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IMPACT OF STUDENTS ATTITUDES TOWARDS SOCIAL MEDIA USE IN EDUCATION ON THEIR ACADEMIC PERFORMANCE

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Abstract:

Purpose: The primary focus of the paper is to examine the relationship between student's beliefs and attitude towards social media use in Education on their Academic Performance. It also seeks to examine the social media usage trends among management students of private colleges and universities and understand the interaction between social media usage and their academic performance

Design/methodology/approach – The paper used predominantly the quantitative approach and briefly outlines the relationship between use of social media in education on the academic performance of students using the data from a sample of 237 management students from 3 private colleges and 2 private universities of Delhi NCR region. Data was collected using a self-designed questionnaire. Pilot testing was done to check the reliability of the questionnaire and the Cronbach alpha value was found to 0.72. Correlations, regressions and descriptive analysis were carried out.

Findings- The study results provided considerable support for the hypothesized relationships between positive beliefs and attitudes towards social media for exchanging academic activities and the academic performance of the students. The results also indicated that management students used social media mainly for sharing their assignments, projects and learning experiences with their colleagues. The study results suggested that the academic institutions should promote both students and faculty to develop a positive attitude towards usage of social media as effective learning tools in order to affect the academic results of their institution in a positive way.

Research limitations/implications- Research implications of the findings outlined in this paper will encourage research to link various aspects of social media and its impact on the academic performance. Future studies may use a mixed method approach and use qualitative design for understanding the relationship in an in-depth manner.

Practical implications – By focusing on developing a positive attitude towards usage of social media in students and faculty, management institutions can help in improving the academic performance of the students. It is likely that this occurs because students develop holistic learning by sharing their knowledge over social media due to which their academic performance improves.

Originality/value – The paper contributes by filling a gap in the management literature, in which empirical studies on social media and its relationship with academic performance of management students have been scarce until now.

Keywords: Social Media, Management students, Academic performance

1. Introduction

The term social media refers to the wide range of internet-based and mobile services that allows users to participate in online exchanges, contribute user created content, or join online communities. Social media is defined by Kaplan and Haenlein (2010) as ‘internet based applications that allow the creation and exchange of content which is user generated’. Social media allows users as well as communities to create, collaborate and edit user content. Key features of web included providing a rich user experience, where users interact with the data which is dynamically created from users’ input, users act as contributors to a site through reviews as well as comments and allowing users to classify and find information through the art of tagging. Features of web have formed a solid foundation for social media as highlighted by Kaplan and Haenlein (2010) and the reverse of the relationship is noted by Hendler and Golbeck (2008). The rapid development of mobile devices, apps, and tablet computing is revolutionizing the concept of socializing as well as mobile computing and learning. Graphing mathematical equations, creating and sharing notes, electronic publishing, and employing location-aware technologies are among the few educational uses for mobile devices that can provide numerous potential opportunities for the academic world (Johnson, Adams, & Cummins, 2012a, 2012b)

The use of new technologies, especially social media, is becoming increasingly ubiquitous in students’ daily lives. Free or inexpensive apps distributed through app stores have given rise to a social-media-focused culture that is shaping how we should communicate, teach, and learn. Hence, we can conclude that Social Media is contributing a lot in gathering information and making aware with the latest updates.

2. Literature Review

2.1 Social Media in Education

The push to innovate teaching and learning using social media has been a clear theme in both the early stage research on web technologies represented by blogs and wikis as well as recent research on social networking sites such as Facebook and Twitter. Bradley (2009) and Grosbeck (2008) gave emphasis on recognition of higher education and promoting the huge potential brought by web technologies to improve student engagement, college experiences, and pedagogical practices, and has been advocating innovations and changes to stay current with the changed education market. Ajjan & Hartshorne, 2008; Chen & Bryer, 2012; Roblyer, McDaniel, Webb, Herman, & Witty, 2010 indicated several factors and investigated in the context of higher education, faculty use and student engagement on social media and their usage in education. Heiberger & Harper, 2008; Hsu & Ching, 2012; Junco, Elavsky, & Heiberger, 2012 studied impact of social media and its relation to academic achievement. Yang and Chang (2011) concluded that university students showed more positive attitudes toward peer interaction and academic achievement through interactive blogs. The study by Junco et al. (2011) showed that the use of Twitter significantly improved undergraduate students’ engagement and semester grade point averages (GPA). However, in the other study Junco (2012), the author found that time spent on Facebook was significantly negatively related to college students’ GPA, and was weakly related to time spent preparing for classes.

