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Put You Down versus Tune You Out: Further Understanding Active and Passive Email Incivility

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Abstract

Although email incivility is becoming a growing concern in the workplace, it remains an understudied topic. Scholars have paid inadequate attention to its dimensionality (i.e., active and passive email incivility) and its impact on well-being outcomes, thus precluding a more comprehensive understanding of its implications in the workplace. To address these gaps, we conducted two studies to investigate the nature and outcomes of email incivility. In Study 1, we surveyed a sample of working employees about their email incivility experiences at work and collected their appraisals of a discrete email incivility event. Confirmatory factor analysis results provide support for the empirical distinction between the two dimensions. Findings from event-level appraisals highlight that active email incivility leads to a greater level of emotionality appraisal, whereas passive email incivility is viewed as more ambiguous. In Study 2, we conducted a diary study to examine the spillover effects of email incivility on well-being. Multilevel modeling results indicate that passive email incivility is positively associated with insomnia, which then leads to heightened negative affect at the beginning of the workday. Overall, this research clarifies the nature of email incivility dimensions, highlights their implications for employee well-being, and identifies important implications for organizational scholars and practitioners.

Keywords

email incivility; insomnia; afte	ct; appraisal	

"I have a different accusation to level at email—it has made us all passive aggressive. ... It has stifled debate and made office life more stultifying and aggravating than it has ever been."

-Lucy Kellaway (2016)

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There is little doubt that dealing with work emails has become an essential part of many employees' workday. In 2017, a staggering number of business- and consumer-related emails were exchanged every day around the globe—an estimated 269 billion such messages (Radicati Group, 2017). In a national survey conducted in the United States, 61% of workers who used the Internet reported that email was "very important" for doing their job (Purcell & Rainie, 2014). Others have estimated that employees could spend as much as one-third of their day reading and answering work emails (Duxbury & Lanctot, 2016).

While the introduction of email has greatly improved communication efficiency, many employees have come to realize that it is a mixed blessing, in that it has opened the door to an insidious problem—rudeness through email communication (i.e., email incivility). Disrespectful emails, without any face-to-face interactions, can evoke perceptions of rudeness due to the unique features of electronic communications (e.g., lack of immediate feedback, no body language or tone of voice available; Byron, 2008; Daft & Lengel, 1986; Sproull & Kiesler, 1986). Problematically, rudeness through email communications is becoming a prevalent concern in the workplace, as more than 90% of business executives and professionals have reported experiencing disrespectful email communications at work (Lim & Chin, 2006).

Indeed, a growing body of research has revealed that email incivility—defined as "communicative behavior exhibited in computer mediated interactions that violate workplace norms of mutual respect" (Lim & Teo, 2009, p. 419)—is detrimental to employees' work outcomes. In the first study of email incivility, Lim and Teo (2009) linked it to lower levels of organizational commitment and job satisfaction and higher levels of turnover intention and workplace deviance. Similarly, subsequent research has linked it to other work outcomes such as absenteeism (Giumetti, McKibben, Hatfield, Schroeder, & Kowalski, 2012), lower levels of energy and engagement (Giumetti et al., 2013), and a crossover effect to spouses' work withdrawal (Park & Haun, 2018). Additionally, researchers have begun to examine its implications for employee well-being (Park, Fritz, & Jex, 2018).

Despite the progress made in this research area, several important gaps remain. Chief among them is the inadequate attention paid to the dimensionality of email incivility. On the one hand, email incivility can take an active form, whereby the sender engages in disrespectful acts toward the email recipient. For example, when the sender uses all capital letters in the email (all CAPs), it usually indicates shouting. On the other hand, email incivility can be passive in nature, such that the recipient perceives a lack of decent interpersonal treatment. For example, the epigraph to this paper was taken from an article by *Financial Times* columnist Lucy Kellaway based on a personal experience with work email. In the article, Kellaway described a frustrating experience in which she waited all day and heard nothing after sending a carefully crafted email to a colleague. In the evening, she received a curt, one-word response: "Noted." Examples of both active and passive email incivility are probably not new to anyone who uses email for work communications. Anecdotal evidence, such as Kellaway's experience, suggests that people using email for work purposes can relate to the differences between active and passive email incivility.

To date, this important distinction has received insufficient attention from occupational health psychologists. Since Lim and Teo (2009) reported a two-dimensional structure (i.e., active versus passive email incivility) from their exploratory factor analysis, no subsequent research has provided conceptualizations of these dimensions or empirically confirmed the dimensionality. Researchers have either focused on one aspect—usually the active dimension—of email incivility or used a composite score to capture email incivility, thereby masking potentially meaningful differences between the two dimensions. To the extent that dimensionality is key to construct validity (Schwab, 1980), this gap precludes a more nuanced understanding of this emerging workplace stressor.

Broadly speaking, investigating the dimensions of email incivility holds promise to extend theorizing in workplace mistreatment, as various scholars have noted the theoretical importance of distinguishing between commission of disrespect (e.g., active email incivility) and omission of respect (e.g., passive email incivility; Buss, 1961; Ferris, Chen, & Lim, 2017; Robinson, O'Reilly, & Wang, 2013). Theoretical implications aside, revealing the differences between the two dimensions can also inform effective intervention efforts aimed at combating different forms of email incivility in the workplace.

Much still remains to be learned about the consequences of email incivility. Specifically, prior research has primarily linked email incivility to negative work-related outcomes (e.g., Giumetti et al., 2012, 2013; Lim & Teo, 2009; Scisco, Giumetti, Bodinger, Randall, & Shemanskis, 2019), but less is known about its impact on employee well-being. Notably, Park and colleagues (2018) linked daily email incivility to affective and physical distress. However, because they used a composite score to capture daily email incivility (without differentiating its active and passive dimensions), it remains unclear which dimension is more problematic for employee well-being. Moreover, these authors did not investigate the implications of email incivility for sleep health—a crucial component of employees' well-being. As recent evidence suggests stressful work experiences can contribute to sleep problems (e.g., Demsky, Fritz, Hammer, & Black, 2019), linking daily email incivility to insomnia can expand scholarly understanding of its cost for employee well-being (Schilpzand, De Pater, & Erez, 2016). Further, poor nightly sleep can create downstream problems such as heighted negative affect at the start of the workday (Sonnentag, Binnewies, & Mojza, 2008). As such, linking email incivility to somatic (i.e., insomnia) and affective (i.e., next-morning negative affect) responses can further reveal the adverse effect of email incivility spilling over from one day to the next day.

To fill these research gaps, we conducted two studies to examine the nature and the consequences of email incivility for employee well-being. In Study 1, we test for the empirical and theoretical distinctions between the active and passive email incivility dimensions. To empirically verify the two-dimensional structure of email incivility, we surveyed individuals about their experiences of email incivility at work and conducted a set of confirmatory factor analyses (CFA). We then collected discrete active and passive email incivility events and compared how individuals appraised the two types of incidents to reveal their theoretical differences. In Study 2, we conducted a daily diary study and linked active and passive email incivility to insomnia and next-morning negative affect to further elucidate their implications for employees' sleep health and affective well-being.

