

Incivility at Academic Conferences: Gender Differences and the Mediating Role of Climate

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Published online: 20 February 2014
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Abstract In a survey study of 458 U.S. women and men, we examined experiences of incivility at an academic conference, a context that represents an important extension of the academic/professional workplace. We hypothesized and found that women reported more incivility, perceived the climate to be more sexist, and reported more conference exclusion than men. Counter to our prediction, men and women did not differ in how negatively they viewed the climate or their conference satisfaction. Since incivility may be a subtle form of bias that targets women more than men, women's experiences of incivility may lead them to view the environment as more sexist. We found support for this, such that the relationship between incivility and sexist climate perceptions were stronger for women than men. Finally, we proposed that incivility would be related to negative conference outcomes through more negative perceptions of the conference climate for both genders, and through sexist climate perceptions only for women. Results of our path analyses indicated that positive, but not sexist, climate perceptions mediated the relationship between incivility and conference satisfaction for both genders. Further, both sexist and positive climate perceptions mediated the relationship between incivility and conference exclusion for both genders. We discuss incivility as a gendered phenomenon related to sexist contexts, as well as reasons for the observed mediated relationships. Additionally, we discuss the significant role that conference experiences may play for women and men in academia and professional settings, and implications for conference organizers.

Keywords Incivility · Organizational climate · Academic/professional conferences · Sexism · Satisfaction · Human gender differences

Introduction

Incivility – rude and discourteous behavior – is a form of interpersonal mistreatment that has increasingly become the focus of research in the areas of discrimination and workplace deviance (Cortina 2008; Montgomery et al. 2004). This increased attention is partially due to the fact that incivility is a common phenomenon for employees in the U.S. (e.g., Cortina et al. 2001; Neuman 2004). Further, although incivility is characterized by low-intensity, subtle behaviors, studies of workers in the U.S. indicate that it still has a negative relationship to employee workplace outcomes as well as to their physical and psychological health (Andersson and Pearson 1999; Cortina and Magley 2009; Cortina et al. 2001; Johnson and Indvik 2001; Miner et al. 2012). Merely witnessing incivility or hostility towards women has been found to have a negative impact on outcomes (e.g., health satisfaction, well-being, job satisfaction) for both male and female observers in the U.S. (Miner-Rubino and Cortina 2004, 2007). Given the prevalence and harm caused by uncivil behavior to targets and observers, it is important to understand more about the underlying processes by which incivility comes to be associated with poor outcomes.

In the present study, our first goal was to test the possibility that one such underlying process may be climate perceptions. In addition, Cortina (2008) has suggested that incivility may be a form of subtle bias that is more often directed at women and racial minorities (i.e., “selective incivility”, p. 55). For this reason, a second goal of the present study was to examine gender differences in these relationships to determine whether incivility may reflect a form of gender discrimination. Using

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survey methodology, we investigated these aims in an understudied yet consequential extension of the academic/professional workplace: the academic professional conference. Thus, our research has the potential to empirically add to the literature on selective incivility toward women, and to better understand the process by which incivility is related to negative outcomes. Although our work draws upon literature studying the experiences of individuals in the U.S., it is possible that the processes we examine would occur in other countries and cultures as well.

Workplace Incivility

Incivility is defined as subtle workplace behaviors that violate norms of respect, such as speaking with condescension and using demeaning or unprofessional language (Andersson and Pearson 1999). Incivility has been identified as a frequently experienced form of interpersonal mistreatment, with estimates suggesting that between 60 % and 80 % of individuals experience incivility in the workplace (e.g., Cortina et al. 2001; Neuman 2004). Incivility is often considered to be ambiguous, in that targets of uncivil behavior may be uncertain about whether the perpetrator intends to harm them or whether the perpetrator is merely expressing his or her ignorance and/or negative personal characteristics (Andersson and Pearson 1999). Despite the often ambiguous nature of incivility, it has been associated with many negative outcomes for the target of the mistreatment. For example, incivility is negatively related to workplace outcomes, including lower job satisfaction and work productivity, and greater workplace turnover (Johnson and Indvik 2001; Miner et al. 2012; Pearson and Porath 2005). Incivility is also related to negative psychological and health outcomes, such as greater workplace stress, ill health, and psychological distress (Andersson and Pearson 1999; Cortina et al. 2001). Cortina (2008) has suggested that incivility also causes problems in relationships between coworkers, thereby reducing cooperation. Incivility is thought to negatively impact targets by acting as a daily hassle (Cortina 2008) that, like other stressors, taxes or depletes an individual's cognitive, emotional, and physical resources (Lazarus and Folkman 1984).

Despite the fact that incivility does not appear to be mistreatment based on the target's group membership (unlike sexual harassment or racial discrimination, for example), Cortina (2008) suggested that it may be more often targeted at women and racial minorities; its ambiguous nature allows it to be directed toward unwelcome individuals without it being easily labeled as reflecting the perpetrator's sexist or racist biases. Support for this theory comes from research finding that women experience more incivility in the workplace than men (Cortina et al. 2001, 2002; Lim et al. 2008). However, most of the research comparing men and women suggests that incivility generally has comparably negative impacts on the

workplace and psychological outcomes of both women and men (Cortina et al. 2001; Lim et al. 2008). In an exception, Cortina et al. (2001) found that incivility was more strongly related to psychological distress for men than women, although there were no gender differences in 12 other outcomes. Thus, although incivility seems to target women more than men, its impact appears to be similar.