Most studies investigated individual social media tools such as MySpace, Facebook, or Twitter as innovations in education, and this research trend seems reasonable considering the sweeping generalization of the term social media itself. It indicates that social media technologies have not

become a mainstream technology adopted in education. Roblyer et al. (2010) found that in higher education, students are more positive about the potential of using Facebook and other similar new technologies for supporting teaching and learning than faculty, who prefer traditional technologies. In his review of social media in higher education classes, Tess (2013) concluded that most universities have the infrastructure and support for social media use, but instructors are slow in adopting it for educational purposes. In addition, while social media may have the potential to promote personal learning environments (PLE) as a promising new pedagogical approach to enhance self-regulated learning (Dabbagh & Kitsantas, 2011), some caution against the use of social media for academic purposes due to the “commercially contoured” nature of social media services (Friesen & Lowe, 2011, p. 193) or simply “an academic form of a ‘moral panic’ without empirical evidence” (Bennett, Maton, & Kervin, 2008, p. 775).

Patel (2010) gives us a visual way of seeing the rise of social media. In his article, he draws and reports that the rise of social media among three target groups (Baby Boomers, Generation Xers, and Millennials) is dramatic. Not only has the usage of these technologies grown, Patel notes that the tenants of learning and work productivity also improve dramatically as we move along the target groups. In fact, this notion of using social media as a learning tool has carried over to the business world. Baird and Fisher (2005) are credited with conducting the first major examination of potential uses of social media in education and identify key advantages that social media platforms provide today's neo-millennial learners. Their study readily points out that today's students have been raised in the "always on" world of interactive media, the Internet, and digital messaging technologies and, therefore, have very different expectations and learning styles than previous generations. This net-centric generation values their ability to use the Web to create a self-paced, customized, on-demand learning path that includes multiple forms of interactive, social, and self-publishing media tools.

Hence we can conclude that many studies have been conducted in the past on social media and its use in education but these studies somehow cannot examine how these social media usage is affecting the academic performance of students.

2.2 Usage of Social Media and Academic Performance

Kirschner & Karpinski, 2010; Kolek & Saunders, 2008; Pasek, More, & Hargittai, 2009 Pasek et al. 2009 examined the relationship between Social media usage and academic performance, and found there was no relationship between between Social media usage and grades. Saunders (2008) found that there were no differences in overall grade point average (GPA) between users and non-users of Facebook. Kirschner and Karpinski (2010), on the other hand, found that Facebook users reported a lower mean GPA than non-users; additionally, Facebook users reported studying fewer hours per week than non-users. The Kirschner and Karpinski (2010) paper examined differences between Facebook users and non-users but did not analyze actual time spent on Facebook (though their methods suggest this information was collected). The majority of research conducted so far relating to use of social media within education has been focused on engagement or social presence. Examples include Walter & Barazova's (2008) study on how social media allows for propinquity within groups and addresses the perceived impact on social presence. Researchers have also looked at number of tweets and their communicative purposes (Boyd, Golder, & Lotan, 2010; Honeycutt, & Herring, 2009) and instances of job

postings over LinkedIn, a social network for professionals analyzing qualifications needed as specified by employers (Wakefield, Warren, & Mills, 2012).

