Trust and Respect at Work: Justice Antecedents and the Role of Coworker Dynamics

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Abstract

The authors address three overlooked issues regarding the well-established organizational justice and trust relationship: how an authority's enactment of fair outcomes, procedures, and interactions "trickles down" to the development of coworker trust; how trust and respect represent distinct interpersonal outcomes; and whether coworker dynamics mediate these relationships. Using original survey data collected at two time points from 354 high school teachers, the authors investigate justice antecedents and the mediating role of coworker dynamics using structural equation modeling. The authors find that the effects of the authority's (i.e., principal's) distributive and procedural justice actions on coworker trust and respect do "trickle down" and are mediated through coworkers' collective responsibility and work communication. In contrast, principal's interpersonal justice has no effect on coworker dynamics or interpersonal outcomes, but coworker interpersonal justice enhances these outcomes. The results of this study also provide empirical support for the conceptual distinctiveness of trust and respect in the workplace.

TRUST AND RESPECT AT WORK: JUSTICE ANTECEDENTS AND THE ROLE OF COWORKER DYNAMICS

"Considerations of justice will almost always be important when individuals are thrust into the give-and-take of cooperation and sharing" (Cropanzano & Ambrose, 2015a:3). Such dynamics characterize any organization and contribute to its success. In the last 25 years, those social dynamics have fallen under the rubric of organizational justice (see e.g., Cropanzano & Ambrose, 2015b; Greenberg & Colquitt, 2005) or, simply, fairness in the workplace. Fair treatment, in general, conveys messages about individuals' own value and their belongingness to the group (e.g., Resh & Sabbagh, 2014; Tyler & Blader, 2000), which increases their willingness to be vulnerable to the actions of others, i.e., to trust them (Mayer, Davis, & Schoorman, 1995). In this vein, scholars have shown that organizational justice enhances the emergence of relational trust, largely in authority-subordinate relationships (e.g., DeConinck, 2010; De Cremer, van Dijke, & Bos, 2006; Dirks & Ferrin, 2002; Tyler & Blader, 2000). Yet, far less is known about how authority behaviors "trickle down" to impact relationships among subordinate peers.

Forret and Love (2008) provide evidence that the fair behaviors of authorities do affect employees' relationships with one another. They, however, do not address the *mechanisms* by which trickling down occurs. Masterson (2001) offers a glimpse at operation of one mechanism, demonstrating that organizational commitment mediates between the perceived fairness of the treatment received by subordinates and how they interface with their clients. That study stops short of investigating trust among coworkers. Despite the paucity of studies of how an authority's justice-related actions come to shape subordinates' dynamics, Valet (2018) stresses the importance of underlying mechanisms to understand fairness-related processes and perceptions in the workplace. Here we augment an understanding of such processes by importing

relevant concepts from education research, given that our data collection occurred in high schools. In doing so, we hope to advance organizational justice research by abstracting from processes described for educational settings to a variety of workplaces, all in the service of understanding the mechanisms of "trickle down" effects.

The actions and communications of authorities set the tone for lateral interactional dynamics within the workplace and subordinates' attitudes toward each other (e.g., Lau & Liden, 2008; Li, Cropanzano, & Molina, 2015; Salancik & Pfeffer, 1978). We extend previous research on the organizational justice and trust linkage in hierarchical relations by focusing on mediating processes. Complementing Fulmer and Ostroff (2017), who reveal the "trickle up" effects of a supervisor's use of fair procedures on subordinates' trust in top organizational leaders, we examine how the actions of the authority "trickle down" to shape dynamics among subordinates, which in turn cultivate lateral trust and respect among coworkers. We consider the extent to which subordinates' activities involve helping each other to ensure meeting the goals of the organization or addressing specific issues impacting the work. Such an emphasis is consistent with previous work that shows helping behaviors serve as a basis of assessments of the trustworthiness of colleagues (Ferrin, Dirks, & Shah, 2006; Lau & Liden, 2008).

To examine the pathways between organizational justice generated by authorities and interpersonal outcomes of trust and respect among subordinates, we employ data from a survey of teachers (n=354), at two points in time (fall and spring) in five high schools in the southeastern U.S. These data allow us to assess, using structural equation modeling, how an authority (the principal) institutes organizational justice (focused on reward distributions, decision-making procedures, and interactions), which in turn shapes an array of dynamics among subordinates (teachers) that may enhance trust and respect among coworkers.

Our investigation makes three distinct contributions to basic research on justice, trust, and respect by: 1) specifying the mediating role of coworker dynamics in the relationship between an authority's fairness actions and trust and respect among coworkers; 2) treating trust and respect as separate constructs with distinct antecedent processes; and 3) exploring the unique impact of each type of justice enacted by organizational authorities on coworker dynamics. Our study also augments growing work on justice processes in education. Bryk and Schneider (2002) stressed the importance of the development of trust among members of the school community to ensure the fundamental mission of schools to advance the education and welfare of children. Yet neither they, nor subsequent studies (e.g., Dipaola & Guy, 2009; Hoy & Tarter, 2004; Thomsen, Karsten, & Oort, 2014), emphasized the mediating role of coworker dynamics as we do here.

HOW ORGANIZATIONAL JUSTICE SHAPES TRUST AND RESPECT

The domain of organizational justice draws upon theorizing related to three types of justice: distributive, procedural, and interpersonal (sometimes also labeled "interactional").² Distributive justice involves principles governing the nature of the distribution of outcomes, rewards, resources, or burdens within a group or organization (Jost & Kay, 2010). The distributive principle of equity, dictating that recipients receive outcomes (e.g., compensation) commensurate with their relevant contributions (e.g., labor and value to the organization), is likely to govern what people typically perceive as fair in any workplace, including schools (e.g., Mueller, Iverson, & Jo, 1999). Procedural justice focuses on decision-making processes in the workplace, regarding, for example, performance evaluations or resource access. Leventhal, Karuza, and Fry (1980) identify fair procedural principles, including: consistency of procedures across persons and across time; representativeness of participants to a decision or "voice;" bias suppression; and the potential to correct bad decisions. Interpersonal justice (Bies & Moag,

1986) focuses on evaluations of everyday events and encounters in the workplace in terms of sincerity, dignity, respectfulness, neutrality, and honesty, regardless of procedural or outcome issues.³ In any workplace, the quality of interactions, captured by the extent of interpersonal justice in both hierarchical (e.g., authority-subordinate) and lateral (e.g., coworker) relationships, affects whether an organization functions in a manner to achieve its goals (see Cropanzano & Ambrose, 2015a; Lavelle, Rupp, Manegold, & Thornton, 2015).

We consider trust and respect as interpersonal outcomes that contribute to the coherence and functioning of a group in a variety of contexts, including the workplace. Following Rogers and Ashforth (2017), we treat trust and respect as distinct concepts.⁴ Even so, both outcomes are important to the coherence and functioning of a group. Mayer et al. (1995:712) define trust as "The willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party." Trust emerges from experience (Paxton & Glanville, 2015), typically over a series of interactions in relationships of interdependence.

Presumably, the actions of the other will be beneficial to the vulnerable party (Robinson, 1996) who is potentially at risk for losing something of importance (e.g., truthful information, extra effort, positive evaluations of one's ability, expected mentorship).