Even less is known about the processes by which incivility is related to outcomes, and whether these processes differ for women and men. Caza and Cortina (2007) identified perceived injustice and perceived ostracism as mediators of the relationship between incivility and student outcomes. In the present study we examined a different type of underlying mechanism. Specifically, we propose that incivility may be associated with negative workplace outcomes because it leads individuals to view the workplace climate more negatively. However, the types of negative climate perceptions affected by experiences of incivility may differ for women and men, due to the fact that incivility may be enacted both as a general type of mistreatment and as a gendered type of mistreatment selectively targeting women.

Climate Perceptions

Individuals' perceptions of their workplace policies, procedures, and practices define the psychological climate (Kickul and Liao-Troth 2003; Ostroff et al. 2012; Parker et al. 2003; Seibert et al. 2004). Thus, the climate is the individual's subjective, individual-level perception of what the organization is like, and is influenced by the broader organizational context and culture – the ideologies and values of an organization (Ostroff et al. 2012). These perceptions are formed as individuals interact with others in their environment (Hulin et al. 1996; Seibert et al. 2004) and they impact individuals' broader feelings about the workplace environment, such as their level of workplace commitment and desire to stay in the organization (Preston 1994, 2004; Ostroff et al. 2012). Thus, despite the subjective nature of climate perceptions, they are important factors to consider when examining workplace experiences. In the present study, we examined two aspects of the workplace climate: the extent to which it is viewed as sexist and how much the climate is viewed as generally having positive versus negative characteristics.

A sexist climate is one in which women are disadvantaged and subjected to poorer treatment than men (e.g., Hall and Sandler 1982; Settles et al. 2006). Given this definition, it is not surprising that most of the research on sexist climates has examined experiences of women. In one exception, Settles et al. (2013) found that for women, negative experiences (e.g., gender discrimination and derogation) were associated with the feeling that their organization is one in which women experience sexist treatment. However, they found that personal mistreatment was not associated with men's perceptions

that the organization was sexist. Thus, the limited evidence suggests that men's negative personal experiences may not impact their perceptions of organizational sexism.

Research on outcomes related to sexist climate perceptions has found it to be associated with negative workplace outcomes for women. For example, Yoder and Aniakudo (1996) found that female firefighters with greater perceptions that their workplace was chilly for women reported feeling less accepted, and in turn, less important to and valued by their fire station. Similarly, Settles et al. (2006) found that for female faculty members in academic science, sexist climate perceptions were associated with women's reports of lower job satisfaction and feeling that they had less influence within their departments. A related construct, organizational tolerance of sexual harassment, has also been linked to women and men's reports of lower work satisfaction, lower satisfaction with coworkers and supervisors, and job withdrawal (Fitzgerald et al. 1999; Hesson-McInnis and Fitzgerald 1997; Hulin et al. 1996). Thus, when women feel there is more sexism and tolerance for sexist behaviors in their workplace, they report more negative work outcomes, including lower job satisfaction, acceptance, and influence. Again, for men, the research in this area is more limited. However, Miner-Rubino and Cortina (2004, 2007) found that both men and women are negatively affected by working in an environment where women are mistreated. Thus, if men perceive the climate to be sexist, it may similarly impact their psychological and organizational outcomes.

The general climate refers to how much the environment is perceived as positive versus negative, where a positive climate is characterized as being warm, friendly, and supportive (Carr et al. 2003). Caza and Cortina (2007) found that male and female students who reported more incivility reported feeling that they were treated unfairly; injustice is likely related to negative climate perceptions. Research on other types of mistreatment supports the relationship of mistreatment with negative climate perceptions. For example, women who reported little or no sexual harassment reported that their workplace climate was more positive than those reporting higher levels of harassment (Cortina et al. 1998). Additionally, perceptions of a supportive workplace climate were associated with perceiving less institutional racism in a sample of Black men and women (Jeanquart-Barone and Sekaran 1996). Thus, positive interpersonal treatment seems to be related to viewing the organization positively.

Studies have also examined various general components of positive organizational climates in relation to workplace outcomes for women and men. For example, qualities such as supportiveness and teamwork from coworkers and supervisors were found to be positively related to work satisfaction (Donovan et al. 1998; Johnson and McIntye 1998; Joyce et al. 1982). Similarly, results from a meta-analysis of 51 studies found that affective aspects of the climate that include

cooperation and warmth among coworkers were associated with job satisfaction and organizational commitment (Carr et al. 2003). In research on individuals in academia, perceptions that the climate was more generally positive were related to higher job satisfaction and work productivity for both genders (Settles et al. 2006, 2013). Thus, as with sexist climate perceptions, when individuals view their workplace as being a positive environment, they report more positive outcomes, including greater satisfaction with their jobs.