Lastly, the study by Kolek and Saunders (2008) examined student Facebook profiles and found there were no differences in overall GPA between users and nonusers. It is important to note that “non-users” in the Kolek and Saunders (2008) study were those students from a randomly selected sample of the university’s student database that researchers could not find on Facebook. These students could have either been non-users or had privacy settings enabled to disallow searching, confounding the results of these findings. Previous studies of Facebook use and academic performance have also been limited in how student grades were measured. Until now, all studies have used self-reported, non-continuous measures. Students in the first sample in the Pasek et al. (2009) study were asked to report grades on an 8-point Likert scale with anchors for “Mostly F’s” to “Mostly A’s” and categories in between such as “A’s and B’s.” For the second and third samples, GPA was coded on a four-point scale from “D or less” to “A.” Kirschner and Karpinski (2010) used a five-point Likert scale (where 0 was 1.99 and below, 1 was 2.0–2.49, 2 was 2.5–2.99, 3 was 3.0–3.49, and 4 was 3.5–4.0). Kirschner and Karpinski (2010) also coded time spent studying on a 5-point Likert scale (where 0 was less than 1 h per week, 1 was 1–5 h, 2 was 6–10 h, 3 was 11–15 h, and 4 was 16 or more hours). None of the previous studies have explored what students do on Facebook. The Facebook platform allows for different activities— from commenting on user content to sending private messages, uploading photos, and lurking (seeing what others are doing); these activities could be related to outcomes in different ways than frequency of use.

2.3 Attitudes and Beliefs

Research findings suggest that teacher attitudes and beliefs about technology can be one of the major barriers to effective technology integration in K-12 education (Hew & Brush, 2007). In the literature, attitudes and beliefs are usually defined as separate constructs (Calderhead, 1996; Simpson, Koballa, Oliver, & Crawley, 1994; Wesely, 2012): Attitudes refer to feelings indicating favor or disfavor, and beliefs are premises about something that are felt to be true. A more comprehensive definition by Gall, Gall, and Borg (2003) describes that an attitude is an individual’s viewpoint or disposition with affective, cognitive, and behavioral components, and the cognitive component is one’s beliefs or knowledge about the attitude object. Bodur, Brinberg, and Coupey (2000) summarized that understanding the relations between cognitive structure (i.e., beliefs), affect, and attitude has been the focus of attitude research. Their research findings suggest that affect, as a noncognitive determinant, has a direct impact on attitude and can lead to the inconsistency between attitude and behavior. By the definition of technology affordance adopted in this paper, interaction between a user and a tool may become another determinant that should be considered in the process of forming an attitude toward technology use. This may be especially true when research on learner attitudes and beliefs is expanded from learner traits and learning environment, to the interaction between the learner and the environment (Wesely, 2012).

Research undertaken in the area of attitude and attitude formation shows that attitudes and beliefs are linked, and attitudes and behaviors are linked; moreover, attitudes are essentially divided into likes and dislikes (Siragusa & Dixon, 2008). With the broad expansion of ICT in education during the last decade, many research studies have explored the attitudes of users (educators and stu-

dents) towards the integration of ICT in education (Gasaymeh, 2009; Mishra & Panda, 2007; Wen & Shih, 2008).

It is nearly impossible to talk about opinions and views of advertising in online social networks without considering users' attitudes (Kornias & Halalau, 2012). Fishbein (1967) defined attitude as "a learned predisposition of human beings". "*An individual would respond to an object (or an idea) or a number of things (or opinions)*". Generally attitudes have three basic components, which are: affect cognition and behavior. The affect component refers to feelings about an object, cognition is related to beliefs about an object, and the behavioral component means the intention to take any action related to the object (Soloman, 2007). Ad clicking has been considered as a behavioral outcome of online advertising. After the existence of technological advances, many researchers conducted studies to measure the attitude of consumers towards online advertising.

Throughout the years, there have been different models describing and explaining attitudes toward advertising construct (Kornias & Halalau, 2012). One of these models is the Ducoffe (1996) one, which also focuses on attitudes towards advertising, and includes three factors: entertainment, information and irritation. The factors involved and the fact that this model has been previously tested in an online environment made this model more simplistic, straightforward and appropriate to be studied (Kornias & Halalau, 2012). The credibility factor was integrated to the Ducoffe (1996) model by Bracket & Carr (2001) as a complement, as it offered further explanation of the attitude toward advertising construct. In the present study, attitudes towards advertising are measured by three different dimensions. The first one is the Facebook related variables which include the advertising characteristics of the Ducoffe model, and include credibility and interactivity, as well as one other characteristic, which is customization.

