

From Insult to Injury: Explaining the Impact of Incivility

Brianna Barker Caza

Department of Business Administration, University of Illinois at Urbana-Champaign

Lilia M. Cortina

Departments of Psychology and Women's Studies, University of Michigan

Previous research has demonstrated that violence, harassment, and discrimination have negative consequences for individual well-being. However, this literature has focused less on subtle forms of mistreatment, such as incivility. The current study addresses this gap by developing and testing a conceptual model of incivility, as experienced in institutions of higher education. A survey of 1,043 university students revealed that over 75% had experienced uncivil behavior from other members of their institution in the prior year. Structural equation analyses suggest that these incivility targets endured psychological distress, dissatisfaction with and disengagement from their institution, and performance decline. We also identified perceptions of injustice and ostracism as key mediators in this process, which operated somewhat differently depending on the formal institutional status of the incivility instigator. Implications for theory and research are discussed.

Although overtly aggressive acts of violence or harassment may be more memorable, they actually represent a small portion of disruption in applied social contexts. Incivility—a low-intensity deviant behavior—is actually more prevalent (Cortina, Magley, Williams, & Langhout, 2001). Incivility takes the form of “milder” mistreatment such as condescending remarks or impolite gestures. In isolation, a single rude comment may not pose a serious threat to an individual’s well-being. However, persistent experiences of incivility in valued settings can accumulate over time to be potentially debilitating to the individual (Cortina et al., 2001). The present study takes a closer look at the relationship between incivility and well-being, examining the roles that social status and cognition play in the unfolding of negative outcomes.

BACKGROUND: INCIVILITY IN INSTITUTIONS

Andersson and Pearson (1999) defined *incivility*, as it occurs within social contexts, as “low intensity deviant

behavior with ambiguous intent to harm the target, in violation of [institutional] norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others” (p. 457). A growing body of literature on incivility in settings of work suggests it to be both prevalent and harmful to individuals in those contexts (Andersson & Pearson, 1999; Cortina et al., 2001; Cortina, Lonsway, Magley, Freeman, Collinsworth, Hunter, & Fitzgerald, 2002; Pearson & Porath, 2001, 2004). High incidence rates, in conjunction with the possibility that incivility may “spiral” into more extreme and violent behavior (Andersson & Pearson, 1999), underscore the need for a better understanding of this phenomenon. Moreover, increasing diversity in institutions makes it likely that misunderstandings and unintentional incivilities will occur, which could trigger additional adversities (Muir, 2000).

Although the literature on incivility has come a long way in its short history, a number of gaps remain. First, to date, little research had addressed mechanisms that drive the harms of incivility. Although strong empirical evidence suggests that experiences of incivility have negative outcomes (e.g., Cortina et al., 2001, 2002; Pearson et al., 2001; Johnson & Indvik, 2001), researchers have only theorized about the process by which incivility leads to such outcomes. For instance, Cortina

Correspondence should be addressed to Brianna Barker Caza, who is now at the University of Illinois at Urbana-Champaign, Department of Business Administration, 350 Wohlers Hall, 1206 South Sixth Street, Champaign, IL 61820. E-mail: bcaza@uiuc.edu

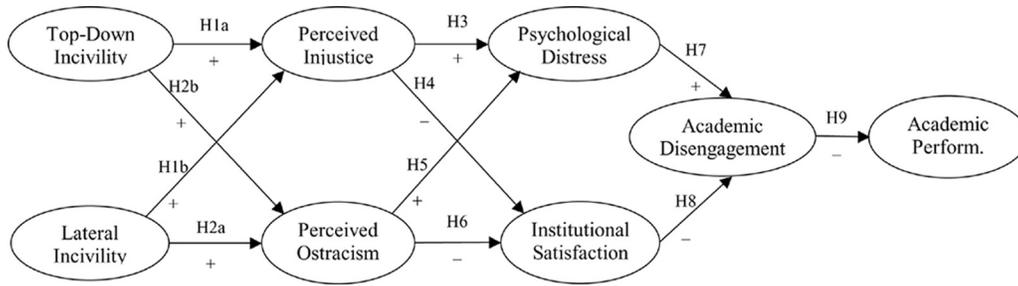


FIGURE 1 Conceptual model, showing all hypothesized relationships and their predicted valence (positive or negative).

et al. (2001) suggest a number of cognitive and affective variables that might link workplace incivility to individual outcomes, such as anger, fear, damaged social identity, cognitive distraction, and cognitive appraisal. Pearson and Porath (2000) add justice perceptions to this list of potential mediators. However, this theorizing has not yet been put to an empirical test.

Second, there is little known about the effect of the dyadic power relationship between the target and instigator of incivility. However, given the salience of social hierarchies in many institutions (e.g., Pfeffer, 1981), it seems likely that power relationships would affect how uncivil experiences unfold in those contexts. The majority of current research conducted on general mistreatment in applied settings has either focused on abuse from higher-status individuals¹ (e.g., Ashforth, 1994; Tepper, 2000) or ignored issues of power altogether (e.g., Andersson & Pearson, 1999). One notable exception is work by Aquino and colleagues, who have looked extensively at how status influences individuals' responses to mistreatment (Aquino & Douglas, 2003; Aquino, Galperin, & Bennett, 2004; Aquino, Tripp, & Bies, 2001, 2006). This work clearly indicates that both hierarchical and relational status have consequences as to how individuals respond to mistreatment. This suggests that status must also have implications for the individuals' personal and professional well-being after experiences of mistreatment.

Third, little research has focused on the experience of incivility in applied contexts outside of the workplace, such as educational institutions. Given the importance of social relations in educational settings (e.g., Feldmann, 2001; Plank, McDill, McPartland, & Jordon, 2001), it is important that we systematically examine the experience of everyday social (and antisocial) interactions among students, professors, administrators, and other staff.

¹In terms of specific (i.e., targeted) mistreatment, however, there have been studies of same-status perpetrators in the sexual harassment literature (e.g., O'Connell & Korabik, 2000).

THE CURRENT STUDY

The present study addresses these three gaps in the literature by testing an integrated model of students' experiences of incivility in a university setting. Our conceptual model, summarized in Figure 1, builds on theoretical principles to explain the process by which experienced incivility triggers adverse personal and academic consequences. Note that this model differentiates between incivility from higher-status individuals (termed *top-down incivility*) versus incivility from peers (*lateral incivility*). Moreover, it posits that two cognitive mechanisms—*perceived injustice* and *perceived social ostracism*—would mediate the impact of incivility on subsequent outcomes. In short, we propose that experiencing incivility from both same- and higher-status instigators will culminate in perceived social ostracism and perceived injustice, which will in turn negatively influence psychological and academic health.

INSTIGATOR STATUS

To date, empirical research has not distinguished between incivility instigated by higher-status versus same-status individuals. However, theoretical and empirical evidence from related domains suggests that the experience of hostile interpersonal behavior may be dramatically different depending on who instigates it. For example, in two different papers, Aquino et al. (2001, 2006) found that status of the victim and perpetrator influence if the victim will choose to respond to mistreatment with revenge, forgiveness, or reconciliation. Further, social power theories (e.g., Carli, 1999; Raven & French, 1958; Johnson, 1976) assert that low-power individuals may be more at risk for abuses of power. Other theories suggest that the frequency of harassment from high-status individuals may not necessarily be greater than harassment from same-status individuals, but the severity of the incident may be worse if the instigator is in a position of power (e.g., Fitzgerald, Swan, & Magley, 1997). Studies of sexual harassment have found location within the status hierarchy to be a

key determinant of vulnerability to mistreatment (e.g., Tangri, Burt, & Johnson, 1982) and of cognitive appraisals of the mistreatment (Malamut & Offermann, 2001). Other work has indicated that behavioral responses to abuse in organizations may vary as a function of perpetrator status (e.g., Zellars, Tepper, & Duffy, 2002).

Within the workplace incivility literature, researchers have theorized about how position in the institutional hierarchy affects targets' willingness to reciprocate the rude behavior (Pearson et al., 2001; Pearson & Porath, 2004). An unexplored topic to date, however, is how the instigator's hierarchical status affects the unfolding of incivility outcomes. To investigate this question, we examine the impact of formal or "legitimate" status, as indicated by the instigator's position within the institutional hierarchy (French & Raven, 1959). Given that the targets in this research are students, if another student instigates the incivility, we consider it to be *lateral incivility*, or same-status mistreatment. If a member of the faculty, staff, or administration instigates the uncivil conduct, it will be considered *top-down incivility*, or higher-status mistreatment. Below we hypothesize about how these status-differentiated experiences of incivility might influence mediators and outcomes in the process.