The Current Study

In the present study, we tested our theory that the relationship between incivility and negative outcomes is indirect. That is, we propose that incivility leads individuals to negatively view their climate, and these negative climate perceptions are associated with negative outcomes, such as lower job satisfaction and feelings of exclusion. However, for women, incivility may lead to negative outcomes via both general perceptions of the climate as poor and perceptions that the climate is sexist. That is, women may perceive that they are being targeted with incivility in part because of their gender. This prediction is consistent with Cortina's (2008) theory of "selective incivility" whereby women and racial minorities are targeted with incivility as a form of modern, subtle discrimination. Because this process would not occur for men, incivility may result in negative outcomes via general perceptions of the climate, but not sexist climate perceptions. This research will add to the existing literature on incivility by providing empirical evidence regarding whether incivility can be a form of gender discrimination, and by elucidating the process by which incivility is related to negative outcomes.

This theory has some support from a study with similar constructs of faculty members in science and engineering fields. Specifically, Settles et al. (2013) found that for women, the relationship between gender discrimination and job satisfaction was mediated by general climate perceptions, and the relationship between reported gender derogation (i.e., insensitive and disparaging comments directed at individuals of one's own gender) and job satisfaction was mediated by two factors – perceived organizational sexism and, in turn, general climate perceptions. For men, these relationships were not supported although gender derogation and organizational sexism were associated with scholarly alienation, a construct similar to exclusion, and general climate perceptions were associated with job satisfaction. Other support for our theory is less direct. For example, in a cross-sectional study, Hulin et al. (1996) found that although experiences of sexual harassment predicted outcomes, for female but not male employees, perceptions of the organizational climate as tolerant of sexual harassment accounted for more variance in work withdrawal, psychological and health outcomes than sexual harassment. This finding highlights the importance of climate perceptions

on outcomes, and potential differences in the impact of climate perceptions on outcomes for women and men.

Most of the research on incivility and organizational climate has examined the workplace. In the present study, we extend this workplace research by examining an important component of academic jobs: professional conferences. We draw upon research on the culture of academic conferences, because the culture of an organization influences how individual members perceive the climate within the organization (e.g., Ostroff et al. 2012). Egri (1992) has suggested that the culture of an academic conference reflects that of the larger organization it represents (e.g., the American Psychological Association [APA] convention reflects the culture of the APA as an organization). Further, conferences are thought to be important places at which faculty socialization takes place (Egri 1992). Conferences provide disciplinary engagement between individuals with similar scholarly interests; at times, there can be greater shared scholarly interests with other conference attendees than with other individuals within one's department or university (Ward 2003). Thus, conferences can be important places for networking and mentoring to take place. Conferences are also places where attendees learn about the value placed on certain types of scholarship (Egri 1992). Through the presentation of one's scholarly ideas to others, individuals can gain recognition and prestige within their field (Ward 2003). For these reasons, we feel that academic conferences are important extensions of the daily academic workplace that impact the career outcomes of both women and men and deserve greater study.

Positive conference participation may be especially important for women to feel integrated and accepted into their discipline, as they may experience less effective socialization as graduate students and as new faculty members (Olsen et al. 1995). Research suggests that compared to men, women in academia report less institutional support (Olsen et al. 1995), poorer departmental relations (Johnsrud and Des Jarlais 1994), and greater alienation (Settles et al. 2013). If women also feel alienated and excluded at professional conferences, this may contribute to their overall dissatisfaction with the field and lead them to exit their profession. Thus, it is useful to examine experiences of incivility at academic conferences, as well as perceptions of the climate in these settings, and to compare experiences for women and men. Based on the literature, we made three predictions.

Hypothesis 1: Women will report more incivility, more sexist climate perceptions, less positive general climate perceptions, less conference satisfaction, and more conference exclusion than men.

Hypothesis 2: The relationship between incivility and sexist climate perceptions will be stronger for women than men.

Hypothesis 3a: For women, incivility will be related to negative conference outcomes (i.e., conference satisfaction and conference exclusion) and this relationship will be mediated by greater perceptions of the conference as sexist and generally less positive (Fig. 1, top panel).

Hypothesis 3b: For men, incivility will be related to negative conference outcomes (i.e., conference satisfaction and conference exclusion), and this relationship will be mediated by greater perceptions of the conference as less positive, but not sexist climate perceptions (Fig. 1, bottom panel).

Method

Participants and Procedure

Participants were 197 women and 261 men (458 total participants) who were members of a professional society focused on scholarship at the intersection of history and science. All participants indicated that they had attended at least one past "annual meeting" (i.e., professional conference) for the society. Table 1 presents information on all demographic variables combined and separately for men and women. Most participants had faculty or other academic/professional positions and were White. Participants ranged in age from 22 to 87 years and all participants were U.S. citizens.

All members were sent an email by the president of the society and the women's caucus inviting them to participate in a survey "to learn about how you view the annual meeting." The email included a link to the online survey, which collected responses anonymously. Two reminder emails were sent to all society members at intervals of 1–2 weeks after the initial email invitation. The survey took approximately 10–15 min to

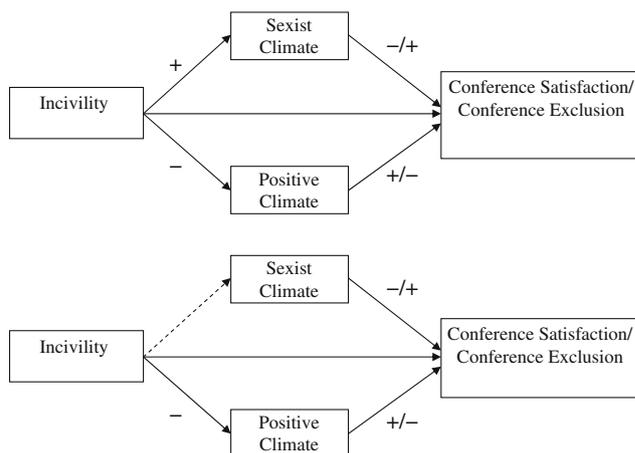


Fig. 1 Hypothesized mediational model for women (*top*) and men (*bottom*). *Solid lines* indicate predicted relationships; *dashed lines* indicate no predicted relationships. *Signs* indicate the direction of the predicted relationship