In general, respect entails people according value or worth to another person (Spears Ellemers, Doosje, & Branscombe, 2006). It conveys positive status, reputation, or standing in a group, rather than liking (Huo, Binning, & Molina, 2010). As an appraisal of the excellence of activities undertaken or performances enacted by an individual, it is particularistic and accorded by one person to another as a form of reward (see Rogers & Ashforth, 2017). Respect, unlike trust, does not typically require ongoing interaction to emerge.

Many studies support the justice-trust linkage, though few examine it in a trickle-down context. The group value model (Lind & Tyler, 1988; Tyler & Lind, 1992) suggests that when authorities enact principles of fair distributions, procedures, and treatment, they positively affect subordinates' sense of self-worth and perceptions of the trustworthiness of authorities and coworkers (e.g., Lind, 2001; Tyler, Deogey, & Smith, 1996). To the extent that fair decision-making and treatment of subordinates in an organization cultivate feelings of being valued in one's work group and signal a positive relationship with the authority, workers are more likely to express trust in their workplace authority (e.g., De Cremer et al., 2006; Tyler & Blader, 2000). Other studies look at the justice-trust linkage across tiers of the organization. Aryee, Budhwar, and Chen (2002) demonstrate that all three types of justice are positively related to trust in an organization, although only interactional justice significantly affected trust in the immediate authority. A study of vocational education teachers likewise finds that perceived procedural justice positively affects trust in the supervisor and that such perceptions trickle up to trust in higher management but do not trickle down to trust in the teacher team (Thomsen et al., 2014).

A meta-analysis by Dirks and Ferrin (2002) reinforces the robust patterns between the three components of organizational justice and subordinates' trust in direct authority or, more generally, organizational authorities, plus considers mediating factors. They demonstrate that as a mediator, perceived organizational support (workers' assessment that their organization values their contributions and cares about their well-being) enhances trust in the authority and in the organization. Subsequent studies replicate that effect and show that perceived *supervisor* support mediates between interactional or distributive justice and trust in the authority (DeConinck, 2010, study 2; Stinglhamber, De Cremer, & Merken, 2006). What factors mediate between the fair behaviors of authorities and the rise of coworker trust largely remain to be investigated.

A handful of studies explore the trickle-down justice-trust linkage, and one study examines the trickle-down justice-respect linkage. Most of these, however, do not explore possible mechanisms. Within an education setting, DiPaola and Guy (2009) find that teachers' perceptions of organizational justice (a scale of all components) correlate positively with trust in the principal; incorporating some trickle-down analysis, they also show that the same holds for trust in colleagues and parents/students. And, indirectly pertaining to trust, Masterson (2001) reveals that college instructors' perceptions of the distributive and procedural fairness of their organization positively affect their organizational commitment (implicitly signaling trust in the organization), which in turn shaped interactions with their students. Students perceived the instructors more committed to the organization as exerting greater effort and fairness toward them. In one of the few studies focused on respect, Huo, Binning, and Molina (2010) show that fair treatment (involving elements of procedural and interpersonal justice) by a school authority (and peers) enhances teacher's perceptions of the respect that they receive from group members.

Only one study to our knowledge outside of an educational setting specifically addresses organizational justice and coworker trust. Forret and Love (2008) indicate that distributive justice ensures that people are less likely to feel that authorities are taking advantage of them and are more satisfied with their work environment, increasing feelings of security to allow them to be vulnerable to their colleagues. They draw from the group value model (Lind & Tyler, 1988; Tyler & Lind, 1992) to argue that procedural and interpersonal justice makes subordinates feel valued and connected to members of the group. Procedural justice achieves that end by demanding that the same set of rules apply to all workers and that each can voice concerns. And, authorities who enact interpersonal justice model behavior also expected from workers: positive, repeated encounters necessary to develop trust. Findings from their cross-sectional study show

that each type of justice used by authorities positively affects trust in coworkers (measured by a scale tapping into support, reliability, and confidence in coworkers).

To the extent that distributive justice ensures satisfaction and security in the workplace and procedural and interpersonal justice create positive feelings of self-worth and group identity, coworkers are likely to feel more comfortable with each other, allowing themselves to be vulnerable to the actions of their colleagues. Similarly, to the extent that an authority's fair behaviors draw coworkers together, these subordinates may come to recognize the strengths of each other. In doing so, they are according each other with respect. Thus, we predict:

Hypothesis 1a: Perceptions of organizational justice (distributive, procedural, interpersonal) are positively related to trust in colleagues.

Hypothesis 1b: Perceptions of organizational justice (distributive, procedural, interpersonal) are positively related to respect for colleagues.

Although *Hypothesis 1* proposes direct effects of organizational justice on coworker trust and respect, such analyses fail to address what Forret and Love (2008) stress in their discussion: the potential impact of unmeasured mediating factors.

COWORKER DYNAMICS: THE "MECHANISM" CONNECTING ORGANIZATIONAL JUSTICE TO TRUST AND RESPECT AMONG PEERS

The Effects of Organizational Justice on Coworker Dynamics

Following Lind (2001) and De Cremer, Van Dijke, and Mayer (2010), we argue that fairness, which engenders trust in authority-subordinate relationships through daily interactions or repeated exchanges among those differentially positioned in the organization, in turn signals behavioral patterns deemed appropriate for all organizational members. Lau and Liden (2008) emphasize that the group authority, "through roles as the official performance appraiser, reward

distributor, and very often, mentor of subordinates, has the potential to shape the immediate environment of the work group" (p. 1130). To the extent that workers perform their tasks collaboratively or in teams, their success relies upon interdependent helping behaviors.

Importantly, Ferrin, Dirks, and Shah (2006) show that helping actions contribute to the development of trust among coworkers. Likewise, in educational settings, scholars trumpet the importance of the principal to ensuring a collective sense of engagement and professional teacher behavior (Bryk & Schneider, 2002; Hoy & Tarter, 2004). Smith and Flores (2014) explain how principals "set both the intellectual and organizational tone of schools" (p. 259) and model the types of behaviors that their teachers might adopt in their own relationships.

In school settings, like that of our study, relational dynamics among teachers involve organizational-level and interpersonal practices (see Bryk & Schneider, 2002) and vary in degrees of interdependence and helpfulness. Interdependence especially fosters frequent teacher interaction and cohesion, as shown in Price and Collett's (2014) study of elementary teachers. In general, collective responsibility demands the motivation and ability to think and act interdependently in service of some common purpose that benefits the organization (Valentine & Edmondson, 2015). Bryk and Schneider (2002) highlight collective responsibility in elementary schools, where, as a dimension of professional community, teachers take responsibility for serving all students and achieving the educational mission. Yet, beyond the k-6th grade setting of many studies, Bidwell and Yasumoto (1999) show that high school teachers cohere interdependently within their specific departments, if not their schools. (Analyses of qualitative data collected from our sample likewise corroborates the importance and nature of interdependence in secondary schools [Author, 2018]). We emphasize how collective

responsibility constitutes a mechanism mediating the relationship between organizational justice and coworker trust and respect.

Another potential mechanism drawn from the education literature focuses on work communication per se, which involves sharing concerns, problem-solving, or transmitting organization-relevant information. We consider how teachers talk to (or dialogue with) each other regarding work practices (e.g., sharing knowledge about students, giving professional advice) (Bryk & Schneider 2002). Such communication assumes a lower level of interdependent interaction than collective responsibility and provides for, but does not require, the possibility of helpful collaboration. A third potential mechanism, peer interpersonal justice, focuses on how coworkers treat each other in terms of kindness, care, respectfulness, neutrality, and honesty (Bies & Moag, 1986). Though any work-related collaboration among peers may be characterized by interactionally just treatment, the notion covers non-work-related interactions as well and is thus more diffuse than the other forms of coworker dynamics. Interpersonal justice among teachers signals a professional work environment but requires neither interdependence nor reveals helpfulness.

