences and practices of those who lived every day this profession could be the first step to develop a paper and/or virtual archive of good practices and to share it with the intention of building a common heritage to be integrated and constantly updated.

In conclusion, in the light of the evidence emerged, it can be seen that encouraging inclusive school paths, aimed at the well-being of each individual student, means in our day not only to reproduce consolidated sequences of actions and interventions, however positive or successful, but rather to make possible, in a logic of educational differentiation, the experimentation of paths capable of capturing - and enhancing - the contribution of all individuals.

References

- Association TreeLLLe, Caritas Italiana and Fondazione Giovanni Agnelli. (2011). *Gli alunni con disabilità nella scuola italiana: bilancio e proposte*. Trento, Italia: Erickson.
- Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: ASCD.
- Tranes, D. (2006). *La speciale normalità. Strategie di integrazione e inclusione per le disabilità e i Bisogni Educativi Speciali*. Trento, Italia: Erickson.

The implementation of the Schoolwide Enrichment Model to promote talent development in Italian schools

Lara Milan¹

¹ Università degli Studi di Pavia

Introduction

In order to overcome some of the problems that historically have drawn criticism to the field of gifted education, and to avoid labelling students as 'gifted' and 'nongifted', in recent years there has been a trend promoting more flexible approaches to both identification and programming, as some of the activities recommended for the gifted can successfully be applied to larger segments of the school population (Renzulli, 1977; Reis & Renzulli, 1982; Feldman, 1983). Indeed, some scholars have suggested to replace the term 'gifted education' with 'talent development'.

The purpose of the research study is to examine the effects of a programming model that was specifically designed to apply some of the technology of gifted education to the overall process of schoolwide enrichment. The model employed as the experimental treatment in the study is entitled *The Schoolwide Enrichment Model* (SEM, Renzulli & Reis, 1985). Simply stated, the vision underlying the SEM is that schools should be places for talent development (Renzulli, 1994), and some of the activities recommended for the gifted can successfully be applied to larger segments of the school population (Renzulli, 1977; Reis & Renzulli, 1982). As an Enrichment Specialist, the choice of the Model has been made by reviewing the most important strategies and models adopted in the United States in the past 40 years.

The criteria that guided the choice of the SEM are as follows:

- Scientific research
- Inclusive Education
- Flexible Model
- Practical materials and tools for teachers
- Conversion of the underachieving process
- Prevention of drop-out
- Twice Exceptional students (2E)
- For free: all materials can be downloaded at no cost from the 'Renzulli Center of Creativity and Talent Development' website

The SEM meets all the criteria listed above.

As the implementation of the SEM Model represents the first attempt to adopt a model for talent development in Italian State Schools, in order to prevent any criticisms and misconceptions about new educational strategies, the 8 key competences as recommended by the

European Commission have been taken into account in planning any enrichment activity. The idea of merging of these two different approaches seemed to be a challenging task at first, but including the 8 competences in the Enrichment Clusters has been an easy and smooth task as they interlock with the SEM pedagogical principles, which challenge students to become creative productive thinkers ready to face the challenges of the future. If needed, the SEM has proven to be a very flexible model which does not replace or interfere with existing programs or state regulations.

Research question

To what extent the implementation of The Schoolwide Enrichment Model effects the student academic outcomes and creative productivity?

Criteria for inclusion of students

The SEM provides general enrichment opportunities for *all* students, simultaneously ensuring the opportunities for more advanced work for highly able and motivated students. All students involved in the project participated in the enrichment activities.

Moreover, the model proved to be particularly effective in accommodating the needs of special needs students, proving its inclusive approach to talent development.

Research methodology, tools and sample

This study examines the effectiveness of a two years long application of the Schoolwide Enrichment Model in two schools. Subjects consisted of 75 middle school students, 5 teachers, 150 parents, 12 mentors, and 2 principals.

The study compared differences between a control group and the groups participating in the two years long SEM programs. The specific factors examined were student attitudes toward learning, teacher attitudes toward teaching, the extent and quality of students' creative productivity, and the processes involved in the implementation of SEM.

In this research study two softwares, namely The Renzulli Learning System and the Cebeci Creativity Test, were used for the first time in Italy.

The Renzulli Learning System, translated into Italian by the Enrichment Specialist, creates a personalized profile of each student's academic strengths, interests, learning styles, and preferred modes of expression. A differentiation search engine built in the software examines thousands of resources in its database to select appropriate activities related to each student's profile. respectively, to create a personalized profile of each student's academic strengths, interests, learning styles, and preferred modes of expression, and to identify the creative potential of all students participating in the study. This research-based enhancement of the SEM (Field, 2009) is an innovative online enrichment program that eliminates the teacher's load of extra work that individualized and personalized education may involve. The Cebeci Test of Creativity (CTC), translated into Italian by the Enrichment Specialist, was used to identify the creative potential of all students participating in the pilot project.

The infusion of enrichment activities into the regular curriculum was made possible thanks to the Curriculum Compacting, another important component of the SEM, which allows the regular curriculum to be modified by eliminating portions of previously mastered content, and alternatively substituting more advance work or enrichment activities.

Analysis and results

Data analysis¹ reveals positive changes in student and teacher attitudes.

Student creative products are numerous and exceeded the norm of typical student creative output. Most notable among qualitative data analysis were:

- enrichment activities were made available to all students involved in the study, infusing them in the regular school hours;
- students were given the chance to work on self-selected activities based on their Interests;
- greater cooperation between classroom teachers and parents;
- appreciation of a new professional figure, namely, gifted education specialists, to support classroom teachers in schools;
- a new perspective on the possibility of having special programming in public schools for parents;
- a general new awareness and understanding of enrichment programs and gifted education goals;
- remarkably favorable changes in attitudes toward education and the emotional and educational needs of the gifted concerning classroom teachers and the general student population;
- an increase of creative products and services concerning students involved in the pilot project.

Preliminary analysis on levels of creativity between male and female students shows that, despite the popular belief which attributes to female students a greater disposition towards imagination and creativity compared to male students, the differences in creativity between gender scores are quite smaller than 1 standard deviation.

So far, partial results after one year of implementation of the SEM model show that there is no significant difference in creativity between genders.

Discussion

The results of the investigation at present time made several important points about students and teachers. The results of this study revealed that student attitudes toward learning were positively enhanced by participation in the schoolwide enrichment treatment. This was particularly evident in terms of students' beliefs that their interests were considered in determining the nature of activities in which they would become involved. Results provide evidence that participation in the treatment had a positive influence on teachers' attitudes toward enrichment activities and gifted education in general, a field of study mostly unknown in Italy.

Another important aspect of the research is the need of a new professional figure, namely the Enrichment Specialist, in Italian schools, in order to develop a strong enrichment curriculum. Indeed, the Specialist in Gifted Education has several responsibilities:

- develop, plan and implement a creative and enriching program of instruction that requires the maximum use of higher level thinking skills, problem solving techniques and creative thinking skills;
- provide in-service training sessions to staff and administration;

1. Data collection and analysis is still under process as the implementation process is still on going.

- create an Enrichment Team with trained teachers cooperating with the Enrichment Specialist in the development of the enrichment program;
- provide ongoing and regular communication with institute principals, teachers and parents regarding enrichment activities and students' progresses;
- maintain accurate and complete students' record;
- arrange parent meetings on the enrichment program;
- create and update a database of mentors and professionals to be involved in the SEM implementation.

This whole-school approach has proved to meet the educational, social and emotional needs of all students including gifted and talented students. The benefits the SEM took to the experimental school were so evident that, although in Italy there are no State norms or gifted programs in either public nor private schools, the administrators decided to be the forefront of a new trend which will take long to be adopted by establishing the first SEM school in Italy, which will start in September 2019 in the experimental school.

References

- Feldman, D. H. (1983). Reconceptualizing excellence: Still a national priority. *Roeper Review*, 6(1), 2-4.
- Field, G. (2009). The Effects of the Use of Renzulli Learning on Student Achievement in Reading Comprehension, Reading Fluency, Social Studies, and Science. *International Journal of Emerging Technologies in Learning (IJET)*, 4(1), 29-39.
- Reis, S. M., & Renzulli, J. S. (1982). Case for a broadened conception of giftedness. *Phi Delta Kappan*, 63(9), 619-620.
- Renzulli, J. S. (1977). *The enrichment triad model: A guide for developing defensible programs for the gifted*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S. (1994). New directions for the Schoolwide Enrichment Model. *Gifted Education International*, 10, 33-36.
- Renzulli, J. S., & Reis, S. M. (1985). *The schoolwide enrichment model: A comprehensive plan for educational excellence*. Mansfield Center, CT: Creative Learning Press.

Modello interdisciplinare STIMA: valorizzare il potenziale cognitivo e le competenze socio-emotive a scuola

Silvia Montuori¹, Rossella La Motta¹ e Maria Assunta Zanetti¹

¹ Università degli Studi di Pavia

Introduzione

Il sistema scolastico italiano risulta oggi caratterizzato da un elevato dinamismo, che lo qualifica come in continua evoluzione e rinnovamento. L'obiettivo di una scuola efficace è di creare piani di insegnamento validi, che consentano a tutti gli studenti di raggiungere i risultati desiderati, cercando di valorizzare le diversità, promuovendo le potenzialità e il talento di ciascun alunno e adattando tutte le iniziative utili al raggiungimento del successo formativo (Art.4; Autonomia delle istituzioni scolastiche, 2000). Per intervenire in modo funzionale sul contesto scolastico è fondamentale tenere presente che ogni gruppo classe non è considerabile solo come un insieme di tante individualità, ma deve essere anche considerato come gruppo psicosociale, con caratteristiche proprie di natura sociodinamica (Carli & Mosca, 1980). All'interno di questo gruppo è possibile individuare due livelli distinti, ma fortemente complementari, legati tra di loro: il primo, volto al raggiungimento degli obiettivi didattici, è legato alla struttura organizzativa; il secondo invece, si caratterizza per la dimensione socio-relazionale, nella quale entrano in gioco aspetti emotivi (Zanetti, Berrone, & Renati, 2011). In quest'ottica, la scuola dovrebbe essere un laboratorio di sperimentazione e crescita personale, dove coltivare e far fruttare capacità e talenti. È quindi compito degli insegnanti, adeguatamente formati e consapevoli, impostare situazioni educative adatte a tutti gli studenti, al fine di valorizzare le peculiarità di ognuno (Polito, 2000). Accompagnare bambini e ragazzi ad inserirsi nella società di oggi vuol dire aiutarli a maturare e a sviluppare competenze per poter rispondere alle richieste del mondo del lavoro, a trovare un proprio benessere personale e contesti in cui poter esprimere le proprie potenzialità e talenti, fornendo loro gli strumenti per poter affrontare situazioni problematiche. Già a partire dagli anni '90 nel contesto americano si è diffusa la metodologia STEM, acronimo di *Science Technology Engineering Mathematics* (Scienze Tecnologia Ingegneria Matematica). Questo approccio alla didattica propone l'insegnamento di queste quattro aree secondo una modalità interdisciplinare ed esperienziale; le materie quindi, sono integrate tra di loro attraverso la proposta di attività ecologiche con implicazioni nella vita di tutti i giorni. A partire da STEM, durante l'*International Space University, Studies Program*, è nato il metodo STEAM, che integra all'interno delle discipline anche l'Arte e la Creatività (Boy, 2012). L'introduzione di questa modalità di espressione all'interno del modello è di fondamentale importanza, perché include il concetto di pensiero divergente, inteso come uno stile di pensiero anticonformista, alternativo, capace di problematizzare e che arriva a soluzioni originali aprendo le porte a nuovi punti di vista (Gurnon, Voss-Andreae, & Stanley, 2013; Root-Bernstein &

Root-Bernstein, 2013). Nel contesto italiano ad oggi, non esiste un modello multidisciplinare ed integrato come quello americano STEAM, che si possa adattare alle esigenze scolastiche del nostro Paese. Per questo motivo è stato elaborato il modello STIMA, che mantiene l'idea di base del modello americano di creare un *curriculum* scolastico interdisciplinare ed esperienziale che sia basato sulla didattica inclusiva ed integrata; allo stesso tempo però, riadatta i principi del modello di partenza rispetto a quelle che sono le necessità, richieste e disponibilità (comprese quelle economiche) della scuola italiana. Per l'implementazione nel contesto italiano, l'acronimo STIMA ha una doppia lettura, che nasce dalla necessità di affiancare agli aspetti cognitivi anche gli aspetti emotivi e motivazionali degli studenti. Vengono quindi integrate alle discipline più didattico-cognitive, competenze trasversali che risultano fondamentali in ogni ordine di scuola, come fattori protettivi della crescita e promotori di competenze utili in ambito scolastico e lavorativo (Sicurezza, Talento, Intelligenza emotiva, Motivazione, Autostima). In questo modo, le materie scolastiche e le competenze socio-emotive possono integrarsi tra di loro.

Domanda di ricerca e obiettivi

Obiettivo del progetto è stato quello di fornire, in un'ottica inclusiva ed integrata, strumenti che potessero promuovere una didattica volta a valorizzare il potenziale di ogni studente, non solo dal punto di vista cognitivo, ma anche tenendo in considerazione gli aspetti emotivo-motivazionali, indispensabili per un apprendimento solido.

L'idea di base è stata quella di partire dagli interessi e dai punti di forza di ciascun alunno, per poi metterlo nella condizione di sperimentare una modalità di apprendimento pratica nella quale ogni studente potesse giocare un ruolo attivo.

Metodologia, strumenti e campione

Il progetto STIMA si è sviluppato nell'anno scolastico 2016-2017 coinvolgendo scuole di Pavia e provincia, Milano e Latina, e successivamente è stato implementato in altri istituti negli anni a seguire. Il campione coinvolto è composto da 796 bambini/ragazzi, frequentanti la scuola dell'infanzia ($N=133$, $M_{età}=4.69$, $DS_{età}=0.5$), la primaria ($N=513$, $M_{età}=8.03$, $DS_{età}=1.37$) e la secondaria di primo grado ($N=150$, $M_{età}=11.7$, $DS_{età}=0.95$). L'assessment ha previsto una fase iniziale di formazione dei docenti delle classi che hanno aderito. Durante gli incontri di formazione sono state espone le metodologie didattiche che sono state poi adottate in classe. La formazione inoltre, ha approfondito la concezione della classe come gruppo dinamico, introducendo la tematica relativa ai BES e alla plusdotazione in un'ottica inclusiva. Nel mese di ottobre si è svolta la fase di pre-test, con strumenti che indagano competenze cognitive, socio-emotive e di pensiero divergente. Nello specifico, la batteria era composta da: matrici progressive di Raven nella versione Colorata e Standard (Raven, 1998, 2003, 2004), per la misurazione dell'intelligenza fluida; sociogramma (Moreno, 1951), per visualizzare la posizione del singolo individuo all'interno del gruppo classe; *Visual Figurative Creative Test* (Shumakova, 2013), che valuta la creatività nei domini verbale e figurativo; questionario self-report REMA, costruito ad hoc per indagare competenze trasversali come motivazione, autostima o resilienza. Successivamente i docenti, sotto supervisione dei conduttori del progetto, hanno messo a punto le Unità Didattiche di Apprendimento (di seguito UDA), schede di progettazione di attività che seguono metodologie specifiche (*apprendimento pratico e manipolativo, insegnante come facilitatore, brainstorming*) sulla base del modello interdisciplinare. In seguito, i docenti hanno messo in atto in classe quello che avevano progettato nelle UDA, con

una supervisione continua da parte dei conduttori del progetto. Infine, nel mese di maggio è stata riproposta la batteria iniziale (fase post-test) per valutare l'efficacia del progetto.

Analisi e risultati

Per verificare i cambiamenti che l'intervento ha portato, è stata fatta un'analisi statistica attraverso l'uso del *t* di Student. Sono stati quindi confrontati i punteggi ottenuti nella prima valutazione (pre-test) con quelli osservati dopo l'implementazione della metodologia proposta (post-test). I risultati hanno mostrato un incremento in diverse aree: per quanto riguarda le capacità di ragionamento fluido si è osservato un incremento generalizzato, ma emerge in misura maggiore nei bambini frequentanti la scuola primaria ($p < .05$); la creatività a livello verbale non ha subito cambiamenti significativi, tuttavia, per quanto riguarda invece la creatività figurativa, i punteggi al post-test sono aumentati rispetto al pre-test ($p < .05$); infine, dal questionario REMA, emerge un incremento nella soddisfazione amicale e familiare nei bambini della scuola dell'infanzia ($p < .05$), nella primaria invece, la motivazione è aumentata nella seconda valutazione ($p < .05$), infine le capacità di concentrazione negli studenti della scuola secondaria di primo grado, intesa come autoregolazione, ha subito un incremento significativo ($p < .05$). In generale, nei punteggi osservabili nel post-test non sono stati osservati decrementi, piuttosto alcune condizioni sono rimaste stabili (ad esempio la creatività verbale).

Discussione

In riferimento a quanto emerso dai risultati, si può osservare un miglioramento generalizzato. Tuttavia, per quanto riguarda il ragionamento fluido, l'incremento maggiore che è stato messo in evidenza nei bambini della scuola primaria, potrebbe essere influenzato dalla maggiore durata di questo ciclo di istruzione, in cui si hanno i maggiori cambiamenti legati allo sviluppo tipico del singolo bambino. Per quanto riguarda invece, la creatività, si potrebbe giustificare l'incremento del solo livello figurativo considerando che la scuola italiana di base adotta una metodologia prevalentemente verbale. In quest'ottica, utilizzare metodologie che stimolano l'apprendimento pratico, manipolativo ed esperienziale potrebbero avere slatentizzato competenze più insite nell'ambito artistico.

In conclusione, le attività sembrano capaci di stimolare la curiosità e potenziare le capacità di pensiero critico, con un effetto positivo sulle competenze emotive, aumentando la predisposizione alla collaborazione e il rispetto delle diversità e delle caratteristiche individuali.

Lavorare in un'ottica inclusiva e interdisciplinare, che metta lo studente in condizioni di sperimentare in prima persona gli argomenti di interesse sviluppando competenze didattiche e trasversali, permette inoltre di osservare diversi effetti sugli studenti. In primo luogo, adottare metodologie didattiche inclusive influisce positivamente sul clima classe, fattore fondamentale per l'insegnamento e per l'apprendimento, nonché per lo sviluppo di competenze sociali. Di conseguenza, lo studente è messo nella condizione di sviluppare la propria identità attraverso un continuo scambio sia con gli insegnanti, sia con i pari. In secondo luogo, creare maggiori spazi di espressione del talento personale e della creatività aumenta la motivazione nel singolo e rinforza la sua autostima. Inoltre, proporre attività ecologiche che possono essere calate nel contesto reale di vita del singolo studente, permette la trasferibilità dei saperi e delle conoscenze. Infine, favorire la flessibilità del pensiero e delle strategie di *problem solving* promuove capacità fondamentali nella società odierna.

Bibliografia

- Autonomia delle istituzioni scolastiche. (2000). Disponibile da http://www.istitutomarzoli.edu.it/iismarzoli/pof/Regolamento_autonomia_dpr275_99.pdf
- Boy, G. A. (2012). *What space can contribute to global science, technology, engineering, and mathematics (STEM)*. Education, Proceedings of the 63rd International Astronautical Congress, Naples, Italy.
- Carli R., & Mosca A. (1980). *Gruppo e istituzioni a scuola*. Torino, Italia: Boringhieri.
- Gurnon, D., Voss-Andreae, J., & Stanley, J. (2013). Integrating art and science in undergraduate education. *PLOS Biology*, 11(2), 1-4.
- Moreno, J. L. (1951). *Sociometry, Experimental method and the Science of Society. An approach to a new political orientation*. New York, NY: Beacon House.
- Polito, M. (2000). *Attivare le risorse del gruppo classe: nuove strategie per l'apprendimento reciproco e la crescita personale*. Trento, Italia: Erickson.
- Raven, J. C., Raven, J., & Court, J. H. (1998). *Manual for Raven's Progressive Matrices and Vocabulary Scales. Section 2: The Coloured Progressive Matrices*. Oxford, England: Harcourt Assessment.
- Raven, J. C., Raven, J., & Court, J. H. (2003). *Manual for Raven's Progressive Matrices and Vocabulary Scales. Section 1: General Overview*. Oxford, England: Harcourt Assessment.
- Raven, J. C., Raven, J., & Court, J. H. (2004). *Manual for Raven's Progressive Matrices and Vocabulary Scales. Section 3: Standard Progressive Matrices*. Oxford, England: Harcourt Assessment.
- Root-Bernstein, R., & Root-Bernstein, M. (2013). The art and craft of science. *Educational Leadership*, 70(5), 16-21.
- Shumakova, N. (2013). *Divergent Creativity in the 10-years students*. Bologna, Italia: MIC Conference.
- Zanetti, M. A., Berrone, C., & Renati, R. (2011). Le competenze nell'area relazionale: promuovere relazioni positive a scuola. In C. Trombetta (a cura di), *Lo Psicologo Scolastico. Competenze e metodologie professionali* (pp. 223-263). Trento, Italia: Erickson.

Promoting well-being in Irish primary schools: an exploratory study incorporating the voices of teachers

Margaret Nohilly¹ and Fionnuala Tynan¹

¹ Mary Immaculate College

Introduction

There is an increasing interest in the notion of wellbeing, politically, societally and educationally. A review of literature in the area of wellbeing highlights that it is interpreted in different ways and indeed there is not a universally accepted definition of wellbeing that incorporates its multifaceted and multidimensional elements (Gillet-Swan & Sargeant, 2015). Indeed, the terms wellbeing and happiness are sometimes used interchangeably (Bache, Reardon, & Anand, 2016) and wellbeing is sometimes synonymous with mental health. The lack of a universally accepted definition and consequently, the lack of theoretical frameworks, remain challenging in the field which has led to a research base that is “diverse and at times unclear and discrepant” (Miller, Connolly, & Maguire, 2013, p. 241). Particularly in the field of education, wellbeing has received much attention. This paper takes account of educational policy developments in the area of wellbeing over the last decade in Ireland. Wellbeing is a central theme in the Early Childhood Curriculum Framework and an area of learning at post-primary education. At primary school level, while wellbeing guidelines and a wellbeing policy statement and framework for practice have been published, teachers remain less certain of where wellbeing sits within the current curriculum structure. Research findings from primary school teachers’ understanding of the concept of wellbeing are presented. The challenges teachers face in promoting wellbeing in the primary school are also explored. The findings highlight that wellbeing is open to many interpretations and embedding a culture of wellbeing in the education environment can often seem a rather abstract concept, however the importance of creating a space for wellbeing in public education is promoted.

Educational policy developments in Ireland

Wellbeing is a concept that is changing and developing and this is evident in the Irish educational landscape. Policy developments in recent years have incorporated wellbeing as a central theme in both the early years and junior cycle education. In 2009, Aistear, the curriculum framework in Ireland for all children from birth to six years was introduced, and it includes wellbeing as a central theme. Wellbeing is outlined as having two major components; physical wellbeing and psychological wellbeing. Physical wellbeing takes account of children exploring, investigating and challenging themselves in the environment. Psychological wellbeing focuses on children’s relationships and interactions with their families

and communities and their need to feel respected, included and empowered (NCCA, 2009). In early 2013, the “Wellbeing in Post-Primary Schools: Guidelines for Mental Health Promotion and Suicide Prevention” were published by the Department of Health and the Department of Education (2013). The particular focus of these guidelines is on mental health. In 2015, the “Wellbeing Guidelines in Primary Schools: Guidelines for Mental Health Promotion” were published (Department of Education and Skills and Department of Health and Children, 2015). Indeed, they are an adjustment of the post-primary guidelines for the primary school context but with less emphasis on suicide prevention. The guidelines outline a whole school approach to mental health promotion and the model advocated is based on the World Health Organisation’s school model for mental health promotion. The importance of a whole school approach to wellbeing and specifically mental health and the promotion of positive mental health and wellbeing rather than prevention are important messages that underpin the guidelines. In July 2018, the Wellbeing Policy Statement and Framework for Practice (2018-2023) was published by the Department of Education. The ambition of the framework is that “all schools and centres for education will have embedded a Self-Evaluation Wellbeing Promotion Process by 2023” (DES, 2018, p.1). This framework therefore will become an important guideline for primary schools in the more formal development of wellbeing practices in schools and requires that schools “commit to a process of self-reflection to identify existing strengths, opportunities and challenges in their practice and incorporate a Wellbeing Promotion Process into their existing planning and self-evaluation processes” (DES, 2018, p. 24).

In terms of post-primary education, the framework for Junior Cycle, which is the first state exam students sit after three years of post-primary education, was published in 2015. Wellbeing is one of the principles that underpins Junior Cycle education and it is supported by a number of statements of learning and incorporated into the key skills of the Junior Cycle framework. Students will also undertake learning in a new area entitled Wellbeing throughout the three years of Junior Cycle. Junior Cycle wellbeing guidelines were published in 2017. The guidelines promote the central role of schools in supporting pupils learning about and for wellbeing. Accordingly, students learn about wellbeing through specific curriculum areas and various wellbeing initiatives organised to develop awareness, knowledge and skills about wellbeing. Students learn for wellbeing when their whole experience of school life, both within and beyond the classroom are respectful and caring (NCCA, 2017). The guidelines emphasise the importance of the whole school community building and sharing a common understanding of wellbeing. However, the guidelines recognise that arriving at a definition of wellbeing that communicates its multidimensional nature is a challenge. Given that much of the research and policy documentation defines wellbeing in psychological terms, it is often perceived as a combination of sustained positive feelings and attitudes. This approach presents challenges as it ignores the fact that wellbeing and ill-being exist together as part of the human condition and also the individual is seen as being solely responsible for their wellbeing without consideration of the wider societal and context conditions which enable wellbeing to flourish (NCCA, 2017). A definition therefore should communicate the multidimensional nature of wellbeing and communicate it less as a state of being and more of a process of well-becoming.