3. Purpose, Research Questions And Significance of The Study

3.1 Need for the study: On The basis of the reviewed literature, there seems to be a lot of work done in the area of social media and its effect on children and adolescents. Various studies have also investigated the feeling of students and their general attitudes toward e-learning. However, despite the fact the change in technology impinges upon a change in learning and teaching styles also, there had been lack of studies that focus on understanding the students' perspective towards the use of social media in education. Also, there seems to be a limited research done to understand the relationship between students' attitudes towards usage of social media and their academic performance specifically in the Indian context. There is a scarcity of research on social media usage in education in India and due to this needed focus; the present study is an attempt to fill the gap.

3.2 Purpose of the study and research questions: The main objective of the study is to examine the relationship between students' beliefs and attitude towards social media use in education and their academic performance. Specifically, the objectives of the study are:

1) To understand the students' perspective towards the use of social media in education.

- 2) To investigate the relationship between various individual variables viz. gender, perceived ease of use and privacy concerns and the beliefs and attitudes of management students' towards the use of social media in education.
- 3) To investigate the relationship between students' beliefs and attitude towards social media use in education and their academic performance in the management students of Delhi NCR.

Therefore, this study investigated the following research questions:

RQ1: Are the beliefs and attitudes of management students' towards the usage of different social media tools in education positive?

RQ2: What is the relationship between various individual variables viz. gender, perceived ease of use and privacy concerns on the beliefs and attitudes of management students' towards the usage of different social media tools in education?

RQ3: Is there a relationship between students' attitudes toward social media use in education and academic performance of students?

3.3 Significance of the study: The results of the survey are considered to be significant because they are intended to assist the management institutions in developing the strategies to develop a positive attitude in students towards social media usage in education, so as to improve the academic performance of the students.

4. METHODOLOGY

4.1 Participants

A predominantly quantitative approach was adapted for this study. Organizations were selected using purposive sampling method. The sample was drawn from 3 private colleges and 2 private universities of Delhi NCR region. The sample consisted of 237 management students. Total 300 were approached (60 from each), out of which 237 responses were complete. Out of 237 responses, 161 (68 percent) were male and 76 (32 percent) were females. Mean age of the respondents is 19.7 years.

4.2 Data Sources

For this study primary data as well as secondary data is used. The primary data was collected by researcher personally conducting a field survey. The secondary data available in print form and various online databases were also used.

4.3 Instruments and tools for data collection

Data was collected using a self-designed questionnaire. The questionnaire used a seven-point likert-scale to investigate the students' beliefs and attitudes toward the usage of social media in education. The questionnaire included two categories of questions:

(a) **Demographic and individual preferences related information:** Questions about gender, academic grade level (CGPA), perceived ease in using social media (2 items), and privacy related issues (2 items) were addressed. The privacy related questions were derived from Buchanan *et al.* (2006) and the perceived ease of use related items were derived from Davis (1989).

(b) **Students' beliefs and attitudes towards social media usage in education:** A 15 item self-report questionnaire was designed based on past studies in the area to measure the students' beliefs and attitudes towards social media use in education. The three dimensions are represented in the scale i.e. opinion towards usage of social media in education (3 items); efficacy of social media tool as compared to traditional educational tools (6 items); utility of social media in improving skills (6 items). It had been highlighted in the model that positive attitude towards social media use in education is characterized by high scores on all the three sub-scales. Pilot testing was done to check the reliability of the questionnaire and the pretest showed that scales are reliable with overall Cronbach alpha levels of 0.72. Few sample questions from the questionnaire are, "Using social media in education makes learning meaningful"; "I enjoy using social media for completing assignments and projects"; "I experience better participation in classes when I am allowed to contribute through social media". Students' beliefs and attitudes were considered to be positive or negative based on the comparison of mean scores with 4 (the middle/ neutral point on a 7-point scale).