COGNITIVE MEDIATORS

The few studies that have investigated the effect of incivility on individual well-being (e.g., Cortina et al., 2001, 2002) have not empirically examined the mechanisms driving these outcomes. We address this gap by examining two cognitive mechanisms, perception of injustice and perception of social ostracism, which should mediate academic and psychological outcomes of experiencing incivility.

Perception of Injustice

Pearson and Porath (2000) argue that targets of incivility in institutions can develop perceptions of unfairness—more specifically, a perception of interactional injustice—as a result of the uncivil experience. Interactional injustice refers to perceptions of unfair treatment from authority figures during the enactment of organizational procedures (Bies, 1987; Bies, 2001; Bies & Moag, 1986). In other words, it refers not to the treatment that is external to the person, but rather to an internal *cognitive evaluation* of that treatment, culminating in a judgment of unfairness. It is distinguishable from other justice judgments by its explicit focus on the interpersonal aspects of organizational life, as opposed to organizational procedures or outcomes (for a review see Cropanzano & Greenberg, 1997). Research indicates that perceptions of interactional injustice elicit a number of negative

emotional, attitudinal, and behavioral responses from individuals (for a review see Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Tyler & Blader, 2000).

Throughout the literature on organizational justice, justice judgments are based on evaluations of treatment by authority figures or decision-makers; the behavior of peers does not factor into the discourse. This suggests that only top-down incivility can trigger perceptions of interactional injustice (Pearson et al., 2000, 2001). In sum, organizational theory supports the notion that incivility instigated "from above," i.e., from a higher-status individual, will likely result in a perception of interactional injustice. We thus predict that:

Hypothesis 1a: Incivility instigated by higher-status individuals ("top-down incivility") will lead to perceived interactional injustice.

Although not readily apparent from the organizational justice literature, there is reason to believe that peer-instigated incivility could also result in perceived interactional injustice. Incivility—regardless of who instigates it—is a violation of basic implicit norms of respectful interpersonal interaction (Andersson & Pearson, 1999; Pearson & Porath, 2004). Targets may hold the institution responsible for failing to uphold these standards and allowing the uncivil behavior to take place. The institution may therefore appear unjust in their eyes, which could trigger negative individual consequences. In terms of empirical evidence, Donovan, Dragow and Munson (1998) found unfair treatment from peers to be just as damaging to the individual as similar treatment from supervisors. Based on this theory and evidence, we challenge the notion that behavior from same-status individuals is inconsequential to perceived fairness of the institution, hypothesizing that:

Hypothesis 1b: Incivility instigated by same-status individuals ("lateral incivility") will lead to perceived injustice.

Perception of Social Ostracism

A second possible cognitive mediator of incivility outcomes is perceived social ostracism. Williams and colleagues (Sommer, Williams, Ciarocco, & Baumeister, 2001; van Beest & Williams, 2006; Williams, 1997; Williams, 2001; Williams, Cheung, & Choi, 2000; Williams, Forgas, & Von Hippel, 2005; Williams & Sommer, 1997) define *social ostracism* as a perception of being ignored, excluded, or rejected by others, which deprives the perceiver of feelings of belongingness and weakens her/his perceived control over interactions with others. Simply stated, ostracism can be conceptualized as a sense of social rejection (Sommer et al., 2001).

Research on ostracism in organizational settings indicates that the target of the ostracism is often unsure why it is occurring, which results in them questioning whether their existence is meaningful to the organization (Sommer et al., 2001). Oftentimes the target of ostracism struggles with assigning a cause to the mistreatment, because intentionality is ambiguous (Williams, 1997; 2000; Williams et al., 2000; Williams & Sommer, 1997; van Beest & Williams, 2006). If the target perceives the treatment as a mistake on the part of the instigator, the harmful consequences of ostracism may be fairly limited. However, if the target believes that the instigator purposefully ostracized him or her, this results in aversive self-reflection, where targets attribute perceived ostracism to personal shortcomings (Sommer et al., 2001; Williams, 1997, 2001; Williams et al., 2000).

We propose that frequent experiences of incivility are likely to lead an individual to feel ostracized. This may be particularly true for incivility manifested in educational contexts. Although research indicates that individuals can experience social ostracism at all points in their lives (Williams et al., 2000), some argue that it is most commonly experienced in educational settings, instigated by peers (Cairns, Cairns, Neckerman, Holly, Gest, Garipey, 1988). Ostracism is often used as a punishment tactic in adolescent peer groups (Cairns, Cairns, Neckerman, & Ferguson, 1989). Due to its familiarity as a punishment tool utilized by peers, students may be particularly likely to perceive the experience of lateral incivility as intentional social ostracism.

Hypothesis 2a: Incivility instigated by same-status individuals (“lateral incivility”) will lead to a perception of social ostracism.

Individuals who experience top-down incivility may also develop a perception of social ostracism from the institution. In university settings, faculty, staff, and administrators are highly representative of the institutional community, and they have a profound effect on students’ perceptions and behaviors (Moran & Volkwein, 1988). Thus, when the student perceives him or herself to be unfairly treated by such individuals, the student’s self-perceived status as a valued member of the institution may be called into question. That is, the student is likely to feel ostracized:

Hypothesis 2b: Incivility instigated by higher-status individuals (“top-down incivility”) will lead to a perception of social ostracism.

Academic and Psychological Consequences

We now turn our attention to describing how the two mechanisms described above, perceived injustice and

perceived social ostracism, mediate the relationship between experienced incivility and individual outcomes. We focus on outcomes in two domains that are particularly salient in educational contexts: academic outcomes (satisfaction, disengagement, and performance) and psychological outcomes (depression and anxiety).

Consequences of Perceived Injustice

Although not yet empirically tested, theory holds that interactional injustice may mediate the incivility-outcome relationship (e.g., Andersson & Pearson, 1999). Moreover, various studies have documented adverse effects of injustice perceptions on both the individual and the affiliated institution (e.g., Beugre & Baron, 2001; Colquitt et al., 2001; Cropanzano, Byrne, Bobocel, Rupp, 2001; Tyler & Lind, 1992). When individuals perceive their institution to be treating them unfairly, their social identity as a group member may be threatened; perceptions of injustice therefore trigger psychological distress (Lind & Tyler, 1988; Tyler & Blader, 2000). Likewise, literature on “just world” beliefs (e.g., Lerner, 1980) indicates that individuals have a need to believe that fairness exists, especially inside a valued institution. Without such perceived fairness or justice, they endure psychological harm (Beugre & Baron, 2001; Bies, 2001; Colquitt et al., 2001). In the present study, we focus on anxiety and depression as indicators of psychological distress, predicting that:

Hypothesis 3: Injustice perceptions will lead to increased psychological distress (i.e., anxiety and depression).

Injustice perceptions in an institutional context can have consequences for not only psychological health but also attitudes toward the institution. For example, in the workplace, injustice perceptions have been linked to dissatisfaction with the organization (e.g., Aquino, Griffeth, Allen, & Hom, 1997; Cropanzano et al., 2001). By contrast, employees who perceive fair treatment are more satisfied with their jobs (Donovan et al., 1998). Expecting parallel findings in institutions of higher education, we posit that students’ perceptions of injustice will have negative effects on their school-related attitudes:

Hypothesis 4: Perception of injustice will lead to lower satisfaction with the institution.

Consequences of Perceived Social Ostracism

As with perceptions of injustice, perceived social ostracism also has negative implications for individuals’ well-being. Williams (1997, 2001) posit that ostracism threatens individuals’ fundamental needs for belonging,

self-esteem, control and meaningful existence, which has detrimental impact on individuals' well-being (see Williams, Forgas, & von Hippel, 2005 for a review). According to Baumeister and Leary's (1995) theory of social belongingness, forming and maintaining interpersonal relationships with others is a basic human need, driving social group membership. Furthermore, Tyler (1989) noted that interpersonal treatment during social interactions gives people information about their status within their group. Thus, when individuals receive negative interpersonal treatment, they are likely to question their group membership, which challenges the basic human need for social acceptance. As a result, studies indicate that experiences of social ostracism have powerful, negative effects on mood, sense of social satisfaction, self-appraisal, sense of social belonging, and control (Geller, Goodstein, Silver, & Sternberg, 1974; Williams & Sommer, 1997; Williams et al., 1998). Research further suggests that negative ostracism outcomes are exacerbated when the target is unable to attribute the ostracism to a specific cause (Sommer et al., 2001). When targets ruminate about the causes and consequences of the ostracism, or they perceive threats to their control, anxiety results (Williams & Sommer, 1997; Sommer et al., 2001). Moreover, the attribution of the perceived social ostracism to personal shortcomings can foster depression (Geller et al., 1974). Based on this theory and evidence, we propose that:

Hypothesis 5: Perceptions of social ostracism will lead to increased psychological distress (i.e., anxiety and depression).