Research questions and objectives, methodology, methods and sample

In response to anecdotal confusion about the concept of wellbeing amongst teachers, a

small-scale mixed-methods study was undertaken to ascertain the understanding of Irish primary school teachers on the concept of wellbeing, to identify strategies currently in use to promote wellbeing and to specify challenges, if any, of promoting wellbeing in primary schools. To this end, a series of workshops were organised for primary-school teachers in three counties in Ireland commencing in January 2017. A total of twenty six teachers attended the workshops. The teachers included mainstream and support teachers and teachers from special schools also attended. A summary of the workshop process and the methodologies incorporated throughout are presented below

Workshop 1:

- Overview of wellbeing
- Understanding of wellbeing
- Concerns about wellbeing
- Current approaches to promoting wellbeing in schools
- Perceived enablers and barriers to promoting wellbeing initiatives
- Professional development needs for session 2 and 3

Methodology: Group discussion with participants and participants responses noted on flip-chart paper

Workshop 2:

- Developing a whole-school approach to wellbeing
- Action planning
- Professional development needs for session 3

Methodology: Action plans and feedback on progress since workshop 1

Workshop 3:

- Feedback on action plans
- Wellbeing across the continuum of need
- Wellbeing through the curriculum
- Wellbeing through the school atmosphere/climate
- Developing self-management
- Developing self-regulation
- Supporting feelings and emotions

Methodology: Focus group discussions and Questionnaires

The data collected across the workshops was analysed thematically, following Braun and Clarke's six-step framework for thematic analysis (Braun & Clarke, 2006).

A central aspect of the research design was a participatory approach. Participatory research advocates that the voice of the participant is heard throughout. It contains "an action agenda for reform that may change the lives of participants, the institutions in which they live and work" (Cresswell, 2007, p. 23). It enabled participants to articulate their needs in the area of wellbeing to be better able to support the wellbeing of the school community. This study mirrored the key features of participatory practice identified by Kemmis and Wilkinson (1998):

1. It was a recursive process. The study involved meeting teachers at three different Continuous Professional Development (CPD) events as outlined above. Participants identified their CPD needs and clarified their preferences for the following event.
2. It was focused on bringing about positive changes in practice. The second workshop involved action planning by participants. Rather than simply presenting information to teachers, the workshop focused on them selecting strategies that may suit their individual context. The outcomes of these action plans were discussed at the third workshop to highlight the barriers to implementation and facilitate group discussion on how such barriers may be overcome.
3. It was focused on individuals freeing themselves from constraints, in this case the focus on student academic outcomes. As there are so few suggestions by the Department of Education regarding how wellbeing can be measured by schools, it was important for teachers to be creative in how this could be achieved for their definition of wellbeing.
4. It is emancipatory. Teachers decided what they would undertake to develop within their own school context. It established a community of practice which facilitated open discussion about how wellbeing could be addressed and promoted through sharing good practice.
5. It was collaborative, each action was developed through consultation with others. It also allowed participants to identify issues in the area of wellbeing which was researched through literature and thereafter the researchers provided basic guidelines for. The teachers then went and developed an action plan, tried it out and provided feedback. It ensured that actions were context-based and relevant for the individual environment of the participant.

Analyses and results

As there were a number of different data sets collected across the workshops including group responses to questions, focus group discussions and also the participants completed a survey-questionnaire, the data sets were analysed individually and also collectively to see the common themes and trends that were emerging. The survey questionnaire provided details of the teachers' concept of wellbeing and also on how they viewed the approach to continuous professional development that the workshops offered. It also asked the participants to consider if the workshop had developed their understanding of wellbeing. The focus groups provided an opportunity for the teachers to elaborate on the actions they undertook in their schools in relation to wellbeing and the enablers and barriers in the school context. The results shed interesting perspectives on teachers' understanding of the concept of wellbeing. The themes that emerged included; skill development for pupils including self-esteem, self-awareness, confidence, responsibility, ability to cope, resilience and social and communication skills. The development of feelings including a sense of happiness, safety, a sense of belonging and compassion were also identified by participants as inherent to wellbeing. Health was also considered a component of wellbeing and this included both physical and mental health. The participants who attended the workshops were asked to identify any challenges they experienced in promoting wellbeing across the school. Themes that emerged relating to challenges included Time, Attitudes, Resources, Availability of CPD and External factors. Teachers were also asked to share strategies they use to promote wellbeing at class level. Responses highlighted that whole school initiatives and whole school activities and resources were implemented in addition to classroom interventions, classroom activities and resources. The participants who attended the workshop were asked to

consider their needs to support the promotion of wellbeing. The collated responses identified CPD needs, Whole-school implementation, Resources and development of Confidence in the area of wellbeing.

Discussion

Findings from the study on wellbeing completed in the primary school context provide insights into teachers' interpretations of wellbeing and how wellbeing is being promoted in the classroom and across the school context. The challenges, as reported by the teachers in terms of wellbeing implementation illustrate the competing demands on teachers' time and the real lack of confidence that teachers feel in their own ability in the area. The current research study illustrates in very real terms the gap that exists between national educational policy in relation to wellbeing and day to day practice in schools. While the Junior Cycle wellbeing guidelines acknowledge that the multidimensional nature of wellbeing presents challenges in terms of definition and interpretation, the feedback from teachers highlight that wellbeing is open to multiple interpretations.

It is evident from the findings of the study that the teachers who participated in the workshop are doing much work to promote the wellbeing of their students. Furthermore, the examples provided by the teachers illustrated that many components of student wellbeing are being addressed which include taking care of physical wellbeing, supporting children to develop strategies to cope with the stresses of life and ensuring children have a sense of belonging to the school community. However, while teachers are incorporating a range of wellbeing strategies including mindfulness and positive psychology, there is a clear disconnect between the national definition and the implementation of national curricula which causes them concern. In most of the schools there is no real structure to addressing wellbeing across the school, and it happens more in an ad hoc way. Of greatest significance was the fact that the actions to enhance pupils' wellbeing also enhanced teachers' wellbeing creating a momentum for developing a positive school culture and climate. Ultimately, the discourse on wellbeing needs to be translated into a context-based language that can actually be understood and accepted by professionals.

References

- Bache, I., Reardon, L., & Anand, P. (2015). Wellbeing as a wicked problem: negotiating the arguments for the role of government. *Journal of Happiness Studies*, 17(3), 893-912. doi: 10.1007/s10902-015-9623-y
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Cresswell, J. W. (2007). *Qualitative enquiry & research design: choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- DES. (2018). *Wellbeing Policy Statement and Framework for Practice 2018-2023*. Retrieved from <https://www.education.ie/en/Publications/Policy-Reports/wellbeing-policy-statement-and-framework-for-practice-2018%E2%80%932023.pdf>
- Department of Education and Skills and Department of Health and Children. (2013). *Well-Being in Post-Primary Schools: Guidelines for Mental Health Promotion and Suicide Prevention*. Retrieved from https://www.education.ie/en/Publications/Education Reports/Well_Being_PP_Schools_Guidelines.pdf

-
- Department of Education and Skills and Department of Health and Children. (2015). *Well-Being in Primary Schools: Guidelines for Mental Health Promotion*. Retrieved from <https://www.education.ie/en/Publications/Education-Reports/Well-Being-in-Primary-Schools-Guidelines-for-Mental-Health-Promotion.pdf>
- Gillett-Swan, J., & Sargeant, J. (2015). Wellbeing as a process of accrual: Beyond subjectivity and beyond the moment. *Social Indicators Research*, 121(1), 135-148.
- Kemmis, S., & Wilkinson, M. (1998). Participatory action research and the study of practice. In B. Atweh, S. Kemmis, & P. Weeks (Eds.), *Action research in practice: Partnership for social justice in education* (pp. 21-36). London, England: Routledge.
- Miller, S., Connolly, P., & Maguire, L. K. (2013). Wellbeing, academic buoyancy and educational achievement in primary school students. *International Journal of Educational Research*, 62, 239-248.
- NCCA. (2009). *Aistear: The Early Childhood Curriculum Framework*. Retrieved from http://www.ncca.ie/en/Curriculum_and_Assessment/Early_Childhood_and_Primary_Education/Early_Childhood_Education/Framework_for_early_learning/.
- NCCA. (2017). *Junior Cycle Wellbeing Guidelines*. Retrieved from http://www.juniorcycle.ie/NCCA_JuniorCycle/media/NCCA/Curriculum/Wellbeing/Wellbeing-Guidelines-for-Junior-Cycle.pdf.

Teaching resilience to at-risk undergraduates

Cynthia Potter¹

¹ American University

Introduction

Teaching resilience to undergraduates is critical and particularly relevant to the current generation of college students. Over the past decade, undergraduates in the US are experiencing increasing rates of suicide ideation, depression, and anxiety (Center for Collegiate Mental Health, 2019). They are also entering university with unprecedented levels of learning differences that require classroom, learning, and testing accommodations. These factors correlate with both low academic resilience and psychological resilience. Further, the millennial generation is susceptible to unique stressors, such as the pressures inherent in social media, and pressures to succeed in multiple and novel realms (Walker, Gleaves, & Grey, 2006). Finally, US colleges are increasing their race/ethnic and socioeconomic diversity. Minority, low income students and first-generation students face unique threats to their academic success and psychological well-being. Finally, the transition to college can be a vulnerable time in a person's developmental trajectory; new independence and autonomy for incoming university students can increase vulnerability (Walker et al., 2006). Taken together, these issues make the topic of resilience, and positive psychology as a whole, particularly salient for millennial undergraduates.

The next question that raises is, if resilience is important, how do we teach it? Educational researchers have studied unique learning needs and challenges of millennials; this uniqueness requires us to adapt a pedagogy that both challenges these students and meets them where they are intellectually and with the skills they possess upon entering college.

Methods

Using reflections from an undergraduate seminar I designed on resilience as a case study, this paper presents recommendations of why and how to teach resilience as an introductory course to millennial undergraduates in the US. My reflections were collected over the semester and included notes, syllabus and reading changes, and lectures. I also used a literature review to provide a background on current pedagogical needs of millennial students.

Discussion

Resilience on the college campus carries two connotations. Academic resilience refers to

academic success, including retention and graduation rates. From a student perspective, it can be defined “as the positive adaptation to situations of stress and adversity within the context of the situated formal or informal learning experience which enables student progress, growth, and learning” (Holdsworth, Turner, & Scott-Young, 2018). Psychosocial resilience is a more complex concept but generally refers to the ability to adapt to stressful or challenging situations to a normal or improved level of overall functioning. Since these two types of resilience are mutually predictive, and interventions to foster one can have a generalized positive impact, “resilience” in this paper refers to both meanings.

Teaching in an era of emotional and academic needs

A report of 550 US college and university mental health clinics was issued this calendar year (Center for Collegiate Mental Health, 2019). The report summarizes data from mental health clinic visits; these data do not represent a survey of non help-seeking students. Between 2005 and 2015, there has been a 30-40% increase in number of students seeking treatment at US campus mental health clinics (Center for Collegiate Mental Health, 2019). Thirty-five percent of students visiting the campus mental health clinic reported previous serious suicide ideation and over half have received prior counseling for mental health disorders (Center for Collegiate Mental Health, 2019). Clinicians rated anxiety as the top concern for student clients (23%) followed by depression (19%) (Center for Collegiate Mental Health, 2019). Evidence suggests that high depression predicts low resilience and that depression is negatively associated with academic performance (Ahmed & Julius, 2015).

Students share their experience with medication, treatment seeking, and therapy with their professors and each other. At the author’s institution, student relish criticizing the availability, timeliness, and quality of student mental health services in class discussions. The lack of stigma around mental health and seeking treatment is undoubtedly positive. Could there be a downside? The normative nature of mood disorders can minimize the experience of those with serious mental disorders. But it can also impact how students think about resilience. How can resilience be nurtured in the context of prevalent pathology and struggle?

Rates of learning accommodations for US undergraduates range between 9-11%, depending on age, race/ethnicity, and veteran status (National Center for Educational Statistics, 2016). Learning accommodations are basically the availability of tools and modification of course material to allow students with learning differences to succeed. Examples include extra time on tests, permission to record lectures, and audio-recording of text books. Many students also use writing tutoring. Students with learning accommodations can experience anxiety with the transition to college due to high expectations over performance, learning to advocate for oneself to multiple professors, and new ways of interacting in a classroom setting. But these challenges can impact student resilience as well. Accommodations cannot replace academic self-efficacy; accommodations must be fundamentally emancipating. They need to support student growth and prepare students for life post college. Students who need the same level and type of accommodations throughout their college years and who cannot perform academic tasks without tutoring can have limited academic resilience.

Lessons learned

It was important to introduce students to the ideas of positive psychology as not a replacement of traditional psychology. I encouraged students to complete a screen for depression

and anxiety in one of their texts, and to seek treatment if their scores indicated clinical symptoms. I described the orientation of positive psychology, and resilience in particular, as skills that are within our control to acquire and grow, but not as a substitute for treatment in the context of psychopathology. Furthermore, I stressed examples and stories of the practice of resilience in the presence of mood disorders. Students sometimes ‘overshare’ with the presumption that a welcoming and friendly seminar environment is a ‘safe space’ for personal disclosures of mood disorders and personal hardships. I learned to establish boundaries at the beginning of the semester, before students offer potentially awkward or inappropriate disclosures. Secondly, and more challenging for me as a teacher, was to gently correct students who ‘talk at’ the class and use the seminar as a platform to talk about themselves without an anchor to the course readings or discussion prompts.

For my students with learning differences, I hold them to the same standards as their peers and meet with them one on one to discuss their accommodations as well as my own needs. For example, I describe my experience as someone who doesn’t like having her lectures recorded and clarified their process of deleting their recordings in a timely fashion. This reinforces mutual accountability and needs. I describe my purpose in having these conversations overtly: that my goal is to support their self-efficacy and adaptability in the classroom.

Reaching and Teaching Millennials – Do they really require novel pedagogies?

Educational and psychological research suggests that millennials, those born between 1995-2004, come to college with skills and challenges that differentiate them from other generations. In addition to general pedagogical approaches favoring the use of technology in the classroom and hands on activities (Oomen-Early & Early, 2015; Roseberry-Mckibbin, Pieretti, Haberstock, & Estrada, 2016), one of the critical differences salient for resilience in particular is that millennials appear to have a sense of a greater external locus of control (Twenge, Zhang, & Im, 2004). For professors teaching positive psychology and resilience, this poses challenges because resilience requires agency and academic success requires agency. Indeed, in a qualitative study of high achieving, low income, students of color, students reported strong self efficacy as a key factor in their academic resilience (Morales, 2014).

Similarly, millennial students also value clear rubrics and instructions for assignments (McAllum in Morreale & Staley, 2016), and frequent assessment and feedback (Leinberger, 2015), which can also impair growing academic agency and resourcefulness.

Lessons Learned

In order to cultivate agency and academic resilience, I encouraged my students to reach out to teach other through a classroom email list, and to the undergraduate teaching assistant, before contacting me for assignment clarifications and other ‘housekeeping’ items. One assignment had flexible due dates. I had thought this would accommodate demands of their other classes, but without a clear due date, this assignment went under the radar for most of the students. I need to assign each student a topic and due date.

We also supplemented the text on positive psychology with a hands-on self-help book on increasing resilience. Students were required to complete weekly chapter exercises, and I put two students in charge of leading the seminars that utilized the ‘pop culture’ text. Judging from the quality of classroom discussion, these were engaging and rewarding activities. From a pedagogical perspective, being able to link scholarly texts with the self-help book helped solidify the students’ learning as well.

Conclusion

I designed a 'high touch' seminar whose primary learning objective was to teach students critical thinking skills. A secondary objective to demonstrate an understanding of the positive psychology term 'resilience' and to understand its promises and limitations. My final learning objective was for them to increase their own levels of resilience through practice exercises throughout the course. My experience in teaching a seminar on resilience included first adapting the teaching of resilience to the context of high prevalence of mood disorders and stress in US college campuses. Secondly, I needed to adapt to the millennial learning preferences that includes the desire for frequent clarification, reliance on technology, and reminders of deadlines and due dates, all of which can undermine self-efficacy, engagement, and agency, and thus, resilience.

Walker and colleagues (2006) offer a thoughtful and provocative discussion of whether students can learn resilience in terms of being adaptable and being able to endure. Unpacking the complexity of resilience, the authors suggest that resilience is both a cognitive behavioral process that can be learned, as well as a trait of how we adapt to external circumstances. This suggests that resilience is malleable, and can indeed be learned. Indeed, for students of color and indigenous students in particular this may mean facilitating access to traditions and traditional support systems to support the student in a new environment (Strand & Peacock, 2003). This underscores that it is incumbent upon faculty and the administration to stock the university with many positive experiences and environments for incoming students that promote their resilience.

References

- Ahmed, Z., & Julius, S. H. (2015). Academic performance, resilience, depression, anxiety and stress among women college students. *Indian Journal of Positive Psychology, 6*(4), 367-370.
- Center for Collegiate Mental Health. (2019). *2018 Annual Report* (Publication No. STA 19-180).
- Holdsworth, S., Turner, M., & Scott-Young, C. M. (2018). ...Not drowning, waving. Resilience and university: a student perspective. *Studies in Higher Education, 43*(11), 1837-1853. doi:10.1080/03075079.2017.1284193
- Leinberger, G. (2015). Teaching Millennials: Time for a Change in Tactics. *Journal of Higher Education Theory and Practice, 15*(1), 123-132.
- Morales, E. E. (2014). Learning from Success: How Original Research on Academic Resilience Informs What College Faculty Can Do to Increase the Retention of Low Socioeconomic Status Students. *International Journal of Higher Education, 3*(3), 92-102. doi:10.5430/ijhe.v3n3p92
- Morreale, S. P., & Staley, C. M. (2016). Millennials, teaching and learning, and the elephant in the college classroom. *Communication Education, 65*(3), 370-373. doi:10.1080/03634523.2016.1177842
- National Center for Educational Statistics. (2016). *Fast Facts. Students with Disabilities*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=60>
- Oomen-Early, J., & Early, A. D. (2015). Teaching in a Millennial World: Using New Media Tools to Enhance Health Promotion Pedagogy. *Pedagogy in Health Promotion, 1*(2), 95-107. doi:10.1177/2373379915570041
- Roseberry-Mckibbin, C., Pieretti, R., Haberstock, K., & Estrada, J. (2016). Effective Pedagogical Strategies for Millennial University Students in Communication Sciences and Disorders: Student Survey Results. *Communication Disorders Quarterly, 37*(3), 180. doi:10.1177/1525740115619866

- Strand, J., & Peacock, R. (2003). RESOURCE GUIDE: Cultural Resilience. *Tribal College*, 14(4), 28.
- Twenge, J. M., Zhang, L., & Im, C. (2004). It's beyond my control: a cross-temporal meta-analysis of increasing externality in locus of control, 1960-2002. *Personality and social psychology review : an official journal of the Society for Personality and Social Psychology, Inc*, 8(3), 308-319. doi:10.1207/s15327957p-spr0803_5
- Walker, C., Gleaves, A., & Grey, J. (2006). Can Students within Higher Education Learn to be Resilient and, Educationally Speaking, Does It Matter? *Educational Studies*, 32(3), 251-264. doi:10.1080/03055690600631184

'The Good Actions': a kindergarten children intervention to promote social behavior and an inclusive friendship

Sara Santilli¹, Maria Cristina Ginevra¹ and Laura Nota¹

¹ Università degli Studi di Padova

Introduction

The complexity of our modern societies poses challenges to the social relationships that characterize the contexts we live in (Nota & Soresi, 2018). The new social paradigm of inclusion underlines the need to reflect on, explore and increase the competencies necessary to reach the cooperative inclusion of individuals with and without disabilities in their different and natural life contexts since early childhood (Wehemeyer & Shogren, 2018). Lerner (2017) argued that in promoting positive development through an approach derived from PYD model of individual-context relations resources, "social nutrients" that environments can make available to facilitate fruitful and positive trajectories, such as satisfying relationships with significant adults, activity proposals for the construction of knowledge and skills, opportunities for participation in community life being able to capitalize on developmental plasticity and on the specific strengths of young people to enhance the course of their lives. One key strategy for improving inclusive environments in line with PYD is through school interventions aimed at promoting opportunities for interaction and social reflection and developing a range of social skills and positive attitudes useful to stimulate social closeness, a prerequisite for the development of inclusive friendships and for promoting positive youth development associated with greater acceptance of peers with disabilities (Dunlap, Strain, Joseph, & Lee, 2017).

Based on this, the designed training program "The Good Actions" for kindergarten children aimed to develop (a) the ability to highlight peer differences; (b) the ability to emphasize their own and others' strengths (with or without disability); (c) the ability to involve, help, and support peers; and (d) the ability to rely on their own positive aspects to establish positive relationships. It is divided into ten 35-45 minutes sessions focused on positive actions (e.g., saying beautiful things to others, smiling, thanking, asking please) that can be taken within and outside school. Multiple teaching techniques and methods were used in each session, including social reinforcements, informational feedback, role playing and modeling to show children how to implement the target skills and behaviors. To implement modeling activities, the Pew Research Center's (Smith, 2010) suggestions about the positive impact of the new technologies on younger generations and the likelihood that technology might be effective in interventions to provide an engaging and valued educational model for children were followed. Specifically, some clips of very popular cartoons among kindergarten children were used to show targeted behaviors and skills throughout the training.

Aim of the study

To assess the effectiveness of the intervention we involved 3-6 years kindergarten students randomly assigned to the experimental (EG) and control (CG) groups, and evaluated their social interactions (sociometric nominations) and problem-solving skills. We also considered peers with vulnerabilities and disabilities that attended regular classes participating in this study that presented low sociometric status and low level of acceptance within their class and which therefore appeared to be at risk of social exclusion. In respect of the latter, taking into account Owen-DeSchryver et al. 's (2008) suggestions concerning the need to evaluate the effectiveness of intervention by assessing social interactions in naturalistic school settings, we examined changes in social behaviors occurring between peers and classmates at risks of social exclusion. Lastly, we also considered the peer sociometric nominations that peers with vulnerabilities and disabilities received from their classmates (Avramidis, Strogilos, Aroni, & Kantaraki, 2017).

We expected that at post-test children who participated to the intervention (experimental group) would show more sociometric positive nominations and less negative sociometric negative nominations and more problem-solving skills (i.e., more assertive responses, and less passive and aggressive responses) than peer that did not participate to the intervention (control group). Moreover, considering peers of the experimental group with vulnerabilities and disabilities we expected that at post-test they would receive more positive and fewer negative behaviors, more positive and fewer negative sociometric peer nominations from their classmates, and also that they would adopt more positive and fewer negative positive behaviors toward classmates. Lastly, based on Hanish et al. 's (2005) results, we expected a significant impact of the intervention on social skills among older participants, as they are more involved in forming friendships with peers.

Method

According to Shadish, Cook and Campbell (2002) in order to test the research hypotheses, we designed a quasi-experimental study with two repeated measures done in an experimental and a control group. The study was conducted with 21 kindergarten classes of a northern Italian province with a large industrial economy.

Specifically, participants were 365 Italian kindergarten students (188 boys and 177 girls), with a mean age of 4.6 years ($SD = 1.48$).

The research team then randomly assigned classes to experimental and control groups. Statistical comparisons were conducted between the pretest results of the experimental and control groups to determine their relative scores before the intervention. The experimental group, which was targeted by the intervention, was up of 187 children and the control group was made of 178 children (86 boys and 92 girls; $M_{age} = 4.64$; $SD = .72$).

Measures

Social problem-solving skills were assessed, presenting children with five social problems (Soresi & Nota, 2007). Each problem was described by the interviewer using a standard script and the situations written out on cards were shown in random order, asking the following questions: "How would you solve this problem?" and "What would you say or do?". Each proposed solution was coded as aggressive, passive, assertive, or as irrelevant/no response. Participants were also administered a sociometric peer procedure. The class was the reference group, allowing both same-sex and other-sex choices and unlimited nominations. Self-nominations were not allowed. Participants were asked to nominate classmates they

would be most likely to invite to their party (positive nominations), and those they would be most likely not to invite to their party (negative nominations). For this study, scores were calculated for each participant considering the number of positive and negative nominations that he/she made for the classmates with ID.

Finally, from the sociometric test were observed the social behaviors of peers, in which they emerged as being at risk of social exclusion. Correctly, social behaviors were observed in naturalistic class settings. Researchers used the "School inclusion facilitation" coding system (Soresi & Nota, 2007) to analyze social behaviors adopted and received by each at-risk peer from his/her classmates.

Results

Regarding the peer sociometric nominations, the mixed design MANOVA showed a significant interaction for Treatment condition x Time, Wilks's $\lambda = .683$, $F(4, 316) = 2.647$, $p = .001$, $\eta^2p = .091$. Univariate analyses showed an interaction effect for Positive peer sociometric nominations adopted, $F(1, 293) = 49.38$, $p = .021$, $\eta^2p = .014$, Positive peer sociometric nominations received $F(1, 293) = 22.168$, $p = .017$, $\eta^2p = .019$, Negative peer sociometric nominations received $F(1, 293) = 11.254$, $p = .014$, $\eta^2p = .020$. Results revealed that, at post-test, the experimental group adopted and received more positive peer sociometric nominations and received less negative peer sociometric nominations than the control group.

A significant interaction for Time x Treatment condition x Age was also yielded, Wilks's $\lambda = .904$, $F(4, 316) = 1.615$, $p = .042$, $\eta^2p = .025$. At the univariate level, significant differences were revealed in Negative peer sociometric nominations received, $F(1, 293) = 7.695$, $p = .006$, $\eta^2p = .026$. Bonferroni-corrected post-hoc revealed that, at post-test, younger children of the experimental group received less negative peer sociometric nominations than younger children of the control group.

Referring to social problem solving skills, the mixed-effects MANOVA showed an interaction effect for Treatment condition x Time Wilks's $\lambda = .989$, $F(3,286) = 1.065$, $p = .002$, $\eta^2p = .072$. Univariate analyses showed an interaction effect for Assertive responses $F(1, 293) = 6.638$, $p = .007$, $\eta^2p = .025$. Specifically, at post-test, the experimental group provided more assertive answers than the control group.

As regards children with disabilities and vulnerabilities at risk of social exclusion, the non-parametric Mann-Whitney showed significant differences at post-test on Negative behaviors received $U = 111.5$, $p = .044$. Children with disabilities and vulnerabilities included in the classes randomly assigned to the experimental group at post-test received less negative social behaviors from their classmates than those attending the classes of the control group. The Wilcoxon test for the experimental group showed significant changes between pre-test and post-test on Negative behaviors received by peers at risk of social exclusion from their classmates $z = -2.060$, $p = .039$, Positive peer sociometric nominations received $z = -2.769$, $p = .006$, and Negative peer sociometric nominations received $z = -1.913$, $p = .05$. Children with disabilities and vulnerabilities included in the classes randomly assigned to the experimental group received at post-test less negative social behaviors and negative peer sociometric nominations and more positive sociometric nominations from their classmates.

Conclusion

Even if the results are encouraging, some limitations should be considered. Firstly, the effectiveness of the training program was tested examining only changes occurred between

the beginning and the end of the intervention. Therefore, future studies should also include 6- and 12-month follow-ups to examine whether children of the experimental group conserved and generalized the social skills developed and to verify the level of social acceptance of students with disabilities and vulnerabilities. These results highlight that the abilities to establish peer relationships derive from experiences and the history of learning of individuals can be increased through ad hoc training opportunities. Furthermore, “The Good Actions” intervention supports the involvement of peers in the co-creation of inclusive contexts, promoting inclusive social relationships and cooperative societies in which diversity is considered an element to be valued.