Table 1 Univariate differences between women and men on demographic variables

Variable	Women	Men	Total
Age <i>M (SD)</i>	47.68 (14.48)	54.46 (15.47)	51.56 (15.41)
Position <i>n (%)</i>			
Faculty/Other professional	163 (82.74)	222 (85.06)	385 (84.06)
Graduate Student/Post-doc	28 (14.21)	27 (10.34)	55 (12.01)
Did not report	6 (3.05)	12 (4.60)	18 (3.93)
Race/Ethnicity <i>n (%)</i>			
White	162 (82.23)	227 (86.97)	389 (84.93)
Latino/multi-racial Latino	6 (3.05)	10 (3.83)	16 (3.49)
Black/multi-racial Black	3 (1.52)	1 (0.38)	4 (0.87)
Native American/Canadian or Alaska Native	2 (1.02)	1 (0.38)	3 (0.66)
Asian/Pacific Islander/multi-racial Asian	10 (5.08)	2 (0.77)	12 (2.62)
Other/Did not report	14 (7.12)	20 (7.67)	34 (7.42)
Total	197 (43.01)	261 (56.99)	458 (100)

Percentages represent proportions within the same gender, except for the total, which represents the proportion of the total sample

complete and no compensation was provided to participants. The response rate for the study was 37 %.

Measures

Incivility

To assess the frequency of perceived incivility experienced during the conference, we adapted Cortina et al.'s (2001) measure of workplace incivility. Seven items asked participants how often at the conference they experienced uncivil behaviors (e.g., “Put you down or was condescending to you?” “Made demeaning or derogatory remarks about you?”) using a scale ranging from 1 (*never*) to 5 (*many times*). All items were averaged such that higher scores indicated having experienced more frequent incivility ($\alpha=0.86$).

Sexist Climate

Sexist climate assessed the extent to which women viewed the climate of the conference to be one in which women were treated more poorly and with less regard than men. We measured sexist climate with nine items adapted from a sexist workplace climate scale used in Settles et al. (2007; see also Hostler and Gressard 1993; Riger et al. 1997). In addition, we included one item from Barak et al. (1998) Diversity Perceptions Scale, and one item from Nesbitt et al. (2003) Faculty Perceptions of the Work Environment measure. Participants rated all items (e.g., “Sexist remarks are heard at the Annual Meeting”; “The ‘old boys’ network’ is alive and well at the Annual Meeting”) on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). After reverse-coding appropriate items, a mean of all items was computed such that higher scores indicated a more sexist conference climate ($\alpha=0.93$).

General Climate

General perceptions of the climate at the conference were measured using a scale adapted from the Texas A & M University Campus Climate Survey (Hurtado 1998). Using 5-point semantic differential scales in which each pair of descriptors served as the labels for the poles, participants rated the annual meeting climate on 11 dimensions including friendly–hostile, disrespectful–respectful, collegial–contentious, cold–warm, cooperative–competitive, and not supportive–supportive. Appropriate items were reversed and a mean was computed such that higher scores indicated a more positive conference climate ($\alpha=0.92$).

Conference Satisfaction

We assessed how satisfied individuals were with the conference using eight items. Seven of these items were adapted from the University of Michigan Faculty Work-Life Study (CSHPE and CEW 1999) and asked about satisfaction with various aspects of the annual meeting (e.g., “Amount of social interaction with others”; “Level of intellectual stimulation at the meeting”). An additional item asked about overall satisfaction at the conference. All items were assessed on a scale that ranged from 1 (*very dissatisfied*) to 5 (*very satisfied*). A mean of all items was created such that higher scores indicated more satisfaction with the conference ($\alpha=0.90$).

Conference Exclusion

How intellectually and socially excluded vs. included individuals felt at the conference was assessed with seven items adapted from the University of Michigan Faculty Work-Life Study (CSHPE and CEW 1999). Participants indicated their agreement with each statement (e.g., “Others come to me

to discuss intellectual ideas”; “Other individuals seem to find it easier to ‘fit it’ at the annual meeting than I do”) using a scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Appropriate items were reverse scored, and all items were averaged such that higher scores indicated more exclusion at the conference ($\alpha=0.76$).

Results

We first conducted confirmatory factor analyses to determine whether all items comprising the mediators and the outcomes loaded onto their assigned construct and not others. Two principal components factor analyses, each with promax rotation, were conducted – one with the items comprising the mediators and one with items comprising the outcomes. Results indicated that for the mediators, a two-factor solution accounted for 58.38 % of the variance, and all sexist climate items loaded onto one factor (loadings ranged from 0.65 to 0.86) and all the general climate items loaded onto a second factor (loadings ranged from 0.68 to 0.86). None of the items loaded onto both factors. For the outcomes, a two-factor solution accounted for 58.02 % of the variance. All of the exclusion items loaded on one factor (loadings ranged from 0.60 to 0.81), all of the meeting satisfaction items loaded on a second factor (loadings ranged from 0.52 to 0.84), and none of the items loaded onto both factors. Thus, we proceeded to analyze our constructs as theorized.