No studies specifically connect organizational justice to coworker dynamics as we propose here. Distributing resources (e.g., compensation, benefits, assignments) fairly to subordinates signals a key value of the organization and assures workers that future outcome distributions are likely to be just, thereby providing a basis for subordinates to feel secure in and satisfied with their workplace (Forret & Love, 2008). Subsequently, distributive justice enhances subordinates' organizational citizenship behaviors (OCBs) involving voluntary commitment to tasks that are not part of contractual ones (see Colquitt, Conlon, Wesson, Porter, & Ng, 2001; see also Hodson, 2001). Ethnographic evidence suggests that when work environments exhibit

distributive justice, employees voluntarily act to protect others undertaking their specific jobs (Schrank, 1983), while environments lacking a fair distribution of rewards generate social infighting and avoidance among coworkers (Burris, 1993). We propose that to the extent that the authority's distributive justice colors workers' feelings about the organization, they are more likely to feel collectively responsible for meeting the goals of the organization and doing so by communicating with their colleagues. Thus:

Hypothesis 2: Perceptions of distributive justice (stemming from an authority's behaviors) are positively related to collective responsibility and work communication.

Authorities' use of fair procedures leads subordinates to feel valued by the authority and develop pride in their work group and a shared identity (Lind & Tyler, 1988; Tyler & Lind, 1992). Workers' perceptions of procedural justice, moreover, enhance positive evaluations of their organization and their commitment to it (see Colquitt et al., 2001), which may stimulate actions that benefit the organization. In contrast, poorly organized workplaces (i.e., those lacking in procedurally fair decision-making) tend to lead to a breakdown in worker relationships (Hodson, 2001). Together these studies indicate that authorities' use of fair procedures enhances individual work that benefits the organization and positively affect coworkers' influence on each other. As such, procedural justice is likely to be pivotal to how subordinates come together to address issues facing their organization. We thus predict:

Hypothesis 3: Perceptions of procedural justice (stemming from an authority's behaviors) are positively related to collective responsibility and work communication.

Because both distributive and procedural justice call attention to systemic organizational features as represented in the behavior of the authority, we connect them to the coworker dynamics that require greater interdependence and are largely focused on work. Such forms of

justice may be less likely to influence the day-to-day routine interactions of coworkers as represented by peer interpersonal justice. Yet, how an authority interacts with his or her subordinates may model how they should act among themselves (Bandura, 1977). Although focused on abusive interactions, Mawritz, Mayer, Hoobler, Wayne, and Marinova (2012) demonstrate how abusive supervision (conceived of as interactionally unjust [see Aryee et al., 2007]) trickles-down to create a hostile environment among employees. Thus, to the extent that an authority exhibits interactionally fair behaviors toward workers, they are likely to emulate those behaviors in their interactions in the workplace, although they might have little bearing on the interdependent endeavors necessary to meeting organizational goals. Thus:

Hypothesis 4: Perceptions of interpersonal justice (stemming from an authority's behaviors) are positively related to peer interpersonal justice.

The Effects of Coworker Dynamics on Interpersonal Outcomes

Our coworker dynamics signal the willingness to share control (collective responsibility), communicate openly at work, and express concern for colleagues' needs and interests by demonstrating dignity in interactions (peer interpersonal justice). These kinds of positive coworker dynamics reveal common interests, values, and attitudes that forge solid relationships (Dulebohn et al. 2012), fostering a shared identity. Such an identity among workers propels collaborations to achieve shared goals, which require taking a chance (i.e., being vulnerable) that coworkers will do what is necessary. Judgments of the result of such collaboration constitute a basis for appraising others' worth—that is, according them respect.

Elsbach (2004) substantiates how sharing control, communicating openly to share ideas, and treating each other with consideration are critical to the development of trust in relationships generally. Several studies additionally highlight how such dynamics contribute to the

development of trust and respect. Primary school teachers who perceive colleague support (akin to what might result from collective responsibility and communication) in general tend to express trust toward their colleagues (Taşdan & Yalçin, 2010). Similarly, Biggart (1989) shows how Tupperware distributors who shared knowledge among colleagues indicated their mutual desire to have one another succeed, implying that they allow themselves to be vulnerable to each other and to accord respect upon achieving success. In a related but contrasting way, Applebaum (1981) found that pile driving work crews withheld esteem from work groups that slacked off and delayed other crews—suggesting that those who do not take collective responsibility for organizational goals fail to earn the respect of their coworkers. Indeed, generally, work team success engenders respect among members (Prestwich & Lalljee, 2009). Thus, we propose:

Hypothesis 5a: Perceived collective responsibility, work communication, and peer interpersonal justice are each positively related to trust in colleagues.

Hypothesis 5b: Perceived collective responsibility, work communication, and peer interpersonal justice are each positively related to respect for colleagues.

In summary, our argument identifies two sets of antecedents to coworker trust and respect. The first, from the organizational justice literature, are the forms of justice enacted by the authority (*Hypothesis 1*) that directly cement people's perceptions as valued group members with a shared identity, which potentially cultivate trust in and respect for colleagues. The second focuses on positive coworker dynamics shaped by the justice context created by authorities (*Hypotheses 2-4*). Coworker dynamics, more proximal to workers' willingness to be vulnerable while they fulfill job responsibilities and serve clients, influence the emergence of trust and respect in peers (e.g., see Lavelle et al. 2015). We argue that they represent key mechanisms, translating the authority-formed justice context, to engender lateral trust and respect. Thus:

Hypothesis 6: Perceived collective responsibility, work communication, and peer interpersonal justice will mediate the effects of organizational justice on trust in and respect for colleagues.

METHODS

Overview of Procedures

We use survey data collected from individual teachers in five public high schools in the southeastern United States in the fall and spring of the 2014-2015 academic school year. The first author recruited respondents at faculty meetings and offered \$10 to complete each survey. Surveys were administered electronically, and paper copies of the survey (in sealed envelopes, labeled with an identifier to match teacher with survey) were made available as an option. The overall response rate was 85 percent in the fall and 89 percent in the spring (N=312 and N=327 of 369 total teachers), resulting in a total sample of N=354 respondents. Using full information maximum likelihood provided in Stata allowed us to include data from teachers responding at only one point in time; this procedure is preferred in single-level structural equation models to pairwise deletion, listwise deletion, and mean imputation (Enders & Bandalos, 2001).

We use survey items that measure teachers' perceptions of organizational justice in their workplace and trust in their colleagues. In addition, the survey asked questions about the teacher's demographic characteristics, perceptions of a range of working conditions, and self-reported interactional behaviors within the workplace. We identified additional demographic information by acquiring personnel data from the State Department of Education.