References

- Avramidis, E., Strogilos, V., Aroni, K., & Kantaraki, C. T. (2017). Using sociometric techniques to assess the social impacts of inclusion: Some methodological considerations. *Educational research review*, 20, 68-80.
- Dunlap, G., Strain, P., Lee, J. K., Joseph, J., & Leech, N. (2018). A randomized controlled evaluation of pre-vent-teach-reinforce for young children. *Topics in Early Childhood Special Education*, 37(4), 195-205.
- Hanish, L., Martin, C., Fabes, R., Leonard, S., & Herzog, M. (2005). Exposure to externalizing peers in early childhood: Homophily and peer contagion processes. *Journal of Abnormal Child Psychology*, 33(3), 267-281. doi:10.1007/s10802-005-3564-6
- Lerner, R. M. (2017). Commentary: Studying and testing the positive youth development model: A tale of two approaches. *Child development*, 88(4), 1183-1185.
- Nota, L., & Soresi, S. (Eds.). (2018). *Counseling and Coaching in Times of Crisis and Transitions: From Research to Practice*. Abingdon, Oxford, England: Routledge.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.
- Smith, R. (2010). Social Work, Risk, Power. *Sociological Research Online*, 15(1), 1-10.
- Soresi, S., & Nota, L. (2007). *ASTRID Portfolio per l'assessment, il trattamento e l'integrazione delle disabilità* [ASTRID Portfolio for the assessment, treatment and integration of disabilities]. Firenze, Italia: Giunti-Organizzazioni Speciali.
- Wehmeyer, M. L., Shogren, K. A., & Thompson, J. R. (2018). Self-Determination and Adult Transitions and Supports. *New Directions for Adult and Continuing Education*, 2018(160), 53-62.

Uno studio pilota su Prevenzione Emotiva e Terremoti nella scuola primaria (progetto PrEmT): come potenziare le strategie di regolazione delle emozioni

Giada Vicentini¹, Emmanuela Rocca¹, Veronica Barnaba¹, Erminia Dal Corso¹,
Roberto Burro¹ e Daniela Raccanello¹

¹ Università di Verona

Introduzione

I disastri naturali, inclusi i terremoti, hanno potenzialmente un impatto altamente traumatico sul funzionamento psicologico (Fergusson & Boden, 2014; Galambos, 2005; Neria, Nandi, & Galea, 2008). Ciò è particolarmente vero per i bambini, la cui vulnerabilità dipende dal livello di sviluppo cognitivo ed emotivo (Kar, 2009). Conseguenze traumatiche documentate riguardano un peggioramento della salute fisica (es., disturbi cardiovascolari), accresciuti tassi di psicopatologia (es., disturbo post-traumatico da stress, depressione, ecc.) e impatto emotivo negativo (es., ansia, paura, rabbia, sentimenti di minaccia, ecc.), sia per le vittime primarie che esperiscono gli eventi direttamente sia per le vittime secondarie influenzate tramite i mass-media (Furr, Comer, Edmunds, & Kendall, 2010; Masten & Osofsky, 2010).

Numerosi studi si sono focalizzati su interventi psicologici successivi a un disastro (Kar, 2009), ma scarsa attenzione è stata posta alla conduzione di interventi che mirino a costruire la competenza emotiva dei bambini, utile per far fronte al trauma psicologico associato a possibili terremoti. Sono tuttavia noti i legami tra conoscenze e propensione a mettere in atto comportamenti di prevenzione dei danni, almeno negli adulti (Hurnen & McClure, 1997; Tekeli-Yeşil, Dedeoğlu, Braun-Fahrlaender, & Tanner, 2010). È altresì dimostrata l'efficacia di interventi sullo sviluppo della competenza emotiva, quale abilità di esprimere, comprendere e regolare le emozioni (Denham, 1998; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

La competenza emotiva comprende la conoscenza delle emozioni e delle strategie per regolarle (Denham, 1998). La conoscenza o comprensione delle emozioni è a sua volta un costrutto multi-componenziale che include la conoscenza sia della natura e delle cause delle emozioni, sia delle modalità che permettono di controllarle (Grazzani Gavazzi & Antonietti, 2006). La regolazione delle emozioni riguarda la possibilità di modificare intensità e/o durata delle reazioni emotive (Thompson, 1994). In particolare, le strategie di regolazione possono essere definite come quelle modalità messe in atto volontariamente per raggiungere i propri obiettivi (Eisenberg & Spinrad, 2004). Le diverse posizioni teoriche concordano sulla natura multi-dimensionale e complessa del costrutto in esame, sottolineando che la valenza adattiva o disadattiva delle strategie non è assoluta, ma dipende dalle caratteristiche del contesto (Denham, 2010; Molina et al., 2014). Zimmer-Gembeck e Skinner (2011), sottolineando la somiglianza di tale costrutto con quello di coping, raggruppano le diverse

strategie in 12 famiglie: una recente meta-analisi ha anche identificato quali tra queste famiglie risultano adattive in caso di disastro naturale per bambini e adolescenti (Raccanello, Rocca, & Brondino, 2019).

In conclusione, a fronte dell'importanza delle strategie di regolazione delle emozioni in caso di disastro naturale, è utile promuovere, in particolare nei bambini, lo sviluppo di conoscenze sulle emozioni e sulle strategie per regolarle.

Domanda di ricerca e obiettivi

La domanda di ricerca da cui prende avvio il presente studio riguarda la verifica dell'efficacia di un training sulla prevenzione emotiva legata al rischio sismico, sperimentato con bambini di scuola primaria che hanno partecipato alla fase pilota di un progetto più ampio. Si tratta del progetto "Prevenzione Emotiva e Terremoti nella scuola primaria" (PrEmT¹; Raccanello, Vicentini, Brondino, & Burro, 2020; Raccanello, Vicentini, & Burro, 2019), realizzato dall'Università di Verona con il sostegno della Fondazione Cariverona. Il training mira a potenziare le conoscenze dei bambini sulle emozioni più frequenti in caso di terremoto e sulle strategie utili per regolarle, per diminuire l'impatto traumatico di un eventuale futuro evento sismico. In linea con tali obiettivi, per la fase pilota qui descritta si è ipotizzato (1) che la paura nei confronti dei terremoti non subisca un aumento tra la valutazione precedente e successiva all'intervento e non differisca tra il gruppo di controllo e quello sperimentale, e (2) che a seguito del training i bambini siano in grado di produrre un maggior numero di strategie di regolazione delle emozioni, sia rispetto alla valutazione iniziale, sia rispetto al gruppo di controllo.

Metodologia, strumenti e campione

Campione

Tramite campionamento di convenienza, sono stati coinvolti 126 bambini di una scuola primaria del Nord Italia, 63 frequentanti il secondo anno ($M = 7.66$ anni, 44% femmine) e 63 il quarto anno ($M = 9.63$ anni, 56% femmine), previa autorizzazione dei genitori tramite consenso informato. I partecipanti sono stati suddivisi in un gruppo sperimentale ($n = 66$) e uno di controllo ($n = 60$), in base alla disponibilità degli insegnanti. La ricerca è stata approvata dal Comitato Etico del Dipartimento di Scienze Umane dell'Università di Verona.

Metodologia e strumenti

I bambini assegnati al gruppo sperimentale hanno preso parte ad un training formato da dieci unità di un'ora ciascuna a cadenza settimanale, svolto durante l'orario scolastico. Il training era finalizzato ad accrescere le conoscenze sulla natura dei terremoti, sui comportamenti di sicurezza da mettere in atto, sulle emozioni esperite in caso di terremoto e sulle strategie efficaci per regolarle. I bambini del gruppo di controllo non hanno partecipato al training, ma per motivi etici vi parteciperanno al termine del progetto. Tutti i bambini hanno compilato, prima e dopo lo svolgimento del training, un questionario cartaceo volto a rilevare le conoscenze sulle tematiche affrontate. Di seguito sono descritte le domande considerate nel presente studio.

1. <https://www.hemot.eu>

Paura durante e dopo un terremoto. Per misurare l'intensità della paura durante e dopo un terremoto sono state poste due domande chiuse (i.e., *Quanto spaventato/a si sente un/a bambino/a durante/dopo un terremoto?*) con risposta su scala Likert a 5 livelli (1 = *per niente*, 5 = *moltissimo*), supportate da immagini disegnate ad-hoc.

Strategie di regolazione della paura in caso di terremoto. Per rilevare le strategie di regolazione della paura in caso di terremoto conosciute dai bambini sono state poste due domande aperte (es., *Se durante/dopo un terremoto un/a bambino/a ha paura, come può mandare via la paura?*). La codifica delle risposte aperte è stata effettuata contando il numero di strategie riportate.

Analisi e risultati

Analisi dei dati

I dati sono stati analizzati tramite Linear Mixed Models (LMM) e Generalized Linear Mixed Models (GLMM) usando il pacchetto statistico lme4 di R (R Core Team, 2019), alternando opportunamente gaussian family e identity link function (quando la variabile dipendente segue una distribuzione normale) a poisson family e log link function (quando la variabile dipendente è un numero che esprime una frequenza). I partecipanti sono stati considerati come effetto random. Il livello di significatività è stato $p < .05$. Per favorire la comprensibilità, le statistiche descrittive riportate si riferiscono ai dati grezzi.

Intensità della paura durante e dopo un terremoto

Sono stati condotti due LMM separati, con gruppo (controllo, sperimentale), fascia di età (secondo, quarto anno) e fase (pre-training, post-training) come effetti fissi, e l'intensità della paura rispettivamente durante e dopo un terremoto come variabili dipendenti. Non sono emersi effetti o interazioni significativi.

Strategie di regolazione della paura durante e dopo un terremoto

È stato fatto un GLMM con gruppo (controllo, sperimentale), fascia di età (secondo, quarto anno) e fase (pre-training, post-training) come effetti fissi, e il numero di strategie di regolazione della paura durante e dopo un terremoto come variabile dipendente. Sono emersi i seguenti effetti principali e di interazione significativi: gruppo, $\chi^2(1, 126) = 131.06$, $p < .001$; fascia d'età, $\chi^2(1, 126) = 7.62$, $p = .006$; gruppo X fascia, $\chi^2(1, 126) = 5.86$, $p = .015$; e gruppo X fase, $\chi^2(1, 126) = 68.61$, $p < .001$. Sono riportati di seguito i valori di confronto tra il modello stimato e il rispettivo modello nullo: $\Delta AIC = 546.3$, Chi-Square Difference Test (7) = 585.06, $p < 0.001$. Per quanto riguarda quest'ultima interazione, si riportano le frequenze medie delle strategie riportate dai bambini: nella fase pre-training, il gruppo di controllo ha riportato in media 3.07 ($DS = 2.30$) strategie e il gruppo sperimentale 3.61 ($DS = 2.26$); nella fase post-training, il gruppo di controllo 3.17 ($DS = 2.71$) e quello sperimentale 14.79 ($DS = 7.04$).

Discussione

I risultati confermano le ipotesi iniziali e danno prova dell'efficacia dell'intervento messo in atto nella fase pilota del Progetto PrEmT. In primo luogo, l'intensità della paura durante e dopo un terremoto è rimasta ad un livello intermedio, a testimonianza del fatto che i bambini riconoscono la potenziale pericolosità di tale fenomeno naturale; tuttavia, come da ipotesi, la partecipazione all'intervento non ne ha comportato un aumento. In secondo luogo,

il numero di strategie di regolazione della paura in caso di terremoto elencate dai bambini che hanno preso parte all'intervento, come da ipotesi, è aumentata in modo significativo. Ciò conferma la bontà delle metodologie messe a punto in questa fase pilota, e ne supporta un utilizzo futuro con campioni più ampi e in contesti diversi.

In conclusione, il presente studio, che segue gli standard per le ricerche *evidence-based* (Flay et al., 2005), dimostra l'efficacia di interventi che mirano a potenziare o sviluppare la competenza emotiva (Denham, 1998; Durlak et al., 2011), in particolare in riferimento alla prevenzione del rischio sismico. Tali interventi possono essere generalizzati anche in relazione ad eventi traumatici diversi dai terremoti, quali altri disastri naturali, disastri tecnologici o terrorismo.

Bibliografia

- Denham, S. A. (1998). *Emotional development in young children*. New York, NY: Guilford.
- Denham, S. A. (2010). Introduzione. In E. Baumgartner (Ed.), *Gli esordi della competenza emotiva. Strumenti di studio e valutazione* (pp. 13-15). Milano, Italia: LED.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405-432. doi:10.1111/j.1467-8624.2010.01564.x
- Eisenberg, N., & Spinrad, T. (2004). Emotion-related regulation: Sharpening the definition. *Child Development, 75*(2), 334-339. doi:10.1111/j.1467-8624.2004.00674.x
- Fergusson, D. M., & Boden, J. M. (2014). The psychological impacts of major disasters. *Australian & New Zealand Journal of Psychiatry, 48*(7), 597-599. doi:10.1177/0004867414538677
- Flay, B. R., Biglan, A., Boruch, R. F., Gonzalez Castro, F., Gottfredson, D., Kellam, S., ... Ji, P. (2005). Standards of evidence: Criteria for efficacy, effectiveness and dissemination. *Prevention Science, 6*(3), 151-175. doi:10.1007/s11121-005-5553-y
- Furr, J. M., Comer, J. S., Edmunds, J. E., & Kendall, P. C. (2010). Disasters and youth: A meta-analytic examination of posttraumatic stress. *Journal of Consulting and Clinical Psychology, 78*(6), 765-780. doi:10.1037/a0021482
- Calambos, C. M. (2005). Natural disasters: Health and mental health considerations. *Health and Social Work, 30*(2), 83-86.
- Grazzani Gavazzi, I., & Antoniotti, C. (2006). La comprensione delle emozioni. *Età Evolutiva, 83*, 117-128.
- Hurnen, F., & McClure, J. (1997). The effect of increased earthquake knowledge on perceived preventability of earthquake damage. *The Australasian Journal of Disaster and Trauma Studies, 1997-3*. Retrieved from <http://www.massey.ac.nz/~trauma/issues/1997-3/mcclure1.htm>
- Kar, N. (2009). Psychological impact of disasters on children: Review of assessment and interventions. *World Journal of Pediatrics, 5*(1), 5-11. doi:10.1007/s12519-009-0001-x
- Masten, A. S., & Osofsky, J. (2010). Disasters and their impact on child development: Introduction to the special section. *Child Development, 81*(4), 1029-1039. doi:10.1111/j.1467-8624.2010.01452.x
- Molina, P., Sala, M. N., Zappulla, C., Bonfigliuoli, C., Cavioni, V., Zanetti, M.A., ... Cicchetti, D. (2014). The Emotion Regulation Checklist - Italian Translation. Validation of parent and teacher versions. *European Journal of Developmental Psychology, 11*(5), 624-634. doi:10.1080/17405629.2014.898581

- Neria, Y., Nandi, A., & Galea, S. (2008). Post-traumatic stress disorder following disasters: A systematic review. *Psychological Medicine*, 38(4), 467–480. doi:10.1017/S0033291707001353
- Raccanello, D., Rocca, E., & Brondino, M. (2019). *Disaster-related coping strategies: A meta-analysis on children*. European Congress of Developmental Psychology, Athens, Greece.
- Raccanello, D., Vicentini, G., Brondino, M., & Burro, R. (2020). Technology-based trainings on emotions: A web application on earthquake-related emotional prevention with children. *Advances in Intelligent and Soft Computing*, 1007, 53–61. doi:10.1007/978-3-030-23990-9
- Raccanello, D., Vicentini, G., & Burro, R. (2019). Children's psychological representation of earthquakes: Analysis of written definitions and Rasch scaling. *Geosciences*, 9(5), 208. doi:10.3390/geosciences9050208
- R Core Team. (2019). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing.
- Tekeli-Yeşil, S., Dedeoğlu, N., Braun-Fahrlander, C., & Tanner, M. (2010). Factors motivating individuals to take precautionary action for an expected earthquake in Istanbul. *Risk Analysis*, 30(8), 1181–1195. doi:10.1111/j.1539-6924.2010.01424.x
- Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. In N. A. Fox (Ed.), *The development of emotion regulation: Biological and behavioral considerations*. *Monographs of the society for research in child development*, 59(2/3, Serial 240), 25–52.
- Zimmer-Gembeck, M. J., & Skinner, E. A. (2011). The development of coping across childhood and adolescence: An integrative review and critique research. *International Journal of Behavioral Development*, 35(1), 1–17. doi:10.1177/0165025410384923

Ampliando il concetto di educazione: il modello Life Skill Education applicato alla Terza Età come risorsa efficace per l'invecchiamento positivo. Un progetto di ricerca-azione partecipata.

Manuela Zambianchi¹

¹ Università di Bologna

Introduzione

La Divisione della Salute Mentale dell'Organizzazione Mondiale della Sanità evidenziò negli anni novanta (OMS, 1994), la rilevanza crescente delle Life- Skills, definite come un insieme di competenze sociali e relazionali che permettono ai ragazzi di affrontare in modo efficace le esigenze della vita quotidiana, rapportandosi con fiducia a sé stessi, agli altri e alla comunità. Le *life skills* individuate dall'OMS sono le seguenti: Autoconsapevolezza; Gestione delle emozioni; Gestione dello stress; Pensiero critico; *Decision making*; *Problem solving*; Creatività; Comunicazione efficace; Empatia; Relazioni interpersonali. Esse sono state sviluppate fino ad ora per l'età evolutiva (Grillo & Gagliardi, 2013).

La psicologia dell'arco di vita (Rutter & Rutter, 1995), estendendo all'intera vita i concetti ed i processi di evoluzione e sviluppo, richiama però la necessità dell'accrescimento di competenze e abilità che possano favorire una transizione costruttiva nei "punti di svolta" della vita (Elder, 1994) quali il pensionamento. L'allungamento della speranza di vita pone inoltre in evidenza la possibilità ed anche la necessità di continuare ad apprendere competenze anche nella terza e quarta età. Un concetto cardine in questo discorso è rappresentato dal *lifelong learning*, già indicato dall'OMS (2002) come fattore in grado di facilitare la partecipazione attiva e la promozione della salute e del benessere nell'età anziana. Una rassegna recente (Narushima, Liu, & Diestelkamp, 2018) ha confermato l'importanza della partecipazione ai programmi di educazione continua nella terza e nella quarta età per la riduzione della vulnerabilità ed il potenziamento delle risorse (*capabilities*) per un migliore benessere psicologico percepito.

La ricerca contemporanea sul tema dell'invecchiamento ha adottato un approccio teorico sistemico, dove l'esito di invecchiamento è determinato dalla sinergia tra fattori di natura biologica, psicologica e sociale. Il modello elaborato da Rowe e Khan (1997) definisce l'invecchiamento di successo come presenza di elevate capacità sul piano fisico, di personalità e cognitivo, che convergono nella partecipazione attiva alla società. La capacità di mantenere attive tali risorse potrebbe configurarsi come uno dei fattori che maggiormente contribuiscono ad un invecchiamento in salute ed a una soddisfacente qualità della vita. Le *Life skills* identificate dall'OMS potrebbero costituire un insieme di abilità in grado di consentire il mantenimento di risorse elevate a livello fisico (facilitando ad es. l'adesione a stili di vita salutari e la gestione costruttiva dello stress), a livello cognitivo (potenziando ad es. la cons-

apevolezza dei processi di elaborazione delle informazioni, di competenza decisionale) e di mantenimento di una partecipazione attiva alla società (potenziando, ad es. le abilità comunicative e sociali) anche in questa età della vita, se debitamente adeguate, come obiettivi, ai bisogni ed alle motivazioni che le sono proprie.

Il pensiero critico come life skill fondamentale nell'invecchiamento di successo

Il pensiero critico rappresenta una competenza fondamentale in ogni età della vita, e di crescente rilevanza anche a causa della progressiva complessificazione della società contemporanea, che richiede sempre più il possesso e l'esercizio di sofisticate competenze cognitive per poter comprendere, elaborare e strutturare l'informazione proveniente da molteplici istituzioni ed agenzie. Questa *life skill* è stata definita in relazione all'età anziana secondo i seguenti obiettivi:

- approfondimento e consapevolezza dei processi che conducono alla costruzione di credenze, euristiche di pensiero, atteggiamenti e stereotipi sociali (Palmonari, Cavazza, & Rubini, 2012). A livello di contenuti è stato privilegiato il tema della salute.

La capacità di decision making in età anziana: una competenza per l'autonomia e l'autodeterminazione.

La competenza decisionale costituisce una risorsa strategica per un invecchiamento positivo. Le ricerche recenti, soprattutto di matrice cognitiva, indicano diverse criticità nella qualità decisionale in età anziana, legata a molteplici fattori, tra cui la minore efficienza del sistema cognitivo stesso a processare una mole elevata di informazioni (Del Missier, Mantyla, & Nilsson, 2016; Lockenoff, 2018), cosa che favorisce il ricorso a strategie semplificate quali le euristiche di pensiero, o la difficoltà a simulare mentalmente scenari ipotetici futuri, che riduce le alternative possibili di scelta o espone al rischio di decisioni scadenti sul piano della qualità e dell'efficacia. Come ha sostenuto Janis (1992), nelle persone poste di fronte a scelte rilevanti per sé o per i contesti sociali in cui vivono possono attivarsi veri e propri "vincoli" di natura cognitiva, emozionale o affiliativa, rendendo più problematico il pervenire ad una rappresentazione effettiva delle forze in campo o comunque dei fattori centrali da soppesare per giungere ad una buona decisione. Questa *life skill* è stata definita in relazione all'età anziana secondo i seguenti obiettivi:

- comprensione della complessità dei processi di natura cognitiva, emozionale e sociale che possono essere implicati nelle decisioni rilevanti legate ad es. alla salute, alla residenzialità, alle scelte finanziarie;
- consapevolezza della limitatezza delle informazioni possedute per decidere; la visione di Simon (1991) dell'uomo come "decisione non totalmente razionale" porta con sé la necessità di tenere in considerazione altri fattori coinvolti nelle decisioni, che possono esercitare un'influenza anche al di fuori della soglia di consapevolezza;
- consapevolezza dell'esistenza di veri e propri "stili decisionali" personali, frutto di modelli di interazione con il mondo sociale e di gestione delle criticità, ma aperti comunque al cambiamento.

La possibilità di sviluppare un percorso di potenziamento sinergico di due *life skills* di area cognitiva che presentano strette connessioni quali il *pensiero critico* ed il *decision making* potrebbe favorire l'acquisizione di competenze sui processi di elaborazione e sistematizzazi-

one delle informazioni (es. le euristiche di pensiero, gli stereotipi) utili ad una successiva comprensione dei processi sottesi alla presa di decisione. Come inoltre sottolinea il filone di ricerca della razionalità ecologica con l'introduzione del concetto di "disegno di ricerca rappresentativo" (Brunswick, 1955; Dhama, Hertwig, & Hoffrage, 2004), la scelta di temi e situazioni dal forte impatto motivazionale per la persona anziana può favorire l'accuratezza nell'analisi delle informazioni strategiche e la consapevolezza dei potenziali vincoli che compromettono una buona decisione.

Metodologia della ricerca

Il progetto ha fatto riferimento, dal punto di vista teorico-metodologico, al modello della ricerca-azione proposto da Lewin (1946), che identifica nella parte teorica del progetto (dove vengono identificati i modelli di riferimento, gli obiettivi da perseguire e gli strumenti di valutazione) una fase propedeutica al cambiamento di aspetti di criticità attraverso un successivo percorso di apprendimento attivo e partecipato da tutto il gruppo. Tutti coloro che hanno compilato gli strumenti *self-report* della parte teorica hanno partecipato agli incontri formativi.

Partecipanti

hanno preso parte al progetto di ricerca-azione partecipata 16 soggetti, 3 maschi e 13 femmine (età media 71.13, range 61-81, DS = 5.43); titolo di studio: due in possesso di licenza elementare, 4 in possesso di diploma di scuola media inferiore, 8 in possesso di diploma di scuola media superiore, due in possesso di Laurea. Essi sono stati reclutati attraverso gli Enti territoriali dell'Unione dei Comuni della Bassaromagna (Italia) che hanno pubblicizzato questo progetto attraverso canali istituzionali ed una apposita conferenza aperta al pubblico. La partecipazione è stata volontaria e raccolta attraverso un modulo di iscrizione appositamente predisposto, in forma cartacea e online, nelle sedi istituzionali del Comune di Bagnacavallo, facente parte dell'Unione dei Comuni della Bassaromagna, dove si è svolto il progetto.

Strumenti

I partecipanti hanno compilato le seguenti misure *self-report*:

- Questionario sulle rappresentazioni sociali della salute nell'età anziana (Zambianchi & Ricci Bitti, 2010) (scala Likert a 5 punti: 1= per niente d'accordo; 5 = completamente d'accordo).
- Un single item ha valutato la credenza che fare attività fisica regolare aiuti la persona anziana a mantenere una buona salute (scala Likert a 5 punti: 1 = per niente d'accordo; 5 = completamente d'accordo).
- Un single item ha valutato la credenza che aderire alla dieta mediterranea aiuti la persona anziana a mantenere una buona salute (scala Likert a 5 punti: 1 = per niente d'accordo; 5 = completamente d'accordo).
- Questionario sugli stili decisionali (Scott & Bruce, 1995). Esso valuta cinque stili decisionali: razionale, intuitivo, dipendente, spontaneo, evitante (scala Likert a 5 punti: 1 = mai; 5 = sempre).

Il laboratorio attivo ha utilizzato come strumenti sia i risultati emersi dalla parte teorica, utilizzati come stimolo alla discussione, sia strumenti atti a favorire l'elaborazione di nuovi contenuti quali il *role playing* e la discussione di casi-stimolo appositamente costruiti. I temi

legati al pensiero critico e al *decision making* sono stati approfonditi in incontri della durata di circa 2 ore ciascuno, in un'aula con possibilità di predisporre l'arredo a semicerchio, in modo da favorire la comunicazione e l'interscambio reciproco. Ogni incontro ha approfondito un argomento specifico di ciascuna *life skill*. Essendo stata considerata propedeutica al *decision making*, la *life skill* pensiero critico è stata approfondita per prima. La conduttrice ha utilizzato una metodologia non direttiva, cercando di facilitare il dialogo tra i partecipanti.