To examine our first hypothesis, that women would report more incivility, greater sexist climate perceptions, less positive general climate perceptions, less conference satisfaction, and more conference exclusion than men, we conducted a Multivariate Analyses of Variance (MANOVA) comparing men and women on these study variables. The MANOVA was significant, Wilks’ Lambda=0.88, $F(1, 323)=8.29$, $p<0.001$. Follow-up univariate analysis (see Table 2) indicated that in support of our prediction, women reported more incivility, perceived the conference climate as more sexist, and reported feeling more excluded than men. Women and men did not differ in their perceptions of the general climate or their reports of conference satisfaction. Thus, Hypothesis 1 was partially supported. For both women and men, incivility was well below the scale midpoint, suggesting that incivility did not occur frequently for either group. The means for sexist

climate and conference exclusion were below the midpoint for both genders, but closer to the midpoint for women, suggesting more neutral perceptions for women, and slightly positive perceptions for men. General climate perceptions and meeting satisfaction, which did not differ by gender, were both above the midpoint suggesting somewhat positive general climate perceptions and above neutral levels of satisfaction.

Table 3 shows the correlations among study variables for women and men. For both genders, incivility was related to greater sexist climate perceptions and lower general climate perceptions. Incivility was related to lower conference satisfaction and greater conference exclusion for both women and men. For both genders, sexist climate perceptions were significantly related to viewing the general climate as more negative, being less satisfied with the conference, and feeling more excluded at the conference. Perceptions that the climate was more positive were significantly related to being more satisfied with and feeling less excluded at the conference for both women and men. Finally, the more participants felt satisfied with the conference, the less they felt excluded at the conference.

To examine Hypotheses 2, 3a, and 3b, we conducted two moderated mediational analyses using the PROCESS macro (Hayes 2013). Hypothesis 2 stated that the relationship between incivility and sexist climate perceptions would be stronger for women than men. Hypothesis 3a stated that for women, both sexist and general climate perceptions would mediate the relationship between incivility and outcomes (i.e., conference satisfaction and conference exclusion), whereas Hypothesis 3b stated that general climate perceptions, but not sexist climate perceptions, would mediate the relationship between incivility and outcomes (i.e., conference satisfaction and conference exclusion) for men.

In the two moderated mediation analyses, incivility was the independent variable, and sexist climate and positive general climate were entered as simultaneous mediators. In separate analyses, meeting satisfaction or meeting exclusion served as the dependent variable and the alternate dependent variable was entered as a covariate (e.g., meeting exclusion was the covariate in the analysis where meeting satisfaction was the dependent variable). Participant gender was the moderating variable and analyses examined whether there were gender differences in each pathway.

Table 2 Univariate differences between women and men on study variables

Variable	Women <i>M</i> (<i>SD</i>)	Men <i>M</i> (<i>SD</i>)	<i>F</i> (<i>df</i> =1, 321)	<i>p</i> -value	Cohen’s <i>d</i>
Incivility	1.62 (0.58)	1.43 (0.51)	9.23	.003	.35
Sexist Climate	2.90 (0.79)	2.42 (0.68)	33.71	< .001	.65
General Climate	3.47 (0.78)	3.58 (0.67)	1.68	.20	-.15
Conference Satisfaction	3.65 (0.76)	3.66 (0.63)	.01	.94	-.01
Conference Exclusion	2.74 (0.72)	2.57 (0.63)	5.07	.03	.25

All scales range from 1–5

Table 3 Correlations on all study variables for women and men

Variable	Incivility	Sexist Climate	General Climate	Conference Satisfaction	Conference Exclusion
Incivility	–	.31**	–.43**	–.30**	.40**
Sexist Climate	.59**	–	–.46**	–.23**	.47**
General Climate	–.64**	–.60**	–	.58**	–.65**
Conference Satisfaction	–.55**	–.48**	.72**	–	–.51**
Conference Exclusion	.58**	.60**	–.76**	–.73**	–

Correlations for women are below the diagonal; correlations for men are above the diagonal. Ns for women range from 137 to 176; Ns for men range from 187 to 232.

** $p < 0.01$, * $p < 0.05$

The first analysis examined conference satisfaction as the dependent variable. As can be seen in Fig. 2, incivility was significantly related to more sexist climate perceptions for women, but these variables were unrelated for men. As predicted in Hypothesis 2, this relationship was stronger for women than men ($p = 0.02$). Incivility was significantly related to less positive general climate perceptions for both women and men; there was a trend for this relationship to be greater for women than men ($p = 0.08$). For women, sexist climate perceptions were unrelated to conference satisfaction, but for men, the perception that the climate was more sexist was related to more meeting satisfaction. As predicted, a more positive general climate was related to more conference satisfaction for women and men. For both genders, incivility was unrelated to conference satisfaction with the two climate mediators included in the analysis. For women, the relationship between incivility and conference satisfaction was not significantly mediated by sexist climate perceptions (indirect effect = 0.02, 95 % CI [–0.04, 0.11]), counter to Hypothesis 3a. However, general climate perceptions significantly mediated the relationship between incivility and conference satisfaction (indirect effect = –0.18, 95 % CI [–0.30, –0.09]), as predicted in Hypothesis 3a. Analyses indicated that the indirect effect through general climate perceptions was significantly greater than the indirect effect through sexist climate perceptions (difference in indirect effects = 0.21, 95 % CI [0.08, 0.36]).