4.4 Research Variables

The two key variables in the study are students' beliefs and attitudes towards social media use in education as the independent variable and students' academic performance as the dependent variable.

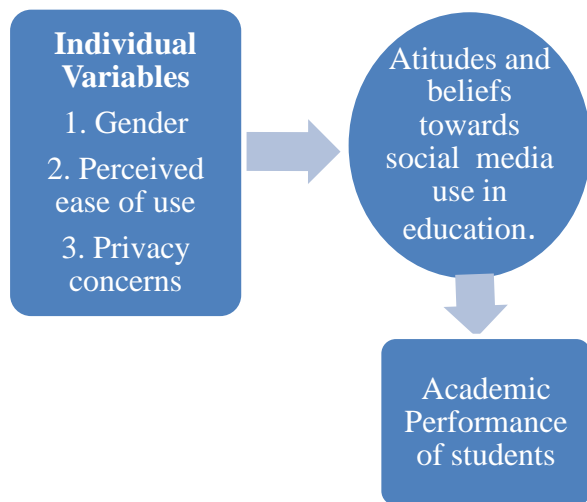


Figure 1: Research Model used in the study.

4.5 Data analysis

The quantitative data collected was subjected to various statistical analyses. Correlations, regressions and descriptive analysis were carried out. Statistical analysis was performed using SPSS (ver.20).

5. RESULTS

5.1 Beliefs and Attitudes of management students towards usage of social media in education

Our first research question was about students' beliefs and attitudes toward usage of social media in education. The objective was to understand whether the management students have positive beliefs and attitude towards the usage of social media in education. The findings illustrate that management students had mixed views and beliefs about social media usage in education. The three dimensions of students' beliefs and attitudes towards social media i.e. opinion towards usage of social media in education; efficacy of social media tool as compared to traditional educational tools; utility of social media in improving skills have been used for measuring the students' beliefs and attitudes towards social media usage in education in management students of Delhi NCR region. The dimensions and their descriptive statistics are shown in table 1. The results indicate that students have highest score on the utility dimension (Mean=5.7060) and almost equal score on opinion (Mean=5.4838) and efficacy dimension (Mean=5.4895) of social media usage in education. Overall beliefs & attitude towards social media use in education score is also found to be above the middle point (Mean=5.5598). It indicates that management students have a positive opinion towards the usage of social media and also find the usage of social media tools useful in education. Also, students had a positive view about the efficacy of social media tool as compared to the traditional educational tools.

Table1: Descriptive Statistics for the three dimensions of students' beliefs and attitudes towards social media & overall beliefs and attitude.

	N	Minimum	Maximum	Mean	Std. Deviation
Opinion	237	3.67	7.00	5.4838	1.08939
Efficacy	237	4.00	6.83	5.4895	.91378
Utility	237	4.33	6.83	5.7060	.80113
Overall beliefs & attitude towards social media use in education	237	4.00	6.61	5.5598	.88222
Valid N (listwise)	237				

The analysis was quite challenging as no group or data was available to do the comparison. Thus, in order to conclude about positive or negative attitude in students towards usage of social media, we conducted a one sample t-test (table 2) wherein the comparison of the scores was done with the middle point 4 on a 7-point scale. We saw that overall beliefs and attitudes toward social media use in education ($t=27.218$, $p<.05$) were significantly above the middle point. Thus, it can be concluded that management students have a positive attitude towards the usage of social media in education.

Table 2: One sample t-test for overall students' beliefs and attitudes towards social media use in education

Test Value = 4			
	T	df	Sig. (2-tailed)
Overall beliefs & attitude towards social media use in education	27.218	236	.000

5.2 Relationship between various individual variables and the beliefs and attitudes of management students towards the usage of different social media tools in education

One of the objectives of the present study was to investigate the relationship between various individual variables viz. gender, perceived ease of use, privacy concerns and the beliefs and attitudes of management students' towards the use of social media in education.