Analisi dei dati

Nella prima somministrazione degli strumenti di indagine (test) sono state calcolate dapprima le medie e deviazioni standard delle variabili oggetto dello studio. Una matrice di correlazione (r di Spearman) è stata poi calcolata per le rappresentazioni sociali della salute, le credenze sugli stili di vita sani e gli stili decisionali. Nella fase di re-test (seconda somministrazione degli strumenti) sono stati calcolati medie e deviazioni standard delle variabili e una matrice di correlazioni per le medesime variabili del test. Successivamente modelli MANOVA a misure ripetute hanno valutato la presenza di differenze significative tra i punteggi della prima somministrazione (test) e della seconda somministrazione (re-test) sulle rappresentazioni della salute, le credenze sugli stili di vita e gli stili decisionali.

Risultati

Un primo modello MANOVA a misure ripetute ha posto come variabili dipendenti le rappresentazioni sociali della salute, con un risultato complessivo che tende alla significatività statistica (Lambda di Wilk's = 0.82; $F(2,24) = 2.52$; $p < 0.10$). Le successive Anova hanno evidenziato un effetto significativo per la rappresentazione sociale "salute come apertura a nuove esperienze e crescita personale" ($F = 5.13$; $p < 0.05$), con un aumento del punteggio al re-test. Un secondo modello MANOVA a misure ripetute ha posto come variabili dipendenti le credenze sull'attività fisica e la dieta mediterranea, con un risultato globale statisticamente significativo (Lambda di Wilk's = 0.75; $F(2,22) = 3.65$; $p < 0.05$). Entrambe le variabili dipendenti sono poi risultate significative: attività fisica: $F = 5.93$; $p < 0.05$; dieta mediterranea: $F = 5.90$; $p < 0.05$.

Un terzo modello MANOVA a misure ripetute ha infine posto come variabili dipendenti gli stili decisionali. Il modello complessivo è risultato non significativo ($p = 0.57$), ma le successive ANOVA univariata hanno evidenziato un effetto al limite della significatività per il *decision making* razionale ($F = 3.46$; $p < 0.07$), con un aumento del punteggio al re-test, ed un effetto al limite della significatività per il *decision making* spontaneo ($F = 3.26$; $p < 0.08$) con invece una riduzione del punteggio al re-test.

Discussione e conclusioni

Gli strumenti di valutazione, somministrati prima del percorso e al suo termine, hanno mostrato un'efficacia statistica del modello di intervento, basato sulla costruzione di attività particolarmente coinvolgenti per i partecipanti quali il *role playing* e la discussione di casi-stimolo, l'attenzione a temi e situazioni cui le persone anziane sono particolarmente sensibili quali la salute, l'autonomia di vita, la necessità di prendere decisioni rilevanti, uniti però anche ad una introduzione di concetti teorici attraverso un linguaggio rigoroso ma accessibile a persone non specialistiche. La possibilità di approfondire due *life skills* con evidenti punti di contatto ha probabilmente favorito l'apprendimento di competenze utili per trattare ed

elaborare le informazioni, PER individuare i processi di pensiero che possono incidere sulla definizione di un problema e le conseguenti ricadute sulle decisioni da prendere nei diversi ambiti di vita, con conseguenze importanti, positive o negative, per la salute ed il benessere generale della persona anziana. Queste competenze sinergiche possono dare origine ad una vera e propria competenza metacognitiva, definita sia come insieme di conoscenze che il soggetto possiede circa i propri processi di pensiero, sia come scelta e applicazione di strategie di *problem solving*, capacità di compiere previsioni e di valutare l'efficacia delle strategie applicate (Flawell, 1979) che consente all'anziano di scegliere consapevolmente le strategie più efficaci per conseguire un obiettivo motivante e desiderato e mantenere nel tempo gli apprendimenti. L'attuazione di futuri progetti basati sul modello Life Skills Education adattato per l'età anziana nelle strutture istituzionali pubbliche (come ad es. le Case della Salute a livello sanitario) o private (come le Università della Terza Età, molto diffuse sul territorio italiano) e l'eventuale conferma della loro efficacia potrebbero aprire una nuova opportunità di apprendimento validato scientificamente per favorire un invecchiamento positivo e la riduzione dei rischi di deterioramento della salute in chiave bio-psico-sociale.

Bibliografia

- Brunswik, E. (1955). Representative Design and Probability Theory in a Functional Psychology. *Psychological Review*, 62(3), 193-217.
- Del Missier, F., Mantyla, T., & Nilsson, L-G. (2016). *Aging, Memory and Decision Making*. In T. M. Hess, C. E. Loeckenoff & J.-H. Strough (Eds), *Aging and decision making: Empirical and applied perspectives*, (pp. 127-148). Elsevier Academic Press.
- Dhimi, M. K., Hertwig, R., & Hoffrage, U. (2004). The role of representative design in an ecological approach to cognition. *Psychological Bulletin*, 130(6), 959-988. doi: 0.1037/0033-2909.130.6.959
- Elder, G. H. jr. (1994). Time, Human Agency and Social Change: perspective on the Life Course. *Social Psychology Quarterly*, 1, 4-15.
- Flawell, J. H. (1979). Metacognition and Cognitive Monitoring. A new area of Cognitive-Development Inquiry. *American Psychologist*, 34(10), 906-911.
- Grillo, V., & Gagliardi, M. P. (2013). Verso una dimensione inclusiva degli alunni diversamente abili nella scuola: presentazione di un percorso formativo orientato al modello Skills for Life. *Psicologia della Salute*, 3, 93-114.
- Janis, I. (1992). *Scelte cruciali*. Firenze, Italia: Giunti.
- Lewin, K. (1946) Action Research and Minority Problems. *Journal of Social Issues*, 2, 34-46. doi:10.1111/j.1540-4560.1946.tb02295.x
- Lockenoff, C. (2018). Aging and Decision Making: A conceptual framework for future research. A mini-review. *Gerontology*, 64, 140-148. doi:10.1159/000485247
- Narushima, M., Liu, J., & Diestelkamp, N. (2018). Lifelong learning in active ageing discourse: its conserving effect on well-being, health and vulnerability. *Ageing & Society*, 38, 651-675.
- OMS. (1994). *Life skills education per bambini e adolescenti nelle scuole*. Ginevra, Svizzera: Divisione mentale.
- OMS. (2002). *Active aging: A policy Framework*. Retrieved from http://whqlibdoc.who.int/hq/2002/who_nmh_nph_02.8.pdf.

- Palmonari, A., Cavazza, N., & Rubini, M. (2012). *Psicologia Sociale*. Bologna, Italia: Il Mulino.
- Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *The Gerontologist*, 37, 433-4 doi:10.1093/geront/37.4.433.
- Rutter, M., & Rutter, M. (1995). *L'arco della vita. Continuità e crisi nello sviluppo*. Firenze, Italia: Giunti.
- Scott, S. G., & Bruce, R. A. (1995). Decision-making style: The development and assessment of a new measure. *Educational and Psychological Measurement*, 55(5), 818-831.
- Zambianchi, M., & Ricci Bitti, P. E. (2010). Rappresentazioni sociali della salute e dell'invecchiamento in un gruppo di anziani. *Psicologia della salute*, 2, 95-109.

Progetto "B.I.C.: BENESSERE IN CLASSE": proposta nelle scuole di attività per promuovere il benessere e lo sviluppo socioemotivo

Maria Assunta Zanetti¹ e Sara Sparaciarì¹

¹ Università degli Studi di Pavia

Introduzione

In passato, parlando di benessere, si era soliti riferirsi a tale costrutto come ad una condizione dell'individuo in assenza di malessere o malattia (Sheldon & King, 2001). Recentemente invece la definizione di benessere prende in considerazione anche la salute psicologica dell'individuo, la qualità della vita, la qualità delle relazioni sociali e i vissuti emotivi (Dodge, Daly, Huyton, & Sanders, 2012). Riferendosi all'età dello sviluppo, operare nel contesto scolastico per promuovere il benessere risulta essere molto importante: in tale ambiente infatti, il bambino si sviluppa sul piano cognitivo, emotivo e relazionale (Cowen, 1991). Diventa quindi fondamentale, considerare e lavorare su alcuni aspetti che influenzano la percezione di benessere scolastico. Uno di questi è l'autoefficacia, che secondo Bandura (2000) è legata alle esperienze positive di successo scolastico, creando un circolo virtuoso che porterà il bambino a sentirsi maggiormente competente e a mettere in atto quei comportamenti che l'hanno aiutato a raggiungere il risultato positivo. Vanno anche tenute in considerazione le emozioni elicitate dal contesto scolastico: i vissuti emotivamente negativi possono portare a sviluppare reazioni fisiologiche come ansia o malessere fisico e psicologico che possono influenzare negativamente anche i processi cognitivi messi in atto durante l'apprendimento (Eisenberg et al., 2000; Cassady & Johnson, 2002; Cizek, 2006). Pertanto, al fine di promuovere un clima supportivo alle relazioni, è necessario che gli insegnanti lavorino sul gruppo dei pari. Il gruppo di pari, infatti, permette sia lo sviluppo di amicizie e relazioni positive e funzionali e delle abilità sociali, sia soddisfazione di bisogni di riconoscimento e affetto (Bokhorst, Sumter, & Westenberg, 2010; Furman & Robbins, 1985). Allo stesso tempo però, relazioni negative con i compagni portano a vissuti di ansia, emozioni e sentimenti negativi, con conseguente numero limitato di occasioni per poter sviluppare le proprie competenze sociali (Bierman, 2004). Tali situazioni hanno effetti anche sul piano cognitivo, a causa di un possibile disimpegno nelle attività scolastiche (Buhs, Ladd, & Herald, 2006). Infine, le relazioni tra alunni e docenti possono essere estremamente positive, quando il bambino si sente capito e apprezzato, arrivando a considerare la figura dell'insegnante come un vero e proprio punto di riferimento (Howes & Hamilton, 1992; Liew, Chen, & Hughes, 2010). Relazioni conflittuali con gli insegnanti possono invece provocare, oltre a vissuti emotivi spiacevoli, problematiche di comportamento internalizzante, difficoltà nell'adattarsi alla vita scolastica e condotte antisociali (Murray & Greenberg, 2006; Murray & Malmgren, 2005).

Considerati tutti questi aspetti, risulta necessario implementare la ricerca rispetto a tali te-

matiche per promuovere il benessere all'interno del contesto scolastico, al fine di supportare al meglio lo sviluppo dell'individuo.

Domanda di ricerca e obiettivi

Il progetto "B.I.C.: BENESSERE IN CLASSE" è nato per promuovere il benessere scolastico attraverso lo sviluppo di competenze sociali ed emotive. La ricerca effettuata intende studiare l'efficacia di alcune attività proposte in classi di una scuola primaria, per sostenere l'apprendimento e migliorare il riconoscimento e la gestione delle emozioni, la capacità di lavorare in gruppo, lo sviluppo dell'empatia e del senso di autoefficacia. Inoltre, ci si è proposti di indagare se il lavoro su tali aspetti abbia aiutato i bambini a vivere al meglio il contesto scolastico, auspicando che la promozione del benessere scolastico possa risultare come fattore protettivo rispetto a fenomeni come l'abbandono scolastico o il sotto-rendimento, fornendo risorse utili a tutti. Gli obiettivi del progetto sono:

- aumentare il livello di benessere dei bambini nel contesto scolastico;
- sostenere lo sviluppo delle competenze socio-emotive;
- promuovere i comportamenti positivi e prosociali e lo sviluppo di relazioni interpersonali costruttive e supportive;
- sostenere il potenziale di ogni studente e favorire l'integrazione di bambini con Bisogni Educativi Speciali (BES), tra cui bambini ad alto potenziale.

Metodologia, strumenti e campione

Le attività sono state proposte durante l'orario scolastico, nel periodo compreso da novembre 2018 a giugno 2019. Gli incontri, della durata di circa due ore, sono stati progettati sul modello di didattica non formale per favorire la partecipazione attiva dei bambini della classe attraverso attività individuali, in coppia e di gruppo, momenti di riflessione, libera e/o guidata, spingendo per una maggior condivisione e confronto, per consentire a ciascun di acquisire maggiore consapevolezza sulla propria dimensione emotiva. Tra le attività previste, sono stati proposti lavori in *cooperative learning* al fine di lavorare sull'adozione di strategie per manifestare e gestire le emozioni, favorendo modalità peer-to-peer e non direttive. Le attività sono state precedute da momenti di brainstorming rispetto ad uno stimolo presentato, per favorire lo scambio e rendere l'attività più vicina ai bisogni di ogni gruppo classe. In base a quanto emerso sono stati proposti momenti di riflessione personale e condivisa, guidati dall'esperto.

Sono state coinvolte anche le docenti, sia favorendo la partecipazione attiva sia con condivisione del materiale, per favorirne l'utilizzo anche al fuori degli incontri previsti.

Il progetto ha previsto un incontro introduttivo prima dell'inizio delle attività per condividere i contenuti e le modalità del progetto.

Per coinvolgere anche la famiglia, sono stati assegnati agli alunni attività da svolgere a casa, per consolidare e condividere con le famiglie quanto proposto a scuola.

Le attività si sono svolte su 8 incontri e sono stati affrontati i seguenti temi:

1. Costruzione di un puzzle per riflettere sul significato di "classe"

2. Giochi di fiducia in palestra
3. Presentazione delle principali emozioni attraverso la visione di video, la lettura di storie e piccoli giochi
4. Riflessione attraverso la lettura di un libro e di un disegno sulle modalità di espressione delle emozioni
5. Riflessione sulle strategie personali di gestione delle emozioni
6. Lavoro di gruppo in *cooperative learning* per riconoscere le emozioni anche negli altri
7. Favorire il pensiero positivo verso l'altro attraverso un gioco in classe
8. Coinvolgimento attivo delle insegnanti lavorando sull'immedesimarsi gli uni negli altri

Le attività sono state precedute da una fase di *assessment* all'inizio e alla fine del progetto, previo consenso informato firmato dalle famiglie, utilizzando i seguenti strumenti:

- QBS 8-14 (Questionario per la valutazione del benessere scolastico e identificazione dei fattori di rischio) (Marzocchi & Tobia, 2015): è stata prevista la somministrazione dello strumento sia per i bambini che per i genitori per indagare il livello di benessere scolastico degli alunni e le percezioni delle famiglie rispetto ai vissuti emotivi a scuola dei figli.
- Sociogramma di Moreno per ottenere una valutazione del clima classe e delle relazioni all'interno di essa.
- EQ-i: YV (Emotional Quotient Inventory - Youth Version) (Bar-On & Parker, 2000): sono stati scelti alcuni item contenuti all'interno dello strumento per indagare in maniera più approfondita le dimensioni emotive senza affaticare troppo i bambini nella compilazione.

Il campione è composto da alcune classi di istituti comprensivi in provincia di Pavia, per un totale di 172 alunni (maschi= 78, femmine= 94) di età compresa tra gli 8 e gli 11 anni. Le classi che hanno aderito alla fase sperimentale del progetto sono sei: una terza, tra quarte e due quinte della scuola primaria. Le classi di controllo, nelle quali sono state eseguite solo le fasi di *assessment* all'inizio e alla fine sono tre: una terza, una quarta e una quinta primaria.

Analisi e risultati

Dalle prime analisi¹ non si apprezzano miglioramenti significativi nelle aree indagate, anche se nelle classi sperimentali si rilevano punteggi più elevati rispetto alle classi di controllo. Tuttavia, da un'analisi qualitativa, sia sui feedback dei partecipanti che degli insegnanti, il progetto è stato apprezzato e valutato positivamente. Nello specifico, i bambini si sono mostrati interessati e incuriositi dai contenuti proposti, e le insegnanti hanno acquisito competenze e appreso modalità di lavoro che hanno poi adottato nelle attività curricolari, prestando maggior attenzione agli aspetti relazionali e socioemotivi come fattori di protezione, per favorire non solo un clima classe positivo ma anche per le ricadute positive sul successo scolastico. Non da ultimo, attività di questo tipo si sono rivelate inclusive, in quanto hanno consentito una maggior integrazione e partecipazione di alunni con fragilità o a rischio di esclusione.

1. Le analisi dei dati sono ancora in elaborazione in quanto la fase di rivalutazione è stata effettuata al termine dell'anno scolastico appena concluso.

Discussione

Il progetto "B.I.C.: BENESSERE IN CLASSE" si inserisce nell'ambito della promozione del benessere all'interno del contesto scolastico, per favorire lo sviluppo personale e sociale, insieme alla consapevolezza e alla gestione delle emozioni, sia individualmente che nella relazione con l'altro. L'ambiente scolastico risulta essere un luogo adatto per lavorare su tali aspetti, grazie alla presenza di un gruppo classe e all'insegnante come figura adulta di riferimento. Risulta importante coinvolgere i docenti nelle attività, offrendo loro spunti da applicare nella programmazione curricolare grazie alla condivisione del materiale. In questo modo, oltre a diversificare l'attività didattica, il lavoro sugli aspetti socioemotivi può continuare oltre le attività previste dal progetto, facilitando l'acquisizione di tali abilità. Anche il coinvolgimento dei genitori è importante: attraverso i compiti da svolgere a casa è possibile portare determinate tematiche anche in famiglia, favorendo così la diffusione e il consolidamento delle abilità socioemotive apprese in diversi contesti.

Naturalmente il progetto presenta alcuni limiti, ma anche possibili sviluppi: innanzitutto la numerosità del gruppo di controllo non è pari a quella delle classi sperimentali, nonostante siano comunque state scelte classi speculari rispetto all'età. In futuro sarebbe importante riproporre il progetto con un campione di controllo più ampio, affinché i risultati siano maggiormente generalizzabili. Rispetto agli strumenti utilizzati, la scelta di fare una selezione di alcuni item del questionario EQ-YV è stata fatta per non rendere troppo faticosa la somministrazione per i bambini, in considerazione del tempo messo a disposizione dalle insegnanti nella loro didattica. Una valutazione della scala completa dell'EQ-YV tuttavia, consentirebbe di ottenere un punteggio di quoziente emotivo che ci permetterebbe di approfondire ulteriormente gli aspetti socioemotivi. Sarebbe utile poi rivedere le tempistiche, in quanto prevedere la fase di rivalutazione alla fine della scuola, un momento particolarmente stressante sia per gli studenti, che per gli insegnanti e le famiglie, potrebbe inficiare la validità dei dati. Inoltre, sarebbe auspicabile prevedere un maggior numero di attività che le insegnanti potrebbero proporre ad integrazione delle attività curricolari, tenute dalle insegnanti stesse nelle classi, previo un periodo di formazione, al fine di favorirne una maggiore acquisizione.

Bibliografia

- Bandura, A. (2000). *Autoefficacia, teoria e applicazioni*. Trento, Italia: Erickson.
- Bar-On, R., & Parker, J. (2000). *BarOn Emotional Quotient Inventory: Youth Version. Technical Manual*. North Towanda, NY: Multi-Health Systems Inc.
- Bierman, K. L. (2004). *Peer rejection: Developmental processes and intervention strategies*. New York, NY: Guilford Press.
- Bokhorst, C. L., Sumter, S. R., & Westenberg, P. M. (2010). Social support from parents, friends, classmates, and teachers in children and adolescents aged 9 to 18 years: Who is perceived as most supportive? *Social development, 19*(2), 417-426.
- Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Peer exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement? *Journal of educational psychology, 98*(1), 1.
- Cassady, J. C., & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary educational psychology, 27*(2), 270-295.

- Cizek, G. J. (2006). *Addressing test anxiety in a high-stakes environment: Strategies for classrooms and schools*. Thousand Oaks, CA: Corwin Press.
- Cowen, E. L. (1991). In pursuit of wellness. *American psychologist*, 46(4), 404.
- Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *International journal of wellbeing*, 2(3), 222-235.
- Eisenberg, N., Guthrie, I. K., Fabes, R. A., Shepard, S., Losoya, S., Murphy, B., & Reiser, M. (2000). Prediction of elementary school children's externalizing problem behaviors from attentional and behavioral regulation and negative emotionality. *Child development*, 71(5), 1367-1382.
- Furman, W., & Robbins, P. (1985). What's the point? Issues in the selection of treatment objectives. In *Children's peer relations: Issues in assessment and intervention* (pp. 41-54). New York, NY: Springer.
- Howes, C., & Hamilton, C. E. (1992). Children's relationships with child care teachers: Stability and concordance with parental attachment. *Child development*, 63(4), 867-878.
- Liew, J., Chen, Q., & Hughes, J. N. (2010). Child effortful control, teacher-student relationships, and achievement in academically at-risk children: Additive and interactive effects. *Early Childhood Research Quarterly*, 25(1), 51-64.
- Marzocchi, G. M., & Tobia, V. (2015). QBS 8-13: *Questionari per la valutazione del benessere scolastico e identificazione dei fattori di rischio*. Trento, Italia: Edizioni Centro Studi Erickson.
- Murray, C., & Greenberg, M. T. (2006). Examining the importance of social relationships and social contexts in the lives of children with high-incidence disabilities. *The journal of special education*, 39(4), 220-233.
- Murray, C., & Malmgren, K. (2005). Implementing a teacher-student relationship program in a high-poverty urban school: Effects on social, emotional, and academic adjustment and lessons learned. *Journal of school psychology*, 43(2), 137-152.
- Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary. *American psychologist*, 56(3), 216.

Well-being and academic achievement

Flow, intrinsic motivation and subjective wellbeing in educational settings

Lada Aleksandrova¹, Bronyus Aysmontas¹ and Inna V. Lvova²

¹ Moscow State University of Psychology and education

² Kuzbass regional institute of educators' professional development and retraining

Introduction

The study was based on an integrated methodology: ideas of positive psychology in disability studies (Wehmeyer, 2013), Csikszentmihalyi flow theory and its applications in various settings (Csikszentmihalyi, 2014) and self-determination theory (Ryan & Deci, 2017), and its applications to human motivation. Also, our study¹ was initially based on the concept of personality potential, proposed by Dmitry Leontyev (2011), which was studied in different conditions and samples.

To investigate the Flow role in educational settings we conducted two researches, based on similar theoretical background and methodology. In both studies the methodology, research design and methods accumulating the achievements of modern domestic and foreign pedagogics and psychology will be elaborated. Besides, research will be conducted on various areas of psychology and pedagogics having initially interdisciplinary character and will show possibilities of synthesis of various scientific paradigms and approaches, both of Russian psychologists and foreign (mostly American) ones, such as cultural and historical psychology (L.S. Vygotsky), activity theory (A.N. Leontyev), psychology of the personality and motivation, especially concepts of personality potential and hampered conditions of development (D.A. Leontyev), special pedagogics and psychology (Madriaga), ideology and values of inclusion, theory and methodology of distance learning, etc.

The first study was based on the need to find the sources for fostering schoolteachers' activity towards innovative methods implementation to their everyday professional activity, to escape emotional burnout. Accordingly, the theoretical background including theory of positive psychology and self-determination were applied together with Maslach's concepts of professional (emotional) burnout and, as the opposite pole, the work engagement and professional calling. The study was conducted among teachers of schools situated in small towns of Kemerovo region, Russian Federation (having less than 100'000 inhabitants).

The second study was conducted in Moscow State University of Psychology and Education where students with disability are educated using distant (on-line) forms and techniques. At the Department of Distance Learning students with disability study psychology using distance, mainly online forms together with non-disabled students. At the same time they have the opportunity to study additional adaptive modules, elaborated to compensate their

1. The study was supported by the Russian foundation for basic research project #19-013-00904 A "Development of personality in students with disability in conditions of inclusive distance learning".

developmental deficits, and develop skills for effective learning, designed to avoid deficits due to their disabilities (impaired hearing, vision, motor skills, oral speech and mobility) based on their particular zones of proximal development (L.S. Vygotsky) and putting forward their personal and social resources (Lazarus, Folkman).

The main idea was the following: computer technologies, electronic/distance/online learning can be considered as a condition and tools for personal development and creating the environment of equal opportunities for students with disability, based on previous research projects held in Russia we participated in, being based on the positive methodology, self-determination theory, theory of Flow. The current research takes into account the results of previous studies developing the ideas of inclusion, personality and motivation development in students with disabilities in different settings the role of distance and online learning personality development of students with disabilities and the universal trends and special demands of distance learning for students with disabilities.

The issue of personality and self-regulation development in students with disabilities in conditions and by means of distance professional education will be considered in terms of both positive approach and clinical paradigm, focusing simultaneously on their positive personality development and developmental deficits compensation. We also consider the distance and online learning accompaniment by rehabilitative and assistive technologies as conditions, the conditions with peculiar demands and experimental situation carrying special challenges to students' autonomous versus controlled motivation, coping strategies, values and goals. Nevertheless, peculiarities of students' learning activity were out of study, except motivational and self-regulation aspects. It is especially true for students with disabilities mostly studied in clinical terms.

The relevance of the research is given by the need to fully integrate into the society youth with disabilities, accompanied and supported with higher technologies, in condition to bring a challenge for equal opportunities for individuals regardless of the presence or absence of their special educational needs.

Aim

Assessing flow experience 1) as a reflection of eudemonic well-being, e.g. well-being through activity and 2) its motivational and regulation functions in different educational environments and activities in schoolteachers and university students, especially those with disabilities.

Samples

237 schoolteachers of several schools situated in Kemerovo region, Russia, 115 university students of Moscow state university of psychology and education, including those with disabilities, studying in settings of distant (mostly online) learning. These two separate studies were conducted with similar inventories sets.

Methods

The Russian version of Flow Short Scale (FSS) (Engeser & Rheinberg, 2008) was a central method of study. We used 13 original items grouped into four subscales, accompanied with three original variables: subjective estimation of activity demands, personal skills and perceived fit of demands, adding fourth – subjective estimation of personal efforts being in-

vested into activity. Participants were asked to fill a questionnaire keeping in mind one of their everyday work/learning activities of their own choice. Cronbach's alpha lay between 0.70 - 0.85, for the subscales. To verify the hypothesis the following set of inventories was applied:

- Satisfaction with life scale (Diener, Emmons, Larsen, & Griffin, 1985)
- Subjective vitality scale (Ryan & Frederick, 1997)
- Generalized self-efficacy scale (Schwarzer & Jerusalem, 1995)
- Noetic orientations test
- Professional/Academic Motivation Questionnaire based on self-determination Theory (Gordeeva, Sychov, & Osin, 2013)

Results

In the first study we asked teachers (N=237), to indicate which activities they kept in mind when answering items of Flow Short Scale. We did not take into account the duration of their work at schools. Before testing Flow we additionally asked teachers to explain where and when they do feel flow at work. Teachers showed different levels of flow experienced in several activities included in teaching process, such as preparing lessons, working with students at classes and outside. The preparation to lessons resulted as the most flow inducing activity most frequently mentioned. We used the Pearson's coefficient to analyze the interconnections between variables.