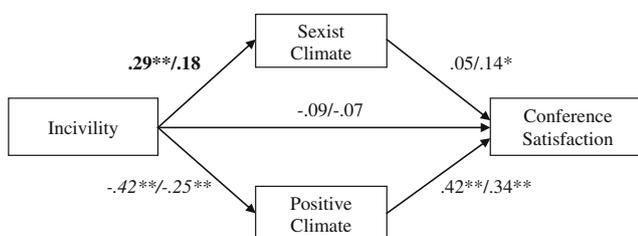


Fig. 2 Mediation of the relationship between incivility and conference satisfaction by sexist climate and positive general climate for women (*before the slash*) and men (*after the slash*). $N = 137$ for women and $N = 186$ for men. Coefficients are unstandardized. **Bolded** coefficients indicate that coefficients significantly differ between women and men at $p < 0.05$. *Italicized* coefficients indicate that coefficients significantly differ between women and men at $p < 0.10$. * $p < 0.05$, ** $p < 0.01$

For men, as predicted in Hypothesis 3b, sexist climate perceptions did not significantly moderate the relationship between incivility and conference satisfaction (indirect effect = 0.02, 95 % CI [–0.002, 0.09]), although general climate perceptions did (indirect effect = –0.09, 95 % CI [–0.16, –0.04]). As with women, for men, the indirect effect through general climate perceptions was significantly greater than the indirect effect through sexist climate perceptions (difference in indirect effects = 0.11, 95 % CI [0.06, 0.20]).

Figure 3 shows the results of the analysis with conference exclusion as the dependent variable. The relationship between incivility and more sexist climate perceptions was significantly stronger for women than men ($p = 0.01$), as predicted in Hypothesis 2, although it was significant for both genders. For both women and men, incivility was related to less positive climate perceptions, sexist climate perceptions were related to more conference exclusion, and more positive climate perceptions were related to less conference exclusion. Controlling for the two climate mediators, incivility was unrelated to conference exclusion for both women and men. For women, we found the hypothesized relationship (Hypothesis 3a); the indirect effects of the relationship between incivility and conference exclusion via sexist climate perceptions and general climate perceptions were both significant (sexist climate indirect effect = 0.10, 95 % CI [0.03, 0.20]; general climate indirect effect = 0.16, 95 % CI [0.08, 0.27]), and there was no

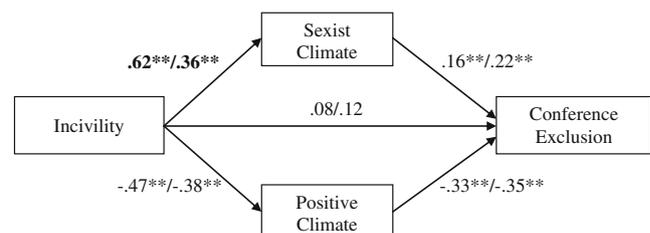


Fig. 3 Mediation of the relationship between incivility and conference exclusion by sexist climate and positive general climate for women (*before the slash*) and men (*after the slash*). $N = 137$ for women and $N = 186$ for men. Coefficients are unstandardized. **Bolded** coefficients indicate that coefficients significantly differ between women and men at $p < 0.05$. * $p < 0.05$, ** $p < 0.01$

significant difference in the strength of the indirect effects (difference in indirect effects=0.05, 95 % CI [-0.07, 0.18]). The same pattern was observed for men, thereby only partially supporting our prediction for Hypothesis 3b. The relationship between incivility and conference exclusion was significantly mediated by sexist climate perceptions (indirect effect=0.08, 95 % CI [0.03, 0.17]) and by general climate perceptions (indirect effect=0.13, 95 % CI [0.05, 0.29]), and the strength of the indirect effects was not significantly different (difference in indirect effects=0.05, 95 % CI [-0.05, 0.20]).

Discussion

Incivility is an important form of interpersonal mistreatment because of its prevalence and association with negative work, psychological, and health outcomes (e.g., Cortina et al. 2001; Cortina and Magley 2009; Miner et al. 2012). However, less is known about the mechanisms by which incivility has a negative impact on targets, and how these mechanisms may differ for women and men. In the present study, we sought to extend the literature on incivility by: 1) testing whether incivility is related to negative workplace outcomes via perceptions of the workplace climate, 2) examining gender differences in the mediational relationships, and 3) looking at incivility and climate relationships within the context of an academic conference. Our analyses examined how personal experiences of incivility were related to personal assessments of the conference in terms of individuals' satisfaction and sense of exclusion via general perceptions not focused on the participants. Thus, our theory links personal experiences through perceptions of the social environment. The results of our analyses supported many of our predictions and are discussed below.