We also propose that social ostracism perceived in an institutional context will affect attitudes toward that institution, leading to lower satisfaction with experiences in that context. In series of studies of cyberball participants, van Beest and Williams (2006) found that participants reported lowered need satisfaction on four levels (belonging, self-esteem, meaningful existence, and control) when ostracized during the game. Further, in research on different forms of victimization in educational and professional settings, links have been found between experiences of ostracizing acts and satisfaction with work in those settings (e.g., Cortina et al., 2001, 2002; Fitzgerald et al., 1997) as well as global attitudes toward the institution (Cortina et al., 1998; Huerta, Cortina, Pang, Torges, & Magley, 2006). Although the evidence is indirect, these studies suggest that individuals are likely to feel less satisfied with institutions within which ostracism is experienced. We therefore expect that:

Hypothesis 6: Perception of social ostracism will lead to lower satisfaction with the institution.

Links Among Outcome Variables

In addition to the links from injustice and ostracism to outcomes, hypothesized above, we also expect relationships among certain outcome variables. Specifically, we predict that increased psychological distress will foster disengagement from the institution. This prediction is based on research conducted by Ramos (2000), indicating that harassment-related anxiety and depression lead students to withdraw, psychologically and physically, from their university. Similar links between mental health and withdrawal behavior have been seen in the organizational psychology literature (Hanisch & Hulin, 1990, 1991), especially in the context of sexual harassment research (e.g., Fitzgerald et al., 1997; Glomb et al., 1997). For these reasons, we expect that:

Hypothesis 7: Increased psychological distress will lead to increased disengagement from the institution.

Based on the higher education literature, we further propose that there will be a strong link between satisfaction with and disengagement from the institution (e.g., Aitken, 1982; Hatcher, Kryter, Prus, & Fitzgerald, 1992; Love, 1993). This research indicates that students with greater levels of satisfaction with their academic environment are more likely to stay active in the academic community and want to be affiliated with the institution (Hatcher et al., 1992). Additionally, prior organizational research has consistently demonstrated that decreased satisfaction leads to increased withdrawal or disengagement behaviors (e.g., Carr, Schmidt, Ford, & DeShon, 2003; Hanisch & Hulin, 1990; Fitzgerald et al., 1997; Glomb et al., 1997; Wharton & Baron, 1991). This suggests that:

Hypothesis 8: Decreased satisfaction with the institution will lead to increased disengagement from the institution.

Disengagement from the institution would, in turn, likely have an impact on performance. Wood and Bandura's (1989) social-cognitive theory of management posits that increased performance can only be achieved through sustained interest and positive affect. Therefore, when individuals disengage psychologically and physically from an organized context, it follows logically that their performance in that context would suffer as a result. This prediction is further supported by recent research indicating that institutional climate perceptions affect performance primarily through their impact on disengagement (Carr et al., 2003; Kopelman, Brief, & Guzzo, 1990). Organizational psychology also demonstrates empirical links between withdrawal cognitions and behaviors (e.g., tardiness, absenteeism, intentions to leave the institution) and performance (e.g., Bowen, 1982;

Ehrenberg, Ehrenberg, Rees, Ehrenberg, 1991; Shaw, Duffy, Johnson, & Lockhart, 2005). We therefore propose that:

Hypothesis 9: Increased disengagement from the institution will lead to decreased performance.

To summarize, Figure 1 presents a graphical display of the hypotheses detailed above. It suggests that experiences of both hierarchical and lateral incivility in institutions of higher education give rise to perceptions of injustice and social ostracism. These perceptions, in turn, foster greater psychological distress and lower satisfaction with the institution. Distress and dissatisfaction then trigger disengagement from the context, leading to lower performance. We investigate these hypotheses in a large sample of university students.

METHOD

Participants

Students from a small public university in the northwestern United States were invited to participate in the study if they met the following criteria: (1) degree-seeking, (2) age 18 or older, (3) enrolled at least half-time, and (4) up-to-date contact information on file. The university registrar provided a database of 8,172 eligible students, all of whom were contacted with an invitation to participate. Of these, 3,347 students responded, providing a response rate of approximately 41%, which is typical of surveys of abusive interpersonal behavior among college populations (e.g., Hinrichs & Rosenberg, 2002; Schneider, 1987). Due to excessive missing data (i.e., missing data on over 50% of the survey), 133 surveys were excluded from the final data set.

To control for the possible influence of targeted harassment on outcomes, the current study focuses only on data from those individuals who reported general incivility (rather than harassment based on gender, race, or sexual orientation) to be the most notable form of mistreatment experienced at the university. This yielded an effective sample size of 1,043. Demographically, the sample closely matched the overall student body at the university. Specifically, 51% were male, 72% were single/unpartnered, and 91% identified as White/European American. Other ethnic identities included Asian American/Pacific Islander (3%), Hispanic (2.5%), Native American/Alaskan Native (1%), and African American (0.5%). The mean age of this sample was 22.57 years ($SD = 5.53$).

Procedure

Survey procedures followed Dillman's (2000) "Tailored Design Method." Specifically, students received an

advance notice about the survey, followed five days later by a letter urging participation, both on university letterhead from the university president. Non-respondents received up to two reminders, spaced 10 days apart, via e-mail. All correspondence contained information about how to complete the survey on a restricted-access website. As a further incentive for participation, respondents had an opportunity to win gift certificates through random drawings.

To access the website, students identified themselves with a code based on their name and student ID number; this allowed us to verify eligibility status and prevent duplicate entries. Introductory materials explained that all respondents' identities would be kept confidential, no identifying information would be associated with responses to the survey itself, and no university officials would have access to any of the data. Institutional Review Boards at three universities approved the survey and all procedures used.

Instrumentation

We designed the survey instrument to provide an accurate and unbiased assessment of respondents' general functioning and campus experiences. Of the scales included in the survey, most relevant to the current article are measures of personal experiences of incivility as well as general psychological, and academic functioning. Notably, questions about general functioning appeared *prior to* questions about experiences of incivility, to minimize demand characteristics. Summary statistics, coefficient alphas, and intercorrelations for all study variables appear in Table 1.

Incivility

We assessed experience of *incivility* using an adaptation of the Workplace Incivility Scale (WIS; Cortina et al., 2001), supplemented with additional items. These twelve items measured the frequency of students' experiences with specific, uncivil behaviors (e.g., "made insulting or disrespectful remarks to you," "interrupted or spoke over you," "gave you hostile looks, stares, or sneers"). Respondents described how frequently they had experienced each behavior from other university members in the prior year; response options included *never*, *once or twice*, and *more than once or twice*. Cortina et al. (2001, 2002) found that such items have high internal consistency and convergent validity, and they load significantly onto a single-factor model.

Immediately following each incivility item, the survey asked respondents to indicate the status (student, faculty, staff, or administrator) of the primary instigator of that uncivil behavior. From these responses, we calculated a *lateral incivility* score by summing the number of

TABLE 1
Reliabilities, Summary Statistics, and Intercorrelations Among Study Variables for Full Sample ($N = 1043$)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Lateral incivility	1.26	0.68	.88							
2. Top-down incivility	0.98	0.57	−0.07**	.88						
3. Perceived ostracism	2.67	1.07	0.06**	0.03*	.86					
4. Perceived injustice	2.95	1.11	0.01	0.12**	0.27**	.82				
5. Psych. distress	0.89	0.68	0.04*	0.01	0.15**	0.14**	0.79			
6. Acad. satisfaction	5.51	1.61	0.01*	−0.12**	−0.51**	−0.65**	−0.17**	0.84		
7. Acad. disengagement	2.15	0.86	0.05**	0.03*	0.02*	0.16**	0.18**	−0.13**	0.76	
8. Acad. performance	3.18	0.70	−0.02**	0.02*	−0.02*	−0.13**	−0.03*	0.16**	−0.24**	–

Note: ** $p < .01$, * $p < .05$. Scale reliabilities (Cronbach's α) are displayed along the diagonal.

incivilities reported to be primarily student-instigated. Likewise, we created a *top-down incivility* score by summing the number of uncivil behaviors that were primarily instigated by faculty, staff, or administrators.