Because this study examines the impact of organizational justice and coworker dynamics on trust in and respect for colleagues, we strategically selected five high schools, with different organizational attributes (e.g., school size, student demographics, administrative procedures and

policies, etc.). Two high schools are in an urban district and three high schools are in a suburban district, all within the same metro area of a city. They represent cases of sizable contrast, which may ensure maximal variation in our independent variables, especially with high response rates. In the urban district, 99 percent of the students identify as black and 100 percent receive free or reduced-price lunch. In the suburban district, student composition varies. In two of the schools, 25 percent of students are black and 17 percent receive free or reduced lunch. In the remaining school, 56 percent of students are black and 51 percent receive free or reduced lunch. Teacher composition in the schools in this sample varies as well: in the urban schools, according to state personnel data, 33 percent of teachers are white, with an average of eight years of teaching experience; in the suburban schools, 86 percent of teachers are white with an average of 13 years of experience. Given this variation, our analyses cluster by school and control for teacher's race.

Participants

Of the 354 teachers in the sample overall, 62 percent identified as female, 36 percent are black, 62 percent white, and two percent of other races. The average years of experience teaching in the respondents' current schools is between five to nine years (as indicated by 2.51 (SD=1.28), based on six response categories, each representing a range of years). About 53 percent of the sample has an advanced degree (Masters level or higher). Forty-eight percent of the sample teaches in urban schools. The average income for the sample is \$43,990.

Measures

Multiple items tap into each key concept represented in our hypotheses. We first conducted a confirmatory factor analysis to verify fit of our measurement model before proceeding to our structural model. We report means, correlations, and alpha reliabilities of the structural model in Table 1. (Supplemental Appendix A describes all the items in each scale.)

Organizational Justice. To measure distributive justice, we asked respondents, "To what extent are you fairly rewarded" regarding six items from Price and Mueller (1986). On a scale of 1 (not fairly) to 5 (very fairly), respondents indicated the extent to which they are fairly rewarded, for example: "considering the responsibilities you have," "in view of the amount of experience you have," and "for the stresses and strains of your job." The alpha reliability is 0.96.

Procedural justice measures focus on teachers' perceptions of the procedures principals use in making decisions about performance evaluations. Adapting indicators from Folger and Konovsky (1989), we asked respondents, "With regard to your PERFORMANCE, to what extent has your principal done each of the following" and then provided statements that tap into different principles of procedural justice (e.g., consistency, voice, accuracy). This scale includes the seven highest loading items of the twelve potentially tapping into procedural justice in the survey. Respondents indicated on a five-point scale ranging from 1 (not at all) to 5 (very much) the extent to which their principal had, for example: "used consistent standards in evaluating your performance," "allowed you to respond before an evaluation was made," and "obtained accurate information about your performance." The alpha reliability is 0.94.

Interpersonal justice shown by the principal to teachers was measured with five items, based on Moorman (1991). Respondents noted how much they agreed with each of the items on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items indicate the extent to which your principal: "treats you without bias," "treats you with kindness and consideration," and "takes steps to deal with you in a truthful manner." The alpha reliability is 0.95.

Coworker Dynamics. For these measures, we rely on items used in Bryk and Schneider's (2002) teacher survey and Moorman's (1991) indicators of interpersonal justice. Collective responsibility emphasizes the extent to which teachers are committed to achieving the goals of

the school. We ask, "How many teachers in this school do you think: really care about each other?; Feel responsible when students in this school fail?; Help maintain discipline in the entire school, not just their classroom?" For each of the items, respondents indicated 1 (none) to 5 (nearly all). The alpha reliability is 0.83.

Teacher work communication captures the frequency with which teachers share ideas about classroom practices and strategies. We asked respondents to consider the following: "As a teacher at this school, about how often have you..." Sample items include: "had conversations with colleagues about what helps students learn best," "talked about instruction at faculty, department, or other teacher meetings," and "designed instructional programs together with other teachers here." Teachers could indicate frequency on a four-point scale ranging from 1 (less than once a month) to 4 (almost daily). The alpha reliability is 0.83.

Teacher peer interpersonal justice represents fairness in the treatment between teachers. Five items request that respondents indicate their amount of agreement, ranging from 1 (strongly disagree) to 5 (strongly agree) constitute the scale. Each item begins with "Other teachers..." and is followed by, for example: "consider your viewpoint," "treat you without bias," and "treat you with kindness and consideration." The alpha reliability is 0.91.

Trust and respect. We draw items for trust and respect from other studies in schools investigating these concepts (Bryk & Schneider, 2002). The items for trust instantiate our conceptualization of trust as willingness to be vulnerable. Respondents indicated how much they agreed on a 1 (strongly disagree) to 5 (strongly agree) scale with the following statements: "Teachers in this school trust each other," and "It's OK in this school to discuss feelings, worries, and frustrations with other teachers." The latter item especially signals whether the respondent feels safe expressing concerns that make him or her appear vulnerable. Vulnerable

parties risk losing something of importance—such as others' perceptions of one's ability, truthful information, a promised resource, extra effort, or expected mentorship—or being otherwise "disappointed in the action of others" (Luhmann, 1988: 102 in Mayer et al., 1995). The alpha reliability is 0.79. The items for respect capture one's perceived worth and value based on others' treatment of them. The respect measure consists of three items, also measured on a 1 to 5 scale of agreement, including: "Teachers respect other teachers who take the lead in teacher-teacher interactions on a daily basis," "Teachers at this school respect colleagues who are expert at their craft," and "I feel respected by other teachers." The alpha reliability is 0.83.

Controls. We included four control variables. We measured gender as male (0) or female (1). To indicate race, we used a dataset from the State Department of Education that classified each teacher as White/Caucasian, Black/African-American, Hispanic, Asian, or Native American. We modeled race as black (1) or non-black (0). To assess experience, teachers indicated how many years they had been teaching in the school. Response categories ranged from 1 (this is my first year) to 6 (more than 20 years) (see Table 1 for intermittent categories). And, finally, given the variation in the schools surveyed on organizational aspects as school resources and district policies, we control on whether the teacher was from a suburban school (0) or an urban school (1) by performing structural equation modeling clustered by school.8 **

Analyses

To capture the effects of organizational justice factors and coworker dynamics on the development of trust and respect among teachers, we employ structural equation modeling (SEM). SEM expands on the OLS regression model in two ways: 1) by modeling latent variables through indicators and their measurement errors instead of scores assuming no measurement error; and 2) by allowing multiple outcomes and multiple mediation, and thus capturing the

naturally-occurring interrelationships among latent concepts represented by survey items (see Hayes, 2018). Also, in contrast to conducting multiple regressions that separately assess pieces of a model, SEM allows testing of the whole model at one time as well as assessment of specific direct and indirect effects on trust and respect. Doing so may reveal mediation effects even in the absence of direct effects (see Kenny, Kashy, & Bolger, 1998; Zhao, Lynch, & Chen, 2010). We assess direct effects of organizational justice on teacher trust and respect as well as indirect effects, mediated through forms of coworker dynamics. We argue that the effects of principal-teacher justice take longer to shape coworker dynamics while the impact of coworker dynamics on teacher trust and respect occurs closer together. Thus, we use fall data to measure organizational justice and spring data to capture coworker dynamics and their effects on peer interpersonal outcomes. Teachers are likely to have fuller information in the spring about the quality of their coworker interactions, upon which to base their evaluations of trust and respect. 10

We created and analyzed a measurement model to ensure that items within latent variables demonstrated construct validity. We tested the hypothesized 8-construct measurement model, which relies on established constructs and scales, using the SEM model builder in Stata 14.1. We used standardized Maximum Likelihood (ML) with missing values to estimate the measurement model (and ML with missing values and standardized, clustered robust estimates to estimate the structural model). All 36 factor loadings were statistically significant, each averaging: 0.90 (Distributive Justice); 0.86 (Procedural Justice); 0.88 (Principal Interpersonal justice); 0.79 (Collective Responsibility); 0.69 (Work Communication); 0.85 (Peer Interpersonal justice); 0.81 (trust); and 0.79 (respect). The model was significant (χ^2 (519) = 796.43, p < .001) but met standards of fit proposed by Hooper, Coughlan, and Mullen (2008) and Steiger (2007) of 0.95 and above for CFI and 0.07 or lower for RMSEA (CFI=0.971; RMSEA=0.039).