Flow scale omitting subscales showed similar results especially for Fluency in Performance, Absorption by Activity. We found that the Flow scale showed strong positive interconnections between Flow and Self-efficacy ($r=0,39$ $p<0,001$), Sense of life ($r=0,43$ $p<0,001$), Subjective vitality ($r=0,38$ $p<0,001$), ($r=0,39$ $p<0,001$), Intrinsic motivation ($r=0,36$ $p<0,001$). Satisfaction with life showed no connections with Flow in teachers.

Data show that the Flow experience contributes more substantially to teachers' wellbeing through action compared to their wellbeing as a state. Also, the Flow showed itself as motivational resource for teachers' professional activity of different kinds, accompanied with high scores in Sense of life, Self-efficacy, Subjective vitality, which, in turn, buffers stressful events and emotional burning, according to numerous studies.

In second study, university students with disabilities (N=59) and without disabilities (N=55) of all years of baccalaureate and magistracy education took part. Disabled students showed both common and peculiar interconnections between flow and other variables under study. Correlational analyses using Spearman's correlation coefficient were calculated separately for samples for data of students with disabilities and non-disabled students. The results for students with disabilities and for non-disabled students are given in brackets.

In students with disabilities Flow showed strong connections with SWLS ($r=0,42$ $p<0,001$) for students with disabilities and no significant connections in non-disabled students between these variables, between Flow and VT-d scores ($r=0,53$ $p<0,001$) for students with disabilities and ($r=0,35$ $p<0,05$) for non-disabled students. The similar interconnections were found for Noetic orientations scale ($r=0,34$ $p<0,05$) for students with disabilities and ($r=0,30$ $p<0,05$) for non-disabled students and Self-efficacy ($r=0,58$; $p<0,001$) and ($r=0,32$ $p<0,05$), intrinsic motivation ($r=0,56$ $p<0,001$) and ($r=0,48$ $p<0,01$) and achievement motivation ($r=0,38$ $p<0,01$) ($r=0,45$ $p<0,01$) accordingly. Fluency in Performance has similar interconnections with our variables as listed above. The interconnections between flow and intrinsic motivation and achievement motivation appeared to be of the similar weight as in students with disability and non-disabled students. At the same time the interconnections between Flow (in learn-

ing activity) and Satisfaction with life, Subjective vitality and Sense of Life were surprisingly stringer in students with disability than in non-disabled students. So we can conclude Flow as inseparable part of learning process in university students with disabilities and without it, fostering their wellbeing but more effectively in students with disability.

Discussion

So we can conclude the different role of flow experience in all samples under study, the fact need further investigation. Schoolteachers showed predictable interconnections between Flow and its components and all variables under study, namely Intrinsic and identified motivation, Self-efficacy, Hardiness, Sense of life (Future, present and past – Of Noetic Orientations test) – all variables under study, except Satisfaction with life scores. In students, we found a partly similar picture. In non-disabled students, learning process showed less significant interconnections with variables under study, despite of similarity of their Flow scores with those of students with disabilities. Moreover, we found the learning process tends to be more flow inducing in students with disability compared with non-disabled students. Satisfaction with life and Flow appeared to be significantly interconnected only in university students with disability.

Conclusion

Both studies are in progress now. We plan to obtain repeated measurements in all samples under study, to compare the dynamics of scores in samples and use more sophisticated methods of statistical analysis than correlational design undermines.

Some preliminary results may be reported just now, such as the followings. First, our data supports the idea of Flow experience as an inseparable part of educational process in both schoolteachers and university students. We found the teaching as well as the learning process may be the source of flow experience for teachers and university students, motivating them to teaching and studying as one of the key sources for their intrinsic motivation.

References

- Csikszentmihalyi, M. (2014). *Applications of Flow in Human Development and Education: The Collected Works of Mihaly Csikszentmihalyi*. Dordrecht, Netherlands: Springer.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Engeser, S. (2012). *Advances in flow research*. New York, NY: Springer.
- Gordeeva, N. O., Sychov, O. A., & Osin, E. N. (2013). Students' Internal and External Academic Motivation: its Sources and Impact on Psychological Well-being. *Issues of psychology*, 1, 35-45.
- Leontyev, D. A. (Ed.). (2011). *Lichnostnyi Potentsial: struktura i diagnostika* [Personality Potential structure and diagnostics]. Moscow: Smysl.
- Ryan, R. M., & Frederick, C. M. (1997). On energy, personality and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, 65, 529-565.
- Ryan, R. M., & Deci, E. L. (2017). *Selfdetermination theory, Basic Psychological Needs in Motivation, Development and Wellness*. New York, NY: Guilford Press.

-
- Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.
- Wehmeyer, M. L. (Ed.). (2013). *Oxford handbook on Positive Psychology of Disability*. London, England: Oxford university press.

Intelligenza Emotiva e Creatività a scuola

Camilla Brandao De Souza¹ e Margherita Pasini¹

¹ Università di Verona

Introduzione

Ad oggi, solo un numero limitato di studi sulla creatività sono stati intrapresi direttamente in relazione all'Intelligenza Emotiva di tratto (Sanchez-Ruiz, Hernandez-Torrano, Pérez-Gonzalez, Batey, & Petrides, 2011). Ivcevic e Brackett (2015) sostengono che le emozioni giochino un ruolo cruciale nei confronti della creatività e sostengono che la capacità di regolare le emozioni sia un aspetto molto importante nella predizione positiva di comportamenti creativi in soggetti che sono aperti all'esperienza. Nonostante questo non si trovano comunque in letteratura molte ricerche sulla relazione tra intelligenza emotiva e creatività-intesa come abilità cognitiva. Come Sternberg (2003) ha osservato, il grado in cui creatività ed intelligenza sono correlati- e la natura di tale relazione- è "teoricamente importante e la sua risposta influisce sulla vita di innumerevoli bambini ed adulti". Plucker e Renzulli (1999) sostengono che non è tanto questione di scoprire se l'intelligenza emotiva e la creatività sono correlati, ma piuttosto di scoprire come lo sono.

Alcune ricerche (De Souza Fleith, 2010) vedono inoltre una diretta influenza da parte del clima percepito nei confronti della creatività e del suo sviluppo. Dudek (1974), ha riscontrato, ad esempio, che il clima globale percepito influenza in modo significativo la performance degli studenti nel test di creatività. Inoltre, hanno osservato che le dinamiche sociali presenti in classe, tra cui la relazione emotiva tra insegnante-studente può avere un impatto sulle abilità creative dei propri studenti.

Domanda di ricerca

In questa prospettiva si è inserito questo studio finalizzato ad approfondire la relazione esistente tra le abilità emotive degli insegnanti e la creatività dei propri studenti.

In secondo luogo questa ricerca analizza il ruolo del clima di creatività all'interno della classe, e la relazione con la creatività degli studenti. In particolare questo studio ha lo scopo di verificare se il clima di creatività percepito dai bambini in età scolare (9,10 anni) modera la relazione tra l'intelligenza emotiva dell'insegnante (intesa secondo il costrutto dell'Intelligenza Emotiva di Tratto) e la creatività dei bambini stessi.

La creatività viene considerata sia globalmente sia suddivisa nei fattori di creatività quali: fluidità (capacità di produrre tante idee), flessibilità (idee diverse tra loro), originalità (idee diverse dal comune) ed elaborazione (idee ricche di dettagli ed elementi).

Sulla base della letteratura precedentemente esposta, sono dunque state formulate in particolare le seguenti ipotesi:

H1: Il livello di creatività dei bambini di età compresa tra gli 8 e i 10 anni dipende dall'Intelligenza Emotiva degli insegnanti e dal clima di creatività totale percepito all'interno della propria classe.

H2: Il clima di creatività percepito all'interno di una classe modera la relazione tra Intelligenza Emotiva degli insegnanti e la creatività dei bambini di età compresa tra gli 8 e i 10 anni

Metodo

Partecipanti

Il campione preso in esame per questo studio è di 339 bambini (170 maschi e 169 femmine) e di 18 insegnanti. Per questa indagine si è scelto di considerare solamente gli insegnanti di italiano e matematica corrispondenti a ciascuna classe, poiché insegnanti con più ore nelle classi di riferimento. I bambini presentano un'età compresa tra gli 8 e gli 11 anni, con un'età media di 9,56 anni. Sono stati selezionati da tre differenti scuole situate nel Nord Italia, tramite i dirigenti scolastici e i coordinatori di ciascuna classe. Gli studenti di origine straniera sono stati esclusi dal campionamento, così come gli studenti con difficoltà scolastiche (DSA) o problemi di apprendimento per evitare di affaticarli ed esporli ad un test self-report viste le loro difficoltà (di comprensione della lingua e/o scolastiche). I rispondenti che non hanno risposto a più di 15 item sono stati esclusi dalle seguenti analisi.

Strumenti di misura

Intelligenza Emotiva. L'intelligenza emotiva degli insegnanti è stata misurata con il Trait Emotional Intelligence Questionnaire - Short Form (TEIQue-CSF) (Mavroveli, Petrides, Shove, & Whitehead, 2008). In questo studio è stata utilizzata la versione breve, caratterizzata da 36 item (esempio: "Sono molto bravo a capire come si sentono le altre persone"), con risposta su scala Likert a 5 punti (1= Completamente in disaccordo, fino a 5= Completamente d'accordo).

Il questionario misura il punteggio globale dell'intelligenza emotiva degli insegnanti. Per ogni partecipante, i punteggi relativi sono stati calcolati sul tratto globale di Intelligenza Emotiva e non le specifiche nove scale misurate invece attraverso il TEIQue full form.

Creatività. Per misurare la creatività degli studenti è stato utilizzato il TTCT. Torrance Test of Creative Thinking, Figural Part B (Torrance, 1998). Il TTCT test comprende 4 scale che sono elencate come segue, con la descrizione di ogni scala e le informazioni in merito al punteggio assegnato e al contenuto che viene misurato (Torrance & Ball, 1984; Torrance, 1990): Fluidità: il numero di idee rilevanti; mostra la capacità di dare più soluzioni possibili ad un

problema; Originalità: il numero di idee statisticamente poco frequenti; mostra una capacità di produrre risposte non comuni o uniche. Elaborazione: il numero di dettagli aggiunti; Flessibilità: riguarda la varietà di categorie di risposte pertinenti.

Clima di creatività. Il clima di creatività è stato misurato con la Person-Environment Fit Scale (PESFC). La PESFC è stata elaborata da Sedat, Selcuk e Caglar (2014) ed è un test self report che ha dimostrato soddisfacente affidabilità e validità. Questo test comprende 14 item (7 item relativi alla dimensione Persona e 7 item relativi alla dimensione Ambiente) su scala Likert a 5 punti (1= Completamente in disaccordo, fino a 5= Completamente d'accordo).

In questo studio si è scelto di considerare il clima di creatività non solo singolarmente nelle due dimensioni dell'ambiente e della persona, ma anche a livello globale, considerando cioè il clima di creatività ottenuto dalla media delle due dimensioni prese in esame. Infatti, non solo il modello a due fattori, ma anche quello ad un fattore, è risultato essere un buon modello. Il clima di creatività è stato misurato basandosi sulle percezioni degli studenti.

Analisi dati e risultati

In fase di analisi le dimensioni della Creatività quali fluidità, originalità, elaborazione e flessibilità sono state considerate singolarmente. La misura della Creatività Globale è stata poi ottenuta sommando le dimensioni della Creatività stessa.

Le analisi dei dati sono state effettuate utilizzando il pacchetto statistico IBM SPSS Statistics (versione 23).

Per poter effettuare l'analisi di moderazione è stata fatta una ri-codifica relativamente all'Intelligenza emotiva degli insegnanti. Questa è stata infatti calcolata facendo la media tra l'IE degli insegnanti di italiano e matematica. Successivamente è stata calcolata la mediana dell'IE degli insegnanti ed i valori che si trovavano al di sotto del valore mediano sono stati codificati con 1, quelli che invece si trovavano al di sopra sono stati codificati con 2.

Lo stesso procedimento è stato effettuato in merito alla creatività dei bambini: ovvero è stata calcolata la mediana ed i valori che si trovavano al di sotto del valore mediano sono stati codificati con 1, quelli invece che si trovavano al di sopra sono stati codificati con 2.

Per verificare se il clima di creatività percepito dal bambino modera la relazione tra l'intelligenza emotiva dell'insegnante e la creatività totale del bambino è stata svolta un'ANOVA fattoriale a due vie 2x2 in cui i fattori tra i soggetti sono Intelligenza Emotiva (fattore a due livelli: alta e bassa) e Clima di Creatività (fattore a due livelli: alto e basso) e la variabile dipendente è il livello di creatività totale. L'effetto di interazione di IE X Clima di creatività risulta statisticamente significativo ($F(1,164) = 4,438; p < 0,05; \eta^2$ parziale = 0,26) con un effetto che si può considerare di piccole dimensioni: quando l'IE dell'insegnante è bassa e il Clima di Creatività è basso allora la Creatività totale si pone ad un livello intermedio; quando l'IE dell'insegnante è bassa e il Clima di Creatività è alto, la creatività totale si pone ad un livello intermedio ma più basso del precedente; quando l'IE dell'insegnante è alta e il clima di creatività è basso la creatività totale si pone ad un livello basso; quando invece l'IE dell'insegnante è alto ed anche il clima di creatività è alto, la creatività totale dei bambini è alta. Passando a considerare le singole dimensioni della creatività, ponendo come variabile

dipendente la Fluidità, l'effetto di interazione di IE X CL C risulta di nuovo statisticamente significativo ($F(1,164) = 4,534; p < 0,05; \eta^2$ parziale = 0,27) con un effetto che si può considerare di piccole dimensioni: quando l'IE dell'insegnante è bassa e il clima di creatività è basso allora la fluidità si pone ad un livello intermedio; quando l'IE dell'insegnante è bassa e il Clima di Creatività è alto la fluidità si pone ad un livello basso; quando l'IE dell'insegnante è alta e il livello di Clima di Creatività è basso la fluidità si pone ad un livello intermedio ma più basso del precedente; quando l'IE dell'insegnante è alto e il clima di creatività è alto la fluidità dei bambini è alta.

Riguardo alla flessibilità, l'effetto di interazione di IE X CL C risulta ancora statisticamente significativo ($F(1,164) = 4,357; p < 0,05; \eta^2$ parziale = 0,26) con un effetto che si può considerare di piccole dimensioni: quando l'IE dell'insegnante è bassa e il clima di creatività è basso, la flessibilità si pone ad un livello medio alto; quando l'IE dell'insegnante è basso e il clima di creatività è alto la flessibilità si pone ad un livello basso; quando l'IE dell'insegnante è alta e il clima di creatività è basso la flessibilità è bassa; quando l'IE dell'insegnante è alta e il clima di creatività è alto, la flessibilità è alta.

Discussione

La prima ipotesi di questo studio, secondo cui il livello di creatività totale dei bambini di età compresa tra gli 8 e i 10 anni dipende dall'Intelligenza emotiva degli insegnanti e dal clima di creatività totale percepito all'interno della propria classe viene confermata, anche se i risultati mostrano un effetto significativo, ma debole. È quindi chiaro che il livello di creatività globale dei bambini, di età compresa tra gli 8 e i 10 anni, dipende solo in parte dall'Intelligenza emotiva degli insegnanti e dal clima di creatività percepito all'interno della propria classe.

Secondo i risultati emersi, quando l'IE dell'insegnante è bassa e il Clima di Creatività è basso allora la Creatività totale dei bambini si pone ad un livello intermedio; quando l'IE dell'insegnante è bassa e il Clima di Creatività è alto, la creatività totale dei bambini si pone ad un livello intermedio ma più basso del precedente; quando l'IE dell'insegnante è alta e il clima di creatività è basso la creatività totale si pone ad un livello basso; quando invece l'IE dell'insegnante è alto ed anche il clima di creatività è alto, la creatività totale dei bambini è alta. Questo tipo di dati può essere molto utile specialmente osservando l'elevato grado di importanza che questo tipo di variabili, l'intelligenza emotiva e la creatività, stanno acquisendo nel ventunesimo secolo.

In particolare, la capacità di risolvere problemi, di incontrare soluzioni inedite e di fronteggiare il cambiamento richiede una capacità creativa e un'apertura, secondo Brackett e Simmons (2015) nei confronti dell'esperienza. Yvcevic e Brackett (2015) sostengono, infatti, che l'apertura nei confronti dell'esperienza sia il tratto di personalità (McCrae & Costa, 1999) più correlato con la creatività. L'apertura include tratti di personalità e di motivazione come la ricerca di nuove esperienze, l'espressione sociale tramite atteggiamenti non conformi e tratti relativi alla *self regulation* come la tolleranza nei confronti dell'ambiguità.

All'interno di questo quadro teorico, l'intelligenza e la creatività sono considerate parti integranti della capacità di saper risolvere i problemi in modo efficace ed efficiente (Plucker, Kaufman, & Beghetto, 2015).

Conseguentemente, sostengono Plucker e colleghi (2015), è fondamentale che le scuole e i luoghi di lavoro impieghino le proprie risorse allo scopo di coltivare e supportare entrambe.

Se l'intelligenza emotiva degli insegnanti ha un impatto sulla creatività dei propri studenti potrebbe essere possibile anche adottare delle strategie educative finalizzate ad accrescerla e a preparare pertanto gli studenti a pensare in modo critico ed inedito, caratteristiche fondamentali nel mondo contemporaneo. Inoltre, questi risultati permettono di fare luce anche sull'importanza che il clima di creatività percepito dai bambini all'interno delle proprie classi, ha, nello sviluppo di comportamenti e di capacità creative.

Bibliografia

- Brackett, M., & Simmons D. (2015). Emotions Matter. *Educational leadership*, 22-27.
- De Souza Fleith, D. (2010). Teacher and student perceptions of creativity in the classroom environment. *Roeper & Review*, 22(3), 148-153.
- Dudek, S. Z. (1974). Creativity in young children: Attitude or ability? *Journal of Creative Behavior*, 8, 282-292.
- Ivcevic, Z., & Brackett, M. A. (2015). Predicting creativity: Interactive effects of openness to experience and emotion regulation ability. *Psychology of Aesthetics, Creativity, and the Arts*, 9(4), 480-487.
- Mavroveli, S., Petrides, K. V., Shove, C., & Whitehead, A. (2008). Investigation of the construct of trait emotional intelligence in children. *Eur Child Adolesc Psychiatry*, 17(8), 516-526.
- McCrae, R. R., & Costa, P. T. (1999). A five-factor theory of personality. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality* (pp. 139-153). New York, NY: Guilford.
- Plucker, J. A., & Renzulli, J. S. (1999). Psychometric approaches to the study of human creativity. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 35-61). New York, NY: Cambridge University Press.
- Plucker, J. A., Kaufman, J. C., & Beghetto, R. A. (2015). *What We Know about Creativity*. (P21 Research Series). Washington DC: Partnership for 21st Century Learning.
- Sánchez-Ruiz, M. J., Hernandez-Torrano, D., Pérez-González, J. C., Batey, M., & Petrides, K. V. (2011). The relationship between trait emotional intelligence and creativity across subject domains. *Motivation and Emotion*, 35, 461-473.
- Sedat, S., Selcuk A., & Caglar C. (2014). Development of the Person-Environment Fit Scale (PEFSC): A New Measure of Creativity. *Psychology of Aesthetics, Creativity and the art*, 8 (4), 443-445 .
- Sternberg, R. J. (2003). *Wisdom, intelligence and creativity synthesized*. New York, NY: Cambridge University Press.
- Torrance, E. P. (1990). *The Torrance Tests of Creative Thinking Norms – Technical Manual Figural (Streamlined) Forms A & B*. Bensenville, IL: Scholastic Testing Service.
- Torrance, E. P. (1998). *The Torrance Tests of Creative Thinking Norms – Technical Manual Figural (Streamlined) Forms A & B*. Bensenville, IL: Scholastic Testing Service.
- Torrance, E. P., & Ball, O. E. (1984). *Torrance Tests of Creative Thinking Streamlined (Revised) Manual, Figural A and B*. Bensenville, IL: Scholastic Testing Service.

Alto potenziale cognitivo e sviluppo socio emotivo: un percorso di supporto in ambito scolastico

Elena Carelli¹, Alice Lizzori¹ e Maria Assunta Zanetti¹

¹ Università degli Studi di Pavia

Introduzione

Con il termine “plusdotato” (*gifted*) si identifica solitamente un individuo che, rispetto ai pari, mostra o ha il potenziale per mostrare un’abilità sorprendente in un determinato momento e in specifiche aree considerate di rilievo nella propria cultura di appartenenza (Keating, 2009; Pfeiffer & Stocking, 2012; Sternberg, Jarvin, & Grigorenko, 2011). La plusdotazione non è un tratto fisso e costante (Bronfenbrenner & Ceci, 1994; Ceci & Williams, 1997), i contesti di crescita (famiglia, scuola, società) e gli eventi della vita sembrano avere un ruolo fondamentale nello sviluppo e nel mantenimento del potenziale (Renati, Gualdi, & Zanetti, 2013). La plusdotazione è inoltre una complessa costellazione di caratteristiche personali e comportamentali che si esprimono in modi differenti e che talvolta hanno ricadute sulla socializzazione a causa dell’asincronia che la caratterizza (Terrassier, 1985; Silverman, 2002). È frequente che alunni *gifted* possano sperimentare difficoltà, quali noia, sotto-rendimento, abbandono scolastico, e problemi comportamentali (Gross, 2006; Matthews & Foster, 2009; Reis & McCoach, 2000). Questi studenti, inoltre, hanno bisogni speciali dal punto di vista cognitivo, emotivo e sociale e alcune caratteristiche di tratto li rendono maggiormente vulnerabili dei loro pari. Una continua carenza di stimoli dovuta ad una plusdotazione non riconosciuta può determinare l’insorgere di problemi di comportamento e di adattamento (Patterson, 2009). Per questi motivi risulta necessaria una identificazione precoce nei primi anni di scolarizzazione, al fine di consentire alle scuole di attivare adeguati interventi a supporto agli apprendimenti (Silverman, 1992) e dello sviluppo socio-emotivo con l’obiettivo di ridurre o contenere situazioni di disagio con conseguenze negative a livello cognitivo, accademico, sociale ed emotivo (Neihart, 2002).

Gli studenti AP mostrano modalità di apprendimento che li differenziano dagli altri studenti; essi pertanto, richiedono un ambiente scolastico stimolante che alimenti costantemente la loro sete di conoscenza, la loro creatività e la loro autostima. Al fine di innescare processi di resilienza utili a fronteggiare momenti difficili e sfide legate ai diversi stress affrontati nei loro contesti di sviluppo (Cefai, 2008) è importante introdurre metodologie didattiche flessibili, capaci di rispondere agli specifici bisogni di questi ragazzi, integrando aspetti cognitivi ed emotivi.

Domanda di ricerca e obiettivi

Per sostenere e sviluppare pienamente, in ottica inclusiva, le diverse potenzialità accademici-

che e creative di ciascuno studente, in alcune scuole della provincia di Pavia è stato proposto un percorso di supporto socio-emotivo a sostegno del potenziale cognitivo, attraverso l'implementazione di un programma di apprendimento socio-emotivo (SEL- *Social and Emotional Learning*), volto a migliorare le competenze emotive e sociali dei partecipanti. Con il termine SEL si intende quel processo attraverso cui si forniscono a bambini e ragazzi le competenze necessarie per riconoscere e gestire le proprie emozioni, dimostrarsi d'aiuto per gli altri, stabilire relazioni positive, prendere decisioni responsabili, risolvere problemi in maniera costruttiva seguendo una propria morale e etica (Elias et al., 1997; Payton et al., 2000). Inoltre, l'apprendimento socio-emotivo favorisce la buona salute dei partecipanti, lo sviluppo di una coscienza etica e della motivazione ad apprendere nuove informazioni (CASEL, 2003). Il progetto prevede che i contenuti disciplinari, proposti a partire da punti di forza e interessi di ciascun alunno, siano integrati con aspetti socio-emotivi, capaci di favorire un apprendimento partecipato grazie all'utilizzo di strategie di autoregolazione, nell'ottica secondo cui bambini e ragazzi emotivamente competenti e che si sentono bene nel contesto scolastico in cui sono immersi, sperimentano maggior soddisfazione e motivazione a scuola, con una ricaduta positiva anche sui risultati scolastici (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Metodologia, strumenti e campione

Il progetto ha visto il coinvolgimento di 7 classi per un totale di 150 bambini (di cui 79 maschi), di età compresa tra i 6 e i 10 anni ($M=8$ anni e 5 mesi).

In queste classi erano presenti 3 bambini ad alto potenziale certificati e diversi studenti con caratteristiche che potrebbero essere riconducibili all'alto potenziale ma non ancora in possesso di una valutazione specifica.

La struttura del progetto ha previsto diverse fasi:

1. formazione dei docenti delle classi interessate, confronto circa le necessità della classe e dei bambini *gifted* eventualmente presenti in essa, e progettazione delle attività;
2. pre-test con somministrazione di una batteria di questionari in self-report per gli studenti Sociogramma di Moreno (Moreno, 1951), Matrici Progressive di Raven Colorate (Raven, 1958; validazione italiana Belacchi, Scalisi, Cannoni, & Cornoldi, 2008) e i Questionari per la valutazione del benessere scolastico e identificazione dei fattori di rischio - QBS (Tobia & Marzocchi, 2015);
3. da ottobre a marzo sono stati svolti laboratori nelle classi (8 attività), condotti dall'esperto esterno in presenza dei docenti di classe. Le attività sono state svolte in ottica inclusiva con metodologie che hanno previsto il coinvolgimento di tutti gli alunni della classe senza prevedere metodologie differenziate per gli alunni ad alto potenziale. In ottica di continuità e per promuovere l'alleanza scuola-famiglia, le attività hanno previsto anche il coinvolgimento dei genitori. Ogni attività era accompagnata da un breve compito da svolgere a casa riguardante i temi trattati durante la lezione, per permettere ai bambini di generalizzare quanto appreso e rendere il programma più efficace coinvolgendo i diversi contesti di vita dei bambini;
4. post-test agli alunni, con l'utilizzo della stessa batteria di questionari della prima valutazione;
5. consegna di report di classe e di report individuali.