Study 1

The goal of Study 1 was to investigate the distinction between active and passive email incivility. In the broader literature on aggression, researchers have theorized the important distinction between active and passive aggression as follows: "Active aggression produces harm through the performance of some behavior while passive aggression delivers harm through the withholding of some action" (Baron & Neuman, 1996, p. 164; see also Buss, 1961). Similarly, scholars have noted the potential difference between commission of disrespect and omission of respect in recent theoretical reviews of workplace mistreatment. Ferris et al. (2017) pointed out that the extant conceptualization of incivility is more focused on "the interactive components ... where the perpetrator and the target of incivility interact, usually in a negative manner" (p. 318). In other words, this behavior involves commission of something disrespectful (Robinson et al., 2013). For example, demeaning or derogatory remarks from the perpetrator made about the target through email (an item of active email incivility identified by Lim and Teo [2009]) imply that the two parties interact with each other and that the perpetrator has instigated disrespectful behaviors. In addition, incivility can involve noninteractive, exclusionary behaviors (Ferris, Brown, Berry, & Lian, 2008; Ferris et al., 2017; Robinson et al., 2013). For example, behaviors such as ignoring a request that was made through email (an item of passive email incivility identified by Lim and Teo [2009]) represent omission of respectful treatment. Unfortunately, since Lim and Teo (2009) presented their preliminary—yet encouraging—results regarding the active and passive dimensions of email incivility, no follow-up research has addressed this issue.

Building on this line of work, we posit that the unique medium of email serves as the backdrop against which the distinction between the active and passive nature of incivility may become pronounced. Various communication theories (Daft & Lengel, 1986; Sproull & Kiesler, 1986) converge on the core notion that electronic communications have certain limitations. Such communications restrict the immediacy and channels of feedback (i.e., no body language or tone of voice is available); lack the social and contextual cues that would otherwise be abundant in face-to-face interactions; and reduce the regulatory impact of social norms, thereby encouraging uninhibited and self-centered behaviors (see Spears & Lea, 1992, for a review). As a result, electronic communications open the gate to the two dimensions of email incivility.

Specifically, the appropriate social norms that might otherwise restrict rude interpersonal interactions in face-to-face interactions have a diluted effect in the context of electronic communications (McLeod, Baron, Marti, & Yoon, 1997). In effect, the disinhibiting nature of email communications makes it easy for the sender to be discourteous in composing an email. Derogatory, mean, and rude comments are just at the sender's fingertips. If anything, the lack of contextual cues (e.g., facial expression) in electronic communications amplifies the rudeness embedded in active email incivility (Byron, 2008). In turn, active incivility may emerge as a distinct dimension in email incivility. Further, as suggested by the epigraph, email may have "made us all passive aggressive" (Kellaway, 2016). The lack of established norms regarding electronic communications (Byron, 2008; Kiesler, Siegel, & McGuire, 1984) leaves individuals with plenty of leeway to delay responses to messages and to use email for time-sensitive work matters. As email is an asynchronous communication medium

that provides limited opportunities for instantaneous clarification with the other party, the sender's request may be sometimes ignored or overlooked. Thus, passive email incivility represents the other distinct dimension of online rudeness.

Accordingly, we posit that email incivility should be conceptualized as a two-dimensional construct. *Active email incivility* taps into communicative behaviors during email interactions that indicate commission of disrespect by the email sender. Examples of active email incivility include making rude comments in the email, using all CAPs to shout at the recipient, and inserting sarcastic or mean comments between paragraphs in emails. In comparison, *passive email incivility* refers to omission of respect and consideration in email communications. Examples include ignoring requests made through emails, making no reply whatsoever, and responding to an email but not addressing the queries. These two dimensions are expected to be empirically interrelated but distinct from each other.

Hypothesis 1: The two-factor model of email incivility (i.e., active versus passive email incivility) will fit better than the one-factor model.

Furthermore, we expect that individuals will make different appraisals of the two email incivility dimensions. According to the transactional model of stress (Lazarus & Folkman, 1984), individuals make primary appraisals of whether environmental stimuli constitute threats to their well-being and goal accomplishment upon encountering stressors. Extending this model to individuals' interpretations of distressing emails in the workplace, Brown, Duck, and Jimmieson (2014) identified two primary qualities that individuals may associate with their stressful email experiences: email emotionality and email ambiguity. *Email emotionality* refers to the degree to which an email is appraised by the recipient as "emotionally charged" and "insensitive," whereas *email ambiguity* refers to appraisals that the received emails "are ambiguous" and "require further clarification because they are not clearly written." In other words, emotionality and ambiguity refer to cognitive appraisals of aversive stimuli that are conceptually different from subjective experiences of emotions (Lazarus & Folkman, 1984). Building on the work of Brown et al. (2014), we tested how the two dimensions of email incivility differ from each other as evidenced by email emotionality and ambiguity appraisals.

Active email incivility, due to the commission of disrespectful behaviors, may provide employees with conspicuous cues that they have suffered mistreatment. For example, rude comments sent through email clearly convey to the recipient that the sender has mistreated him or her. By comparison, passive email incivility, through its omission of respect and consideration, may leave the email recipient with a great deal of ambiguity, because it is unclear whether the perpetrator intended to send the uncivil email or whether the incident happened by chance. For example, when an emailed request or opinion is ignored, it is difficult to verify whether the other party simply forgot to attend to the query or actually intended to turn a blind eye. As Robinson et al. (2013) noted, omission or absence of respect and decency can create a great deal of ambiguity for individuals. Moreover, the lack of

¹Although Brown et al. (2014) termed them "qualities" rather than "appraisals," we consider these two qualities to capture primary appraisals, as they tap into specific types of threats that a discrete email event poses to an individual (Lazarus & Folkman, 1984).

nonverbal cues and delayed feedback in electronic communications may exacerbate this problem (Kingsbury & Coplan, 2016), as the recipient continues to waver between possible explanations for the incident. Therefore, compared with active email incivility, we expect passive email incivility to be related to higher levels of email ambiguity appraisals.

Hypothesis 2: Compared with active email incivility incidents, individuals will make higher levels of ambiguity appraisals of passive email incivility incidents.

With relatively clear cues of rudeness (e.g., all CAPs or derogatory remarks in email, using a condescending or discourteous tone in messages), individuals will be able to call out active incivility events as being insensitive and emotionally charged. By comparison, passive email incivility incidents (e.g., the recipient paying little attention to the sender's statement in an email) are less likely to yield discernable cues that can directly lead to negative emotionality appraisals. Therefore, active email incivility, in comparison to passive email incivility, will be associated with higher levels of emotionality appraisals.

Hypothesis 3: Compared with passive email incivility incidents, individuals will make higher levels of emotionality appraisals of active email incivility incidents.

Method

Participants and Procedure.—Upon receiving approval from the institutional review board to conduct this study, we circulated the study information through a mass email listserv in a large Midwestern public university in the United States. Individuals associated with this listserv worked in a variety of occupations that involve frequent email communications (e.g., administration, counseling, health care, information technology). To be eligible for this study, participants needed to be at least 18 years old, to work full-time, and to frequently use email for work-related communication.

After giving their consent to participate, eligible individuals were invited to complete the Time 1 (T1) survey, which assessed their demographics and email incivility experiences in general. At the end of this survey, we listed the definition of email incivility offered by Lim and Teo (2009) and indicated that the items they had just assessed were examples of email incivility. We then instructed the participants to take the Time 2 (T2) survey the next time they experienced an email incivility incident similar to any of the email incivility examples. The link to the T2 survey was provided at the end of the T1 survey. We also emailed participants the link shortly after they completed the T1 survey, so that they could readily access it when needed. The T2 survey asked the respondents to provide the content of their specific email incivility event and assessed their appraisals of the discrete event. We collected one incident per participant.