Given that sample sizes of greater than 200 are considered large in SEM (Kline, 2016), we are adequately powered for this analysis.

RESULTS

We evaluate the fit between our hypothesized model and the observed data using statistical indices of chi-square, Comparative Fit Indices (CFIs), and the Root Mean Square Error of Approximation (RMSEA). The chi-square for our model is significant (χ^2 (622) = 1018.46, p < .001), which is unsurprising given our sample size is greater than N=200 (Kline, 2016). Other statistics suggest a good fit (CFI=0.958; RMSEA=0.042). Thus, we offer a parsimonious model of factors predicting teacher trust and respect. While Bryk and Schneider (2002) place items about trust and respect in one scale, we separate them and find better model fit in doing so.¹²

Descriptive Statistics

Table 1 presents the means, standard deviations, and zero-order correlations among the variables used in the study. The correlations signal significant relationships among nearly all constructs of theoretical interest. We assess these relationships in more detail in our structural equation models. Regarding control factors, teacher gender exerts no effects. In contrast, black respondents perceive lower levels of collective responsibility, coworker interpersonal justice, trust, and respect than their white counterparts. Similarly, teachers in urban schools report lower levels of perceived organizational justice represented by the principal's actions, less positive coworker dynamics, and lower trust and respect in their peers compared to educators in suburban schools. And, years of teaching experience correlates positively with peer interpersonal justice, trust, and respect, as well as with being white.

(Table 1 here)

Tests of Hypotheses

The results, shown in Figure 1, provide evidence that coworker dynamics mediate the impact of organizational justice, as reflected in perceived behaviors of the principal, on trust and respect among teachers (Supplemental Appendix B provides the full table of the results). Control variables were included by adding direct paths onto the outcome variables.

(Figure 1 here)

Although we predicted direct effects of an authority's fairness on coworker trust (*Hypothesis 1a*) and respect (*Hypothesis 1b*), no evidence for such effects emerges. Distributive justice, however, had a significant indirect effect on both trust (β =.180, SE=.08) and respect (β =.154, SE=.05), but procedural justice did not (Appendix B). Authority's interpersonal fairness had an indirect effect only on respect among coworkers (β =.168, SE=.08).

Hypotheses 2-4 assert the positive influence of perceived organizational justice (distributive, procedural, interpersonal) on coworker dynamics. Although none of these hypotheses are fully supported, the impact of distributive and procedural justice clearly emerges providing partial support for Hypotheses 2 and 3, respectively. Distributive justice nurtures the profoundly important sense of collective responsibility among teachers. The standardized coefficient indicates that for a one standard deviation increase in principal distributive justice, there is a small increase in teacher collective responsibility by .185 of a standard deviation (SE=.08). Likewise, procedural justice, which involves principals' fairness in how they go about making decisions about performance evaluations and reward distributions, appears to be pivotal for cultivating work communication, exerting a moderate effect (β =.291, SE=.08). Although we find evidence of these two positive, significant effects of distributive justice and procedural justice, interpersonal justice had no effect on any of the mediators. The one indirect effect

noted previously of principal interpersonal justice on coworker respect suggests that the mediators in the model each carry some portion of its effect.¹⁵

Hypothesis 5a and 5b predict that positive coworker dynamics will enhance teacher trust and respect in colleagues, respectively. As the model shows, five of the potential six pathways to teacher trust and respect are significant, largely supporting these hypotheses. Teacher collective responsibility exerts large effects on both teacher trust (β =.616, SE=.10) and respect (β =.552, SE=.14). Though moderately sized, peer interpersonal justice likewise positively affects teacher trust (β =.326, SE=.04) and respect (β =.338, SE=.05). Work communication, however, is related positively only to teacher trust (β =.182, SE=.05) and constitutes a smaller effect. The pattern of coefficients suggests that collective responsibility has a greater effect on teacher trust and respect than teacher work communication or peer interpersonal justice.

Given the absence of significant direct effects between elements of organizational justice and teacher trust and respect, the model largely substantiates *Hypothesis* 6 regarding mediation (see Kenny et al., 1998; Zhao et al., 2010 for discussion of mediation without direct effects).¹⁷

Our results indicate that particular forms of justice instituted by authorities influence certain elements of coworker dynamics, which in turn mediate the effects of justice on teacher trust and respect.

DISCUSSION

Our study provides greater understanding of behavioral and perceptual mechanisms that translate organizational justice between authorities and subordinates into lateral trust and respect among colleagues. We argue that the fairness of an authority shapes coworker dynamics, which are distinguished in terms of interdependence and degrees of helpfulness. In turn, these coworker dynamics serve as the basis for lateral trust and respect assessments. In a structural equation

model, we depict the paths by which the organizational justice context "trickles-down" to affect trust and respect outcomes among peers.

Although we examined the effects of organizational justice on coworker trust and respect (*Hypothesis 1*), no significant pathways emerged. Instead, our results show mediation through coworker dynamics of collective responsibility and work communication, but not peers' interpersonal justice, thus lending some strong, but not total, support for *Hypothesis 6*. Mediation is exhibited in the significant indirect effect of distributive justice on trust and respect (Appendix B), and significant pathways through the collective responsibility mediator. The two statistically significant pathways between procedural justice on work communication and such talk on trust further suggest mediation. These findings underscore the importance of authorities' practices on shaping perceptions of collegial interactions (*Hypotheses 2-4*), which in turn affect the perceived trust and respect teachers report towards their colleagues (*Hypotheses 5a* and *5b*). The different effect sizes of the mediators reflect the importance of this interdependence, where actions on behalf of the whole (i.e., collective responsibility) are more meaningful for cultivating trust and respect in peers than kindness and consideration shown between peer dyads.¹⁸

In addition to the impact of the mediators, our study also reveals that organizational justice components differentially impact coworker dynamics. Principal distributive justice (*Hypothesis 2*) had a small effect on collective responsibility, a pattern that partially confirms our expectations. Principals who are fair about distributing rewards and recognition among staff signal that the organization cares about the well-being of subordinates, rewarding people for doing a commensurate share of the work. The lack of relationship between distributive justice and work communication may reflect the nature of our survey items, which focus on information sharing about technical tasks like instruction, not navigating social and political dynamics in the

workplace. Regarding procedural justice, we find that it exerted a moderate effect on work communication (*Hypothesis* 3), partially confirming our expectations. The effect of procedural justice on work communication suggests that principals who set consistent and clear standards for decision-making, evaluation, and expectations of teachers create a work environment that encourages and motivates teachers to talk to one another more often (or regularly) about their instructional practices. The lack of a relationship between procedural justice and collective responsibility contrasts with our expectation. It may, however, reflect the measurement of procedural justice in this study where emphasis rests on performance evaluation, not policy-related decision-making rules. Interestingly, interpersonal justice (*Hypothesis* 4) failed to impact peer interpersonal justice as expected nor had any effect on other elements of coworker dynamics. This lack of an effect implies the uniqueness of a work setting where workers simultaneously have high autonomy but also need interdependence with colleagues—and substantial material support from supervisors—to do the work. In such a setting, the authority's enactment of interpersonal justice may be seen as a superficial form of support or simply limited to that teacher.