Analisi dei risultati e discussione

L'adozione di una didattica inclusiva, con metodologie che hanno privilegiato l'apprendimento cooperativo e partecipativo ha avuto ricadute positive sia sugli apprendimenti che sul miglioramento delle relazioni nel contesto classe. I risultati hanno mostrato un aumento del livello di benessere degli studenti all'interno del gruppo classe, tali miglioramenti hanno interessato principalmente le aree del questionario QBS quali "Atteggiamento emotivo a scuola" ($p < .05$) e "Rapporto con i compagni" ($p < .05$) inoltre, le attività socio-emotive hanno promosso un clima di maggior condivisione e partecipazione attiva che ha permesso a ciascun alunno di potenziare competenze trasversali, quali la motivazione allo studio e la regolazione emotiva. È inoltre emerso un incremento dei risultati scolastici¹.

Verrà inoltre presentata un'analisi approfondita dei risultati ottenuti dai bambini ad alto potenziale cognitivo evidenziando differenze emerse rispetto al resto del campione.

Il progetto presenta alcuni limiti e possibili sviluppi futuri: nello specifico la mancanza di classi di controllo non permette un confronto tra i bambini delle classi che hanno partecipato al progetto e coloro che hanno seguito la normale programmazione didattica, pertanto i risultati ottenuti non possono essere generalizzati e ricondotti solo al progetto ma potrebbero essere dovuti a fattori esterni. In futuro sarà quindi importante riproporre il percorso di supporto socio-emotivo avendo un campione di controllo, appaiato per età al gruppo sperimentale, affinché i risultati siano maggiormente trasferibili.

Bibliografia

- Belacchi, C., Scalisi, T., Cannoni, E., & Cornoldi, C. (2008). CPM - Coloured Progressive Matrices. Standardizzazione Italiana. Manuale.
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualized in developmental perspective: A biological model. *Psychological Review*, 101, 568-586.
- Ceci, S. J., & Williams, W. M. (1997). Schooling intelligence, and income. *American Psychologist*, 52, 1051-1058.
- Cefai, C. (2008). *Promoting resilience in the classroom. A guide to developing emotional and cognitive skills*. London, England: Jessica Kingsley Publishers.
- Collaborative for Academic, Social and Emotional Learning (CASEL). (2003). *Safe and Sound: An Educational Leader's Guide to Evidence-Based Social and Emotional Learning (SEL) Programs*. Retrieved from www.casel.org.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82, 405-432.
- Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., ... Shriver, T. P. (1997). *Promoting social and emotional learning: Guidelines for educators*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Gross, M. U. M. (2006). Exceptionally gifted children: Long-term outcomes of academic acceleration and nonacceleration. *Journal for the Education of the Gifted*, 29, 404-429.
- Keating, D. P. (2009). *Developmental science and giftedness: an integrated life-span framework*. Washington, DC: American Psychological Association.

1. I risultati verranno discussi in maniera approfondita nell'intervento durante il convegno.

- Matthews, D. J., & Foster, J. F. (2009). *Being smart about gifted education: A guidebook for educators and parents* (2nd ed.). Scottsdale, AZ: Great Potential Press.
- Moreno, J. L. (1951). *Sociometry, Experimental Method and the Science of Society. An Approach to a New Political Orientation*. New York, NY: Beacon House.
- Neihart, M. (2002). Gifted children and depression. In M. Neihart, S. Reis, N. Robinson, & S. Moon, (Eds.), *The social and emotional development of gifted children* (pp. 93-103). Waco, TX: Prufrock Pres.
- Patterson, J. B. (2009). Professional identity and the future of rehabilitation counseling. *Rehabilitation Counseling Bulletin*, 52(2), 129-132.
- Payton, J. W., Wardlaw, D. M., Graczyk, P. A., Bloodworth, M. R., Tompsett, C. J., & Weissberg, R. P. (2000). Social and emotional learning: A framework for promoting mental health and reducing risk behavior in children and youth. *Journal of School Health*, 70(5), 5-179.
- Pfeiffer, S. I., & Stocking, V. B. (2000). Vulnerabilities of academically gifted students. *Special Services in the Schools*, 16, 83-93.
- Raven, J. C. (1958). *Guide to Using the Coloured Progressive Matrices, Sets A, Ab, B*. London, England: H. K. Lewis.
- Reis, S. M., & McCoach, D. B. (2000). The underachievement of gifted students: What do we know and where do we go? *Gifted Child Quarterly*, 44, 152-170.
- Renati, R., Gualdi, G., & Zanetti, M. A. (2013) La relazione a supporto degli apprendimenti: l'insegnante e lo studente gifted. *Psicologia dell'educazione*, 7(2), 217-229.
- Silverman, L. K. (1992). Scapegoating the gifted: The new national sport. *Images*, 6(2), 3-5.
- Silverman, L. K. (2002). *Upside-down brilliance: The visual spatial learner*. Denver, CO: DeLeon Publishing
- Sternberg, R. J., Jarvin, L., & Grigorenko, E. L. (2011). *Explorations in giftedness*. Cambridge University Press. Retrieved from http://assets.cambridge.org/97805215/18543/frontmatter/9780521518543_frontmatter.pdf
- Terrassier, J.-Ch. (1985). Dyssynchrony: Uneven Development. In J. Freeman (Ed.), *The Psychology of Gifted Children* (pp. 265-274). Chichester, England: John Wiley.
- Tobia, V., & Marzocchi, G. (2015). *QBS 8-13 Questionari per la valutazione del benessere scolastico e identificazione dei fattori di rischio*. Trento, Italia: Erickson.

The “full time project” in Italian Primary Schools: a good chance for educational success and wellbeing? Some results

Brunella Fiore¹

¹ Università degli Studi di Milano - Bicocca

In 1971, the Law 820 introduces for the first time, in the Italian school system, a model of extended time for primary school (40 hours). The possibility of spending more time at school is part of an educational and training project organized at ministerial level. In its early beginnings, full-time was considered an innovative model based on democratic values: the aim was to improve the cultural conditions of a large part of the population and in particular, of those students who could not rely on support in homework. The fundamental assumption is the “right to education” to replace that of the school as a place of assistance (Cerini & Spinosi, 2002). Educational success is one of the cardinal principles of the full-time, where educational success is one of the primary components underlying the overall well-being of the student (Salovey & Mayer, 1990). The idea is to go beyond the transmission of basic skills in favour of an intensive and inclusive pedagogical approach to take charge of educational success by the educational institution itself. Full time is fully realized in the seventies, that is the period of the introduction of the “delegated decrees”. These decrees provided for the reorganization of the school and of the legal status of the managerial, inspection, teacher and non-teaching personnel. There were numerous studies that, at that time, questioned the new role of families in schools where the legislation itself is provided as an integral part in the process of constructing scholastic paths in a perspective of “democratic school” (Ay-mone, 1972; Pinter, 1986). The realization of full time is a product of this climate that leads to defining the entire program as a “community school”: teachers, families, students, individual members of the local community are part of the project aimed at building a model of welcoming school and inclusiveness. The relationship with the territory and with the local community becomes the constitutive basis of the project according to an approach that aims to welcome and enhance diversity, identity roots in respect of individual freedoms. Although growing, the full-time proposal is still not the most requested and the membership was neither plebiscite now nor in the past: still in the 2002/03, the demand for full time stood at around 20% at national level. The “normal” or “traditional” school-time varies between 24 and 27 hours, extendable to 30 hours based on the requests of families and the supply of schools. Alternatively, families can opt for the full time normally held between about 8.00-8.30 a.m. and 4.00-4.30 p.m.: this modality is feasible when the school administrations provide human and municipal resources and have the funds to carry out the canteen service or the transport service. In the 2015/16, 2.9% of students chose to stay at school for 24 hours, 34.5% for 27 hours and 23.7% for up to 30 hours, 39% chose the full-time model (Miur, 2015). According to Miur data, the choice of full time by families has observed a progressive in-

crease in the last ten years. Data analysis Invalsi a.s. 2008/09 show a growth of about 15 percentage points of full-time at national level. We also know that full-time has experienced a different diffusion in the different areas of the country, with peaks of participation higher in the North-West and in the Centre and less participation in the North-East and South Italy where the more traditional forms of school time are optioned to a greater extent by families. For macro-areas there is a growth equal to 17.2 percentage points in the North-West, 12.5% in the North-East, 18.9% in the Center and 5.7% in the southern regions. In particular, with reference to the classrooms, we note the increase from 26.9% of classes activated in 2007/08 to 33.4% in 2016/17 (Tuttoscuola, 2017). Despite the strong ideological-didactic premises built around full-time, few studies have investigated the benefits of full-time participation in comparison with normal time. Full-time planning requires specific attention to the quality of the laboratories, the adequacy of the structures, external areas (recreational time), libraries and canteens. The studies related to the effect of full-time are aimed mainly focused at the total school time over a school year (Aronson & Zimmerman, 1998). However, the subject dealt with here is different: these studies address the issue of “lost” days of school due to randomness and unforeseeable events or to the absenteeism of students.

Literature refers to full-time as a project with precise aims and which should bring real benefit to the overall level of training of students, particularly those with more modest socio-economic status. Unfortunately, at present we are not aware of datasets that make it possible to relate school time with dimensions not strictly related to the detection of learning performances and, specifically, to Reading, Math and English. However, although there are numerous other dimensions linked to the overall education of an individual, the transmission of basic skills by education systems is considered a crucial element in creation and human capital since these are deemed necessary to live in societies advanced (Decataldo & Fiore, 2018). This contribution analysis the effectiveness of full-time/normal time on the basis of a common core curriculum (Gromada & Shewbridge, 2016), taking into account that this is within an overall diversified global didactic offer starting from the beginning of the year. The performances in basic skills in Reading and Maths constitute the crucial output or measure for identifying the effect of school time on student training. On the basis of the considerations described above and the reference literature, the following hypothesis is formulated: about the full-time students, we suppose that reading and maths performances are only to a limited extent, on average, higher than those of those who attend traditional time. Most studies do not show a significant correlation between time spent at school and performance levels detected through standardized tests (OECD, 2016). We suppose that the advantage of full-time on traditional time is more pronounced for mathematics, for students with more modest socio-economic and cultural status and for students living in southern regions. About this, the literature on time spent at school shows a link that is not necessarily linear and positive between time spent at school and greater preparation in basic skills. Given the divergent considerations on the effectiveness of full-time, we assume a very limited effect of the greater effectiveness of full-time on traditional time in relation to students with a medium or high socio-economic status. The considerations are different with respect to students of low socio-economic and cultural status. Full time as mentioned is a measure built and addressed primarily to students of more modest socio-economic and cultural status. It should be said that, on average, the socio-economic and cultural status of full-time families is higher than the traditional one. The students of modest origin who participate in full-time could therefore benefit from the tracking effects offered by higher average status levels. We hypothesize that this is particularly true in the regions of South-

ern Italy where, as has been pointed out by several parties, the population is more polarized from the point of view of both socio-economic and cultural status and in performance outcomes (Invalsi, 2017). We then hypothesize that the effects are clearer on mathematics, where time spent at school with subject teachers could offer support in filling the gaps with respect to the area on which families traditionally are weaker. To test our hypothesis we use socio-economic gradients (Willms, 2000). The socio-economic and cultural status gradients estimate correlations and show different significance depending on the geographical area concerned. The data used refer to the surveys in the Invalsi tests for the 2015/16 years for Italian and mathematics on students aged around 11 for level 5. In addition to the results of the tests, some contextual information provided by the schools or the student questionnaire were used. The first observation shows something known to the literature: within each time modality, the reading performances are significantly higher than those for maths. Even in the low queues of the distribution, where mathematical linguistic codes could be simpler for some categories of students, the overtaking of mathematics on reading is not evident: the exception is the case of Central Italy where the disciplinary differences are not significantly different but the case requires further investigation. For students of socio-economic and cultural average extraction, the socio-economic and cultural status gradients highlight how attending full-time or traditional time up to 27 hours does not lead to a substantial difference in the results of standardized tests. Partial exception would appear, as said, to belong to the queues of the distribution where, depending on the macro area to which they belong, different situations emerge. In queues, depending on the macro-area concerned, full time sometimes offer an added value to part-time or vice-versa. Longitudinal analyses highlight specific models linked to geographical belonging, which sometimes disappear with respect to the effectiveness of a prevailing model of school time. Our results highlight a greater differentiation of mathematical outcomes compared to those of reading between the two modes of school time and the effect; in general, is present mainly in the queues of socio-economic and cultural status distributions (Bovini, De Philippis, & Sestito, 2016). In conclusion, it would seem that the territorial macro-area may not represent the most suitable territorial unit to grasp the complexity of the articulation of performance results linked to traditional time vs. full time. The effects that differentiate full time, if present, do not seem to be sought in the learning outcome linked to the disciplines of reading and mathematics detected by standardized tests. The results of this contribution suggest that the strengths/weaknesses of full time in understanding if this modalities contributes to student well-being, are to be found in other types of skills such as some soft skills (development of interpersonal skills, civic sense etc.) and to be understood through surveys, also qualitative, linked to the characteristics of family choices.

References

- Aronson J., Zimmerman J., & Carlos L. (1998). *Improving Student Achievement by Extending School: Is It Just a Matter of Time*. San Francisco, CA: WestEd.
- Aymone, T. (1972). *La scuola dell'obbligo. La città operaia*. Bari, Italia: Laterza.
- Bovini G., De Philippis M., & Sestito P. (2016). *Time Spent at School and Inequality in Students' Learning Outcomes*. Paper presented at Seminare “Invalsi Data: a tool for research”, 17th and 18th November 2016.
- Cerini, G., & Spinosi, M. (2002). *La riforma della scuola. La Nuova proposta*. Napoli, Italia: Tecnodid.
- Decataldo, A., & Fiore, B. (2018). *Valutare l'istruzione. Dalla scuola all'università*. Roma, Italia: Carocci.

- Gromada, A., & Shewbridge, C. (2016). Student Learning Time: A Literature Review. *OECD Education Working Papers*, 127. Paris, France: OECD Publishing. doi:10.1787/5jm409kqqkjh-en
- Invalsi. (2017). *Rapporto Nazionale sugli apprendimenti, 2016-2017*. Roma. Retrieved from https://INVALSI-areaprove.cineca.it/docs/file/Rapporto_Prove_INVALSI_2017.pdf
- Miur. (2015). Focus “Le iscrizioni al primo anno delle scuole primarie, secondarie di primo e secondo grado del sistema educativo di istruzione e formazione”. Servizio Statistico Miur, Roma. Retrieved from http://www.istruzione.it/allegati/2015/Focus_iscrizioni_as2015_2016_publicazione.pdf
- OECD. (2016). *How is learning time organized in primary and secondary education?*. Paris, France: OECD Publishing.
- Pinter, A. (1986). *Quale scuola per quale famiglia? Aspirazioni scolastiche e cultura familiare*. Bologna, Italia: Cappelli Editore.
- Salovey, P., & Mayer, J. D. (1990). *Emotional Intelligence, in Imagination, Cognition, and Personality*. : New York, NY: Baywood Publishing Co. Amityville.
- Tuttoscuola. (2017). *In crescita continua il tempo pieno nella primaria*. Retrieved from <https://www.tuttoscuola.com/crescita-continua-tempo-pieno-nella-primaria/>
- Willms, J. D. (2002). *Ten hypotheses about socio-economic gradients and community differences in children's developmental outcomes*. Ottawa, ON: Applied Research Branch of Human Resources Development

What are the functions of positive emotions in fostering school engagement in primary school (and how to deal with it)?

Philippe Gay¹, Nicolas Bressoud¹, Elena Lucciarini¹, Jean-Marc Gomez¹, Jérôme Rime¹ and Andrea C. Samson²

¹ Haute Ecole Pédagogique du Valais

² Université de Fribourg

Introduction

The main goal of teachers is without doubt helping students to learn and succeed. Previous research has shown that negative (sadness, frustration) as well as positive (happiness, pride) emotions are frequent in the school context and affect school engagement, which plays a key role in successful learning.

It is well established that school engagement is particularly important for achievement (e.g., Pekrun & Linnenbrink-Garcia, 2012; Pietarinen, Soini, & Pyhältö, 2014). It is also associated with academic motivation and prevents school dropout (Fredricks, Blumenfeld, & Paris, 2004). Engagement is an umbrella term that encompasses a variety of actions, emotions and thoughts. The most recent attempt to develop a comprehensive approach of this concept has empirically distinguished three dimensions in school engagement (Fredricks et al., 2004): behavioural, emotional and cognitive.

Behavioural engagement refers to behaviours such as following the school and the class rules (e.g. not skipping school or getting into trouble, homework), making effort and persisting in academic achievement (e.g., focusing and asking questions) and non-academic school-related activities (e.g., participation in athletics or school governance).

Emotional engagement relates to students' positive and negative reactions in the classroom; these reactions (e.g., interest, boredom, happiness, sadness, anxiety) are supposed to engage or disengage students.

Finally, cognitive engagement focuses on psychological investment in learning, a desire to go beyond the requirements of the teacher, and a preference for challenge.

Regarding the factors related to engagement, Pekrun, Goetz, Frenzel, Barchfeld, and Perry (2011) found higher correlations between intrinsic motivation (including school engagement) and positive emotions than between intrinsic motivation and negative emotions. Similarly, Malmivuori (2001) showed that perseverance is almost independent from anxiety but strongly correlated with positive emotions. Therefore, positive emotions in the classroom seem to play a more important contribution to students' engagement than the inhibitory role of anxiety.

In an attempt to clarify the underlying mechanisms of engagement, some researchers proposed that positive emotions lead students to focus more on the task (Meinhardt & Pekrun, 2003) and increase perseverance (Rodríguez, Plax, & Kearney, 1996). Moreover, a virtuous circle can be described. Positive attitudes imply better results, which in turn leads students to perceive their learning even more positively (Hagenauer & Hascher, 2014). Research has also shown that positive emotions can broaden the scope of attention (Fredrickson & Branigan, 2005). Indeed, positive emotions play a role in complex problem-solving skills by helping to approach the learning situation with divergent and creative solutions (Fredrickson, 2001).

Interestingly, positive emotions are essential to psychological well-being (Seligman, 2011; Diener, Suh, Lucas, & Smith, 1999; Ryff, 1989) as defined by Diener et al. (1999) as “a broad category of phenomena that includes people’s emotional responses, domain satisfactions, and global judgments of life satisfaction” (p. 277). Thus, what some people call a good life may be a life where good (positive) experiences play an important role and at school, this may be characterized by pleasant work as well as good relationships with classmates and teachers. We propose to use the term positive feelings (of students) to more precisely define the subjective emotional experience component of emotion and thus avoid considering other aspects of emotions such as physiological changes (Scherer, 2005).

In this context, positive feelings related to school and teachers as well as more general well-being and positive emotions play a crucial role in school engagement. However, it is important to clarify what kind of positive feelings and in which context they can foster school engagement. In this context, it could be very helpful for teachers to better know how and when feeling good can have an impact on their students’ engagements.

Research question and aims

The aim of this study is to better understand which types of positive feelings are related to engagement with pupils between 8 and 12 years in the school context. Insight into these associations may lead to promotion of good practices on what a teacher can do to increase students’ engagement, which is known for predicting academic achievement.

Methodology and methods

A total of 146 children (66 females) between 8 and 12 years old ($m=9.61$, $sd=1.15$) completed the following questionnaires:

- The KidScreen (Ravens-Sieberer et al., 2008) with the five subscales Physical Well-Being (4 items, $\alpha=.63$), Psychological Well-Being (3 items, $\alpha=.55$), Peers and Social Support (4 items, $\alpha=.82$), School Environment (4 items, $\alpha=.80$) and social acceptance (3 items, $\alpha=.77$).
- The school engagement measure (SEM; Fredricks, Blumenfeld, Friedel, & Paris, 2005; French validation: Bernet, Karsenti, & Roy, 2014) with three dimensions: behavioural engagement (4 items, $\alpha=.61$), emotional engagement (6 items, $\alpha=.81$) and cognitive engagement (7 items, $\alpha=.71$).

Analyses and results

Correlational analyses revealed that both school environment’s positive feelings and physical well-being are positively related to the three dimensions of school engagement. Psycho-

logical well-being is positively related to behavioral and affective engagement, and social support is positively related to affective engagement.

Multiple regression analyses including gender, age and the five dimensions of the KidScreen as independent variables revealed the following significant results, each presented by order of magnitude of the standardized beta (β):

- Behavioural engagement was predicted by School Environment ($\beta = .487$; $p < .001$), physical well-being ($\beta = .199$; $p < .05$) and gender ($\beta = -.158$; $p < .05$; indicating that girls obtained higher scores than boys).
- Emotional engagement was predicted by School Environment ($\beta = .585$; $p < .001$).
- Cognitive engagement was predicted by School Environment ($\beta = .289$; $p < .001$) and age ($\beta = -.183$; $p < .001$).

Discussion

In accordance with previous results and suggestions, the present study emphasizes that positive feelings about school and teachers are important to promote students' engagement, which could ultimately lead to learning and achievement. The results showed that feeling good in school and getting along with teachers are related to the three forms of school engagement whereas physical well-being is also a significant predictor of behavioural engagement.

While psychological well-being is positively correlated with affective and behavioural engagement, these relations disappear when other dimensions of the kidscreen are controlled for. This indicates that a positive feeling specifically related to school context is more important than general dimensions of well-being to improve these two forms of engagement.

Several approaches have shown to be efficient at adaptively increasing positive emotions and well-being in school as well as to developing a positive climate in the classroom and foster students' academic performance (for a review, see e.g., Waters, 2011). For instance, interventions in positive psychology, such as gratitude, mindfulness or strengths-based approaches could be of interest. In this context, the present study may lead to such projects' implementation in schools underlining that interventions addressing the positive climate are crucial not only for feeling good but also for academic achievement.

Limitations and perspectives

Despite promising results, several limitations should be mentioned. The correlational nature of the present study precludes any causal inferences about the relations; the use of questionnaires may have different biases; finally, the dimensions of positive emotions and well-being should be more developed and with measurement of fine-grained. Thus, future studies should use a longitudinal design, direct observations (e.g., dropout or perseverance in different tasks for engagement) as well as distinguishing different forms of positive and negative school climates (e.g., authoritarian vs democratic).

In conclusion, giving time to positive emotions and school climate is important if teachers aim to increase school engagement in their pupils.

References

- Bernet, E., Karsenti, T., & Roy, N. (2014). Mesure de l'engagement scolaire. Engagement scolaire en milieux défavorisés: traduction et validation exploratoire d'une échelle de mesure. *Educational Journal of the University of Patras Unesco Chair*, 1(1), 20–33.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276–302.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218–226.
- Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition & Emotion*, 19(3), 313–332. doi:10.1080/02699930441000238
- Fredricks, J. A., Blumenfeld, P., Friedel, J., & Paris, A. (2005). School Engagement. In K. A. Moore & L. H. Lippman (Eds.), *What do children need to flourish: Conceptualizing and measuring indicators of positive development* (pp. 305–321). New-York, NY: Springer Science & Business Media.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of educational research*, 74(1), 59–109.
- Hagenauer, G., & Hascher, T. (2014). Early adolescents' enjoyment experienced in learning situations at school and its relation to student achievement. *Journal of Education and Training Studies*, 2(2), 20–30. doi:10.11114/jets.v2i2.254
- Malmivuori, M. L. (2001). *The dynamics of affect, cognition, and social environment in the regulation of personal learning processes: The case of mathematics* (Doctoral dissertation, University of Helsinki, Finland). Retrieved from <https://helda.helsinki.fi/bitstream/handle/10138/19814/thedynam.pdf?sequence=2>
- Meinhardt, J., & Pekrun, R. (2003). Attentional resource allocation to emotional events: An ERP study. *Cognition and Emotion*, 17(3), 477–500. doi:10.1080/02699930244000039
- Pekrun, R., Goetz, T., Frenzel, A. C., Barchfeld, P., & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The Achievement Emotions Questionnaire (AEQ). *Contemporary educational psychology*, 36(1), 36–48.
- Pekrun, R., & Linnenbrink-Garcia, L. (2012). Academic emotions and student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 259–282). New York, NY: Springer.
- Pietarinen, J., Soini, T., & Pyhältö, K. (2014). Students' emotional and cognitive engagement as the determinants of well-being and achievement in school. *International Journal of Educational Research*, 67, 40–51. doi:10.1016/j.ijer.2014.05.001
- Ravens-Sieberer, U., Gosch, A., Rajmil, L., Erhart, M., Bruil, J., Power, M., ... Phillips, K. (2008). The KIDSCREEN-52 quality of life measure for children and adolescents: Psychometric results from a cross-cultural survey in 13 European countries. *Value in Health*, 11(4), 645–658.
- Rodríguez, J. I., Plax, T. G., & Kearney, P. (1996). Clarifying the relationship between teacher nonverbal immediacy and student cognitive learning: Affective learning as the central causal mediator. *Communication education*, 45(4), 293–305. doi:10.1080/03634529609379059
- Ryff, C. D. (1989). Happiness is Everything, or Is It? Exploration on the Meaning of Psychological Well-Being. *Journal of Personality and Social Psychology*, 57, 1069–1081. doi:10.1037/034645
- Scherer, K. R. (2005). What are emotions? And how can they be measured? *Social science information*, 44, 695–729. doi:10.1177/0539018405058216
- Seligman, M. E. P. (2011). *Flourish*. New York, NY: Free Press.

Waters, L. (2011). A review of school-based positive psychology interventions. *The Educational and Developmental Psychologist*, 28, 75-90. doi:10.1375/aedp.28.2.75

Music education and emotional engagement

Angelika GÜSEWELL¹

¹ Haute Ecole de Musique Vaud Valais Fribourg, Haute Ecole Spécialisée de Suisse occidentale

Introduction

Within the context of an increased questioning of the meaning and value of music education, the evidence of a link between the sensitivity to artistic and the sensitivity to other types of beauty, moral beauty in particular, is of interest, as such a link allows for the assumption that fostering the sensitivity to aesthetic beauty within the scope of music or art education may have an impact on the sensitivity to non-aesthetic beauty. However, this assumption pre-supposes that music education actually fosters the sensitivity to aesthetic beauty – which has not been empirically confirmed yet.

The present study is based on the recognition that all models of the sensitivity to beauty and goodness highlight the importance of emotional engagement for beauty and goodness to be experienced. This, in turn, raises the question whether or not music lessons (i.e. school music lessons) elicit such emotional involvement. The main aim therefore is to investigate whether or not pupils experience emotional involvement, and how they describe it. Furthermore, it will be of interest what conditions and factors seem to facilitate emotional involvement (or engagement) within the scope of formal music education.

Whereas a number of studies have examined why music is important to adolescents (e.g., North, Hargreaves, & O'Neill, 2000; Reed, Kubey, & Coletti, 1989; Tarrant, North, & Hargreaves, 2002;) and showed that among other effects music fulfills their emotional needs (North et al., 2000), little is known on emotional experience and emotional engagement in the context of formal art education, as well as conditions and factors that might facilitate such experience or involvement.