Our first hypothesis was that women would report more incivility, perceive the climate to be more sexist and less positive, and report being less satisfied and more excluded at the conference. This prediction was supported for three of our five variables. Men and women did not differ in general climate perceptions or conference satisfaction, but women did report more incivility. The finding that women reported experiencing more incivility than men is consistent with Cortina's (2008) theory of incivility as a subtle form of bias that may be directed more at women than men. Women also perceived the conference climate to be more sexist and felt more excluded at the conference than men. Previous studies have found that women evaluate academic workplaces more negatively (e.g., less supportive, more alienating) than men (Olsen et al. 1995; Settles et al. 2013). That we have found similar gender differences in perceptions of an academic conference supports Egri's (1992) theory of conferences as reflecting many processes shared by academic organizations. Future research should further examine the extent to which

women and men perceive disciplinary conferences as similar to the environment of their discipline in their institution.

Hypothesis 2 proposed that the relationship between incivility and sexist climate perceptions would be stronger for women than men. This prediction was supported, indicating that incivility was more related to seeing the conference as having a sexist climate for women than men. These results also support our theory that women who experience uncivil treatment perceive this mistreatment as partially directed at them because of their gender and are consistent with the notion of selective incivility (Cortina 2008). This pattern of results is also consistent with past research that found that men's experiences of mistreatment were not associated with their perception that their organization was sexist although women's personal mistreatment was related to perceiving more organizational sexism (Settles et al. 2013).

Hypotheses 3a and 3b further tested this theory, stating that the relationship between incivility and conference outcomes would be mediated by two aspects of the conference climate for women, sexist climate perceptions and general climate perceptions (Hypothesis 3a), but there would only be mediation by general climate perceptions for men (Hypothesis 3b). For conference satisfaction, Hypothesis 3a was only partially supported, whereas Hypothesis 3b was fully supported. That is, incivility was related to less satisfaction with the academic conference via perceptions that the conference climate was less friendly, supportive, and cooperative for both women and men. But incivility did not lead to less conference satisfaction through perceptions of the conference as more sexist for either women or men. For conference exclusion our predictions were again only partially supported as the pattern of relationships did not differ for women and men. For women, sexist climate perceptions and gender climate perceptions both mediated the relationship between incivility and feeling excluded at the conference, as predicted in Hypothesis 3a. For men, this same pattern emerged, although we predicted that only gender climate perceptions would mediate the relationship between incivility and conference exclusion for them (Hypothesis 3b).

The lack of relationship between sexist climate perceptions and conference satisfaction for women was unexpected, and likely accounts for the lack of support for Hypothesis 3a for conference satisfaction. Women's perceptions of the sexist climate at professional conferences may not have been related to conference satisfaction because women in academia may expect to experience sexism in the workplace. Thus, they may discount assessments of how sexist their conferences are when determining the overall value of the conference (i.e., satisfaction). A growing body of research is consistent with the theory that devalued group members may develop resilience from group-based mistreatment because familiarity with the group-based mistreatment allows them to develop coping strategies and to practice engaging in self-regulatory behaviors following negative experiences (Johnson et al. 2010; Salvatore and

Shelton 2007). For example, Settles et al. (2014) found that negative appraisals of sexual harassment had a stronger impact on psychological and work outcomes for men in the military than women in the military, possibly because women in the military expect and prepare for experiences of sexual harassment. In the present study, since women in academic settings may have previous experiences of working in sexist environments, sexism at professional conferences may be dealt with using “typically” employed coping and self-regulation strategies (i.e., whatever strategies they have used most often in the past). This ability to compartmentalize sexist climates may allow women to maintain their overall satisfaction with the conference. However, our results suggest that even if this is the case, sexist climates are still associated with women’s sense of isolation and “otherness” (i.e., conference exclusion).

We did not anticipate that the sexist climate perceptions would mediate the relationship between incivility and feelings of exclusion for men (Hypothesis 3b). Some research has found that both genders are negatively impacted by working in an environment where women are mistreated (Miner-Rubino and Cortina 2004, 2007). Yet this does not explain why men’s experiences of incivility would lead them to view the climate as more sexist, when controlling for feelings of exclusion. It may be that men treated uncivilly by others are more likely to notice other forms of interpersonal mistreatment, such as sexual harassment of women or may also notice when women are treated with incivility. Thus, they might feel that their incivility co-occurs with the mistreatment of women, thereby contributing to a sexist environment. These results should be treated as tentative until they can be confirmed by other research.

We also compared the strength of the indirect effect of incivility for sexist and general climate perceptions to determine which mediator accounted for more of the relationship between incivility and outcomes. For conference satisfaction, the indirect effect of incivility through general climate perceptions was greater than the indirect effect through sexist climate perceptions for both women and men, suggesting that general climate perceptions better explained the relationship between experiences of incivility and less conference satisfaction. For conference exclusion, the indirect effects of incivility did not differ for sexist and general climate perceptions. That is, sexist and general climate perceptions equally accounted for the relationship between more incivility and feeling more excluded. The consistent finding that incivility is related to negative conference outcomes for men and women via perceptions that the conference environment is less generally positive is consistent with past research finding that mistreatment is associated with workplace outcomes through climate perceptions (Settles et al. 2013). The fact that indirect effects of incivility through general climate perceptions were as strong as or stronger than those through sexist climate perceptions

reinforces the importance of this aspect of the environment as a mechanism that may explain why incivility is related to poor outcomes.