Cognitive Mediators

Perceived injustice was measured using a six-item scale, tailored to a university context. Finding no pre-existing measure of interactional justice for student populations, we adapted these items from workplace justice measures (e.g., Bies & Moag, 1986; Colquitt, 2001). We then verified the validity of this new scale using an independent sample of 120 students; the scale was highly correlated with Colquitt et al.'s (2001) interactional justice subscale ($r = .89$). A sample item from this measure includes: "I have been treated unfairly on this campus." Participants responded on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). See the Appendix for the complete items.

At the time of this survey, we could locate no psychometrically rigorous measure of *perceived ostracism* in the existing literature. To create such a measure, we developed five items assessing perceptions of social acceptance and rejection on campus. A sample item from this measure includes "I feel left out at [this university]." Participants indicated level of agreement with these statements on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Again, the complete items appear in the Appendix.

Outcomes

Our model considered outcomes in two domains: psychological and academic. Specifically, we assessed *psychological distress* based on the anxiety and depression subscale of the Brief Symptom Inventory (BSI; Derogatis & Spencer, 1983). These 12 items asked students to indicate the extent that each of a list of symptoms (e.g., "feeling blue," "feeling fearful") had distressed or bothered them during the previous seven days, on a scale from 1 (*not at all*) to 5 (*extremely*).

Extensive psychometric evaluations support the reliability and validity of this measure, including strong correlations with relevant MMPI subscales (Boulet & Boss, 1991; Derogatis & Melisaratos, 1983; Derogatis & Savitz, 2000).

Global satisfaction with the institution, or *institutional satisfaction*, was assessed with two items: "I would recommend attending [this university] to others" and "If I had it to do over again, I would still attend [this university]." Participants responded on a 7-point scale, ranging from *strongly disagree* to *strongly agree*. This measure has the advantage of being both brief and reliable (Cortina, Swan, Fitzgerald, & Waldo, 1998).

Academic disengagement was assessed using an 8-item instrument developed by Ramos (2000). Patterned after measures of organizational withdrawal (Hanisch, 1990; Hanish & Hulin, 1990, 1991), this scale assesses behaviors that effectively disengage students from the educational enterprise, or the central activities of the institution. Respondents described how frequently, in the previous semester, they had engaged in such behaviors as sleeping in class, attending class high or intoxicated, and thinking about quitting school altogether. They responded on scale from 1 (*almost never*) to 7 (*almost always*).

We requested students' grade point averages to determine their *academic performance*. Although this measure is self-report, previous research has demonstrated that approximately 87% of student-reported grades match school-reported grades (Bridgeman & Wendler, 1991).

RESULTS

Overview

To test the theoretical model depicted in Figure 1, we employed structural equation modeling with latent variables, as implemented by the EQS software program (version 6.1; Bentler, 1995). This analytic method has advantages over traditional regression and ANOVA techniques, in that it assesses both direct and indirect relationships and corrects for measurement error (Klem,

2000). Full structural equation models consist of two submodels. The *measurement model* tests the loadings of the observed variables onto their latent factors. Methodologists (e.g., Kenny, Kashy, & Bolger, 1998) recommend establishing the fit of the measurement model prior to testing the *structural model* (which specifies relationships among the latent variables).

Prior to analyses, we randomly assigned and summed items for each construct into two manifest indicators. We then checked the reliability of the two indicators for each construct, to ensure that it matched the reliability of the scale as a whole. The only exception to this procedure was with academic performance, which we treated as an observed variable, having only one item assessing it.

We then tested measurement and structural models using maximum likelihood estimation. Following Raykov, Tomer, and Nesselrode (1991), we focused on the following goodness-of-fit indices: normed fit index (NFI), non-normed fit index (NNFI), and the comparative fit index (CFI). Additionally, we examined the root mean square error of estimation (RMSEA), which is considered a misfit index, as recommended by Boomsma (2000). In judging model fit, we followed Hu and Bentler's (1999) criteria. Specifically, goodness-of-fit indices "close to" .95, and an RMSEA "close to" .06, were considered evidence of acceptable fit.

Because our proposed theoretical model incorporated a number of paths that had not previously been studied, we first fit the proposed model on a *model-development sample*, which constituted a random half-sample of the data. We then cross-validated the modified model on the remaining half-sample (*model-confirmation sample*).

Descriptive Statistics

Of the entire student sample ($N = 3,347$), 76% reported experiencing at least one act of incivility on campus in the previous year. Of the subsample that described incivility as the most notable form of mistreatment they had experienced on campus ($n = 1,043$), 58% reported lateral incivility experiences, and 47% described top-down incivility experiences. Note that these groups are not mutually exclusive, as many students had experienced both varieties of incivility. Reliabilities, summary statistics, and intercorrelations among study variables are reported in Table 1. Reliabilities, summary statistics, and intercorrelations among study parcels for each random half sample are reported in Table 2.

Testing the Conceptual Model

Model-Development Sample

To recap, we first tested the measurement and structural model on a random half of the data

($n = 514$, following listwise deletion), in case revisions were necessary. Table 3 contains goodness-of-fit statistics and shows that the measurement model provided an excellent fit to the data. We also found good data-model fit for the structural model. Figure 2 presents the standardized path coefficients for the structural model, as well as the proportion of variance accounted for in each endogenous variable.

As predicted, both lateral and top-down incivility was associated with perceived injustice and perceived social ostracism, both of which linked to decreased satisfaction with the institution. Perceived social ostracism also related to increased psychological distress (but perceived injustice did not). In turn, greater psychological distress and lower academic satisfaction predicted disengagement from school, which then yielded a decline in academic performance.

Model-Confirmation Sample

Next, we cross-validated modeling results on the second random half of the sample ($n = 520$, following listwise deletion). Because the initial model's fit indices were high, and almost all of the proposed relationships were significant, we made only one revision to the model based on the model-development results. Specifically, because there was no significant relation between injustice and distress, this path was removed in the cross-validation analysis. We offer potential explanations for this non-relationship later in the paper.

With data from the model-confirmation sample, we again found good fit for both the measurement model as well as the structural model. As Figure 3 shows, all standardized path coefficients were significant. Figure 3 also displays the proportion of variance accounted for in each endogenous variable. This second analysis thus cross-validates the initial model-development results.²

We conducted additional analyses to test formally the mediating roles of perceived injustice and perceived ostracism. Specifically, following procedures recommended by Holmbeck (1997) for testing mediating effects in a structural equation modeling framework, we tested the model depicted in Figure 3 against a model that includes direct effects from the two exogenous variables (top-down incivility and lateral incivility) to the two proximal outcome variables (psychological distress and institutional satisfaction). In other words, the direct-effects model included four new paths:

²Because it can be difficult to capture the exact nature of hierarchical status relations in University settings, specifically the status relations between students and faculty, we reran these analyses excluding the 21 graduate students in the sample, as there is a more clear hierarchical status relationship between undergraduate students and faculty than there is between graduate students and faculty. The results remained virtually unchanged.