While our selection, design, and analytic strategies have reduced bias and error to enhance the reliability of our findings, our study is not without limitations. To reduce the common methods bias, we collected data from individuals at separate time points, as recommended by Podsakoff, MacKenzie, Lee, & Podsakoff (2003). Although having only two waves of data is a limitation, we compared the impact of the mediators measured in the spring (results reported in the text) and the fall (note 14) to clarify the role of time in the justice-dynamics-interpersonal outcomes process. The main difference between these models involved the effects of principal interpersonal justice. While that form of justice ensures a professional

atmosphere, perceptions of it are not anchored in actions explicitly related to students, which may affect how its impact unfolds over the school year. We also recognize that the non-random selection of five schools in the southeastern U.S. limits our findings, as the dynamics we find may not generalize to schools outside of the region. Furthermore, distinct forms of organization, such as those represented in private schools, or at other levels of education (i.e., elementary and middle), might affect how organizational justice in hierarchical relationships filters down to trust in and respect for one's colleagues. Thus, future research should consider the "trickle-down" effects of justice beyond public high schools in the Southeast.

CONCLUSION

The results of this study are instructive for organizational justice research in three areas. First, our findings point to the critical role of coworker dynamics in mediating the trickle-down effects of justice of authorities on subordinates' trust and respect in one another. Future research could look at forms of coworker dynamics in settings where employees work less autonomously, e.g., in teams, and detail employees' social networks. Such studies could reveal the boundary conditions impacting the fairness of the authorities' actions directly or indirectly on coworkers' trust and respect. Also, greater focus on the timing of trickle-down effects would contribute to research on the temporal aspects of justice events (Patient, Cojuharenco, & Fortin, 2015).

Second, consistent with Rogers and Ashforth (2017), we find that respect is more aptly treated as a unique construct, separate from trust, with its own process of development in organizations. While a number of studies confirm the consequences of coworker trust on other organizational outcomes such as increased organizational performance (Salamon & Robinson, 2008; Bryk & Schneider, 2002) and organizational commitment (Ferres et al., 2004), fewer look at the consequences of respect. Based on prior literature, respect may affect outcomes such as a

sense of belonging to a community; satisfaction of the need for status; self-esteem; psychological safety; and role identification (Rogers & Ashforth, 2017). However, future research should distinguish empirically the consequences of coworker trust and respect in the workplace.

Finally, our results reveal the unique and relative impact of forms of justice on coworker dynamics in the workplace. Future studies might delve into these differences by directly assessing what it is about each justice form that facilitates interdependence or helpfulness. For instance, in settings like ours, it might be that the episodic nature of acts of distributive justice facilitates collegial interdependence, i.e., collective responsibility. In contrast, the more continuous nature of procedurally just decision-making may facilitate collegial helpfulness.

Issues inspired by our findings extend beyond education settings to comparable organizations and occupations involving a high degree of collegial interdependence. For individuals employed in the public sector, organizational justice and positive coworker dynamics may function as forms of security at work, beyond job and financial security shown to attenuate dissatisfaction with pay (Narisada & Schieman, 2016). Such dynamics may also provide a basis for addressing conflicts among multiple stakeholders, thereby generating opportunities for novel solutions to problems common in schools and similar client-service organizations. For example, teachers' trust in and respect of parents may be elevated in a context where teachers feel they are fairly rewarded for the work they do towards parent contact (distributive justice), are given clear expectations for parent contact (procedural justice), or observe their principals skillfully arbitrating between teachers' workplace rights and parent demands (interpersonal justice). Finally, our results offer a blueprint for managerial practices to transform dynamics among coworkers, which ultimately nourish or undermine the trust necessary to achieve an organization's goals and the respect necessary to cultivate worker well-being.

ENDNOTES

- Fulmer and Ostroff (2017) note that "trickle-down" models of leadership involve higher levels of leaders passing down (via social learning mechanisms) behaviors and styles of communication to lower level leaders. Our study focuses on how the authority in a school—the principal—models behavior and creates an atmosphere conducive to certain behaviors among his or her subordinates—teachers in the school.
- While construct discrimination and addressing high correlations among the types of justice remain an ongoing debate in justice research, many studies find different correlates and/or independent effects of each, even for procedural and interpersonal justice (Colquitt et al., 2001).
- We focus on the interpersonal component of interactional justice (omitting the informational component), as proposed by Bies and Moag (1986). We refer to "interpersonal" justice but use the term "interactional justice" when previous research employs that term. While interpersonal justice may partly align with the concept of civility emphasizing polite treatment of and regard for others (Andersson and Pearson 1999), it is distinct from the deep emotional sustenance and active coping assistance denoted by social support (Thoits, 2011).
- Some previous studies (e.g., Bryk & Schneider, 2002; Van Quaquebeke & Eckloff, 2010) use measures that confound trust and respect.
- ⁵ "Appraisal" respect differs from "recognition" respect, which focuses on the moral duty of treating people with dignity, regardless of their individual characteristics (see Darwall, 1977; Grover, 2014). Here we focus on appraisal respect to signal a positive evaluation of others' accomplishments. The latter is universalistic and dovetails with principles of interpersonal justice.

- The ethnographic and interview portion of the study involved 99 interviews and fieldwork done over 15 months.
- Being willing to risk loss (if one does not perform that action) does not require the loss; the latter is separately conceptualized by Mayer et al. (1995) as "trusting action."
- Due to the small number of schools in our analysis (N=5), we could not use multilevel modeling as this would skew the estimates.
- Since Baron and Kenny's (1986) seminal work on mediation, Kenny, Kashy, and Bolger (1998) reflect on the classic four steps of mediation and write that: "One might ask whether all of these steps have to be met for there to be mediation. ... Step 1 [i.e., Show that the initial variable is correlated with the outcome, in a direct effect to be mediated] is not required, but a path from the initial variable to the outcome is implied if Steps 2 and 3 are met. So, the essential steps in establish mediation are Steps 2 and 3 [i.e., show initial variable is correlated with the mediator, and show that the mediator affects the outcome variable]" (p. 260).
- We also ran the analyses with measures for organizational justice and coworker dynamics from the fall survey and those for trust and respect from the spring survey. We report those findings in note 14, indicating how they differ from those reported in the text.
- While respectful treatment may constitute an element of interpersonal justice (see e.g., Bies & Moag, 1986; Jost & Kay, 2010), which in turn may affect trust in relationships (e.g., DeConinck, 2010; Stinglhamber et al., 2006), it remains distinct from respect as an appraisal of worth. Nonetheless, given this conceptual issue, we examined whether teacher respect items would map onto the peer interpersonal justice measure. They did not do so.
- Bryk and Schneider (2002) offer a global measure of trust, involving elements that reflect trust in the sense of "vulnerability to risk" and respect. In our preliminary analyses, we ran

separate models, one involving their global measure of trust and another disaggregating that measure into trust and respect, which we consider conceptually more appropriate. In a model comparison test, the fit was superior for the model involving separate interpersonal outcomes. The model using Bryk and Schneider's global measure of trust produced these fit statistics: X^2 (632) = 1050.59, CFI = .956, and RMSEA = .043. The difference between the two models, given the difference in degrees of freedom, is significant, X^2 (10) = 32.13, p< .001.