One odd finding was that the mediational analyses indicated a positive relationship between sexist climate perceptions and more conference satisfaction for both genders, although this relationship was only significant from men. These relationships are contrary to expected patterns, and also in the opposite direction of the bivariate correlations between these variables. Thus, we do not conclude that sexist environments are associated with more conference satisfaction. Rather, we feel that the positive coefficients may be artificial, due to the inclusion of both mediators in the analysis.

The results of our study suggest that academic professional conferences are worthwhile and fruitful extensions of the academic workplace in which to examine issues of incivility and workplace climate. It has been suggested that the culture of a conference may mirror that of the larger disciplinary organization (Egri 1992); similarly, we suggest that the values of a disciplinary organization may trickle-down to individuals within the discipline. Thus, it is reasonable that similar processes occur in conference settings as have been found to occur in college and university settings, because organizational culture often influences individual perceptions of the climate (Ostroff et al. 2012). For example, Settles et al. (2013) found climate to mediate the relationship between gender-based mistreatment and job satisfaction in the workplace for women in academic science. Professional conferences are thought to be important venues for academic socialization, sometimes more important than the day-to-day workplace, because individuals may be able to seek out others with very similar scholarly interests as well as connecting with those with similar demographic characteristics (e.g., gender, race; Ward 2003). Thus, if individuals view their disciplinary conferences negatively, they may question their personal suitability within the field, particularly if they also feel dissatisfied and excluded in their academic/professional workplaces. Conference experiences may be especially important to women, who generally had more negative conference experiences and perceptions (with the exception of general climate perceptions and conference satisfaction) in this study, and who report more negative experiences in academia (Johnsrud and Des Jarlais 1994; Olsen et al. 1995; Settles et al. 2013). Further research should examine how perceptions of professional conferences are related to perceptions of the day-to-day workplace (e.g., university or college department) and the broader discipline.

Limitations and Future Directions

One limitation of the present study is that it consisted of members of one particular scholarly society who had attended the society’s professional conference. Examination of the

means suggests that women and men overall tended to have more positive than negative views of their professional conferences (although the views of men were more positive than those of women along some dimensions). Thus, it is unclear whether the results we observed would generalize to other conferences in other disciplines. We believe that it is likely that *mean levels* of incivility may vary for different conferences, as would perceptions of the climate. However, we expect that the *relationships* we observed in our study would be similar in other conference settings. In addition, our response rate was 37 %, which although not dissimilar to response rates for other studies of academia (CSHPE and CEW 1999), is low. Thus, our respondents may differ from non-respondents in important ways, such as being at the extremes in terms of satisfaction or dissatisfaction with the conference. Additionally, the small number of minorities in our sample prohibited us from comparing relationships for White vs. racial/ethnic minority attendees. As studies suggest that minorities in academia tend to feel alienated (Johnsrud and Des Jarlais 1994; Olsen et al. 1995), it is important for research to examine whether the processes we observed would be stronger for racial/ethnic minorities than for White participants.

Another limitation is that the study is cross-sectional in design. Although we theorized a causal process, our analysis does not permit us to draw conclusions about causality in the relationships we observed and alternative causal relationships may be plausible. For example, it may be that individuals who are more dissatisfied and feel more excluded at conferences are targeted with more incivility because others perceive their discomfort within the setting. Or, those who are more dissatisfied and excluded may tend to see things, such as the conference climate, more negatively. It is also possible that perceptions of a sexist climate may lead to differential treatment of men and women, including instances of incivility, which in turn could lead to differential feelings of satisfaction and exclusion between men and women (e.g., Fitzgerald et al. 1997). It is likely that multiple processes are involved (e.g., sexist climates are those in which women experience more incivility, which contributes to women's perception of the climate as sexist). Future studies could longitudinally follow individuals from their first time participating in a professional conference into the future to better understand how the causal relationships unfold. Additionally, our data consist of self-report assessments of subjective experiences. Although such perceptions may not always accurately reflect the work environment, we feel that it is important to measure subjective perceptions as these determine how individuals feel about their work environment and even drive their decisions about whether to leave the workplace (Preston 2004; Seibert et al. 2004).

In summary, the results of our study found that the level of incivility women and men reported experiencing at professional conferences was related to greater conference dissatisfaction and more feelings of exclusion. We found that these

relationships were mediated by perceptions of the conference climate, but that the mediators differed depending on the outcome. Although general climate perceptions mediated the relationship between incivility and both conference satisfaction and exclusion, sexist climate perceptions only mediated the relationship between incivility and conference exclusion. Although the pattern of mediation did not differ by gender, we did find the hypothesized gender difference in the relationship between incivility and sexist climate perceptions. These results are consistent with our theory that the reason incivility is related to negative outcomes for targets is that incivility leads individuals to feel that the climate of their workplace is poor, and that women may perceive themselves as being targets of incivility in part because of their gender. Although workplaces may have explicit policies regarding acceptable and unacceptable employee behavior, professional conferences typically do not. Thus, they may represent a less regulated aspect of the professional workplace that, like one's day-to-day workplace, communicates messages of acceptance and value. Conference organizers may want to consider how to better create a positive environment for all attendees. We feel that research on professional climates is fruitful and informative, and encourage other researchers to determine whether organizational processes at conferences are similar to or different from those in other types of work environments.

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