Do You Pass It On?
The Effect of Perceived Incivility on Task Performance and the Performance Evaluations of Others

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Do You Pass It On?
An Examination of the Consequences of Perceived Cyber Incivility

The context of social interactions in the workplace has evolved dramatically over the past few decades, from an era dominated mostly by face-to-face interaction to the current organizational landscape, where technology-mediated communication reigns. Despite the changing circumstances and context of our workplace interactions, there is limited knowledge of how message medium influences employee communication. The pertinent question then, is how much of what we understand about face-to-face social interaction can be applied to electronic interactions? In the present study, we contribute to the emerging literature on computer-mediated communication by comparing the effects of incivility experienced face-to-face with incivility encountered via email on both task performance and performance evaluation. The well-known negative effects of workplace incivility, coupled with the frequency of employee interaction through electronic channels at work, make gaining a more complete understanding of the impact of electronic incivility an important research objective.

An emerging field within workplace misbehavior is cyber incivility (Lim & Teo, 2009). Cyber incivility is email behavior perceived by the email recipient as insensitive, disrespectful, and a violation of norms for mutual respect within an organization (Porath & Erez, 2007; Lim & Teo, 2009). Research has shown that cyber incivility is a daily stressor for many employees. In a recent study, when employees experienced cyber incivility, they reported higher affective and physical distress at the end of the workday, which lead to higher distress the next morning (Park, Fritz, & Jex, 2015). Additionally, participants in another study responded with more incivility when they had high workloads and we under stress, indicating that high pressure jobs and insurmountable expectations are likely to perpetrate this type of bad behavior (Francis, Holmval,
& O’Brien, 2015). Thus, the negative effects of cyber incivility are known to be insidious and powerful (Krishnan, 2016; Sguera, et al., 2016; Geldart, et al., 2018), and electronic forms of communication such as social media, email, video conferencing, and direct messaging applications are unavoidable in our daily work lives, such that their specific features and influence warrant further exploration.

Taken together, existing research provides evidence that face-to-face incivility threatens the well-being of organizations, and carries with it serious negative consequences (Giacalone, Riordan, & Rosenfeld, 1997; Griffin, O’Leary-Kelly, & Collins, 1998; O’Leary-Kelly, Griffin, Glew, 1996, & Rosen, Koopman, Gabriel, & Johnson 2016). Research also suggests that important differences between face-to-face and computer-mediated interaction exist, and it has begun to introduce new forms of rude behavior, such as cyber and vicarious incivility (see Burgoon, Alvaro, Grandpre, & Voloudakis, 2002; Lim & Teo, 2009; Giumetti, et al., 2012; Williams & Loughlin, 2016). However, despite this recent surge of interest in this topic, our knowledge of the specific consequences of computer-mediated forms of incivility remains limited and needs to be further explored.

This study examines the effect of message medium (face-to-face or email) and message content (rude or neutral tone) on task performance and the performance evaluations of others. Building on prior research, we show that being exposed to rude email behavior decreases one’s performance on a subsequent task. Further, we show that exposure to a rude email has a greater negative impact on subsequent task performance than being exposed to rude behavior face-to-face. Finally, we find that exposure to rudeness, both face-to-face and via email, is contagious, and results in lower performance evaluation scores for an uninvolved third party. This research contributes to the multidisciplinary theoretical framework of social interactions and builds on our
knowledge of face-to-face rudeness to better understand the consequences of email rudeness at work.