We encouraged participants to take the T2 survey immediately after they experienced an email incivility incident to reduce the potential memory bias. To allow sufficient time for participants to experience and report a discrete email incivility event, we waited about three months before we closed the T2 survey. Meanwhile, we emailed a few reminders to those who had completed the T1 survey but had not taken the T2 survey. To increase the retention rate, we provided participants with a \$5 gift card for completing the T1 survey and a \$10

gift card for completing the T2 survey. In summary, we collected their responses to the email incivility scale items at T1, and their discrete events of email incivility and appraisals at T2, which helped to reduce common method bias and collect accurate appraisals of events right after they occurred.

At T1, 235 participants finished the survey. Among them, 233 provided complete data regarding email incivility, which was used as the sample to test Hypothesis 1 for the two-dimensional structure of email incivility. On average, the participants were 42.00 years old (SD 12.47), worked 41.77 hours per week (SD = 4.94), and had been working at their current organization for 9.01 years (SD = 9.96). They were mostly White (86.7%) and female (74.7%). At T2, 84 participants completed the survey about a specific email incivility incident (retention rate = 35.74%). After content-coding participants' email events at T2 (see the analysis for details), we excluded 9 cases. Thus, the final sample to test Hypotheses 2 and 3 involving email incivility incidents included 75 responses.

Measures

Email incivility (T1).—We measured email incivility with the 14-item scale developed by Lim and Teo (2009), capturing both active (α = .91) and passive email incivility (α = .83). In the study by Lim and Teo (2009), the initial item pool was based on a focus-group discussion with part-time MBA students; it was then revised based on the feedback from subject matter experts and 20 working individuals who frequently used email at work. The authors subsequently surveyed 192 participants, and their findings provided strong support for the scale's psychometric properties. A sample item for active email incivility included "someone sent me emails using a rude and discourteous tone" while a sample item for passive email incivility included "someone ignored a request that I made through email". Participants reported the frequency of their email incivility experiences at work during the past month (1 = never to 7 = always).

Email incivility incident (T2).—At Time 2, we asked participants to upload the content of the email that they found rude but to exclude any personal or identifying information in the original email. In the case that dissemination of work email was not allowed by the organization or regulatory agency, we asked participants to describe and summarize the email event instead of uploading the original content.³ In the survey instructions, we emphasized the importance of this question for the success of our study and encouraged participants to provide as much detail as possible. Their answers were then content-coded as active and passive email incivility events (the detailed coding procedure is provided in the analysis and results section).

²The drop-outs from the T2 survey (G1) did not differ significantly from the 84 participants (G2) regarding age ($\ell(232)=.62, ns$), sex ($\chi^2=4.06, ns$), work hours per week ($\ell(232)=1.24, ns$), job tenure ($\ell(232)=.09, ns$), or job demands ($\ell(231)=.66, ns$). However, the drop-outs reported significantly lower levels of email workload ($M_{GI}=4.30, SD=.74$ versus $M_{G2}=4.51, SD=.65; \ell(231)=2.12, p<.05$), active email incivility ($M_{GI}=1.60, SD=.74$ versus $M_{G2}=1.94, SD=.94; \ell(138)=2.85, p<.01$), and passive email incivility ($M_{GI}=2.80, SD=1.04$ versus $M_{G2}=3.27, SD=1.00; \ell(231)=3.35, p<.01$). Further, they were not significantly different regarding negative affectivity ($\ell(232)=1.26, ns$)—an important trait that may predispose individuals to perceive interpersonal experiences as uncivil (Sliter, Withrow, & Jex, 2015). These results suggest that the drop-outs were not intrinsically different from the final sample, but simply had less exposure to email incivility and, therefore, may have been unable to complete the T2 survey.

Ambiguity and emotionality appraisals (T2).—We used the scale developed by Brown et al. (2014) to capture email-related appraisals. Email ambiguity (e.g., "This email was ambiguous"; $\alpha = .76$) and emotionality appraisals (e.g. "This email was emotionally charged"; $\alpha = .79$) were each measured with four items. Participants were instructed to think about the email incivility incident and indicate their agreement with each item (1 = strongly disagree to 5 = strongly agree).

Analysis and Results

To test Hypothesis 1, we used the open-source package "lavaan" in R (Rosseel, 2012) and conducted a set of CFA on email incivility experiences that were collected in the T1 survey (n = 233). Supporting the distinction between active and passive email incivility, the two-factor model provided a good fit to the data ($\chi^2(76) = 176.31$, CFI = .94, SRMR = .054, RMSEA = .075). Further, it fit the data significantly better than the one-factor model, in which every item was subsumed under the same latent construct ($\chi^2(77) = 432.45$, CFI = .80, SRMR = .088, RMSEA = .141; $\chi^2(1) = 256.14$, p < .01). Therefore, Hypothesis 1—the two-dimensional structure of email incivility—received empirical support.

Prior to testing Hypotheses 2 and 3, the research team content-coded the email incivility incidents collected in the T2 survey. First, the events were saved into a document separate from the participants' responses to ambiguity and emotionality appraisals. This step was intended to ensure that coders were not biased by participants' appraisals but instead used just the content/description of the events. Next, based on the conceptualization of active and passive email incivility, the first two authors and a research assistant who was blind to the study purpose coded all the events independently. Events that did not qualify as either active or passive email incivility were coded into an "other" category. The coding team then compared their coding results and discussed them as a group. Through independent coding, the three coders agreed on 69% of the events. They then discussed the rest of the incidents and achieved consensus on their coding. As a result of this process, 49 events were coded as active email incivility, 26 events as passive email incivility, and 9 events as "other." The 9 events were coded as "other" primarily due to insufficient information provided by the participants. Some examples of active and passive email incivility events are provided below.

Active email incivility example 1 (actual email the participant received): "I have been very busy putting things together for this project, a lot more than you recently, so be ready to hit it hard this week to catch up on things."

Active email incivility example 2 (actual email the participant received; the email sender had to complete a required training module): "Is this a joke??? Are you kidding me? ... Complete waste of time, resources and money."

Passive email incivility example 1 (description by the participant): "I didn't get an email [after asking to reschedule a meeting]—it was the lack of response that I consider rude. ... It has now been 8 days, no response (and the time for having the meeting/discussing the decision is over)."

Passive email incivility example 2 (description by the participant): "In response to my request to acknowledge an important piece of information, the person would

reply: 'I got it! What else do you need from me?!' and so forth. Other inquiries would result in no response or extremely concise responses that wouldn't answer a specific question."