TABLE 2
Reliabilities, Summary Statistics, and Intercorrelations Among Study Parcels

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Lateral Incivility	.821**	.815	-.200**	-.167**	.146**	.346**	-.010	-.024	.115**	.131**	-.013	-.007	.164**	.179**	-.104*
2. Lateral Incivility	-.221**	.149**	-.175**	-.136**	.149**	.319**	.040	.014	.118*	.130**	-.028	-.026	.177**	.185**	-.101*
3. Top-down Incivility	-.165**	-.172**	.767**	.733**	.209**	.039	.461**	.416**	.061	.039	-.283**	-.236**	.102*	.146**	-.122**
4. Top-down Incivility	.157**	-.095	.234**	.245**	.205**	.019	.531**	.426**	.032	.033	-.332**	-.257**	.063	.125**	-.083
5. Perceived Ostracism	.355**	.332**	.066	.070	.400**	.391**	.423**	.426**	.174**	.253**	-.530**	-.444**	.234*	.263**	-.349**
6. Perceived Ostracism	.017	.073	.449**	.499**	.445**	.303**	.269**	.275**	.159**	.237**	-.228**	-.210**	.247**	.315**	-.225**
7. Perceived Injustice	-.015	.042	.409**	.427**	.447**	.295**	.725**	.706**	.155**	.214**	-.558**	-.467**	.171**	.257**	-.232**
8. Perceived Injustice	.138**	.187**	.112**	.122**	.254**	.210**	.185**	.180**	.150**	.180**	-.433**	-.338**	.190**	.273**	-.257**
9. Psych. Distress	.139**	.176**	.084	.108*	.317**	.282**	.243**	.216**	.689**	.650**	-.072	-.129**	.219**	.220**	-.013
10. Psych. Distress	-.020	-.040	-.306**	-.342**	-.511**	-.272**	-.550**	-.428**	-.097*	.179**	-.166**	-.229**	.261**	.295**	-.074
11. Acad. Satisfaction	.208**	.206**	.085	.063	.289**	.294**	.164**	.198**	.285**	.303**	.752**	-.119**	-.108*	.167**	.109*
12. Acad. Satisfaction	.230**	.220**	.137**	.150**	.330**	.344**	.262**	.282**	.305**	.329**	-.147**	-.190**	.642**	.609**	-.447**
13. Acad. Disengage.	-.111*	-.141**	-.197**	-.165**	-.383**	-.268**	-.239**	-.310**	-.133**	-.157**	.225**	.169**	-.479**	-.471**	-.410**
14. Acad. Disengage.															
15. Acad. Performance															

Note: ** $p < .01$, * $p < .05$. The model-development sample is displayed below the diagonal, the model-confirmation sample is displayed above the diagonal.

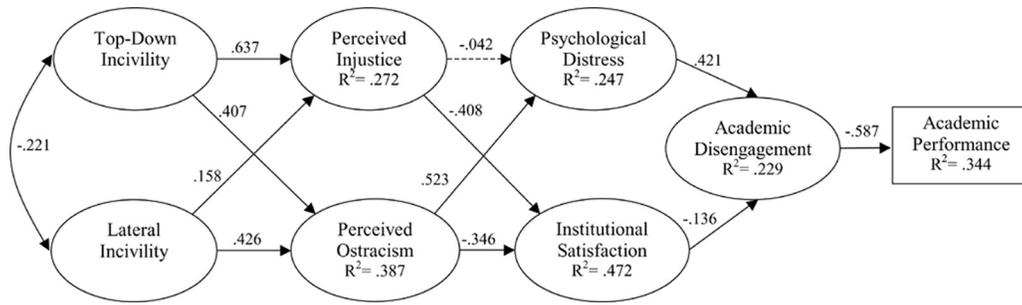


FIGURE 2 Initial structural model, based on the model-development sample ($n = 514$). Numbers on the arrows are standardized path coefficients. Solid arrows represent significant paths ($p < .05$), and dashed arrows indicate non-significant paths.

(1) top-down incivility to psychological distress, (2) top-down incivility to institutional satisfaction, (3) lateral incivility to psychological distress, and (4) lateral incivility to institutional satisfaction. Fit statistics for this model appear in Table 3. A chi-square difference test ($\Delta\chi^2(4) = 9.072, ns$) suggested that this model failed to achieve significant improvement over the more parsimonious model depicted in Figure 3, bolstering our conceptualization of perceived injustice and ostracism as mediators.

DISCUSSION

The present study contributes new knowledge to the literature on antisocial behavior—specifically, incivility—in applied settings in three important ways. First, we identify two cognitive mechanisms, perceived injustice and ostracism, which carry the impact of incivility. Second, the present study clarifies the role of social status in this process, suggesting that these “everyday” slights and indignities are no less harmful when coming from peers versus people in authority. Finally, we extend understandings of incivility to the context of higher education, documenting various negative outcomes that can befall college students targeted with uncivil behaviors.

Following is a review of key findings and their implications for theory and research.

Key Findings

Results based on a large sample of university students suggested that perceptions of social ostracism and interactional injustice factor prominently into the process of incivility, potentially explaining its multitude of negative outcomes. Specifically, we found that uncivil conduct triggers perceptions of social ostracism, regardless of the status of the incivility instigator. That is, incivility targets feel socially rejected, as if they do not “fit in” or belong in the institution. To make matters worse, they may struggle with assigning a cause for the treatment, because a defining feature of incivility is that intentions behind the behavior are unclear to at least one of the parties involved (Andersson & Pearson, 1999). Organizational or educational leaders may not feel that such social perceptions warrant serious attention. However, Williams (1997) argues that perceived ostracism could threaten an individual’s fundamental needs for belonging, self-esteem, control, and meaningful existence within an institution. He further posits that the ambiguity inherent in ostracism exacerbates the stress of the situation. Further, Baumeister, Twenge,

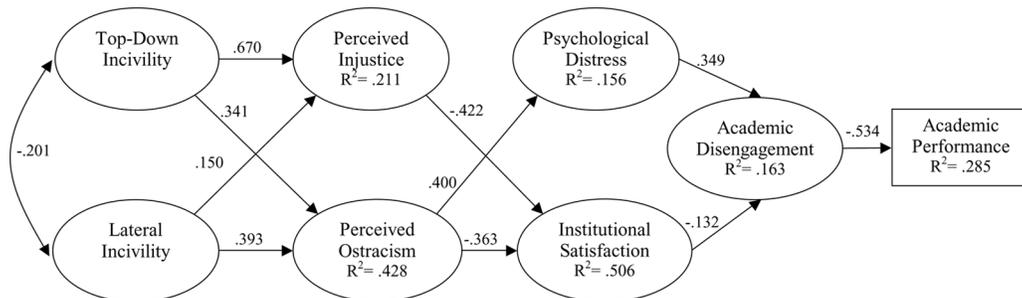


FIGURE 3 Cross-validated structural model, based on the model-confirmation sample ($n = 520$). Numbers on the arrows represent standardized path coefficients, all of which are significant ($p < .05$).

TABLE 3
Goodness of Fit Indices for Each Random Half-Sample

<i>Model</i>	χ^2	<i>Df</i>	χ^2/df	<i>NFI</i>	<i>NNFI</i>	<i>CFI</i>	<i>RMSEA (90% CI)</i>
Model-development sample (<i>n</i> = 514)							
Measurement	121.088	56	2.16	.965	.968	.981	.049 (.037–.060)
Structural	265.88	78	3.40	.928	.929	.944	.069 (.060–.078)
Model-confirmation sample (<i>n</i> = 520)							
Measurement	124.380	56	2.22	.962	.965	.978	.049 (.037–.061)
Structural	261.268	79	3.45	.923	.926	.945	.068 (.059–.077)
Direct effects	252.196	75	3.36	.926	.925	.947	.068 (.059–.078)

Note: NFI = Normed Fit Index; NNFI = Non-Normed Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; CI = Confidence Interval.

and Nuss (2002) have demonstrated that anticipated ostracism or social exclusion can limit cognitive abilities. All of these can culminate in depression, helplessness, low self-efficacy, and anxiety for the individual (Williams, 1997)—a theory that our results support.

Incivility also gives rise to perceptions of injustice. However, the link to justice differs somewhat, depending on the nature of the incivility. Specifically, top-down incivility (i.e., incivility from individuals at a higher level in the institutional hierarchy) is very strongly associated with perceptions of injustice; in fact, this was one of the strongest relationships documented in the present study. In other words, individuals who experience uncivil behavior at the hands of institutional authorities (in this case, members of the faculty, staff, or administration) develop perceptions that their institution as unfair and unjust.

In contrast to top-down incivility, lateral or peer-instigated incivility had only a modest link to perceptions of injustice—one of the weakest relationships emerging from this research. This difference in the magnitude of effect of lateral versus top-down incivility underscores the important role of instigator power in this process. The relationship between lateral incivility and justice was nonetheless significant, suggesting that behavior emanating from peers can in fact foster perceptions that the institution is unjust. This finding calls for a reevaluation of the notion, implicit in the organizational justice literature that perceptions of injustice cannot arise from interactions with same-status individuals.