**Face-to-Face Incivility**

In organizational research, face-to-face rudeness is defined as, “insensitive or disrespectful workplace behavior displayed by a person who shows an absence of regard for others” (Porath & Erez, 2007: 1181). It is a low intensity anti-social behavior lacking the intent of the instigator to harm the target (Andersson & Pearson, 1999), while still violating social norms and injuring others (Cortina, 2008). Rude acts are perceived to be offensive by the target, and consistent with prior conceptualizations of incivility (Andersson & Pearson, 1999; Lim & Cortina, 2005). Exposure to rude behavior for both instigators and targets can create negative psychological consequences, including brooding and worry (Porath & Pearson, 2010), increased levels of psychological distress (Cortina, Magley, Williams, & Langhout, 2001), withdrawal and isolation (Pearson, Andersson, & Wegner, 2001), as well as anxiety (Chen and Spector, 1991; Fox and Spector, 1999; Fox, Spector, and Miles, 2001). Such effects occur because rudeness violates expectations of civility in social settings, disrupts the social equilibrium and is a violation of the person’s dignity.

There are also known behavioral consequences of incivility, including retaliation (Bies & Tripp, 1996; Skarlicki & Folger, 1997), counterproductive workplace behavior (Pearson, Andersson, & Porath, 2005), aggression (Tyler & Blader, 2000), and anti-social behavior (Lim & Cortina, 2005). Further, Porath & Erez (2007) found that rude face-to-face behavior negatively affects employee task performance. Similar to face-to-face communication, individuals are likely to try to reduce uncertainty in electronic communication by making exaggerated attributions based on limited information (Walther, 1996). Building on the results of Porath &
Erez (2007), we hypothesize that individuals who receive a rude email will perform worse on a task than individuals who receive an email that is neutral in tone.

\[ H1: \text{Individuals who receive a rude email will perform worse on a task than individuals who receive the same information in an email with a neutral tone.} \]

Email vs Face-to-Face Incivility

Many of the differences between email and face-to-face communication relate to differences in “richness” between these two mediums of communication. According to Media Richness Theory, all communication mediums vary in their ability to enable users to communicate and to change understanding – “richness” refers to the degree of this ability. Media that can efficiently overcome different frames of reference and clarify ambiguous issues are considered to be richer; communication media that require more time to convey understanding are considered less rich (Daft and Lengel 1986).

While the general population has become more email savvy, the unique characteristics of email reduce the likelihood of effective communication. For example, email is a-synchronous, meaning there is a time gap between when an email is sent and when it is received or read. Email also lacks paralinguistic cues, such as the ability to convey facial expressions, hand gestures, tone, rate of speech, and body language. It also lacks back-channeling cues, or signals intended to convey that the message is being understood, including head nods and hand motions. In face-to-face communication, back-channeling cues compliment a message by providing a wealth of additional information to aid in the interpretation of its meaning (Clark, 1996; Price, Ostendorf, Shattuck-Hufnagel, & Fong, 1991).

There is also increased normative ambiguity through use of email, as less consensus exists about what constitutes acceptable behavior compared to face-to-face communication. For example, there is less unwritten agreement about what constitutes an acceptable response
timeframe, and whether a formal salutation is always necessary (McCarthy, 2016). Further, communicating electronically is not private, rather it is public and permanent. Ironically, however, prior studies have shown that communicating via email provides a false sense of privacy, invisibility, and minimal authority. This increases the likelihood that employees interacting via email will behave in unethical, deviant, and uninhibited ways, and engage in lying, manipulating, cheating, stealing and deception, accompanied by the belief that these types of behavior are acceptable (Caspi & Gorsky, 2006; Naquin, Kurtzberg, & Belkin, 2010). Finally, the distinct physical features of email including word choice, font color and style, and punctuation, tend to be scrutinized and given meaning, which may or may not be indications of the sender’s actual intentions.

Together, the unique characteristics of email create a communication environment where there is more ambiguity and a higher degree of uncertainty from the receiver than in face-to-face communication (Cramton & Webber, 2005). In addition, email may also create an environment where rumination, the repeated focus on the meaning, causes, and consequences of an incident (Lyubomirsky & Nolen-Hoeksema, 1993; 1995) is pervasive. Face-to-face interactions happen rapidly often leading to later rumination, but the a-synchronicity of email allows for real-time rumination before responding.