- Given the high correlation between principal procedural and interpersonal justice, we allowed these (as well as distributive justice) to covary in the model. We also performed a sensitivity analysis to examine whether merging the items into one construct, consistent with Tyler and Bies' (1990) casting of procedural justice as having an interpersonal dimension, would produce similar results. This model did not achieve good fit (RMSEA= 0.053, CFI =0.935).
- The model using fall data to measure both the context of justice created by the principal and coworker dynamics shows that principal interpersonal justice affects collective responsibility and peer interpersonal justice, but peer interpersonal justice does not impact coworker trust or respect. These varying patterns may reflect something unique about how interpersonal justice at hierarchical and lateral levels operates over time in organizations. While our data do not have sufficient variation to support a model controlling for prior time points, future research involving three waves of data may allow a more sophisticated examination of time effects.
- The lack of relationship between interactional justice and trust indicates that the system of relationships in the full model has attenuated their bivariate correlation.
- We recognize that our modeling strategy does not rule out reverse causation. In such a model, trust and respect influence outcomes of collective responsibility, work communication, and peer interpersonal justice—a pattern potentially characterizing the interactions of people

who have been in the organization for a long time. This model also fits the data (RMSEA=0.039; CFI=0.964; χ^2 (628) = 968.357). In SEM, there are always models that will equally fit the data; this is mathematical equivalence. It is, however, inappropriate to compare non-nested models with a chi-square test or Comparison Information; rather, relying on the theoretically grounded model in the absence of competing theories is appropriate (see Werner & Schermelleh-Engel, 2010; Merkle, You, & Preacher, 2016). Because the alternate reverse model goes against our theoretical model that treats trust and respect as emergent properties of social interaction, and controls for the influence of years teaching in the school, we treat the reverse model as mathematically fit but theoretically unfit.

- In supplemental analyses, no significant direct effects of justice on trust or respect were found in a more parsimonious model without mediators.
- In addition to the effects between our key variables of interest, the empirical patterns involving our control variables highlight how race of respondent affects perceptions of peer relationships. On average, blacks perceived significantly lower levels of most coworker dynamics and outcomes than whites. We also ran exploratory analyses separately for white and black teachers, as well as for urban and suburban schools (with the former largely black and the latter largely white). Results for white teachers and teachers from suburban schools show basically the same pattern as reported in the text. The model for black teachers would not converge, while the model for urban schools diverged in three ways: (1) principal interpersonal justice significantly affected peer interpersonal justice; (2) distributive justice had no effect on coworker dynamics; and (3) work communication ceased to significantly affect trust. Direct effects of distributive justice emerge in the respective models, positively affecting respect in suburban schools and negatively influencing trust and respect in urban schools. These

countervailing effects may account for the absence of a direct effect of principal justice on trust and respect in the full model across both types of schools. Given these differences, we stress the need for future research to examine in far more detail than our data allow other factors that may explain why black and white teachers (or black and white workers in general) report different perceptions of fairness, such as the role of past negative experiences in the workplace (Davidson & Friedman, 1998).

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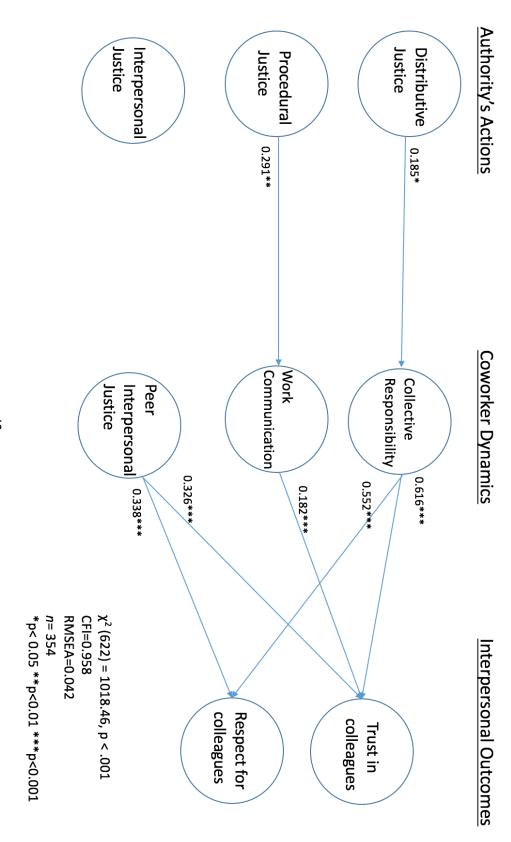
Table 1. Descriptive Statistics, Correlations, and Reliabilities

Note. Pairwise correlation coefficients reported, $N = between 271$ and 354 individuals. $N = 5$ schools. *p-	12. Respect for Colleagues	11. Trust in Colleagues	10. Urban school	categories*)	Years teaching in school (by	8. Black	7. Female	Peer Interpersonal Justice	Work Communication	 Collective Responsibility 	3. Interpersonal Justice (Principal)	2. Procedural Justice (Principal)	1. Distributive Justice (Principal)	
	3.86	3.53	47%		2.51	36%	62%	4.02	2.50	3.31	4.17	3.78	2.93	Z
	0.80	0.89	.50		1.28	0.48	0.49	0.71	0.78	0.86	0.89	1.01	1.19	SD
	.10	.17*	19*		01	07	05	.17*	.18*	.27*	.41*	.43*	(0.96)	ь
	.11	.13*	19*		.11	.10	.05	.16*	.20*	.28*	.72*	(0.94)		2
	.15*	.15*	26*		.04	03	.11	.21*	.10	.30*	(0.95)			ω
	.55*	.59*	39*		.11	12*	.03	.43*	.32*	(0.83)				4
	.23*	.35*	20*		.06	10	.07	.17*	(0.83)					ъ
ools. *p	.51*	.49*	18*		.12*	13*	04	(0.91)						6
<.05.	.02	01	07		.03	02	1							7
	15*	25*	.52*		.0316*	;								∞
ls. *p<.05.	.14*	.15*	21*		1									9
	28*	36*	1											10
	.78*	(.79)												11
	(.83)													12

Coefficient alphas presented in parentheses along the diagonal, where applicable.

*"This is my first year," "2-4," "5-9," "10-15," "16-20," and "More than 20 years"

Outcomes. Standardized Maximum Likelihood (ML), Clustered Robust Estimates Figure 1. Impact of Perceived Authority (Principal) Actions on Perceived Coworker (Teacher) Dynamics and (Teacher) Interpersonal



Supplemental Appendix A

Dependent Variables

Trust in colleagues ($\alpha = .79$)

The next several questions refer to teachers in your school. (1 = strongly disagree, 5 = strongly agree)

- 1. Teachers in this school trust each other.
- 2. It's OK in this school to discuss feelings, worries, and frustrations with other teachers.

Respect for colleagues ($\alpha = .83$)

The next several questions refer to teachers in your school. (1 = strongly disagree, 5 = strongly agree)

- 1. Teachers respect other teachers who take the lead in teacher-teacher interactions on a daily basis.
- 2. Teachers at this school respect those colleagues who are expert at their craft.
- 3. I feel respected by other teachers.