Table 1 reports descriptive statistics and correlations among the event-level study variables. We created a grouping variable and then coded active email incivility events as 0 and passive email incivility events as 1 so that this variable would capture the difference between the two groups of events. To test Hypotheses 2 and 3, we conducted a set of independent sample t-tests. Passive incivility events were rated higher (n = 26, M = 2.49, SD = .89) on ambiguity appraisals than the active ones (n = 49, M = 2.10, SD = .96; $M_{dif} = .39$, t(73) = 1.74, p = .09, Cohen's d = .42). Regarding emotionality appraisals, active email incivility events (n = 49, M = 4.01, SD = .95) were rated higher than the passive ones (n = 26, M = 3.42, SD = .93; $M_{dif} = .59$, t(73) = 2.57, p = .01, Cohen's d = .63). The medium effect sizes (Cohen, 1988) provide further support for the meaningful differences between the two dimensions of email incivility.⁴

Discussion

The findings from Study 1 provided strong support for the empirical and theoretical distinctions between active and passive email incivility. The two-dimensional structure of email incivility suggests that using a composite score may risk overlooking the theoretical richness of this emerging workplace stressor. Furthermore, as expected, passive email incivility tended to infuse the message with ambiguity, whereas active email incivility was associated with higher levels of emotionality appraisals. Having investigated the differences between, and the nature of, the email incivility dimensions, we undertook Study 2 to investigate their implications for employee well-being.

Study 2

Building on the Study 1 findings, the goal of Study 2 was to further understand their implications for employees' daily sleep health and subsequent affective distress. As Study 1 highlighted, active email incivility conveys to victims the sense that others have instigated disrespectful behaviors, in that the emails are often appraised to be emotionally charged and insensitive. In the case of passive email incivility, employees may find the incidents disturbing due to a great deal of ambiguity surrounding the omission of respect and consideration. Both of these email incivility dimensions constitute stressful encounters at work. Early research on aggression theorized that both active and passive aggression are noxious stimuli to the victims (Baron & Newman, 1996; Buss, 1961). Accordingly, we contend that both active and passive email incivility—although lower in intensity compared with aggression—can adversely influence employees' well-being. In particular, past research has supported that the detrimental impacts of email incivility at work can spill over into the home domain. Specifically, Park et al. (2018) found that daily email incivility was positively associated with physical and affective distress at home. This suggests that employees may

⁴At T1, we also measured trait negative affectivity with the 10-item scale (e.g., "irritable"; *a* = .83) developed by Watson, Clark, and Tellegen (1988). We tested the hypotheses through regression analyses by controlling for trait negative affectivity and observed convergent results that would not alter hypothesis-testing results.

continue to be affected by such stressful experiences after they get home. Accordingly, we link daily active and passive email incivility to insomnia at night and negative affect the next morning to explicate the spillover effect of this job stressor.

Sleep research has consistently identified distressing experiences as a major contributor to insomnia (e.g., Åkerstedt, 2006; Jansson & Linton, 2006; Kim & Dimsdale, 2007; Morin, Rodrigue, & Ivers, 2003). Among the various antecedents, social stressors that involve interpersonal communications—as in the case of active and passive email incivility—are a robust predictor of poor nightly sleep (see Sonnentag, Casper, & Pinck, 2016, for a review). With its ostensibly disrespectful cues, active email incivility may lead to elevated physiological arousal, which creates problems for the onset and maintenance of normal sleep (Åkerstedt, 2006). For example, in an experiment on email incivility (Scisco et al., 2019), participants who received uncivil, sarcastic task feedback through email ("good luck, genius") experienced a substantial increase in heart rate compared with the control group. Regarding passive email incivility, the omission of respect and consideration may lead to elevated psychological arousal, as individuals try to discern the meaning of their exclusion and the lack of regard they experience during the workday (Pereira, Meier, & Elfering, 2013). To the extent that heighted physiological and psychological arousal is detrimental to sleep (Åkerstedt, 2006; Sonnentag et al., 2016), active and passive email incivility during the workday will make it difficult for employees to fall and stay asleep at night.

Hypothesis 4: Daily active (H4a) and passive (H4b) email incivility will be positively related to insomnia.

We further link insomnia to next-morning negative affect to understand the downstream implications of email incivility as it continues to influence an employee's morning. After poor nighttime sleep, individuals' top-down regulation of emotional responses may be substantially weakened (Goldstein & Walker, 2014). As impaired sleep undermines individuals' self-regulation capacity, which would otherwise keep undesirable feelings in check, individuals are more likely to experience negative affect in the morning (Muraven & Baumeister, 2000). In addition, poor sleep can increase individuals' awareness of and sensitivity to aversive psychosomatic stimuli associated with not resting well (Finan, Goodin, & Smith, 2013). This bottom-up process may make insomnia itself an aversive stimulus that triggers negative affect in the morning (Sonnentag et al., 2008). A daily diary study found sleep quality to be negatively associated with next-morning negative affect (Sonnentag et al., 2008). In an experimental study, sleep-restricted participants reported substantially higher levels of negative affect than those in the control condition (Krizan & Hisler, 2019).

Based on these groundings, we expect that as individuals experience insomnia due to active and passive email incivility from work, they will be more likely to report negative affect the next morning. In other words, we hypothesize an indirect effect of email incivility on next-morning negative affect through insomnia.

Hypothesis 5: Active (H5a) and passive (H5b) email incivility will be indirectly related to next-morning negative affect through the mediating effect of insomnia.

Given the differences between active and passive email incivility as established in Study 1, it is also of theoretical interest to explore the potentially different impact that these two dimensions have on employee well-being. Sleep scholars have reached a consensus regarding the effect of stressful experiences on insomnia (e.g., Åkerstedt, 2006; Jansson & Linton, 2006; Kim & Dimsdale, 2007; Morin et al., 2003), yet we lack a clear prediction regarding which type of stressors (i.e., active or passive email incivility) might be more detrimental for sleep health. In workplace mistreatment research, scholars have observed that mistreatment reflecting omission of respect (e.g., ostracism) usually has a relatively greater impact on outcomes compared with mistreatment reflecting commission of disrespect (see Ferris et al., 2017, for a review). The theoretical reasoning behind this line of research is closely related to basic human needs for belonging. Evolutionarily speaking, being omitted and excluded constitutes a greater risk to survival (Williams & Zadro, 2005). In other words, although both forms of mistreatment (i.e., active and passive email incivility) are undesirable, individuals may find omission of respect more stressful and threatening (Williams, 2001). As such, passive email incivility may have a stronger impact than active email incivility. However, as pointed out by Ferris et al. (2017), the evidence from this research area is not fully conclusive.

Moreover, contradictory to this general conclusion from mistreatment research, Lim and Teo (2009) found that active email incivility was a stronger predictor compared with passive email incivility, although they focused on only work-related outcomes (e.g., job satisfaction) in a cross-sectional survey. Overall, clear theoretical guidance is lacking in the literature regarding whether active or passive email incivility is a stronger predictor of insomnia. Therefore, we explore this question without formulating a directional hypothesis.

Research Question:

What is the relative impact of active email incivility on insomnia, in comparison to passive email incivility?

Method

Participants and Procedure.—Upon approval from the institutional review board, we advertised this study to our professional contacts, who were then encouraged to forward the study information to their own professional connections (i.e., snowball sampling method). Participants were required to be full-time employees working during regular business hours in the United States (i.e., no shift workers) and using work email on a daily basis. Given the substantive nature of our research model involving email incivility, this sampling method allowed us to recruit a diverse sample of employees who frequently used email for work communications. This recruitment method has been successfully used in prior research on email communications (e.g., Butts, Becker, & Boswell, 2015).