In addition, prior studies have shown that email receivers tend to assume a less optimistic interpretation of message content, and email senders are overconfident in their ability to effectively convey their message. For example, Byron (2008) shows that email messages which the sender intended to be perceived positively in tone were consistently interpreted as neutral, whereas email that was intended to be perceived as neutral, was perceived to be negative. Kruger, Epley, Parker, and Ng (2005) find that participants were much worse at conveying their
intended emotional tone and interpreting other’s intended emotional tones through email than the senders believed. This overconfidence bias of email senders, in combination with the systematically more negative interpretation of receivers, suggests that rude email may be perceived as ruder than rude face-to-face communication, producing more anger, frustration, and stress for the recipient.

A final reason to suspect that email rudeness may lead to lower individual task performance than face-to-face rudeness is because of the increased psychological distance, or feeling of abstractness, between electronic message sender and receiver (Trope & Liberman, 2010). Specifically, the greater psychological distance between email senders and receivers compared to that of individuals who communicate in-person could make retaliation by withholding effort on a task more likely. For example, one of the primary differences between face-to-face interaction and email interaction is a lack of social presence, or the feeling that other actors are jointly involved (Short, Williams, & Christie, 1976). Social presence theory suggests that a communication medium has low social presence if the degree of awareness of the others in a communication interaction is low (Sallnas, Rassmus-Grohn, & Sjostrom, 2000). Email is characteristically low in social presence due to its lack of nonverbal and back-channeling cues, which help to generate a shared orientation and mutual understanding of meaning (Kiesler, Siegel, & McGuire, 1984). Further, this lack of social presence corresponds to an increase in psychological distance, or the salience of the others in a conversation (Short et al., 1976).

Thus, we predict that the differences in the richness of email and face-to-face communication make rude behavior experienced via email more ambiguous, uncertain, and frustrating, which will have a stronger negative effect on task performance than face-to-face rudeness.
**H2: Individuals who receive a rude email will perform worse on a subsequent task than individuals that receive the same rude communication face-to-face.**

**Social Transmission: Email vs Face-to-Face**

The idea of the contagion of rudeness is very similar to the notion of emotional contagion, where one person’s emotions and behaviors activate similar emotions and behaviors in other people (Hatfield, Cacioppo, & Rapson, 1993). A similar idea, vicarious incivility, has also recently been proposed based on Andersson & Pearson’s (1999) seminal conceptualization of the spiral of incivility. More recent research suggests that incivility may have both direct and indirect social consequences through subsequent spirals of incivility spawned by the initial uncivil incident (Reich & Hershcovis, 2015; Totterdell et al., 2012). This suggests that rude behavior may be socially transmitted to other employees and serve as a social signal to other employees who, in turn, are more likely to treat subsequent people negatively (Porath & Erez, 2007; Polansky, Lippitt, and Redl, 1950; Levy and Nail, 1993).

Several studies provide evidence supporting the social transmission of face-to-face rudeness to third parties. For example, Foulk et al. (2016), found that face-to-face rudeness is socially transferred to a subsequent negotiation partner through the contagion effect, with recipients of face-to-face rudeness being more likely to act rudely toward a new partner in a similar interaction. Porath and Erez (2007) argue that targets of workplace mistreatment displace their aggression, acting aggressively toward individuals unrelated to the initial abuser. In addition, other studies show that experiencing disrespectful behavior can lead to displaced aggression (Denson, Pederson, & Miller, 2006; Hoobler & Brass, 2006), where an individual’s behavioral response to a provoking situation can be delayed or transferred to another person (Zillmann, 1979). Further, a robust link has been established between a perceived wrongdoing and subsequent aggressive action (e.g., Bies & Tripp, 1995, 1996, 2001, 2002; Felson &