A study by Campbell and colleagues (2007) investigated the significance of music and music education to middle and high school adolescents. The participating adolescents were heavily invested in the emotional benefits of music; they considered it as a means of self-expression, emotional release and control, and as an acceptable way to vent their feelings or to cope with the challenges of adolescence. Asked about important factors for music classes, they mentioned the teacher's love for music, passion, and competence; furthermore, the instruments offered. However, in most cases, they reported on experiences of boredom, lack of challenge and lack of interest. Bakker (2005) could show that there exists a positive relationship between music teachers' flow (absorption, work enjoyment, and intrinsic work motivation) and the experience of flow among their students.

Research question and objectives

In the face of this lack of empirical data on pupils emotional engagement during school music classes, the present research aimed at investigating (a) whether or not pupils experience emotional involvement during school music lessons, (b) how they describe it (i.e., which emotions are mentioned), and (c) which factors seem to elicit or facilitate such involvement. Two studies were set up to answer these questions, the first qualitative, the second quantitative.

Method and results – Study I

Data collections and participants

Instead of interviewing them, adolescents aged 12 to 18 and living in Lausanne were invited to take part in an essay-writing contest on the theme of music lessons. The idea behind this approach was that the description by participants of what is relevant to them in music lessons would thus not be gleaned from research questions created by adults, but rather capture the complex reality of adolescents' experiences with music in formal educational contexts (the instruction given was to write a text of 1000-3000 characters (including spaces) on at least two of the following aspects: Music classes: courses like any other? How can music classes make you enthusiastic? Music lessons: homework or pleasure? What do you think, what do you feel during music lessons? How would an ideal music course be? Goosebumps during music class, does it happen to you? Is making music like playing sports?). To ensure that as many young people as possible would be aware of the contest, all members of the Société Vaudoise des Maîtres de Musique (SVMM) were contacted by email on this subject and encouraged to share information with their students. Furthermore, flyers and posters were sent to the city and canton leisure centers. Forty-three participants (26 girls, 17 boys) prepared a contribution during their leisure time and submitted it together with basic socio-demographic indications (i.e. age, sex, and grade). A jury consisting of professional musicians and music teachers, as well as journalists evaluated the texts and decided on the winners. Sponsors offered prizes (e.g. concert and cinema tickets, vouchers for books).

Data analysis and results

All essays were content analyzed with HyperResearch taking a directed approach. Initial coding categories were derived from the research questions, namely: (a) which activities, situations, musical contents, persons, or relationships do adolescents describe in their texts; (b) which of these activities, situations, musical contents, persons, or relationships are experienced as relevant and why; (c) by what feelings or emotions are these activities, situations, musical contents, persons, or relationships accompanied? Any text passage that did not fit within one of the initial coding categories was assigned a new code, thus extending and refining the coding scheme. Participants addressed seven main topics in their texts: the importance of classmates and teachers, the aspects they like best or do not like about music classes, emotions and feelings linked with music classes, the meaning of music in their lives, and general thoughts on school music classes. By far the majority of the writing contest participants described music classes as moments of enjoyment, joy, fun, or pleasure, sometimes accompanied by feelings of relaxation or well-being; only a few adolescents reported on boredom or stress. Experiences of social flow (Walker, 2010), the overall good atmosphere in class and teachers' endeavors to share their passion for music with students seemed to play a more important role for subjective emotional experience, whether positive

or negative, than the musical pieces or styles studied in class. The data did not support the idea that music lessons might favor the experience of self-transcendent emotions (i.e. awe, elevation, admiration): none of these emotions or of the typically associated bodily changes or reactions (e.g. shivers, goose bumps, lump in the throat) appeared in adolescents' texts.

Method and results – Study I

Data collection and participants

The principals of three secondary schools or gymnasiums of the cantons of Vaud, Valais and Geneva were contacted to ask them first for permission to administer a questionnaire to some of their students, and then for the contact details of music teachers working at 60% or more in their institution. These teachers were contacted by email to present the project and ask them if they would agree to organize the completion of the questionnaires in all the classes they would meet during the last week before the summer holidays. Five teachers showed interest and were provided with all documents and information needed.

A sample of $N = 237$ adolescents (133 girls, 104 boys) aged 12 to 18 ($M = 13.93$) filled in a questionnaire created on the basis of existing measurement instruments and the writing contest submissions. The first section concerned socio-demographics (i.e. age, sex, school grade), extra-curricular musical activities (i.e. taking music lessons, playing one or several instruments, improvising), and everyday music listening (i.e. favorite music styles, hours of music listening a day, music listening while doing homework). The second section addressed psychological functions of music in adolescence (i.e. different areas of psychological goals or functions that are central to adolescent development and mental health and can be supported by musical activity) as described in Laiho (2004), construction and strengthening of identity, emotional regulation, management of interpersonal relationships, and agency (i.e. feeling of control, competency, achievement, and self-esteem). This section consisted of nine items on 5-point rating scales (from "I strongly disagree" to "I totally agree") derived either from the Music Use Questionnaire (MUSE; Chin & Rickard, 2012), or from the writing contest submissions. The third section concerned adolescents' subjective well-being at school. It comprised eight items on 5-point rating scales (from "I strongly disagree" to "I totally agree") that referred to three of the six scales of the Student Well-being Questionnaire (SWBQ; Hascher, 2007), namely positive attitudes towards school, positive academic self-concept, and enjoyment in school. The fourth section, finally, covered the main ideas expressed by the writing contest participants with regard to school music classes. It comprised 14 items on 5-point rating scales (from "I strongly disagree" to "I totally agree") that took the exact wordings of the young authors. Students filled in the paper-pencil survey as part of a music lesson.

Data analysis and Results

A Varimax rotated principal component analyses was carried out for each section of the questionnaire, except for the first section that concerned socio-demographic indications. In a next step, mean scores, standard deviations skewness and kurtosis were computed for all resulting subscales. It appeared from these descriptive statistics that adolescents seem to engage deeply in music they listened or play out of school (e.g. music evokes strong emotions in them, changes their mood, allows them to express their feelings, or helps them to overcome difficult moments in life), whereas the musical activities and the music pieces or styles approached at school seem to elicit considerably less emotional engagement. None-

theless, the atmosphere of school music classes and the music teachers were highly valued and rated positively. In a final step, all subscales were correlated with each other and with demographics. Young women seemed to feel (and to describe themselves) as more involved in music, and more engaged in music classes than young man. Adolescents' emotional involvement during school music classes correlated highly significantly with the importance of music to them outside school, as well as with the fact that they played (or not) an instrument – a finding that makes sense, but for which empirical evidence was lacking so far (at least to our knowledge).

Discussion

The main objective of the present research was to investigate whether or not pupils report on emotional involvement during school music classes, and how they describe it. A further objective of the study was to explore conditions and factors that seem to facilitate emotional involvement within the scope of formal music education. Two studies were undertaken to answer these questions: the first one, qualitative, to explore students' experience and capture the way they describe it, the second one, quantitative, to check if the views thus expressed are consistent with the ones of a larger and more representative sample of adolescents.

By far the majority of the writing contest participants describe music classes as moments of enjoyment, joy, fun, or pleasure, sometimes accompanied by feelings of relaxation or well-being; only a few adolescents report on boredom or stress. Experiences of social flow (Walker, 2010), the overall good atmosphere in class and teachers' endeavors to share their passion for music with students seem to play a more important role for subjective emotional experience, whether positive or negative, than the musical pieces or styles studied in class. The data do not support the idea that music lessons might favor the experience of self-transcendent emotions (i.e. awe, elevation, admiration) and could thus foster the sensitivity to beauty and goodness: none of these emotions or of the typically associated bodily changes or reactions (e.g. shivers, goose bumps, lump in the throat) appear in adolescents' texts.

The questionnaire, in turn, confirms the fact that most adolescents rate their music teacher and the atmosphere in music classes positively. Not surprisingly and in line with the literature, it evidences the important role music has in adolescents' lives, particularly with regard to emotion and mood regulation. Furthermore, data show that involvement in music strongly correlates with engagement in music lessons, a finding that makes sense but for which empirical evidence was lacking so far (at least to our knowledge). Data also show that there is a statistically highly significant link between extra-scholar music activities and emotional engagement in music lessons, respectively experiencing music lessons as a special school subject.

The present research gives valuable first insight into the conditions and factors that elicit and foster emotional involvement in the context of formal music education, and into the way that adolescents describe such involvement. Additionally, it allowed for the development and initial validation of a short questionnaire that captures adolescents' relation to music, well-being at school and experience of school music lessons, thus opening the door to further studies on this relatively new, but important field of research.

At a time when music education in schools is being questioned, it is not enough to argue that music education and musical practice foster the intelligence, academic achievement and social development of children and adolescents. The more intrinsic value of music education and musical practice for the individual (e.g. their link with positive characteristics and positive emotions), as well as the conditions and factors necessary for them to contribute to the positive development of young human beings (e.g. positive institutions) should be addressed as well – on the basis of sound scientific knowledge that is currently lacking.

References

- Bakker, A. B. (2005). Flow among music teachers and their students: The crossover of peak experiences. *Journal of Vocational Behavior, 66*(1), 26-44. doi:10.1016/j.jvb.2003.11.001
- Campbell, P. S., Connell, C., & Beegle, A. (2007). Adolescents' Expressed Meanings of Music in and out of School. *Journal of Research in Music Education, 55*(3), 220-236. doi:10.1177/002242940705500304
- Chin, T. C., & Rickard, N. S. (2012). The music USE (MUSE) questionnaire: An instrument to measure engagement in music. *Music Perception, 29*(4), 429-446. doi:0.1525/mp.2012.29.4.429
- Hascher, T. (2007). Exploring students' well-being by taking a variety of looks into the classroom. *Hellenic Journal of Psychology, 4*, 331-349. Retrieved from <http://www.pseve.org/journal/upload/hascher4c.pdf>
- Laiho, S. (2004). The Psychological Functions of Music in Adolescence. *Nordic Journal of Music Therapy, 13*(1), 47-63. doi:10.1080/08098130409478097
- Reed, L., Kubey, R., & Colletti, J. (1989). Changing channels: Early adolescent media choices and shifting investments in family and friends. *Journal of youth and adolescence, 18*(6), 583-599. doi:10.1007/BF02139075
- North, A. C., Hargreaves, D. J., & O'Neill, S. A. (2000). The importance of music to adolescents. *British Journal of Educational Psychology, 70*(2), 255-272. doi:10.1177/0305735600282005
- Tarrant, M., North, A. C., & Hargreaves, D. J. (2000). English and American Adolescents' Reasons for Listening to Music. *Psychology of Music, 28*(2), 166-173. doi:10.1177/0305735600282005
- Walker, C. J. (2010). Experiencing flow: Is doing it together better than doing it alone? *Journal of Positive Psychology, 5*, 1-9. doi:10.1080/17439760903271116

Screen time, sleep, and physical activity: associations with academic achievement among Swiss students

Laura Marciano¹ and Anne-Linda Camerini¹

¹ Università della Svizzera italiana

Introduction

The impact of screen time on children's and adolescents' well-being, including academic achievement, is subject of growing concern, particularly considering that everyday behavioral experiences affect brain and cognitive development. Previous studies reported that screen time, i.e. the total amount of time spent using a device including smartphone, tablet, computer, television, or games console, is related to decreased academic achievement because it interferes with activities such as physical activity (PA), e.g., doing sports, and sleep, which proved to directly and indirectly benefit academic achievement. Screen time is a sedentary behavior that, according to the "time displacement hypothesis", takes away valued time for PA (Sisson, Broyles, Baker, & Katzmarzyk, 2010). Evidence suggests that PA is a promising lifestyle factor in eliciting brain plasticity, and it is especially beneficial for cognition, including reaction time, attention, memory, inhibition, as well as multiple domains of academic performance (Prakash, Voss, Erickson, & Kramer, 2015). A meta-analysis, examining the association between PA and 8 cognitive categories in 4 to 18-year-old subjects, found that PA was positively associated with better functioning in all domains (Sibley & Etnier, 2003). Another review found that PA was positively associated with cognition, academic achievement, behavior and psychosocial functioning outcomes in children under 19 years of age (Lees & Hopkins, 2013). From a biological point of view, the benefits of PA include increased expression of molecules (e.g., brain-derived neurotrophic factor) in brain regions important for memory and cognition, increased cerebral blood flow and metabolism, better neurotransmitter regulation, enhanced connectivity between brain regions, and modulation of genes' expression.

Screen time also interferes with sleep, which is another pivotal factor for learning and brain development. In their review, Cain and Gradisar (2010) identified different explanations, including delayed bed time caused by late screen media use, interruptions of sleep due to incoming notifications, and poor sleep quality due to continued emotional arousal from screen time before bed time and bright light exposure caused by the presence of screen devices in the bedroom, which delays the Circadian rhythm. A recent systematic review confirmed the negative impact of screen time on sleep time and sleep quality, leading to adverse outcomes (Hale & Guan, 2015). Inadequate sleep has been associated with negative health outcomes in youth in several areas of health and functioning, such as somatic and psychosocial health (e.g., increased BMI, overweight and obesity, cardiovascular risk,

somatic complaints, fatigue, as well as depression, anxiety, inattention), risk taking behaviors (e.g., smoking, alcohol, and substance use), as well as academic performance (Shochat, Cohen-Zion, & Tzischinsky, 2014). On the other hand, good sleep quality and quantity proved to be positively associated with general cognition and academic achievement. For example, a meta-analysis reported that longer sleep duration is related to increased intelligence quotient (IQ) and verbal skills in children aged 6 to 13 years (Short et al., 2018). The role of sleep in learning can be well understood for its implications in memory consolidation, during which memory traces are reactivated, analyzed, and included in long-term memory (Maquet, 2001).

Given the evidence on the negative impact of screen time on PA and sleep, different national and international guidelines were formulated. For example, according to the World Health Organization, the American National Sleep Foundation, and Health Promotion Switzerland, children and adolescents should spend at least 60 minutes doing moderate to vigorous PA on a daily basis. Furthermore, they should sleep from 9 to 11 hours per night uninterruptedly, and they should spend no more than 2 hours daily with screen-time activities. Given that many of these guidelines are very recent yet heavily promoted, research is needed to investigate if they are actually met and, if so, what effects met vs. unmet guidelines have on academic achievement as a sub-dimension of well-being.

Research objectives

The aim of the present study is to investigate if meeting none, one, two or all of the three (inter-) national guidelines for PA, sleep, and screen time is associated with better academic achievement (measured with overall, artistic, and scientific end-term grades) in a cohort of Swiss middle-school students.

Methodology

Sample

In the current study, we used data from the fifth wave of the ongoing longitudinal MEDI-ATICINO2.0 study, which follows students from childhood to adolescence in Canton Ticino, Italian-speaking Switzerland. The study combines students' self-report with actual end-term school grades by the means of a unique identifier. Given that anonymity of students is fully guaranteed, the regional education administration approved the study design. The fifth wave was collected in 2018, when 1419 questionnaires were distributed among 3rd grade middle school students in 35 public and two private middle schools. Of these, 1374 (97%) were returned. The analytical sample included 1061 students (M age = 13.55, SD = .60) of which 548 (51.6%) were females and 71.5% reported to have a good to very good socio-economic status.

Measures

Screen time. Screen time includes estimates for five different screen-related activities, i.e. time spent watching television, playing videogames, surfing on the Internet, using a smartphone, and social networking. Students were asked to indicate, on a scale with nine time interval, how much time on a typical school day and on a weekend day they spend for each activity. Daily recreational screen time was calculated by taking a weighted average of all

screen-related activities during weekdays and the weekend: $([\text{sum of weekday screen time} \times 5] + [\text{sum of weekend day screen time} \times 2]) / 7$. The total mean screen time reported among all activities falls in the range from 1 to 2 hours ($M = 3.19$, $SD = 1.58$).

Sleep time. Sleep time was calculated from students' indications on when they went to bed the day before and when they got up on the data of questionnaire completion (M hours = 8.30, $SD = 1.00$).

Physical activity. PA was measured asking students to indicate how much time, on a typical school day, they spend doing sports. The majority of students reported to spend up to 2 hours of PA per day (Mode = 4.00, IQR = 2.00 – 5.00).

End-term grades. All grades were provided by the Cantonal educational administration at the end of the school year. They included Italian, math, science, history, geography, music, visual art. For the analyses we pulled them together in a general end-term score ($M = 4.79$, $SD = .52$). Moreover, we divided the final grades in artistic (music + visual art + Italian) and scientific subjects (science, history, geography, and math).

Covariates. We included the following variables as covariates: gender, socio-economic status (SES), body mass index (BMI), and stressful life events (none, one, or more than one). Stressful life events included, among others, parents' divorce, a parent's loss of job, a familiar who deceased or had a serious disease, and worsening of a significant relationship (e.g., with parents, a teacher, or friend).

Statistical analyses

Since data collection was organized at school level, participant-level associations between self-report predictor variables and end-term grades were fitted using multivariate linear mixed-effects (random intercepts) models, nesting participants' grades within schools ($N = 37$). Using a multilevel modeling allows to estimate separately the variance between students within the same school, and the variance between schools. At the first step (Model 1), we tested the model including only the random intercepts and the covariates (following the work by Walsh et al., 2018). Next, we included participants' screen time, PA, and sleep (Model 2). In particular, we were interested in estimating the effects of meeting only one recommendation (screen time or sleep or PA), two recommendations (screen time + sleep, screen time + PA, PA + sleep), or all three recommendations compared to none (reference level). We ran two models for every outcome, i.e. overall end-term grades, grades for artistic subjects, and grades for scientific subjects, comparing the model fit indices and the explained variance (R^2 squared) between Model 1 and Model 2 for each outcome. In all models, parameter estimates were calculated with a maximum likelihood algorithm, using "lme4" package in R software.

Results

Among all students, 20% ($N = 212$) did not meet any of the recommendations, 45.1% ($N = 479$) met one of them, 25.4% ($N = 269$) met two, and only 9.5% ($N = 101$) met all three recommendations. Among students who met one recommendation, 37.3% ($N = 396$) reported to do at least 60 minutes of PA per day, 4.5% ($N = 48$) reported to sleep for at least 9 hours, and only 3.6% ($N = 38$) reported to spend no more than 2 hours on screen leisure activities. Among students

who met two recommendations, 9% ($N = 95$) followed guidelines for PA + screen time, 11.7% ($N = 124$) for PA + sleep, and 4.4% ($N = 47$) for sleep + screen time.

All the models including PA, sleep, and screen time fitted better and explained more variance ($R^2 = .150$) compared to the baseline model (Model 1, $R^2 = .122$) including only covariates. Engaging in at least 60 minutes per day in PA was linked to overall better academic achievement ($\beta = .129, p = .001$), so was meeting recommendations for PA + screen time ($\beta = .354, p < .001$), PA + sleep ($\beta = .176, p = .001$), and sleep + screen time ($\beta = .319, p < .001$). As expected, meeting all recommendations led to better end-term grades ($\beta = .190, p = .001$), too. Among covariates, having a good or very good SES ($\beta = .081, p < .001$) and being female ($\beta = .231, p < .001$) were positively associated with academic achievement. On the other hand, having experienced more than two stress events ($\beta = -.084, p = .028$) and a higher BMI ($\beta = -.017, p = .001$) led to worse grades. Similar results were found by separating between grades for artistic and scientific subjects as the outcomes. Considering that, in Canton Ticino, the school system introduces two difficulty levels (track A and B) at 3rd grade middle school for mathematics and Italian, the model was tested with and without controlling for these tracks¹.

Discussion

Past research provided evidence for the detrimental effect of increased screen time on youth well-being, including cognitive development and academic achievement. This effect can be explained by different mechanisms including displacement of time for beneficial activities such as PA and sleep, but also biological and cognitive processes associated with screen time. These findings have led to the formulation of (inter-) national guidelines for PA, sleep, and screen time with the aim to promote a healthy lifestyle and development from an early age. The question remains if (1) the guidelines are actually met and (2) what is the effect of met recommendations on developmental outcomes, including academic achievement. The result of our study on a Swiss middle-school cohort mirror those from previous studies in other cultural contexts (e.g., Keane, Kelly, Molcho, & Gabhainn, 2017; Walsh et al., 2018), i.e. meeting at least two of the three recommendations leads to better outcomes, especially if these recommendation involve PA and screen time. However, in Canton Ticino, the number of students following two or three guidelines is still low, hence people involved in education (e.g., teachers) as well as families (e.g., parents) should help students to better understand the positive and negative effects of following or not behavioral recommendations and promote sufficient PA and sleep while limiting screen time.

To conclude, some limitations should be acknowledged. First, self-reported data are at risk of recall and estimation bias, which we cannot control for in the analysis. Additionally, the study uses cross-sectional data with limited possibilities to conclude on causality. Hence, longitudinal data should be included in the future to re-evaluate these results.

1. Potential differences will be discussed during the presentation.

References

- Cain, N., & Gradisar, M. (2010). Electronic media use and sleep in school-aged children and adolescents: A review. *Sleep Medicine, 11*, 735-742.
- Hale, L., & Guan, S. (2015). Screen time and sleep among school-aged children and adolescents: a systematic literature review. *Sleep medicine reviews, 21*, 50-58
- Keane, E., Kelly, C., Molcho, M., & Gabhainn, S. N. (2017). Physical activity, screen time and the risk of subjective health complaints in school-aged children. *Preventive medicine, 96*, 21-27.
- Lees, C., & Hopkins, J. (2013). Peer reviewed: effect of aerobic exercise on cognition, academic achievement, and psychosocial function in children: a systematic review of randomized control trials. *Preventing chronic disease, 10*.
- Maquet, P. (2001). The role of sleep in learning and memory. *Science, 294*(5544), 1048-1052.
- Prakash, R. S., Voss, M. W., Erickson, K. I., & Kramer, A. F. (2015). Physical activity and cognitive vitality. *Annual review of psychology, 66*, 769-797.
- Shochat, T., Cohen-Zion, M., & Tzischinsky, O. (2014). Functional consequences of inadequate sleep in adolescents: a systematic review. *Sleep medicine reviews, 18*(1), 75-87.
- Short, M. A., Blunden, S., Rigney, G., Matricciani, L., Coussens, S., Reynolds, C. M., & Galland, B. (2018). Cognition and objectively measured sleep duration in children: a systematic review and meta-analysis. *Sleep health, 4*(3), 292-300.
- Sibley, B. A., & Etnier, J. L. (2003). The relationship between physical activity and cognition in children: a meta-analysis. *Pediatric exercise science, 15*(3), 243-256.
- Sisson, S. B., Broyles, S. T., Baker, B. L., & Katzmarzyk, P. T. (2010). Screen time, physical activity, and overweight in US youth: national survey of children's health 2003. *Journal of Adolescent Health, 47*(3), 309-311.
- Walsh, J. J., Barnes, J. D., Cameron, J. D., Goldfield, G. S., Chaput, J. P., Gunnell, K. E., ... Tremblay, M. S. (2018). Associations between 24 hour movement behaviours and global cognition in US children: a cross-sectional observational study. *The Lancet Child & Adolescent Health, 2*(11), 783-791.

Smartphone overuse, attention problems, and media multitasking: their associations with academic achievement in Swiss students

Laura Marciano¹ and Anne-Linda Camerini¹

¹ Università della Svizzera italiana

Introduction

Today's adolescents have quickly become used to a multitude of media contents, which they can easily access on their smartphone devices. In Switzerland, 99% of adolescents owned a smartphone in 2018, on which they spent, on average, almost 3.5 hours during a weekday and 4.5 hours during a weekend day. Instant messaging, listening to music, social networking, and watching online videos were among the most favorite activities (Süss et al., 2018). The ubiquity of smartphone devices in adolescents' lives has led to a substantial increase in media multitasking, commonly defined as either concurrently engaging in two or more media activities or using media during offline activities (e.g. while doing homework). Previous research on media multitasking in adolescents focused on negative outcomes, including, among others, limited cognitive control capacities and lower academic achievement (for a review see van der Schuur, Baumgartner, Sumter, & Valkenburg, 2015). These outcomes can be theoretically explained with, for example, the "scattered attention hypothesis" (Maté, 2011), supporting that adolescents who frequently multitask on several media have more difficulties in filtering relevant information from their environment due to scattered attention developed during parallel media exposure. Thus, they are more easily distracted in both online and offline contexts, with negative consequences for cognitive control processes and academic achievement. Additionally, according to the "limited information processing capacity hypothesis" (May & Elder, 2018), the brain has a finite capacity of processing incoming environmental stimuli, in that it tends to focus on the most relevant ones. Adolescents' attention capacity, influenced by media multitasking as just described, determines the quality of information processing as well as the memory of information and the speed and the accuracy of the response. In other words, the parallel use of different media devices impacts the capabilities of functioning, reasoning, and remembering information in the offline context (e.g., classroom, homework) (Aagaard, 2019), with negative consequences for academic achievement in youth (van der Schuur et al., 2015).

Nowadays, much media multitasking involves activities on a smartphone while being exposed to other media stimuli (e.g., TV), especially when people have problems putting down their smartphone for a longer time. New media provides quick and easy gratifications, hence young generations are more willing to use digital devices to seek short gratifications, particularly when the first ongoing task (e.g., studying) is not enough gratifying. As such, media multitasking is considered to be a consequence of smartphone overuse, or addiction,

described here as an excessive use and lack of control due over the device to, including activities which have addictive, compulsive and/or impulsive elements, as well as a strong attachment to the device. Hence, smartphone overuse has been broadly described as an antecedent of media multitasking (Jeong & Fishbein, 2007).

Furthermore, media multitasking is determined by more general attention problems and hyperactivity, which manifests, among others, in the attention deficit hyperactivity disorder (ADHD) symptomatology. Adolescents with an ADHD-related symptomatology prefer immediate over long-term rewards: they have been described as indulging in playing video games, watching television, and surfing on Internet for longer time period, for their ever-changing modality, novelty and multi-modal richness, while they are unwilling to involve in more mental demanding tasks (Nikkelen, Valkenburg, Huizinga, & Bushman, 2014). Moreover, as youths with inattention and hyperactivity problems, they also have been positively associated with Internet addictive behaviors. One explanation is that they are inclined to adopt internet-related activities, e.g. multitask behaviors, to seek greater stimulation and reward (Yoo et al., 2004).

Attention problems and smartphone overuse are also directly associated with worse academic achievement. More precisely, adolescents with attention problems are considered to be more at risk of significant impairment in academic functioning, due to executive functioning deficits (Biederman et al., 2004). This results in poor grades, lower reading and mathematics standardized test scores, and a greater probability of repeating a school year (Daley & Birchwood, 2010). Similarly, smartphone overuse showed to negatively impact academic achievement (Hawi & Samaha, 2016), because the constant urge to use the phone, and the stress experienced when being without it for a longer time, interferes with cognitive control needed for effective learning.