Participants completed a demographic survey after they gave their consent to participate in the study. Starting from the following Monday, they began completing daily surveys for 10 consecutive workdays. We tailored the delivery of daily surveys to participants' respective time zones. At 3:00 p.m., they received the afternoon survey, which assessed their email and face-to-face incivility experiences during the workday. On average, they completed this

survey at 4:04 p.m. We sent an evening survey at 7:00 p.m. assessing whether they checked work email after getting home. On average, they completed this survey at 8:14 p.m. The next morning at 7:30 a.m., we sent another survey to measure insomnia and state negative affect. On average, the participants completed this morning survey at 8:25 a.m.

To incentivize survey retention, participants received a \$70 gift card through an online retailer if they completed the demographics survey and at least 90% of the daily surveys. Otherwise, we prorated compensation depending on the number of daily surveys that they completed. Of the 166 participants who initially signed up, 47 failed to provide a minimum of three days of completed surveys, leaving 119 participants for the final sample (response rate = 71.69%).⁵ In our research model, control variables included the previous day's insomnia and negative affect (Day t morning), face-to-face incivility (Day t afternoon), and checking email after work (Day t evening). The main study variables were email incivility (Day t afternoon) and insomnia and negative affect (Day t + 1 morning). Thus, the maximum number of useful daily observations provided by each participant was eight (for each workweek, we matched afternoon surveys from Days 1–4 with morning surveys from Days 2–5). Of the 952 possible daily observations (119 people × 8 days), we received 729 responses (completion rate = 76.58%).

Participants were mostly White (79.8%) and female (69.7%). Their average age was 35.45 years (SD = 11.03). On average, they worked 41.89 hours per week (SD = 8.54) and had been working in their current organization for 5.34 years (SD = 6.87). Participants came from a wide range of industries, including commercial banking, consulting, higher education, health care, and information technology.

Measures

Active and passive email incivility (afternoon survey on Day t).—Active and passive email incivility were measured with Lim and Teo's (2009) scale. Participants were asked to think about their work email communications during the workday and to indicate how many times they had experienced each of the 14 events on the scale (1 = never to 5 = more than 6 times). The mean coefficient α was .78 (SD = .09) for active email incivility and .72 (SD = .07) for passive email incivility.

Insomnia (morning survey on Day t + 1).—We used the four-item scale developed by Jenkins, Jono, and Stanton (1996) to measure insomnia. Participants used a five-point scale (1 = strongly disagree to 5 = strongly agree) to indicate their agreement with each statement regarding their sleep during the previous night (e.g., "I had trouble falling asleep"). The mean coefficient α was .79 (SD = .03).

Next-morning negative affect (morning survey on Day t+1).—We used a six-item scale (originally developed by Watson, Clark, & Tellegen, 1988; shortened by Bledow, Schmitt, Frese, & Kühnel, 2011, for daily surveys) to measure negative affect

⁵We used this cutoff to get meaningful within-person variation from each participant (Beal, 2015). The participants who were excluded (N = 47) did not differ significantly from the final sample (N = 119) regarding age, N = 129, work hours per week, N = 129, N = 129, N = 129, or gender, N = 129, or gender, N = 129, N = 129, which is a sample (N = 119) regarding age, N = 129, work hours per week, N = 129, N = 129, or gender, N = 129, or gender, N = 129, N = 129, which is a sample (N = 129) regarding age, N = 129, which is a sample (N = 129) rega

in the morning. Participants indicated their agreement with each adjective (e.g., "angry," "frustrated") based on how they felt at the moment of taking the morning survey, using a five-point scale ($1 = not \ at \ all \ to \ 5 = extremely$). The mean coefficient a was .85 (SD = .03).

Control variables.—Past research has shown that checking work emails after work is another important source of stress (Butts et al., 2015). To disentangle the distressing effect of email incivility from this covariate, we assessed whether participants *checked work email outside work each evening* (Day t evening), using a binary response scale (0 = no, 1 = yes). We also included insomnia and morning negative affect measured at the previous time point (Day t morning) in our model testing to control for their autoregressive effects on a daily basis (Beal, 2015; Gabriel et al., 2019).

As past research on incivility has almost exclusively focused on face-to-face interactions, we also used the seven-item incivility scale developed by Cortina, Magley, Williams, and Langhout (2001) to measure *face-to-face incivility* (Day t afternoon) and demonstrate the predictive power of email incivility over face-to-face incivility. Participants were asked to think about their face-to-face interactions with others at work during the day and indicate how many times they had each experience that day (1 = never to 5 = more than 6 times). Sample items included "Someone addressed me in unprofessional terms, either publicly or privately," and "Someone put me down or was condescending to me." The mean coefficient α for this scale across ten days was .76 (SD = .08).

Analytical Strategy

We used the "nlme" package for linear and nonlinear mixed effects models in R (Pinheiro, Bates, DebRoy, Sarkar, & R Core Team, 2017), as our daily observations were nested within individuals. Because our study hypotheses were about within-person effects, we centered the Level 1 predictors (i.e., active and passive email incivility, face-to-face incivility, and checking email after work) and the mediator (i.e., insomnia) on the respective individual means to provide unconflated estimates (Hofmann & Gavin, 1998; Zhang, Zyphur, & Preacher, 2009). If this step is omitted in the analysis, parameter estimates may be conflated due to between-person level effects.

Following Beal (2015) and Bliese and Ployhart (2002), we retained the random effects of the main study variables only when nested model comparisons indicated that a random-effect model was superior to a fixed-effect model. This approach ensured a parsimonious model with robust parameter estimates (Beal, 2015), given that random effect inclusion may influence the significance testing of other fixed-effect predictors (Bliese & Ployhart, 2002) and that overfitting a model with too many random effects may result in convergence failure. Following this approach, we specified the fixed effects of active and passive email incivility on insomnia and the random effect of insomnia on negative affect (see the results section for details). We did not observe any meaningful differences that would change our hypothesis testing results when setting the fixed effects to be random. We fixed the effects of the control variables (i.e., face-to-face incivility and checking email after work).

To test for mediation effects, we used Monte Carlo simulations to appropriately construct the confidence interval for the hypothesized indirect effects. Given the fixed effects of active

and passive email incivility on insomnia, the full orthogonality of residuals assumption was plausible in testing 1-1-1 mediation (Tofighi, West, & MacKinnon, 2013). Accordingly, we constructed the 95% confidence interval (CI) for the indirect effect based on Monte Carlo simulations with 20,000 replications (Selig & Preacher, 2008).

Results

Preliminary Analysis.—Before testing the study hypotheses, we verified the multilevel structure of our study data. A one-way analysis of variance showed significant between-person variances in insomnia (intraclass correlation coefficient (ICC [1] = .42, R(118, 610) = 5.50, p < .01) and negative affect (ICC [1] = .41, R(118, 610) = 5.19, p < .01), supporting the use of multilevel modeling. Table 2 shows the decomposition of within- and between-person variances for the study variables. Table 3 reports the descriptive statistics and intercorrelations among study variables at the within- and between-person levels. At the within-person level, face-to-face incivility had small correlations with active (r = .20, p < .01) and passive (r = .16, p < .01) email incivility.

Hypotheses Testing.—Prior to testing Hypotheses 4 and 5, we followed Bliese and Ployhart (2002) and compared two nested models that differed only in whether the study variables had a fixed or random effect; this was assessed through a log likelihood test of statistical significance, as the -2 log likelihood ratio approximates a chi-square distribution. This approach is superior to the significance test of the variance estimate of a slope, which may be inaccurate (Bliese & Ployhart, 2002). The series of nested model comparisons showed that both active ($\chi^2(2) = .00$, p = .99) and passive ($\chi^2(2) = .00$, p = .99) email incivility had a fixed effect on insomnia, whereas insomnia had a random effect on negative affect ($\chi^2(2) = 41.06$, p < .01). Consequently, we specified the random effect of insomnia and the fixed effects of active and passive email incivility.