As an extension of these ideas of the social transmission of incivility, individuals that are the recipients of rude communication might be more likely to negatively evaluate a third party. Existing research in the area of performance appraisal indicates that people are highly socialized to provide positive feedback when required to evaluate the performance of others (Morrison & Milliken, 2000). This tendency represents a strong norm and a mutual expectation for giving and receiving affirmative feedback, as well as avoiding giving others unfavorable or critical feedback. However, when exposed to rude communication, individuals might not follow the norm for giving and receiving affirmative feedback, and this could manifest in more negative evaluations of others. To the extent that individuals are exposed to rudeness, such incivility might be socially transmitted to others in the form of negative appraisals. We build on prior research that examined the contagion of face-to-face rudeness and predict that exposure to rudeness obstructs the norm for giving and receiving affirmative feedback, resulting in a more negative evaluation of others. Specifically, we expect that exposure to rude communication will result in a lower performance rating for an uninvolved third party.

*H3: Individuals who receive rude communication, both face-to-face and email, will evaluate an uninvolved third-party’s performance more negatively than will those who receive the same communication in a neutral tone.*

**The Social Transmission of Rudeness: Email vs Face-to-Face**

Given the differences in medium between email and face-to-face communication, the effects of rudeness might differ as a function of communication medium. That is to say, rudeness via email might have a stronger effect on the evaluation of a third party’s performance than face-
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to-face rudeness. We draw on ego depletion and social presence theory to help explain this effect. Ego depletion is the idea that an individual’s ability to exert self-control and willpower draws upon a limited pool of mental resources that can be used up. When individuals experience incivility, they are more likely to experience lowered self-control and might act aggressively or rudely toward a third party. For example, DeWall, Baumeister, Stillman, and Gailliot (2007) found that when people are insulted, their self-control weakens and they are more likely to express an intention to act aggressively toward a third party. Similarly, Rosen et al., (2016) found that experiencing incivility earlier in the day reduced levels of self-control, resulting in increased instigated incivility later in the day. In the unique context of electronic communication, a rude message in an email is permanent, which means that it can be easily revisited and re-experienced by the receiver. This creates an environment where the insult may be magnified and the receiver might experience increased ego depletion.

Adding to this argument, social presence theory suggests that a communication medium has low social presence if the degree of awareness of others in a communication interaction is low (Sallnas et al., 2000). Email is lower in social presence than face-to-face communication due to its perceived invisibility and lack of nonverbal and back-channeling cues, both of which help to generate a shared orientation and mutual understanding of meaning in face-to-face communication (Kiesler et al., 1984). This lack of social presence corresponds to an increase in psychological distance and a sense of having less in common with others (Trope & Liberman, 2010). This could negatively impact evaluations of others, especially with regards to electronic communication with its lowered social presence and increased psychological distance.

Based on the unique features of email communication, we propose that recipients of rude email will evaluate the performance of third parties more negatively than will recipients of face-
to-face rudeness. We believe that rude email will foster a distancing from those being evaluated, undercutting the normative bias toward positive performance evaluations (Morrison & Milliken, 2000). This will be due to greater ego depletion experienced by recipients of rude email versus recipients of face-to-face rudeness.

H4: Individuals who receive a rude email will evaluate a third party’s performance more negatively than individuals that receive the same rude communication face-to-face.

Method: Study 1

Participants and experimental design. Undergraduate students (n= 254) from a large university in the western United States participated in Study 1. Students received extra credit in one of their social science courses in exchange for their participation. The participants were randomly assigned to one of four conditions based on a 2 (message content: rude tone vs. neutral tone) x 2 (message medium: face-to-face vs. email) between-subjects design.

Procedure. The experimental design and manipulation used in this study closely paralleled prior studies of in-person rudeness (Porath & Erez, 2007, Study 1), with one difference discussed below related to the confederate-participant. Participants were told that they were participating in an on-going research study about the connection between communication style and a person’s approach to problem solving. The experimenter explained that they would be sent two emails - the first with a link to a brief assessment of communication style (the assessment was used as filler to provide the confederate with enough time to ask a question), and the second email with a link to a timed problem-solving activity.