One possible explanation of the differing justice effects of top-down versus lateral incivility is that the two experiences result in different attributions. Applied to educational institutions, students may come to make sense of incivility instigated by their peers differently than incivility instigated by a professor or administrator. Although the actual act of incivility (i.e., what was said or done) may not change based on the instigator's status, the target's cognitive appraisal of the experience may vary.

Pointing to constructs related to appraisal, Martinko, Gundalach and Douglas (2002) used a *causal reasoning*

perspective, grounded in attribution theory, to explain negative outcomes of counterproductive workplace behavior. They argued that an individual's cognitive reasoning process is manifested through the attributions they make for the various outcomes or treatments they receive within the workplace. When an individual attributes negative treatment to internal characteristics, she or he will often develop negative feelings about the self, which may be accompanied by self-destructive behavior (e.g., Martinko & Gardner, 1982). In contrast, if the individual attributes negative treatment to external causes, that person is more likely to direct negative affective reactions to an external source, such as the institution in which the treatment was experienced (Martinko & Zellars, 1998). Based on these arguments, one plausible interpretation of the differential effects of lateral and hierarchical incivility is that lateral incivility is attributed internally ("I'm not likable to my classmates"), whereas hierarchical incivility is attributed externally ("my professors are unfair"). This could explain why incivility targets are more likely to perceive others as unjust in the face of top-down incivility, but less so in response to lateral incivility.

Not to be taken lightly, both perceived ostracism and injustice have negative implications for individual well-being. Specifically, we found that ostracism was directly associated with greater anxiety, depression, and dissatisfaction with the institution. These results are highly consistent with the literature on social ostracism in organizations (e.g., Williams, 1997; 2001; Williams et al., 2000; Williams & Sommer, 1997). We found similar effects for injustice perceptions, with one exception: counter to predictions, perceived injustice had no effect on psychological distress. One potential reason for this non-effect may be that the components of distress measured in this study were anxiety and depression. These distress variables differ from those found to be correlated with interactional injustice in past research. That literature suggests that perceived injustice leads to anger, rage, and resentment (Cropanzano et al., 2001; Folger, 1994; Folger & Skarlicki, 1997; Skarlicki &

Folger, 1997). Perhaps perceptions of injustice primarily foster such externalized manifestations of distress, but do not trigger internalized responses such as depression.

In addition to gaining support for hypothesized relationships among incivility, cognitive mediators, and proximal outcomes, we also found the expected links to distal outcomes. Specifically, increased psychological distress and decreased satisfaction with the institution both fostered disengagement from that institution, which then detracted from performance. These relationships among outcomes are consistent with past research in the realms of educational (e.g., Aitken, 1982; Love, 1993; Hatcher et al., 1992) and organizational psychology (e.g., Carr, 2003; Fitzgerald et al., 1997; Hanisch & Hulin, 1990; Kopelman et al., 1990). Taken together, outcome findings in the present study highlight the multitude of consequences (both direct and indirect) that incivility can have for the targeted individual. It is important to note that, because these findings were based only on data from individuals who reported that general incivility *in the absence of* targeted harassment (e.g., that based on race, gender, etc.) was their worst experience of mistreatment in the institution, this controls for the possible influence of targeted harassment on outcomes.³ This gives us greater confidence in attributing negative outcomes to experiences of incivility.

Limitations and Future Directions

Although securely based on a very large and representative sample, our findings are not without their limitations. A return rate of 41% compares favorably to similar survey studies of college populations, but it may also yield unknown biases. Another shortcoming is that all of our measures were self-report, and some lack long psychometric histories. We encourage investigators to employ diverse methods in assessing incivility, including different approaches to survey measurement as well as experimental and qualitative techniques. Incorporating university records of students' academic performance and counseling visits can further strengthen future research in this domain. Generally speaking, a triangulating methodological approach can lend more confidence to conclusions about incivility.

Future research could also employ alternative indicators of status. An individual's social status or power can be based on many factors, including not only rank in the formal hierarchy but also gender, race, social class, and

access to resources (e.g., Cleveland & Kerst, 1993; Rospenda, Richman, & Nawyn, 1998). For instance, even when a male instigator is at a similar level to female target in the institutional hierarchy (e.g., both are students), he is still "above" her in the gender stratification of the larger society. This social location may give male students access to informal power, enabling them to enact incivility against female peers with the same harmful outcomes as instigators with formal power. More theory and data are clearly needed to further unpack issues of power and status and how they affect the incivility process.

We have proposed and evaluated a model that considerable theory supports. Common parlance sometimes refers to analyses such as ours as "causal modeling," but this is misleading; the cross-sectional nature of the data prevents definitive statements about causality. Definitive proof of mediation will also require longitudinal data (Cole & Maxwell, 2003). We further acknowledge that alternate models might explain the relationships in these data as well as the one we tested. In fact, many relationships in the model are likely reciprocal. For example, it makes sense that individuals may disengage from their institution as a consequence of dissatisfaction with that institution, but disengagement could also serve to heighten dissatisfaction. Despite such possibilities, we believe that our model represents a reasonable, theoretically grounded "snapshot" of the process by which individuals experience incivility in institutions of higher education. We encourage researchers to extend this work with longitudinal paradigms.

Although we tested and cross-validated our model of the incivility process in a university context, there is reason to believe that it would generalize to workplace settings. Educational and professional institutions are both highly organized settings with a number of features in common, including hierarchical power structures, norms of interpersonal respect, and expectations of motivation, commitment, and performance from members. In fact, optimal performance is central to the goals of both types of institutions. At the same time, certain characteristics differentiate these two types of contexts, the most notable being that the individuals who populate them are at different developmental stages. Norms of respect and consequences for norm violation also vary a great deal from institution to institution. Future research should focus on these and other individual and contextual factors that may influence the process by which incivility unfolds in organized settings.

Future research should also consider expanding the model tested here with additional variables. For example, theory suggests additional mediators of the incivility-outcome process, including anger, fear, damaged social identity, cognitive distraction, and cognitive appraisal (e.g., Cortina et al., 2001). One could

³We also reran the final model on the full sample ($N = 3,204$), including those who had experienced targeted harassment. Our findings were virtually identical, suggesting that our findings are generalizable to college students in general (not just those who have escaped targeted harassment).

also investigate “bottom-up incivility” (e.g., from students to faculty), drawing on research on “contrapower sexual harassment” (e.g., Rospenda et al., 1998). In addition, it would be important to rule out the possibility that unmeasured third variables may be responsible for some of the relations found here—for instance, is a personality characteristic producing both a sense of ostracism and dissatisfaction, artifactually creating a correlation between the latter constructs? These and other questions must await future investigation.

CONCLUDING REMARKS

Although incivility may be subtle, its effects are not. Empirical research in work organizations suggests that employees targeted with uncivil behavior experience greater job stress, lower job satisfaction, and psychological distress. Personnel targeted with pervasive incivility ultimately lose commitment to their organizations and exit at higher rates (Andersson & Pearson, 1999; Cortina et al., 2001, 2002; Pearson & Porath, 2000, 2004; Pearson, Andersson, & Wegner, 2001). The current study documents a parallel process operating in the context of higher education. We also elucidate the roles of power, justice, and ostracism in this process. Results send a call to researchers, counselors, and policy-makers alike to pay more attention to small acts of rudeness, derision, and ostracism within institutions. Although seemingly trivial, these quotidian incivilities can accumulate to have a profound negative impact on individual well-being.

ACKNOWLEDGEMENTS

This article is based on the master’s thesis of Brianna Barker Caza. We thank Arran Caza, Lance Sandelands, Fiona Lee, Brian Sandoval, Jacoba Lilius, John Paul Stephens, and Amiram Vinokur for helpful comments on an earlier draft of this manuscript, as well as members of the Cortina Lab at the University of Michigan for their work on the larger project from which this paper emerged.