In sum, past research underlined that smartphone overuse and attention problems are both detrimental for academic achievement, and this can be partly explained by higher levels of media multitasking. However, a comprehensive study investigating these mechanisms is still missing.

Research objectives

The aim of the present study is to investigate how smartphone overuse and attention problems in Swiss adolescents impact academic achievement both directly and indirectly through media multitasking. More precisely, the following hypotheses will be tested:

HP1: Smartphone overuse is directly related to worse academic achievement.

HP2: Attention problems are directly related to worse academic achievement.

HP3: The negative relationship between smartphone use, attention problems, and academic achievement is partially mediated by media multitasking.

HP4: Smartphone overuse and attention problems correlate with each other.

Methodology

Sample

In the current study, we used data from the fifth wave of the ongoing longitudinal MEDI-ATICINO2.0 study, which follows students from childhood to adolescence in Canton Ticino, Italian-speaking Switzerland. The study combines students' self-report with actual end-term school grades by the means of a unique identifier. Given that anonymity of students is fully guaranteed, the regional education administration approved the study design. The fifth wave was collected in 2018, when 1419 questionnaires were distributed among 3rd grade middle school students in 35 public and two private middle schools. Of these, 1374 (97%) were returned, and 1244 without missing data on the variables of interest were included in the analytical sample ($M = 13.55$, $SD = .60$). The analytical sample consists of 51.4% females and 72% students with a good or very good socio-economic status.

Measures

Smartphone overuse. It was assessed with the short version of the Smartphone Addiction Scale for adolescents (Kwon, Kim, Cho, & Yang, 2013). The scale consists of 10 items with responses ranging from 1 (strongly disagree) to 5 (strongly agree) ($M = 2.03$, $SD = .92$; $\alpha = .88$).

Attention problems. They were assessed with three items adapted from the DSM-5 specifications of the ADHD symptomatology, i.e. "During the last month, ... (1) I had difficulty organizing tasks and activities"; (2) "I was not being able to pay attention when I was in class or doing homework or reading a book or playing a game"; (3) "I was easily distracted". Response options ranged from 1 (never) to 5 (almost every day) ($M = 2.30$, $SD = .93$; $\alpha = .77$).

Media multitasking. It was measured using a modified version of the scale by Baumgartner Lemmens, Weeda, & Huizinga (2016). The measure includes 16 questions asking respondents to indicate how frequently they engage in a specific media activity (i.e. watching TV, surfing on the Internet or using social networks, texting, and gaming) simultaneously with other media activities (i.e. listening to music, texting, surfing on internet or using social networks, and gaming). Response options ranged from 1 (never) to 4 (almost ever) ($M = 2.17$, $SD = .66$; $\alpha = .91$).

Academic achievement. It was measured using students' end-term grades for Italian, math, science, history, geography, and arts. In Switzerland, school grades range from 1 (insufficient) to 6 (very good). For this study, the grades for each subject were averaged to a general score ($M = 4.85$, $SD = .53$).

Statistical analyses

Preliminary statistical analyses were performed in SPSS version 24, while the partial mediation model was tested as a path model using the LAVAAN package in R software. To evaluate the model goodness of fit, different fit indices were inspected, including the Comparative Fit Index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR). Gender (0 = male, 1 = female) and socio-economic status were entered as control variables.

Results

Correlations

All variables were significantly correlated: smartphone overuse was positively related to media multitasking ($r = .41, p < .001$) and attention problems ($r = .46, p < .001$), but negatively related to academic achievement ($r = -.21, p < .001$). Attention problems were positive correlated with media multitasking ($r = .29, p < .001$) and negatively with academic achievement ($r = -.17, p < .001$). Finally, media multitasking was negatively related to academic achievement ($r = -.22, p < .001$).

Path analysis

The hypothesized model resulted in excellent model fit indices: ($\chi^2(25) = 1.212, p = .546, CFI = 1.00, SRMR = .006, RMSEA = .00, 90\% CI [.00, .049]$). Academic achievement was significantly and negatively predicted by attention problems ($\beta = -.092, p = .002$) and smartphone overuse ($\beta = -.096, p = .002$) (HP1 and HP2 supported). Furthermore, end-term grades were significantly negatively impacted by media multitasking ($\beta = -.150, p < .001$), which, in turn, was significantly positively predicted by attention problems ($\beta = .130, p < .001$) and smartphone overuse ($\beta = .348, p < .001$). The indirect effect from attention problems to academic achievement, through media multitasking, was also significant ($\beta = -.019, p < .001$) as well as the indirect effect from smartphone overuse to academic achievement ($\beta = -.052, p < .001$) (HP3 supported). Moreover, in the final model, attention problems and smartphone overuse were positively related to each other ($r = .460, p < .001$) (HP4 supported). Finally, also gender ($\beta = .254, p = .001$) and socio-economic status ($\beta = .133, p < .000$) were positively associated with the outcome. Considering that, in Canton Ticino, the school system introduces two difficulty levels (track A and B) at 3rd grade middle school for maths and Italian, the model was tested with and without controlling for these tracks¹.

Conclusion

The present study aimed to investigate the associations between smartphone overuse and attention problems and academic achievement in adolescents. As hypothesized, both directly impact academic achievement in a negative way, but also indirectly, through increased engagement in media multitasking activities².

References

- Aagaard, J. (2019). Multitasking as distraction: A conceptual analysis of media multitasking. *Theory and Psychology, 29*(1), 87-99.
- Baumgartner, S. E., Lemmens, J. S., Weeda, W. D., & Huizinga, M. (2016). Measuring media multitasking: Development of a short measure of media multitasking for adolescents. *Journal of Media Psychology: Theories, Methods, and Applications, 29*(2), 92-101.

1. Potential differences will be discussed during the presentation.
2. During the presentation, the results of this comprehensive study will be discussed in more detail with a focus on the theoretical insights from the "scattered attention hypothesis" and the "limited information processing capacity hypothesis".

- Biederman, J., Monuteaux, M. C., Doyle, A. E., Seidman, L. J., Wilens, T. E., Ferrero, F., ... Faraone, S. V. (2004). Impact of executive function deficits and attention-deficit/hyperactivity disorder (ADHD) on academic outcomes in children. *Journal of consulting and clinical psychology, 72*(5), 757.
- Daley, D., & Birchwood, J. (2010). ADHD and academic performance: why does ADHD impact on academic performance and what can be done to support ADHD children in the classroom? *Child: care, health and development, 36*(4), 455-464.
- Hawi, N. S., & Samaha, M. (2016). To excel or not to excel: Strong evidence on the adverse effect of smartphone addiction on academic performance. *Computers & Education, 98*, 81-89.
- Jeong, S. J., & Fishbein, M. (2007). Predictors of multitasking with media: Media factors and audience factors. *Media Psychology, 10*, 364-384.
- Kwon, M., Kim, D. J., Cho, H., & Yang, S. (2013). The smartphone addiction scale: development and validation of a short version for adolescents. *PLoS one, 8*(12), e83558.
- Maté, G. (2011). *Scattered minds: The origins and healing of attention deficit disorder*. Vintage Canada.
- May, K. E., & Elder, A. D. (2018). Efficient, helpful, or distracting? A literature review of media multitasking in relation to academic performance. *International Journal of Educational Technology in Higher Education, 15*(1), 13. doi:10.1186/s41239-018-0096-z
- Nikkelen, S. W., Valkenburg, P. M., Huizinga, M., & Bushman, B. J. (2014). Media use and ADHD-related behaviors in children and adolescents: A meta-analysis. *Developmental Psychology, 50*(9), 2228.
- Süss, D. D., Waller, G., Lilian, S., Gregor, W., Jael, B., Céline, K., & Isabel, W. (2018). JAMES - Youth, Activities, Media - 2018 Survey Switzerland. Retrieved from https://www.zhaw.ch/storage/psychologie/upload/forschung/medienpsychologie/james/2018/Report_JAMES_2018.pdf
- van der Schuur, W. A., Baumgartner, S. E., Sumter, S. R., & Valkenburg, P. M. (2015). The consequences of media multitasking for youth: A review. *Computers in Human Behavior, 53*, 204-215. doi:10.1016/j.chb.2015.06.035
- Yoo, H. J., Cho, S. C., Ha, J., Yune, S. K., Kim, S. J., Hwang, J., ... Lyoo, I. K. (2004). Attention deficit hyperactivity symptoms and internet addiction. *Psychiatry and clinical neurosciences, 58*(5), 487-494.

The longitudinal relation between student well-being and academic achievement

Julia Morinaj¹ and Tina Hascher¹

¹ Universität Bern

Introduction

The twenty-first century education recognizes the importance of promoting both the skills of academic achievement and the skills of well-being (Layard & Hagell, 2015). This integration contributes to establish effective learning environments as well as a firm foundation for healthy development of young children and adolescents. The weight of evidence shows that particularly during early adolescence both student well-being (SWB) and academic performance tend to decrease (e.g., Eccles, Brown, & Templeton, 2008). The present study is designed to better understand the longitudinal relationship between SWB and academic achievement among secondary school students.

Research has shown that poor SWB has been associated with lower academic performance (Ruthig, Marrone, Hladkyj, & Robinson-Epp, 2011). However, a reverse process can also be proposed, suggesting that academic achievement predicts SWB. This mechanism can be attributed to the self-determination theory (Ryan & Deci, 2000). Students whose basic needs are satisfied tend to perform better academically and experience higher SWB (Neubauer, Lerche, & Voss, 2017). It is also plausible that there is a reciprocal relation between SWB and academic achievement, that is students experiencing well-being in school gain better academic outcomes that in turn, through other mechanisms (e.g., academic motivation, teachers' positive emotions), allow students to maintain their psychological well-being (Baker, Grant, & Morlock, 2008).

The relation between SWB and academic achievement may also vary as a function of gender. Although girls often outperform boys in school, they also tend to experience more physical complaints than boys, perceive themselves more negatively than boys do, and are more prone than boys to worries over their school performance (Pomerantz, Altermatt, & Saxon, 2002). These findings suggest that student gender can play a significant role in the relation between SWB and academic achievement.

In summary, there are some disparities within the extant literature in regard to the causal direction between SWB and academic achievement. Therefore, more research is needed to further disentangle the relationship between SWB and academic achievement as well as to examine whether student gender moderates this association.

Research Questions and Objectives

The aim of the study was twofold: to apply a cross-lagged design of a model integrating SWB and academic achievement among secondary school students across three time points and to contribute to research on the relationship between SWB and academic performance, including gender as a moderator variable. In particular, separately for each SWB dimension, we simultaneously analyzed the cross-sectional correlations between the SWB dimensions and academic achievement, the temporal stability of the constructs, as well as their cross-lagged effects over time (i.e., effects of SWB on academic achievement and vice versa).

Method

Participants and procedure

The data were collected in the framework of the longitudinal three-wave project “School Alienation in Switzerland and Luxembourg” (SASAL, 2015–2019), investigating the phenomenon of school alienation across primary and secondary school students. The sample for this study consisted of 404 secondary school students (t : 55.8% female; $M_{\text{age}} = 13.0$ years [$SD = .54$]) from the Swiss canton of Bern who participated in all three waves of the study (grades 7 to 9). The survey was voluntarily and anonymously completed by students in their classrooms during regular school hours.

Measures

Student well-being. Well-being in school was assessed using the 19-item student well-being questionnaire (SWBQ; Hascher, 2007), comprising three positive and three negative dimensions of SWB: positive attitudes toward school (PAS; e.g., “I like to go to school”), enjoyment in school (EIS; e.g., “Have you experienced joy because of teachers’ friendliness in the past few weeks?”), positive academic self-concept (PASC; e.g., “I don’t have problems mastering school tasks”), worries in school (WIS; e.g., “Have you been worried about your school grades in the past few weeks?”), physical complaints in school (PCS; e.g., “Have you had severe headache in school in the past few weeks?”), and social problems in school (SPS; e.g., “Have you had problems with your classmates in the past few weeks?”). Students responded on a 6-point Likert scale (1 = never, 6 = very often). For all subscales across three waves, Cronbach’s alpha ranged from .73 to .83.

Academic achievement. Students’ academic achievement was operationalized by grade point average (GPA) in three school subjects - Mathematics, German, and French - obtained from teachers at the end of the school year. Cronbach’s alpha for the achievement score was satisfactory for all three measurement occasions ($\alpha_1 = .68$, $\alpha_2 = .63$, $\alpha_3 = .63$). The school grades in Switzerland vary from 1 to 6 (1 = lowest achievement, 6 = highest achievement).

Results

Descriptive statistics

Students’ GPA correlated positively with the positive dimensions of SWB and negatively with negative dimensions of SWB, although the correlations were relatively weak. In regard to SWB, the significant gender difference appeared in regard to physical complaints in school at all three waves, with girls experiencing more physical complaints than boys (all

$ps < .001$). At t_3 , girls exhibited more positive attitudes toward school ($p < .05$); however, they also reported more worries and more social problems in school than boys (both $ps < .05$). Furthermore, girls outperformed boys in terms of grades across all three waves (all $ps < .001$).

Measurement models

The longitudinal measurement models of SWB dimensions incorporating three waves of data were estimated separately and yielded a very good fit (e.g., PAS: $\chi^2(15) = 13.34$, $\chi^2/df = .89$, CFI = 1.00, RMSEA = .00, SRMR = .02). In all models, the residuals of repeated measures were allowed to correlate over time.

Measurement invariance of the longitudinal measurement models was examined by constraining the factor loadings equal across time and comparing the model fit of the restricted models to the free models. A nonsignificant Satorra-Bentler scaled chi-square difference indicated invariance between the nonrestricted and the restricted models (e.g., PAS: $\Delta SB\chi^2(4) = .33$, $p = .99$). Thus, longitudinal measurement invariance could be established, meaning that the SWB construct works equally well across time.

Auto-regressive cross-lagged models

The structural relationships between the six SWB dimensions and students' GPA over time were explored by constructing separate cross-lagged panel models. In all models, residuals of the corresponding items were allowed to correlate and the factor loadings for repeated indicators were held equal across the three measurement times. Student gender was included as a controlling variable and had a significant effect on students' GPA at t_1 in all models ($p < .001$), indicating that girls performed better than boys in terms of grades.

Positive attitudes toward school and academic achievement

The fit statistics for the final cross-lagged model was very good ($\chi^2(55) = 76.45$, CFI = .99, RMSEA = .03, SRMR = .05). The results showed that GPA in grade 8 positively predicted PAS in grade 9 ($\beta = .15$, $p < .05$). The reverse effects were not significant.

Enjoyment in school and academic achievement

The model fitted the data well ($\chi^2(55) = 92.77$, CFI = .98, RMSEA = .04, SRMR = .05). The results revealed that higher levels of GPA in grade 7 positively predicted EIS in grade 8 ($\beta = .29$, $p < .05$). The reverse path was not significant.

Positive academic self-concept and academic achievement

The fit of the final model was very good ($\chi^2(52) = 84.07$, CFI = .98, RMSEA = .04, SRMR = .04). Students' GPA in grade 7 positively predicted PASC in grade 8 and GPA in grade 8 positively predicted PASC in grade 9 ($\beta = .14$, $p < .05$ and $\beta = .39$, $p < .001$, respectively). The reverse effects were not significant.

Worries in school and academic achievement

The model fitted the data well ($\chi^2(55) = 90.46$, CFI = .98, RMSEA = .04, SRMR = .05). WIS in grade 7 negatively predicted students' GPA in grade 8 ($\beta = -.09$, $p < .05$). The reverse path was not significant.

Physical complaints in school and academic achievement

The overall fit of the model was good ($\chi^2(87) = 118.21$, CFI = .98, RMSEA = .03, SRMR = .05). GPA in grade 8 negatively predicted PCS in grade 9 ($\beta = -.14$, $p < .05$). The results also revealed

the significant reverse paths - PCS in grade 7 negatively predicted GPA in grades 8 and 9 ($\beta = -.08, p < .05$ and $\beta = -.19, p < .01$, respectively). Student gender predicted both students' PCS and their GPA at t_1 ($\beta = -.15, p < .01$ and $\beta = -.22, p < .001$).

Social problems in school and academic achievement

The model for SPS and GPA suggested a good fit to the data ($\chi^2(55) = 92.15, CFI = .98, RMSEA = .04, SRMR = .05$). However, the cross-lagged effects between SPS and students' GPA were not significant, neither from t_1 to t_2 nor from t_2 to t_3 .

Discussion

The present study aimed at explaining the nature of longitudinal relationships between SWB dimensions and students' academic achievement. Empirical examination of the full three-wave cross-lagged model investigating longitudinal associations between different SWB dimensions and academic performance among secondary school students provides valuable information in regard to the causal direction of the relationship between SWB and academic achievement.

It appears that earlier academic achievement may be a causal factor in the development of positive attitudes and feelings toward school. This finding is consistent with previous research suggesting that higher academic performance, that can be associated with the fulfillment of the need for competence, predicts greater SWB (Neubauer et al., 2017). The reverse models, in which positive SWB dimensions have a causal effect on subsequent academic achievement, were not supported by the present study. In regard to the negative SWB dimensions, the direction of causality remains unclear and requires further investigation.

Significant gender effect was found in regard to students' academic achievement, with girls showing higher achievement levels than boys. Consistent with previous findings (Morinaj & Hascher, 2017), student gender was also a significant predictor of physical complaints in school, with girls expressing more physical complaints than boys.

Although many education systems have acknowledged the need to incorporate both SWB and academic achievement skills into education policy (Layard & Hagell, 2015; Seligman, Ernst, Gillham, Revich, & Lindkins, 2009), the findings of our study revealed that students' academic achievement and SWB are relatively weakly directly related and that higher academic performance predicts greater SWB. One explanation for this finding might be that schools and teachers place higher emphasis on grades rather than on well-being of their students. Future research might profit from investigating whether promoting the skills of well-being in schools will result in greater academic achievement.

References

- Baker, J. A., Grant, S., & Morlock, L. (2008). The teacher-student relationship as a developmental context for children with internalizing or externalizing behavior problems. *School Psychology Quarterly, 23*, 3-15.
- Eccles, J., Brown, B. V., & Templeton, J. (2008). A developmental framework for selecting indicators of well-being during the adolescent and young adult years. In B. V. Brown (Ed.), *Key indicators of child and youth well-being: Completing the picture* (pp. 197-236). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

-
- Hascher, T. (2007). Exploring students' well-being by taking a variety of looks into the classroom. *Hellenic Journal of Psychology*, 4, 331–349.
- Layard, R., & Hagell, A. (2015). Healthy Young Mind: Transforming the Mental Health of Children. In J. F. Helliwell, R. Layard, & J. Sachs (Eds.), *World happiness report 2015*. New York, NY: The Earth Institute, Columbia University.
- Morinaj, L., & Hascher, T. (2017). Student well-being and school alienation. In J. Marcionetti, L. Castelli, & A. Crescentini (Eds.), *Well-being in education systems* (pp. 56–61). Florence, Italy: Hogrefe Editore.
- Neubauer, A. B., Lerche, V., & Voss, A. (2017). Inter-individual differences in the intra-individual association of competence and well-being: Combining experimental and intensive longitudinal designs. *Journal of Personality*, 86, 698–713. doi:10.1111/jopy.12351
- Pomerantz, E. M., Altermatt, E. R., & Saxon, J. L. (2002). Making the grade but feeling distressed: Gender differences in academic performance and internal distress. *Journal of Educational Psychology*, 94, 396–404. doi:10.1037//0022-0663.94.2.396
- Ruthig, J. C., Marrone, S., Hladkyj, S., & Robinson-Epp, N. (2011). Changes in college student health: Implications for academic performance. *Journal of College Student Development*, 52, 307–320.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. doi:10.1037/110003-066X.55.1.68
- Seligman, M. E. P., Ernst, R. M., Gillham, J. E., Revich, K., & Lindkins, M. (2009). Positive education: positive psychology and classroom interventions. *Oxf Rev Educ*, 35(3), 293–311. doi:10.1080/03054980902934563.

Index of authors

- Addimando Loredana, 107
Aleksandrova Lada, 235
Ambra Ferdinando Ivano, 43
Ambrosetti Alice, 1, 3, 138
Aysmontas Bronyus, 235
Barnaba Veronica, 217
Barrett Hazel, 161
Bartolucci Marco, 170
Basch Jodi, 48
Basile Serena, 43
Basso Alessandra, 165
Batini Federico, 170
Benevene Paula, 112
Brandao De Souza Camilla, 240
Bressoud Nicolas, 185, 253
Buccini Francesca, 61
Buonomo Ilaria, 112
Burro Roberto, 88, 217
Camerini Anne-Linda, 76, 263, 268
Carelli Elena, 245
Castelli Luciana, 1, 3, 80, 116
Cesarano Valentina Paola, 121
Cornaglia Ferraris Paolo, 165
Dal Corso Erminia, 217
De Lorenzo Aurelia, 57
Dessibourg Malika, 53
Diagne Djily, 124
Di Martino Pietro, 116
Donsì Lucia, 71
Ferra Valeria, 43
Ferraro Francesco V., 43
Fiore Brunella, 249
Fiorilli Caterina, 112
Fraccaroli Franco, 5
Gay Philippe, 53, 128, 185, 253
Genoud Philippe A., 53, 128
Ghezzi Carla, 180
Girardi Francesco, 43
Ginevra Maria Cristina, 213
Gomez Jean-Marc, 253
Goodman Leah, 174
Gordon Anne Lise, 133
Güsewell Angelika, 258
Hascher Tina, 273
Hauser Manuela, 84
Hevey David, 161
Iavarone Maria Luisa, 43
Iorio Ilaria, 138
Keller Roger, 142
Koch Alexander Franz, 93
Labalestra Rosanna, 180
La Motta Rossella, 198
Lattke Lynda S., 57
Lizzori Alice, 245
Loderer Kristina, 88
Lucciarini Elena, 185, 253
Lvova Inna V., 235
Maas Jasper, 142
Maeusli-Pellegatta Paola, 150
Maggiolini Silvia, 190
Manno Michelle, 174
Marani Enrico, 180
Marciano Laura, 263, 268
Marcionetti Jenny, 1, 3, 71, 80
Mariotta Lia, 146
Marone Francesca, 61
Masdonati Jonas, 9
Menafro Mariarosa, 43
Milan Lara, 194
Montuori Silvia, 198
Morinaj Julia, 273
Navarra Maria, 61
Neary Stephanie L., 67
Nohilly Margaret, 202
Nota Laura, 13, 213
O'Connor Hester, 161
Panero Monica, 116
Parola Anna, 71
Pasini Margherita, 240
Petrocchi Serena, 76
Petrucci Franck, 80
Pham Giang, 84
Plata Andrea, 1, 3
Pluess Michael, 16
Potter Cynthia, 208
Quintiliani Giorgio, 180

- Rabaglietti Emanuela, 57
Raccanello Daniela, 88, 217
Rackow Pamela, 142
Rime Jérôme, 253
Rocca Emmanuela, 217
Roffey Sue, 21
Ruggeri Mary, 67
Russo Anna, 121
Samson Andrea C., 253
Santilli Sara, 213
Sappa Viviana, 150
Sbaragli Silvia, 116
Schoch Simone, 142
Scholz Urte, 142
Schonert A. Reichl Kimberly, 26
Schüler Julia, 142
Schulz Peter J., 76
Settanni Michele, 57
Sparaciari Sara, 228
Spruyt Bram, 155
Strobel Johannes, 93
Tynan Fionnuala, 202
Van Droogenbroeck Filip, 155
Vicentini Giada, 88, 217
Vieceli Carlotta, 150
Wagner Lisa, 33
Wegner Mirko, 142
Zambianchi Manuela, 98, 222
Zanetti Maria Assunta, 198, 228, 245
Zanfroni Elena, 190

This book collects the contributions presented at the 2nd International Conference on Well-being in Education Systems, held in Locarno on 12-13-14 November 2019 and organized by the *Competence centre for Innovation and Research on Education Systems* (CIRSE). The 49 contributions are research papers, theoretical dissertations and field interventions of academic researchers and practitioners from 10 countries around the world. They cover four areas: student well-being, burnout and teacher well-being, well-being promotion and well-being and academic achievement.

Scientific committee of the 2nd International Conference on Well-being in Education Systems

- **Antonella Delle Fave**, Università degli Studi di Milano
- **Franco Fraccaroli**, Università degli Studi di Trento
- **Fabian Gander**, Universität Zürich
- **Michel Janosz**, Université de Montréal
- **Tage S. Kristensen**, Task-consult, Denmark
- **Doris Kunz-Heim**, Fachhochschule Nordwestschweiz
- **Christian Maggiori**, Haute école spécialisée de Suisse occidentale
- **Jonas Masdonati**, Université de Lausanne
- **Laura Nota**, Università degli Studi di Padova
- **Lindsay G. Oades**, University of Melbourne
- **Micheal Pluess**, Queen Mary University of London
- **Barbara Poggio**, Università degli studi di Trento
- **Sue Roffey**, Exeter and Western Sydney Universities
- **Jérôme Rossier**, Université de Lausanne
- **Kimberly Schoenert-Reichl**, University of British Columbia
- **Lisa Wagner**, Universität Zürich

Luciana Castelli, PhD in Human Interactions, is senior lecturer and researcher at the Competence centre for Innovation and Research on Education Systems (CIRSE) of the Department of Education and Learning, SUPSI. Her research interests lie in the area of teacher well-being, stress and burnout, pre-adolescents' well-being, and the risk of drop-out and burnout during professional training for teachers.

Jenny Marcionetti, PhD in Psychology is senior lecturer and researcher at the Competence centre for Innovation and Research on Education Systems (CIRSE) of the Department of Education and Learning, SUPSI. Her research interests lie in particular in education and work transitions and in factors associated with adolescents' school achievement, career indecision, and life satisfaction.

Andrea Plata, Master in Political Science, is lecturer and researcher at the Competence centre for Innovation and Research on Education Systems (CIRSE) of the Department of Education and Learning, SUPSI. His main research interests are school climate, education policy and civic and citizenship education.

Alice Ambrosetti, Master in Economics, is researcher at the Competence centre for Innovation and Research on Education Systems (CIRSE) of the Department of Education and Learning, SUPSI. Her research activities mainly relates to standardized assessments, at national and international level. She is also interested in the factors associated with students' outcomes, with a special focus on contextual factors.

Hogrefe Publishing Group

Göttingen • Berne • Vienna • Oxford
Boston • Paris • Amsterdam • Prague
Florence • Copenhagen • Stockholm
Helsinki • São Paulo • Madrid • Lisbon