After the overview, the experimenter said, “Because the questionnaires are all online, and we will be emailing you the links to both activities at the times they need to be completed, please have your email open and read all email that comes from me immediately when you receive it. Finally, to minimize distractions to your peers and enable everyone to do their best work, please
email me (at an email address written on the board) with any questions that arise during the study instead of raising your hand for help.” The experimenter emphasized it was important to read and follow the directions. The experimenter then returned to a table at the back of the room and emailed the communication style assessment to the group.

While participants were completing the communication style assessment, a confederate asked a clarifying question about the directions. Specifically, the confederate asked, “On questions 21-25, does a ‘1’ mean not at all agree or completely agree?” The experimenter then replied to the confederate and the class. The experimenter’s response to the question served as the rudeness manipulation (see below). The manipulation in this study was prompted by a confederate-participant who had a question about the directions. This was a change to the experimental design used in Porath & Erez (2007), where the manipulation was prompted by a late confederate. However, the change was necessary as a question about the directions could be asked both face-to-face and via email, whereas a late confederate would not prompt the experimenter’s emails.

After the manipulation, the experimenter sent a second email containing the link to the problem-solving activity, a challenging word scramble used in past research (Erez & Isen, 2002), as the measure of task performance. After ten minutes on the problem solving activity, participants automatically advanced to a final set of questions, which contained study measures and the manipulation check. Participants were then debriefed, thanked, and excused.

**Manipulations: Message Content.** The message content manipulation was adapted from Porath & Erez (2007). In the neutral tone condition, the experimenter answered the confederate’s question with, “May I have your attention, I was just asked a question about the directions… a ‘1’ means not at all agree on questions 21-25.” In the rude tone condition, the experimenter
answered the confederate’s question with, “May I have your attention; I was just asked a question about the directions. Is this really that tough? Yes, a ‘1’ means not at all agree on every question. I would think (name of university) students could follow these simple directions. I run this study on high school students and they have never had a problem… what is with this group?” The display of rudeness was purposively general and abstract, and therefore, not specifically directed toward the participant. In addition, the rude statement was delivered indirectly, as the experimenter used a normal voice level and did not look directly at the participant.

*Manipulations: Message medium.* In the face-to-face medium, the confederate turned to the experimenter (seated at a desk in the back of the room) and loudly asked the clarifying question about the directions. The experimenter then stood up and addressed the class with the answer to the confederate’s question (with either the rude or neutral response above). In the email condition, the confederate emailed the question to the experimenter, and the experimenter replied to the confederate and CC’d all other participants in the room with either the neutral or rude response above.

*Dependent measure.* Task performance, a common dependent variable in micro organizational behavior research, typically examines the speed or quality with which a participant is able to accomplish a work-related segment of a job. It is a significant piece of information because the speed and quality with which employees are able to accomplish workplace tasks is tied to overall organization performance. Theoretically, increasing or improving task performance should result in an increase in productivity, therefore it is an important factor to be studied.

Task performance in this study was measured following Erez & Isen (2002) and Porath & Erez (2007). We asked participants to complete a complex cognitive task, where performance
could be objectively determined. We provided the participants with 10 words where the letters
had been scrambled. We asked the participants to unscramble the words and counted the number
of anagrams that the participant correctly solved in ten minutes. Prior studies have found this
task to be moderately difficult. The average number of words unscrambled in this sample of
participants was about five (\( \bar{x} = 5.22, \text{s. d.} = 2.23 \)).

Study 1 Results

*Manipulation check.* A manipulation check is commonly used in experimental research to
determine whether the experimental manipulation was successful. In other words, it commonly
is a variable which shows that the study did in fact accomplish what it intended to manipulate in
terms of the independent variable. For example, if a study tests the effect of hunger on job
performance, the manipulation check would confirm that those in the experimental condition
were in fact hungry. Alternatively, if a manipulation check is not performed, then doubt could
arise in terms of the true cause of the observed difference in behavior. Thus, it is a secondary
evaluation performed by the researchers to confirm the difference between conditions and thus
help establish a causal connection between the independent and dependent variables.