Table 4 reports the multilevel modeling results. We tested the effects of email incivility on insomnia in Models 1 and 2. In Model 1, we first entered the following control variables: insomnia the previous day (Day t morning), checking email after work (Day t evening), and face-to-face incivility (Day t afternoon), although we note inclusion of these control variables did not alter hypothesis testing results. In Model 2, we added active and passive email incivility (Day t afternoon) to the model. Passive email incivility was positively related to insomnia (γ = .34, p < .01), whereas the effect of active email incivility was nonsignificant (γ = -.17, p = .27). Thus, Hypothesis 4b received support, but Hypothesis 4a did not. Overall, Model 2 explained 16.98% of the within-person variance in insomnia, compared with the null model (Bryk & Raudenbush, 1992; LaHuis, Hartman, Hakoyama, & Clark, 2014).

Next, we tested the effect of insomnia on next-morning negative affect in Model 3 while controlling for negative affect the previous morning (Day t morning), checking email after work (Day t evening), face-to-face incivility (Day t afternoon) and email incivility dimensions (Day t afternoon). The effect of insomnia on negative affect was significantly positive ($\gamma = .14$, p < .01). Model 3 explained 21.35% of the within-person variance in negative affect. Further, the indirect effect of passive email incivility on negative affect

through insomnia was significantly positive (.046; 95% CI [.015, .085]), whereas the indirect effect of active email incivility was nonsignificant (-.023; 95% CI [-.069, .018]). Thus, Hypothesis 5b was supported, but Hypothesis 5a was not.

Our research question involves the relative impact of active email incivility compared with passive email incivility. As when testing Hypothesis 4, passive email incivility remained the significant predictor of insomnia, whereas the effect of active email incivility was not significant when they were entered together. We also explored whether the two dimensions, when entered individually, would be related to insomnia. The results were similar: Passive email incivility was significantly related to insomnia ($\gamma = .31$, p < .01), whereas active email incivility had a near-zero effect ($\gamma = -.04$, ns). Further, the effect of passive email incivility was significantly stronger than that of active email incivility ($\gamma_{difference} = .35$, p < .01).

Supplementary Analysis.—Despite the theoretical importance of attending to the two dimensions of email incivility, using a composite score to conveniently capture email incivility may not result in meaningfully different conclusions. The low correlation between the two dimensions at the within-person level (r= .29) suggests this approach may be inadvisable. Nevertheless, we used the composite score to predict insomnia in a separate model to explore this issue. When using the composite instead of the two dimensions in Model 2, the effect of email incivility composite became only marginally significant (γ = .30, p= .05).

Further, we conducted dominance analyses to evaluate the relative importance of email incivility dimensions and face-to-face incivility in predicting insomnia, using the approach proposed by Raudenbush and Bryk (2002; see also Luo & Azen, 2013 for a detailed tutorial). This approach seeks to evaluate the additional contribution of predictors across a series of subset models and determine their relative importance. For example, for models of size 1 (i.e., containing only one predictor; k=1 average in Table 5), passive email incivility had the largest additional contribution (.0110), followed by face-to-face incivility (.0016), and active email incivility (.0000). If the same pattern of additional contribution is observed across model sizes (k=0, 1, and 2), there is evidence of complete dominance of one predictor over another. As reported in Table 5, the additional contribution of passive email incivility was the greatest across different model sizes. Thus, passive email incivility appeared to be the main driver of insomnia, which further supports the importance of investigating email incivility dimensions instead of using the composite.

Similar to the findings reported by previous research on daily incivility (e.g., Park et al., 2018; Rosen, Koopman, Gabriel, & Johnson, 2016), we observed relatively low base rates for daily email incivility (see Table 3). However, this result should be interpreted in conjunction with our measurement scale (1 = never, $2 = once \ or \ twice$; $3 = 3-4 \ times$; $4 = 5-6 \ times$; $5 = more \ than \ 6 \ times$). In particular, we sought to present more descriptive information beyond the mean and standard deviation to shed light on the prevalence of email incivility on a daily basis. Out of the 729 daily observations, participants did not report any incidents of email incivility on 388 days (53.2%), which means that they experienced at

⁶We thank an anonymous reviewer for suggesting these analyses.

least one incident of rude email on the other 341 days (46.8%). Overall, these descriptive results suggest that email incivility is not rare on a daily basis. When viewed from the same reference period (Schilpzand, De Pater, et al., 2016), the base rates of email incivility in this study should be considered comparable to—and even higher than—the rates of face-to-face incivility reported in some of the previous research (e.g., Cortina et al., 2001, 2002). Further, it should be noted that participants checked their email in the evening on 432 days out of the 729 daily observations (59.26%).

Discussion

Consistent with our theorizing, Study 2 provided support for the detrimental impact of email incivility on employee well-being, in that daily passive email incivility was related to insomnia, which then led to next-morning negative affect. However, daily active email incivility was not a significant predictor. Passive—but not active—email incivility was especially problematic for employees' daily sleep health and affective well-being the next morning. Further, supplementary analysis highlighted the value of focusing on the dimensions rather than using a composite score to capture email incivility. Overall, Study 2 indicates that accounting for the dimensions of email incivility can help scholars pinpoint the problematic aspect of email communication, thereby gaining a more nuanced understanding of its impact on employee well-being.

General Discussion

We undertook this research to further understand email incivility in the workplace. By attending to the distinction between its two dimensions (Study 1) and investigating their implications for employee well-being (Study 2), this research identifies important implications for email incivility research.

Theoretical and Research Implications

First, this research extends scholarly understanding of email incivility by highlighting its two-dimensional structure. Dimensionality is critical for establishing construct validity and accurately representing the phenomenon of interest (Schwab, 1980), and our findings suggest that email incivility is better conceptualized as having both active and passive dimensions. Specifically, the CFA results in Study 1 offered strong support for the twodimensional structure of this construct as compared to a unidimensional operationalization. Results regarding appraisals further highlighted the theoretical difference between the two dimensions: Active email incivility was appraised as more emotionally charged, whereas passive email incivility was viewed as more ambiguous. In Study 2, passive email incivility was especially problematic for employees' sleep health and affective well-being. It appears that by using a composite score, researchers risk overlooking the main driver underling the detrimental effect of email incivility. Given that past research has largely overlooked the distinction between the two dimensions, our findings at the between-person (CFA in Study 1), event (event appraisals in Study 1), and within-person (Study 2) levels underscore the importance of attending to email incivility dimensions. Doing so will not only promote a more nuanced understanding of this (likely increasing) job stressor, but also help organizational researchers better elucidate its implications for employee well-being.

At a broader level, our findings regarding email incivility dimensions and their appraisals provide support for the distinction between commission of disrespect and omission of respect made in workplace mistreatment research (Ferris et al., 2017; Robinson et al., 2013) and the active–passive dimensions in early theorizing of aggression (Baron & Neuman, 1996; Buss, 1961). By attending to the unique features of electronic communications (Daft & Lengel, 1986; Sproull & Kiesler, 1986), we highlight how this distinction may become pronounced through this communication medium. As such, our research lends support to the utility of this theoretical perspective (i.e., commission of disrespect versus omission of respect) and suggests that this broad framework merits more attention from researchers studying incivility and other types of workplace mistreatment.