REFERENCES

- Aitken, N. D. (1982). College student performance, satisfaction & retention. *Journal of Higher Education*, 53, 1, 32–50.
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24, 452–471.
- Asagba, J. O. (1996). Campus violence: A case study of residence halls. *College Student Journal*, US, 31, 129–136.
- Ashforth, B. (1994). Petty tyranny in organizations. *Human Relations*, 46, 755–777.
- Aquino, K., & Douglas, S. (2003). Identity threat and antisocial behavior: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes*, 90, 195–208.
- Aquino, K., Galperin, B. L., & Bennett, R. J. (2004). Social status and aggressiveness as moderators of the relationship between interactional justice and workplace deviance. *Journal of Applied Social Psychology*, 34, 5, 1001–1029.
- Aquino, K., Griffeth, R. W., Allen, D. G., & Hom, P. (1997). Outcome and supervisory satisfaction as predictors of turnover. A test of referent cognitions model. *Academy of Management Journal*, 40, 1208–1227.
- Aquino, K., Tripp, T. M., & Bies, R. J. (2001). How employees respond to interpersonal offense: The effects of blame attribution, offender status, and victim status on revenge and reconciliation in the workplace. *Journal of Applied Psychology*, 86, 52–59.
- Aquino, K., Tripp, T. M., & Bies, R. J. (2006). Getting even or moving on? Power, procedural justice and types of offense as predictors of revenge, forgiveness, reconciliation, and avoidance in organizations. *Journal of Applied Psychology*, 2006, 3, 653–668.
- Baron, R. A. (2004). Workplace aggression and violence: Insights from basic research. In R. W. Griffin & A. O’Leary-Kelly (Eds.), *The darkside of organizational behavior* (pp. 23–61). San Francisco: Jossey Bass.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychology Bulletin*, 117, 3, 497–529.
- Baumeister, R. F., Twenge, J. M., & Nuss, C. K. (2002). Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83, 817–827.
- Bentler, P. M. (1995). *EQS structural equation manual*. Los Angeles: BMDP Statistical Software.
- Beugre, C. D., & Baron, R. A. (2001). Perceptions of systematic justice: The effects of distributive, procedural, and interactional justice. *Journal of Applied Social Psychology*, 31, 2, 324–339.
- Bies, R. J. (1987). The predicament of injustice: The management of moral outrage. In L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 9, pp. 289–319). Greenwich, CT: JAI Press.
- Bies, R. J. (2001). International (in)justice: The sacred and the profane. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organization justice* (pp. 89–118). San Francisco: Stanford University Press.
- Bies, R. J., & Moag, J. S. (1986). Interactional justice: Communication criteria of fairness. In B. H. S. R. J. Lewicki & M. Bazerman (Eds.), *Research on negotiation in organization* (Vol. 1, pp. 43–55). Greenwich, CT: JAI Press.
- Boulet, J., & Boss, M. W. (1991). Reliability and validity of the Brief Symptom Inventory. *Psychological Assessment*, 3, 433–437.
- Bowen, D. E. (1982). Some unintended consequences of intention to quit. *Academy of Management Review*, 7, 2, 205–211.
- Bridgeman, B., & Wendler, C. (1991). Gender differences in predictors of college mathematics performance and in college mathematics grades. *Journal of Educational Psychology*, 83, 2, 275–284.
- Cairns, R. B., Cairns, B. D., & Neckerman, H. J. (1989). Early school dropout: Configurations and determinants. *Child Development*, 60, 1437–1452.
- Cairns, R. B., Cairns, B. D., Neckerman, H. J., & Ferguson, L. L. (1989). Growth and aggression: Childhood to early adolescence. *Developmental Psychology*, 25, 320–330.
- Cairns, R. B., Cairns, B. D., Neckerman, H. J., Holly, J., Gest, S. D., & Garipey, J. (1988). Social networks and aggressive behavior: Peer support or peer rejection? *Developmental Psychology*, 24, 815–823.
- Carli, L. L. (1999). Gender, interpersonal power, and social influence. *Journal of Social Issues*, 55, 1, 81–89.

- Carr, J. Z., Schmidt, A. M., Ford, J. K., & DeShon, R. P. (2003). Climate perceptions matter: A meta-analytic path analysis relating molar climate, cognitive and affective states, and individual level work outcomes. *Journal of Applied Psychology, 88*, 4, 605–619.
- Cleveland, J. N., & Kerst, M. E. (1993). Sexual harassment and perceptions of power: An underarticulated relationship. *Journal of Vocational Behavior, 42*, 49–67.
- Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology, 112*, 558–577.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*, 3, 386–400.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology, 86*, 3, 425–445.
- Cortina, L. M., Lonsway, K. L., Magley, V. J., Freeman, L. V., Collinsworth, L. L., Hunter, M., & Fitzgerald, L. F. (2002). What's gender got to do with it? Incivility in the federal courts. *Law and Social Inquiry, 27*, 235–270.
- Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology, 6*, 64–80.
- Cortina, L. M., Swan, S., Fitzgerald, L. F., & Waldo, C. (1998). Sexual harassment and assault: Chilling the climate for women in academia. *Psychology of Women Quarterly, 22*, 419–441.
- Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior, 58*, 164–209.
- Cropanzano, R., & Greenberg, J. (1997). Progress in organizational justice: Tunneling through the maze. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology* (Vol. 12, pp. 317–372). New York: John Wiley.
- Derogatis, L. R., & Melisaratos, N. (1983). The brief symptom inventory: An introductory report. *Psychological Medicine, 13*, 595–605.
- Derogatis, L. R., & Savitz, K. L. (2000). The SCL-90-R and brief symptom inventory (BSI) in primary care. In M. E. Maruish (ed.), *Handbook of psychological assessment in primary care settings* (pp. 297–334). Mahwah, NJ: Lawrence Erlbaum Associates.
- Derogatis, L. R., & Spencer, P. M. (1983). *The brief symptom inventory: Administration, scoring, and procedure manual I*. Baltimore: Clinical Psychometric Research.
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York: Wiley-Interscience.
- Donovan, M. A., Drasgow, F., & Munson, L. J. (1998). The perceptions of fair interpersonal treatment scale: development and validation of a measure of interpersonal treatment in the workplace. *Journal of Applied Psychology, 83*, 5, 683–692.
- Ehrenberg, R. G., Ehrenberg, R. A., Rees, D. I., & Ehrenberg, E. L. (1991). School district leave policies, teacher absenteeism, student achievement. *The Journal of Human Resources, 26*, 1, 72–105.
- Feldmann, L. J. (2001). Classroom civility is another of our instructor responsibilities. *College Teaching, 49*, 4, 137–140.
- Fitzgerald, L. F. (1997). Ambient sexual harassment: An integrated model of antecedents and consequences. *Organizational Behavior and Human Decision Processes, 71*, 3, 309–328.
- Fitzgerald, L. F., Drasgow, F., Hulin, C. L., Gelfand, M. J., & Magley, V. J. (1997). The antecedents and consequences of sexual harassment in organizations: A test of an integrated model. *Journal of Applied Psychology, 82*, 578–589.
- Fitzgerald, L. F., Swan, S., & Magley, V. J. (1997). But was it really sexual harassment? Legal, behavioral, and psychological definitions of the workplace victimization of women. In W. O'Donohue (Ed.), *Sexual harassment: Theory, research and treatment* (pp. 5–28). Boston: Allyn & Bacon.
- Folger, R. (1994). Workplace justice and employee worth. *Social Justice Research, 7*, 225–241.
- Folger, R., & Skarlicki, D. P. (1998). A popcorn metaphor for employee aggression. In R. W. Griffin, A. O'Leary-Kelly, & J. Collins (Eds.), *Monographs in organizational behavior and industrial relations, Vol. 23: Dysfunctional behavior in organizations: Part A: Violent and deviant behavior* (pp. 43–83). Greenwich, CT: JAI Press.
- French, R. P., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp. 150–167). Ann Arbor: University of Michigan Press.
- Geller, D., Goodstein, L., Silver, M., & Sternberg, W. (1974). On being ignored: The effects of the violation of implicit rules of social interaction. *Sociometry, 37*, 541–556.
- Glomb, T. M., Richman, W. L., Hulin, C. L., Drasgow, F., Schneider, K. T., & Fitzgerald, L. F. (1997). Ambient sexual harassment: An integrated model of antecedents and consequences. *Organizational Behavior and Human Decision Processes, 71*, 309–328.
- Glomb, T. M., Richman, W. L., Hulin, C. L., Drasgow, F., Schneider, K. T., Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal behaviors. *Journal of Vocational Behavior, 37*, 60–78.
- Hanisch, K. A. (1990). A casual model of general attitudes, work withdrawal, and job withdrawal, including retirement. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.
- Hanish, K. A., & Hulin, C. L. (1990). Retirement as a voluntary organizational withdrawal behavior. *Journal of Vocational Behavior, 37*, 60–78.
- Hanisch, K. A., & Hulin, C. L. (1991). General attitudes and organizational withdrawal: An evaluation of a causal model. *Journal of Vocational Behavior, 39*, 110–128.
- Hatcher, L., Kryter, K., Prus, J. S., & Fitzgerald, V. (1992). Predicting college student satisfaction, commitment, and attrition from investment model constructs. *Journal of Applied Social Psychology, 22*, 1273–1296.
- Hinrichs, D. W., & Rosenberg, P. J. (2002). Attitudes toward gay, lesbian, and bisexual persons among heterosexual liberal arts college students. *Journal of Homosexuality, 43*, 61–84.
- Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting and Clinical Psychology, 65*, 599–610.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55.
- Huerta, M., Cortina, L. M., Pang, J., Torges, C. M., & Magley, V. J. (2006). Sex and power in the academy: Modeling sexual harassment in the lives of college women. *Personality and Social Psychology Bulletin, 32*, 616–628.
- Johnson, P. (1976). Women and power: Toward a theory of effectiveness. *Journal of Social Issues, 33*, 2, 99–110.
- Johnson, P. R., & Indvik, J. (2001). Rudeness at work: Impulse over restraint. *Public Personnel Management, 30*, 4, 457–465.
- Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 1, pp. 233–265). New York: McGraw-Hill.
- Klem, L. (2000). Structural equation modeling. In L. Grimm & P. Yarnold (Eds.), *Reading and understanding multivariate statistics* (Vol. II). Washington, DC: American Psychological Association.
- Kopelman, R. E., Brief, A. P., & Guzzo, R. A. (1990). The role of climate and culture in productivity. In B. Schneider (Ed.), *Organizational culture and climate*. San Francisco: Jossey Bass.

- Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion*. New York: Plenum Press.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum.
- Love, B. J. (1993). Issues and problems in the retention of black students in predominantly white institutions of higher education. *Equity and Excellence in Education, 26*, 27–33.
- Malamut, A. B., & Offerman, L. R. (2001). Coping with sexual harassment: Personal, environmental, and cognitive determinants. *Journal of Applied Psychology, 86*, 1152–1166.
- Martinko, M. J., & Gardner, W. L. (1982). Learned helplessness: An alternative explanation for performance deficits. *Academy of Management Review, 7*, 195–204.
- Martinko, M. J., Gundalach, M. J., & Douglas, S. C. (2002). Toward an integrative theory of counterproductive workplace behavior: A causal reasoning perspective. *International Journal of Selection and Assessment, 10*, 1, 36–50.
- Martinko, M. J., & Zellars, K. (1998). Toward a theory of workplace violence and aggression. In R. W. Griffen, A. O'Leary-Kelly, & J. M. Collins (Eds.), *Dysfunctional behavior in organizations: Violent and deviant behavior*. Stamford, CT: JAI Press.
- McLean Parks, J. (1997). The fourth arm of justice: The art and science of revenge. In R. Lewicki, R. J. Bies, & B. H. Sheppard (Eds.), *Research on negotiation in organizations* (pp. 113–144). Greenwich, CT: JAI.
- Moran, E. T., & Volkwein, J. F. (1988). Examining organizational climate in institutions of higher-education. *Research in Higher Education, 28*, 367–383.
- Muir, C. (2000). Can we all get along? The interpersonal challenge at work. *Academy of Management Executive, 14*, 143–144.
- O'Connell, C. E., & Korabik, K. (2000). Sexual harassment: The relationship of personal vulnerability, work context, perpetrator status, and type of harassment to outcomes. *Journal of Vocational Behavior, 56*, 299–329.
- Pearson, C. M., Andersson, L. M., & Wegner, J. W. (2001). When workers flout convention: A study of workplace incivility. *Human Relations, 54*, 11, 1387–1419.
- Pearson, C. M., & Porath, C. L. (2000). Assessing and attacking workplace incivility. *Organizational Dynamics, 29*, 123–137.
- Pearson, C. M., & Porath, C. L. (2004). On Incivility, hidden costs and accessible "cures." In R. W. Griffin & A. O'Leary-Kelly (Eds.), *The darkside of organizational behavior* (pp. 256–309). San Francisco: Jossey Bass.
- Pfeffer, J. (1981). *Power in organizations*. Boston: Pitman.
- Plank, S. B., McDill, E. L., McPartland, J. M., & Jordon, W. J. (2001). Situation and repertoire: Civility, incivility, cursing, and politeness in an urban high school. *Teachers College Record, 103*, 3, 504–524.
- Ramos, A. (2000). *Sexual harassment at the University of Puerto Rico*. Unpublished doctoral dissertation. University of Illinois at Urbana-Champaign.
- Raven, B. H., & French, J. R. P. (1958). Legitimate power, coercive power, and observability in social influence. *Sociometry, 21*, 83–97.
- Raykov, T., Tomer, A., & Nesselroade, J. R. (1991). Reporting structural equation modeling results in psychology and aging: Some proposed guidelines. *Psychology and Aging, 6*, 499–503.
- Rospenda, K. M., Richman, J. A., & Nawyn, S. J. (1998). The confluence of gender, race, and class in contrapower sexual harassment. *Gender and Society, 12*, 40–60.
- Shaw, J., Duffy, M., Johnson, J., & Lockhart, D. (2005). Turnover, social capital losses, and performance. *Academy of Management Journal, 48*, 594–606.
- Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology, 82*, 434–443.
- Sommer, K. L., Williams, K. D., Ciarocco, N. J., & Baumeister, R. F. (2001). When silence speaks louder than words: Explorations into the intrapsychic and interpersonal consequences of social ostracism. *Basic and Applied Social Psychology, 23*, 225–243.
- Tangri, S., Burt, M. R., & Johnson, L. B. (1982). Sexual harassment at work: Three explanatory models. *Journal of Social Issues, 38*, 33–54.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal, 43*, 178–190.
- Tyler, T. R. (1989). The psychology of procedural justice: A test of the group-value model. *Journal of Personality and Social Psychology, 57*, 830–838.
- Tyler, T., & Bies, R. J. (1990). Interpersonal aspects of procedural justice. In J. S. Carroll (Ed.), *Applied social psychology in business settings* (pp. 77–98). Hillsdale, NJ: Erlbaum.
- Tyler, T. R., & Blader, S. (2000). *Cooperation in groups: Procedural justice, social identity, and behavioral engagement*. Philadelphia, PA: Psychology Press.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. Zanna (Ed.), *Advances in Experimental Social Psychology, 25*, 115–191.
- van Beest, I., & Williams, K. D. (2006). When inclusion costs and ostracism pays, ostracism still hurts. *Journal of Personality and Social Psychology, 91*, 5, 918–928.
- Wharton, A. S., & Baron, J. N. (1991). Satisfaction? The psychological impact of gender segregation on women at work. *Sociological Quarterly, 32*, 3, 365–387.
- Williams, K. D. (1997). Social ostracism. In Kowalski (Ed.), *Aversive interpersonal behaviors* (pp. 133–170). New York: Plenum Press.
- Williams, K. D. (2001). *Ostracism: The power of silence*. New York: Guilford Publications.
- Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the internet. *Journal of Personality and Social Psychology, 79*, 748–762.
- Williams, K. D., Forgas, J. P., & von Hippel, W. (Eds.). (2005). *The social outcast: Ostracism, social exclusion, rejection, and bullying*. New York: Psychology Press.
- Williams, K. D., & Sommer, K. L. (1997). Ostracism by coworkers: Does rejection lead to loafing or compensation? *Personality and Social Psychology Bulletin, 23*, 693–706.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review, 14*, 3, 363–364.
- Zellars, K. L., Tepper, B. J., & Duffy, M. K. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology, 87*, 6, 1068–1076.

APPENDIX

Items for Cognitive Mediator Measures

Perceived justice

- (1) I feel free to participate in class by asking questions or making comments.
- (2) I am called on in class as often as other students.
- (3) I have been treated unfairly on this campus.
- (4) My work is evaluated fairly.
- (5) The advisors here are sensitive to student needs.
- (6) I feel my instructors/professors show little interest in my opinions. (reverse-scored)

Perceived ostracism

- (1) I feel left out at [this university].
 - (2) In general, I fit in with the other students here.
 - (3) Other students often ridicule me.
 - (4) I feel I fit in at [this university].
 - (5) I feel out of place when I am in class.
-