To determine whether the experimental manipulation in this study was successful,
participants were asked to respond to several questions about whether participants in the rude
condition perceived that the experimenter had been more rude than participants in the neutral
condition. Participants respond to the following items: “The experimenter was not respectful
toward all participants,” “The experimenter was polite,” “The experimenter acted rudely toward
participants,” and “Participants were treated respectfully at all times during this study,” adapted
from Porath & Erez (2007). The second and fourth items reverse coded, so a low score indicated
more perceived rudeness. These manipulation-check items were measured on 7-point scales.
with point labels that ranged from strongly disagree to strongly agree and averaged to form the manipulation check measure. The reliability estimate of the perceived rudeness scale was $\alpha = .93$, suggesting the participants evaluated the perceived rudeness of the experimenter in a similar manner when responding to all four questions. The results indicated a significant main effect of message content ($F[1, 253] = 591.16, p = .00, \eta^2_p = .56$). Participants exposed to either type of rudeness (email rudeness or face-to-face rudeness) perceived their treatment to be significantly more rude than participants exposed to neutral communications (email or face-to-face). Means, standard deviations, and correlations among Study 1 variables are reported in Table 1. We used IBM SPSS Statistics Software for our statistical analysis.

Insert Table 1 about here

H1 predicted that recipients of a rude email would perform worse than individuals that received an email with a neutral tone. We used an analysis of variance (ANOVA) to test H1 and H2. We found a significant difference ($F[1, 253] = 15.10, p = .00, \eta^2_p = .13$) between the number of words participants unscrambled in the neutral email condition ($\bar{x} = 5.90, s. d. = 2.09$) and the number of words participants unscrambled in the rude email condition ($\bar{x} = 4.30, s. d. = 2.13$). This result supports H1 and suggests that being exposed to rude email behavior has a significantly negative effect on task performance.

H2 predicted that recipients of a rude email would perform worse on a task than participants who received the same rude communication face-to-face. We found significantly lower performance in the rude email condition ($\bar{x} = 4.30, s. d. = 2.13$) than in the rude face-to-
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face condition ($\bar{x} = 5.27$, s. d. = 2.12); ($F [1, 253] = 7.28$, $p = .01$, $\eta^2_p = .05$), supporting H2. See Table 2.

Study 2 Method

Participants and experimental design. A new sample of undergraduate students (n= 256) from the same university participated in Study 2. Students received extra credit in one of their social science courses in exchange for their participation. The participants were randomly assigned to one of four conditions based on a 2 (message content: rude vs. neutral) x 2 (message medium: face-to-face vs. email) between subjects’ design.

Procedure. The procedure used in Study 2 parallels that of Study 1, with one notable difference. Instead of administering a problem-solving task after the manipulation, Study 2 participants completed a performance evaluation of a third party. Specifically, after participants completed the communication style assessment, and received the manipulation, they were shown a short video (5 minutes, 43 seconds) of a student giving a speech, and asked to evaluate her performance.

Dependent measure. Participants evaluated the quality of the speech by rating the speaker on two items: “Overall, I thought the speaker did well,” and “The speaker was better than most I've seen”, using a 7-point scale with point labels that ranged from strongly agree to strongly disagree. The reliability estimate of the two questions related to the quality of the speech was $\alpha = .86$, suggesting the participants evaluated the speech in a similar manner when responding to
both questions. Means, standard deviations, and correlations among Study 2 variables are reported in Table 3.