In linking email incivility dimensions to insomnia and next-morning negative affect, our research expands the empirical base regarding its detrimental consequences. While past research has investigated a wide range of work-related consequences (Giumetti et al., 2012, 2013; Lim & Teo, 2009), studies that examine employee well-being outcomes are surprisingly lacking (see Park et al., 2018, for an exception). Adding to this slowly growing body of literature, our research establishes the link between email incivility and sleep health—a rising public health concern (Barnes & Drake, 2015)—and highlights its insidious effects on employee well-being, as rudeness through email can spill over into the home domain and undermine employees' sleep at night. Further, as morning affect can substantially influence an employee's workday (Rothbard & Wilk, 2011), the possible indirect effect of passive email incivility via next-morning negative affect implies the additional downstream problem it could create for employees upon returning to work.

Regarding the comparative effects of active and passive email incivility, passive email incivility may be especially problematic for individuals' sleep health. Sleep research supports that uncertainty plays a critical role in the onset and maintenance of insomnia (Harvey, 2000). As such, passive email incivility, which is conducive to ambiguity appraisals, may be more likely to keep individuals up at night, compared with active email incivility. Broadly speaking, this points to the importance of viewing incivility through the lens of meaning-making (Andersson & Pearson, 1999; Cortina & Magley, 2009; Marchiondo, Cortina, & Kabat-Farr, 2018), as the intent to harm is especially ambiguous in the case of passive email incivility. Notwithstanding this conclusion, we do not dismiss the role of active email incivility, as it involves behaviors that are clearly indicative of disrespect. Although active email incivility did not predict the well-being outcomes in our research, it could lead to behaviors that are more closely related to emotionality appraisals. For example, individuals may flare up and strike back after experiencing active email incivility, which may further undermine coworker relationships. As reviewed by Ferris et al. (2017), evidence regarding the relative impact of the interactive component versus the noninteractive component of mistreatment is not conclusive. Thus, more research is needed to further explicate the comparative effects of active and passive email incivility and to broaden scholarly understanding of their respective nomological networks.

It is also worth noting that our research provides the first empirical test, to our knowledge, of the effect of email incivility while controlling for face-to-face incivility (see also Scisco et al., 2019). In doing so, we answer the research call by Cortina, Kabat-Farr, Magley, and

Nelson (2017) and substantiate the explanatory power of email incivility beyond face-to-face incivility. Further, behaviors associated with active (e.g. "used CAPS to shout at you through email") and passive (e.g., "not replying to your email at all") email incivility are clearly not captured by the commonly used face-to-face incivility scale developed by Cortina et al. (2001). In turn, researchers solely focusing on face-to-face incivility may overlook this important source of distress for employees. With that being said, we encourage scholars to build on our studies and integrate face-to-face and email incivility into future investigations. Further, given the evolving nature of workplace technology, researchers are encouraged to pay close attention to how this may further influence the content domain of "virtual" incivility (e.g., Giumetti, 2016).

Our study findings also point to other future research directions that may prove fruitful. In light of the detrimental impact of passive email incivility, we encourage researchers to identify its antecedents. Examining predictors of incivility will be especially valuable for organizations as they try to preemptively reduce email incivility in the workplace. For example, extant research has identified email senders' workload (Francis, Holmvall, & O'Brien, 2015) and personality (Krishnan, 2016) as antecedents of such behaviors. In addition, Lim and Teo (2009) found that female supervisors were more likely to engage in passive email incivility, whereas their male counterparts tended to display active email incivility. Some evidence also suggests that incivility is a modern manifestation of sexism and racism in the workplace (Cortina, Kabat-Farr, Leskinen, Huerta, & Magley, 2013). As such, gender and race dynamics may play a role in the instigation of different email incivility dimensions as well as influence the appraisal processes of email incivility. Accordingly, we encourage scholars to consider both the email sender's and the recipient's gender and race in future research (e.g., Gabriel, Butts, Yuan, Rosen, & Sliter, 2018). Finally, cultural norms regarding communications (Byron, 2008; Glinow, Shapiro, & Brett, 2004) and workplace norms for email communication (Brown et al., 2014) may help define what is considered rude, thereby influencing the appraisals of email incivility incidents (Andersson & Pearson, 1999).

In addition to employee well-being outcomes, it is important to consider the implications of email incivility for workplace relationships and group functioning. Indeed, incivility begets incivility (Andersson & Pearson, 1999; Rosen et al., 2016), and just witnessing incivility can negatively influence bystanders (Porath & Erez, 2009; Reich & Hershcovis, 2015). Thus, experiencing active and passive email incivility directly or vicariously through misuses of carbon and blind copying in email correspondence may have important implications for work groups (Schilpzand, Leavitt, & Lim, 2016). Active email incivility, with its relatively clear cues of disrespect, may be more likely to lead to third-party interventions such as helping the victim and punishing the perpetrator (Dhanani & LaPalme, 2019). Passive email incivility may create a great deal of ambiguity for both the victim and third parties, which may further thwart effective collaborations at work.

The designs used in our two studies jointly point to the promise of event-contingent experience sampling method (Wheeler & Reis, 1991) in deepening scholarly understanding of email incivility as a dynamic, relational phenomenon. Specifically, our event-level inquiry in Study 1 revealed the rich context of each incident and highlighted the relational nature

of incivility, as individuals appraised their email incivility event within the context of their work relationship with the email sender (Hershcovis & Reich, 2013). The findings based on the interval-contingent diary design in Study 2 supported the dynamic within-person effects of email incivility. To extend this line of research, scholars may want to adopt an event-contingent design whereby they make detailed assessments every time a specific email incivility event occurs during the workday. This type of design will allow researchers to not only investigate the rich relational context surrounding discrete uncivil interactions, but also examine the dynamic fluctuations of email incivility on a daily basis. Further, scholars will be able to measure individuals' appraisals of each incivility incident in detail and examine the cognitive and affective mechanisms underlying the detrimental impact of email incivility.

Practical Implications

Our research also has important practical implications for workplace practices. Given the detrimental effects of passive email incivility on daily insomnia and negative affect, email incivility should not be dismissed as a mere triviality. Indeed, in a recent *New York Times* opinion piece, Grant (2019) warned about "digital snubbery" via work email—that ignoring email could be perceived as rude (regardless of the various reasons for not replying). Along the same line, our findings suggest that organizations have an imperative to take concrete measures to address email incivility in the workplace. For example, organizations tend to have vague norms regarding what is appropriate in email communication (Byron, 2008), which may contribute to the development of passive email incivility. Establishing clear norms regarding acceptable and appropriate email communications (e.g., the appropriate window to return an email before a follow-up is necessary)—particularly one modeled by leaders—may therefore prove effective in reducing the occurrence of email incivility (Walsh et al., 2012). It can also deliver a forceful message about the organization's intolerance for incivility and its support for employee well-being.