Independent Variables

Contextual Organizational Justice

Distributive Justice (Principal) ($\alpha = .96$)

Fairness in the following questions means the extent to which a person's contributions to the school are related to the rewards received. Money, recognition, and physical facilities are examples of rewards. To what extent are you fairly rewarded... (1= not fairly, 5 = very fairly)

- 1. ...considering the responsibilities you have?
- 2. ...taking into account the amount of education and training that you have had?
- 3. ...in view of the amount of experience you have?
- 4. ...for the amount of effort that you have put forth?
- 5. ...for work that you have done well?
- 6. ... for the stresses and strains of your job?

Procedural Justice (Principal) ($\alpha = .94$)

The following section concerns your head principal. With regard to your PERFORMANCE, to what extent has your principal done each of the following? (1= not at all, 5 = very much)

- 1. Used consistent standards in evaluating your performance.
- 2. Gave you feedback that helped you learn how well you were doing.
- 3. Took into account factors beyond your control.

- 4. Allowed you to respond before an evaluation was made.
- 5. Made clear what was expected of you.
- 6. Obtained accurate information about your performance.
- 7. Observed your performance frequently.

Interpersonal Justice (Principal) ($\alpha = .95$)

The following items refer to the head principal. (1 = strongly disagree, 5 = strongly agree)

- 1. Your principal considers your viewpoint.
- 2. Your principal treats you without bias.
- 3. Your principal treats you with kindness and consideration.
- 4. Your principal shows concern for your rights as an employee.
- 5. Your principal takes steps to deal with you in a truthful manner.

Teacher Dynamics

Collective Responsibility ($\alpha = .83$)

How many teachers in this school do you think... (1 = none, 5 = nearly all)

- 1. ...really care about each other?
- 2. ...feel responsible when students in this school fail?
- 3. ...help maintain discipline in the entire school, not just their classroom?

Work Communication ($\alpha = .83$)

As a teacher at this school, about how often have you... (1= Less than once a month, 4 = almost daily)

- 1. ...had conversations with colleagues about what helps students learn best?
- 2. ...talked about instruction in the teachers' lounge?
- 3. ...talked about instruction at faculty, department, or other teacher meetings?
- 4. ...talked about instruction with other teachers in this building before or after school?
- 5. ...designed instructional programs together with other teachers here?

Peer Interpersonal Justice ($\alpha = .91$)

The following items refer to other teacher who you work with. (1 = strongly disagree, 5 = strongly agree)

- 1. Other teachers consider your viewpoint.
- 2. Other teachers treat you without bias.
- 3. Other teachers treat you with kindness and consideration.
- 4. Other teachers show concern for your rights as an employee.
- 5. Other teachers take steps to deal with you in a truthful manner.

Supplemental Appendix B

Best fitting structural equation model results of organizational justice and coworker dynamics on trust and respect (standardized coefficients reported, clustered by school)

	Pattern Coefficients			
	Standardized	95% Confidence		
D: 4 Fee 4	coefficient	Interval		
Direct Effects				
Peer Interpersonal Justice	_			
Distributive Justice Principal	0.123	-0.032, 0.277		
Interpersonal Justice Principal	0.228	-0.105, 0.561		
Procedural Justice Principal	-0.043	-0.352, 0.265		
Work Communication				
Distributive Justice Principal	0.146	-0.082, 0.374		
Interpersonal Justice Principal	-0.145	-0.417, 0.127		
Procedural Justice Principal	0.291**	0.125, 0.458		
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Collective Responsibility	<u>_</u>			
Distributive Justice Principal	0.185*	0.033, 0.337		
Interpersonal Justice Principal	0.182	-0.082, 0.446		
Procedural Justice Principal	0.129	-0.252, 0.510		
Trust	<u> </u>			
Peer Interpersonal Justice	0.326***	0.240, 0.412		
Work Communication	0.182***	0.081, 0.282		
Collective Responsibility	0.616***	0.426, 0.807		
Teacher Experience	0.060	-0.007, 0.127		
Female	-0.027	-0.188, 0.133		
Black	-0.174*	-0.317, -0.031		
Distributive Justice Principal	-0.040	-0.127, 0.048		
Interpersonal Justice Principal	-0.039	-0.149, 0.070		
Procedural Justice Principal	-0.062	-0.205, 0.081		
Respect	_			
Peer Interpersonal Justice	0.338***	0.238, 0.439		
Work Communication	0.069	-0.072, 0.210		
Collective Responsibility	0.552***	0.281, 0.823		
Teacher Experience	0.049	-0.010, 0.108		
Female	-0.005	-0.114, 0.104		
Black	-0.082*	-0.154, -0.010		

Distributive Justice Principal	-0.113	-0.232, 0.006		
Interpersonal Justice Principal	-0.030	-0.114, 0.053		
Procedural Justice Principal	-0.020	-0.130, 0.090		
Indirect Effects				
Trust	_			
Distributive Justice Principal	0.180*	0.024, 0.337		
Interpersonal Justice Principal	0.160	-0.025, 0.345		
Procedural Justice Principal	0.118	-0.069, 0.306		
Respect	_			
Distributive Justice Principal	0.154**	0.053, 0.254		
Interpersonal Justice Principal	0.168*	0.005, 0.330		
Procedural Justice Principal	0.077	-0.088, 0.242		
Total Effects				
Peer Interpersonal Justice	_			
Distributive Justice Principal	0.123	-0.019, 0.264		
Interpersonal Justice Principal	0.228*	0.006, 0.450		
Procedural Justice Principal	-0.043	-0.270, 0.183		
Work Communication	_			
Distributive Justice Principal	0.146	-0.005, 0.297		
Interpersonal Justice Principal	-0.145	-0.383, 0.092		
Procedural Justice Principal	0.291*	0.053, 0.530		
Collective Responsibility	_			
Distributive Justice Principal	0.185*	0.045, 0.325		
Interpersonal Justice Principal	0.182	-0.039, 0.403		
Procedural Justice Principal	0.129	-0.096, 0.354		
Trust	_			
Peer Interpersonal Justice	0.326***	0.209, 0.442		
Work Communication	0.182***	0.057, 0.306		
Collective Responsibility	0.616***	0.488, 0.744		
Teacher Experience	0.060	-0.039, 0.159		
Female	-0.027	-0.124, 0.069		
Black	-0.174**	-0.274, -0.074		
Distributive Justice Principal	0.141	-0.037, 0.318		
Interpersonal Justice Principal	0.121	-0.124, 0.365		
Procedural Justice Principal	0.056	-0.193, 0.305		

Respect		
Peer Interpersonal Justice	0.338***	0.225, 0.452
Work Communication	0.069	-0.055, 0.193
Collective Responsibility	0.552***	0.423, 0.681
Teacher Experience	0.049	-0.049, 0.147
Female	-0.005	-0.101, 0.091
Black	-0.082	-0.181, 0.016
Distributive Justice Principal	0.041	-0.108, 0.190
Interpersonal Justice Principal	0.137	-0.098, 0.372
Procedural Justice Principal	0.057	-0.183, 0.297

^{*}p<0.05 **p<0.01 ***p<0.001

Note: In the interest of space, measurement effects (i.e., error variances and factor variances and covariances) have been omitted from this table, but are available from authors upon request.