Firstly, in an attempt to understand the relationship between gender and the beliefs and attitudes of management students' towards the use of social media in education, an independent sample t-test was conducted as given in table 3. The results indicate a significant difference exists in the beliefs and attitudes of management students toward social media use in education based on gender $t(235) = 3.265, p < .01$. The mean differences across the two gender groups i.e. male and female also indicate that males had a larger mean on **overall students' beliefs and attitudes towards social media use in education. It can thus be concluded that males have a more positive attitudes towards social media and its use in education as compared to girls.**

Table3:Independent Sample t-tests for overall students' beliefs and attitudes towards social media use in education by Gender

	t	Sig. (2-tailed)	Male		Female	
			Mean	Std Deviation	Mean	Std Deviation
Overall beliefs & attitude towards social media use in education	3.265	.001	5.6746	.93320	5.3165	.70920

Note. $df = 235$. * $p < 0.05$, ** $p < 0.01$.

Secondly, in order to understand the relationship between perceived ease of use, privacy related issues and beliefs and attitudes of management students towards the usage of different social media tools in education, a correlation matrix was calculated as given in table 4. Table 4 presents the correlation coefficients for perceived ease of use, privacy related issues and overall beliefs & attitude of management students towards social media use in education. The results indicate that privacy concerns ($r = -.387, p < .01$) exhibit negative and significant relationship with beliefs and attitudes of management students toward social media use in education. However, perceived ease of use ($r = .557, p < .01$) is found to be positively correlated to beliefs and attitudes of management students toward social media use in education. It can thus be established that if the students have high privacy related concerns while using social media, their attitude is negatively affected and in case they perceive social media to be easy to use, their attitude towards social media is positively affected.

Table4: Correlation matrix of perceived ease of use, privacy related issues and overall students' beliefs and attitudes towards social media use in education

		Overall beliefs & attitude towards social media use in education
Privacy related issues	Pearson Correlation	-.387**
	Sig. (2-tailed)	.000
	N	237
Perceived ease in using social media	Pearson Correlation	.557**
	Sig. (2-tailed)	.000

	N	237
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**** Correlation is significant at the 0.01 level (2-tailed).**

5.3 Relationship between the beliefs and attitudes of management students towards the usage of different social media tools in education and their academic performance.

In order to understand the relationship between the beliefs and attitudes of management students towards the usage of different social media tools in education and their academic performance, a correlation matrix was calculated as given in table 5. The results indicate that the beliefs and attitudes of management students toward social media use in education ($r = .558$, $p < .01$) exhibit positive and significant relationship with the academic performance of management students. It can thus be established that if the students' attitude and beliefs towards social media tools and its usage in education has a positive effect on their academic performance.

Table5: Correlation matrix of perceived ease of use, privacy related issues and overall students' beliefs and attitudes towards social media use in education

		Academic performance
Overall beliefs & attitude towards social media use in education	Pearson Correlation	.558**
	Sig. (2-tailed)	.000
	N	237

**** Correlation is significant at the 0.01 level (2-tailed).**

The results thus emphasize on the importance of developing a positive attitude towards social media tools in students so as to improve their academic performance.

6. Conclusion and Implications

The primary purpose of this research was to explore the students' perspective towards the use of social media in education and examine the relationship between students' beliefs and attitude towards social media use in education and their academic performance. The findings suggest that social media tools can be very useful for being used as educational tool. Students' beliefs and attitudes towards social media tools and its use in education are positive. Students welcomed using social media tools for providing supplementary information related to their curriculum. Most students depicted a positive opinion towards the efficacy and utility of social media tools and their use in education. Findings also highlighted that students' perceived ease of use and privacy related issues also affect their attitude towards social media use in education. Moreover, the beliefs and attitude of students towards social media tools was found to be positively affecting their academic performance. Thus, one of the key implications of this study is for the management institutions and educators who need to consider the academic use of social media tools and explore the various strategies and possibilities for reaching students with learning materials via social media.

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