Relatedly, the successful implementation of policies and rules hinges on the engagement of important stakeholders in organizations. Organizations should make their managers and supervisors aware of the daily costs of email incivility for employee well-being so that they can be both policy/norm enforcers and role models for email communications at work. One way to achieve this goal is through training. For example, a civility training program has been shown to be effective in reducing workplace incivility (Leiter, Laschinger, Day, & Oore, 2011). Training also helps establish organizational norms for electronic media use (Orlikowski, Yates, Ikamura, & Fujimoto, 1995). Therefore, organizations may want to incorporate the topics of email incivility into their formal employee training programs to reduce both active and passive email incivility in the workplace.

Limitations

Despite the strengths of this research, a few limitations should be acknowledged. First, the reliance on self-reports may raise concerns about common method variance (CMV; Podsakoff, MacKenzie, & Podsakoff, 2012). In Study 1, CMV may be less of a concern, as the distinction between active and passive email incivility was based on the actual content/description of the discrete events and then coded by the research team. In Study 2, we took several preemptive measures to reduce the potential influence of CMV (Podsakoff et

al., 2012), including separating measurement occasions for the main study variables and using different response options (e.g., agreement, frequency). Nonetheless, non-self-reported measures might potentially be used in future research, such as use of actigraph devices to assess sleep quality (Pilcher, Burnett, & McCubbin, 2012).

Second, the correlational design employed in these studies limits causal inferences from our findings. Although we ruled out potential influences of extraneous factors by controlling for theoretically relevant variables in both studies, use of experimental or quasi-experimental designs will provide stronger evidence for the causal relationships. Accordingly, future research should constructively replicate and extend the present findings.

Third, we used a listserv affiliated within one organization (Study 1) and snowball sampling (Study 2) to recruit participants. Although these sampling methods were effective in accessing participants relevant for the research purpose (i.e., using email for work), they are essentially convenience samples who were mostly female and Caucasian. Future research should consider systematic sampling methods to recruit more diverse samples to increase generalizability. Further, the sample size in Study 1 was small, so future researchers are encouraged to constructively replicate our findings with a larger set of email incivility incidents.

Conclusion

We undertook this research to further understand the dimensions and impact of email incivility on employee well-being. The findings from Study 1 suggest that email incivility contains both active and passive dimensions, with the former being more conducive to emotionality appraisals and the latter being related to higher levels of ambiguity appraisals. Study 2 highlights the costs of email incivility for employee well-being, as passive email incivility is related to insomnia, which then predicts next-morning negative affect. Importantly, this effect holds even after controlling for the effect of face-to-face incivility. Our supplementary analysis shows that using a composite score runs the risk of masking the detrimental impact of email incivility on employee well-being. Overall, this research provides important clarifications regarding the nature and consequences of email incivility and highlights that email incivility warrants more attention from both occupational health scholars and practitioners.

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Table 1

Descriptive Statistics and Correlations among Study Variables (Study 1)

Variables	Mean SD	as	1	2	3
1. Passive (versus active) email incivility event 0.35 .48	0.35	.48	I		
2. Ambiguity appraisals	2.23	.95	$2.23 .95 .20^{\dagger} (.76)$	(92')	
3. Emotionality appraisals	3.81	86:	3.81 .9829* .16 (.79)	.16	(.79)

Note. n = 75. Passive (versus active) email incivility: 1 = passive email incivility event; 0 = active email incivility event. The Cronbach's a for each scale is reported on the diagonal in parentheses where applicable. SD = Standard deviation.

 $f_{p<.10}$

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Table 2
Variance Decomposition of Main Study Variables (Study 2)

Construct	Within-Person Variance (σ²)	Between-Person Variance (z ₀₀)	% of Within-Person Variance
1. Face-to-face incivility	.050	.028	63.8%
2. Active email incivility	.038	.012	75.1%
3. Passive email incivility	.073	.032	69.2%
4. Insomnia	.583	.373	58.4%
5. Morning negative affect	.178	.142	60.1%

Note. % of within-person variance was computed using the formula $\sigma^2/(\sigma^2+\tau_{00})$.

Table 3

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Descriptive Statistics and Correlations among Study Variables (Study 2)

Variable	Mean	Between- Person SD	Within- Person SD	1	7	3	4	w	9
1. Face-to-face incivility	1.13	.19	.21	(92')	01	(.76)01 .20** .16**	.16**	.07	.12 **
2. Checking emails after work	0.59	.40	.28	.01		00:	.01	04	02
3. Active email incivility	1.05	.13	.18	.42**	.20*	(.78)	.29**	00.	.03
4. Passive email incivility	1.17	.21	.25	.46**	1.	.63 **	(.72)	.12**	.05
5. Insomnia	2.45	.68	.70	.23*	60:	60.	.17	(62')	.31***
6. Morning negative affect	1.39	.42	.39	.24**	.01	.20*	.19*	.42 **	(.85)

Note. Within-person level correlations (N=729) are above the diagonal, whereas between-person level correlations (N=119) are below the diagonal. The mean Cronbach's α for each scale is reported on the diagonal in parentheses where applicable. Checking emails outside of work was coded as 1 = "yes" and 0 = "no." SD = Standard deviation. Page 28

p < .05.

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Table 4

Multilevel Analyses Predicting Insomnia and Morning Negative Affect (Study 2)

	(Day	Model 1 Insomnia (Day t + 1 morning)	ning)	Day t	Model 2 Insomnia (Day t + 1 morning)	ning)	Morning Day t	Model 3 Morning negative Affect (Day t + 1 morning)	Affect ning)
Predictors	٨	SE	t	٨	SE	t	٨	SE	t
Between-person level									
Intercept	00.	.03	00.	00.	.03	00.	1.39 **	.00	36.29
Within-person level									
Insomnia (Day tmorning)	03	.00	0.71	02	.00	0.63			
Negative affect (Day t morning)							*80.	90.	2.09
Checking email after work (Day t evening)	10	60.	1.06	10	60.	1.09	01	.05	0.14
Face-to-face incivility (Day t afternoon)	.24	.13	1.88	.20	.13	1.56	*41.	.07	2.02
Active email incivility (Day tafternoon)				17	.15	1.11	90.	80.	0.65
Passive email incivility (Day tafternoon)				.34 **	11.	3.09	03	90:	0.53
Insomnia (Day $t+1$ morning)							.14**	.03	4.98
Level 1 residual variance		0.489			0.484			0.140	
Pseudo-R ²		16.12%			16.98%			21.35%	

Note. Within-person level sample size = 729; between-person level sample size = 119. SK = Standard error. Time of measurement denoted in parentheses. Within-person level predictors and insomnia were person-mean centered prior to analysis.

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p < .05.** p < .01.

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Table 5

Dominance Analyses (Study 2)

Subset model R&B				
	$\mathbf{R}\mathbf{\&}\mathbf{B}\;\mathbf{\mathit{R}}^{2}$	Face-to-face incivility	Active email incivility	Passive email incivility
k = 0 average	0000	.0033	0000	.0122
Face-to-face incivility .000	.0033		0000	.0101
Active email incivility .000	0000	.0020		.0119
Passive email incivility .013	.0122	.0012	0000	
k=1 average		.0016	0000	.0110
Face-to-face & active email incivility .007	.0020			.0118
Face-to-face & passive email incivility .013	.0134		.0004	
Active & passive email incivility .01	.0119	.0019		
k=2 average		.0019	.0004	.0118
Face-to-face, active, & passive email incivility .013	.0138			
Overall average		.0023	.0001	.0117

Note. R&B = Raudenbush and Bryk (2002).

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