Insert Table 3 about here

Study 2 Results

Manipulation Check. The measures of participants’ perceived rudeness of the experimenter in Study 2 are the same measures used in Study 1, and again we used IBM SPSS Statistics Software for our statistical analysis. The results of the ANOVA indicated a significant main effect of message content ($F[1, 255] = 273.34, p = .00, \eta^2_p = .52$), suggesting that message content (rude vs. neutral) in both the face-to-face and rude email manipulations produced the intended effects.

H3 predicted that participants exposed to rude behavior would rate the performance of an uninvolved third-party as lower than participants who received the same information in a neutral tone. The results of the ANOVA suggest a significant main effect of message content ($F[3, 253] = 5.42, p = .02, \eta^2_p = .02$) and support H3. We found that exposure to rudeness is contagious, weakening the normative bias toward positive performance evaluations, and resulting in a lower performance rating for an uninvolved third party.

H4 predicted that participants who received a rude email would rate the performance of a third party more negatively then participants who experienced the same rude communication face-to-face. We tested H4 using a two-way ANOVA of message content and message medium on the performance ratings. However, we found no significant main effect for message medium ($F[3, 253] = .64, p = .43, \eta^2_p = .00$), suggesting that exposure to email rudeness and face-face
rudeness resulted in a similar decline in ratings. See Table 4.

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Insert Table 4 about here
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Discussion

In this study, we extend the literature on the consequences of face-to-face rudeness, and provide evidence that exposure to email rudeness has a negative effect on individual task performance. We find that email rudeness does not just affect self-reported attitudinal outcomes such as organizational commitment and job satisfaction (Lim & Teo, 2009), but is also detrimental to task performance. Our results also indicate that individuals exposed to email rudeness perform worse on the same task than those exposed to face-to-face rudeness. Although we anticipated this outcome based on existing evidence of the seriousness of the effects of rudeness and cyber incivility (Krishnan, 2016; Francis, Holmval, & O’Brein, 2015; Park, Fritz, & Jex, 2015; Sguera, et al., 2016), when considering the problem intuitively, one might expect face-to-face rudeness to be more distressing. After all, it is uncommon and usually startling to be the victim of rude behavior in-person.

Our finding, however, suggests that email rudeness actually has a more negative effect than face-to-face rudeness, which extends our understanding of the impact of this type of workplace misbehavior. Although we did not test the reasons for this effect, it seems likely that the unique characteristics of email intensify the negative effects of rudeness. Specifically, this may be a result of some of its electronic features such as a-synchronicity, psychological distance, lack of back-channeling cues, and decreased social presence (Sallnas, et al., 2000; Trope &
Liberman, 2010). The widespread use of email in workplace communication suggests this area deserves further study.

We also extend the literature on the contagion of rudeness. Prior studies have examined the effect of direct face-to-face incivility on the recipient of the rudeness (Denson, Pederson, & Miller, 2006; Hoobler & Brass, 2006); however, we examine the effect of cyber incivility on uninvolved third parties. Our findings are consistent with the argument that exposure to rudeness reduces the powerful normative restraint displayed by individuals to provide favorable feedback to others. We show that participants in both the email rudeness and face-to-face rudeness conditions were less inhibited by this norm, giving less favorable evaluations of others after being treated rudely. The results suggest that the negative consequences of exposure to rudeness may damage organizations extensively, and that rudeness can facilitate a vicious circle of poor performance and lower evaluation of others’ performance.

The results of these studies highlight the threat that email rudeness poses to employees and their organizations. Like other research on this topic (Bies & Tripp, 1995, 1996, 2001, 2002; Felson & Steadman, 1983; Luckenbill, 1977; Pruitt & Rubin, 1986; Youngs, 1986), this study raises more questions than it answers. One question is whether email rudeness can negatively influence employees in ways other than task performance. In other words, does it affect the way people assess risk or their ability to concentrate? This topic may have implications for innovation, entrepreneurship, groups and teams, and strategic management. For instance, it would be interesting to determine whether and how investors’ decision-making is influenced by exposure to email rudeness or email rudeness contagion.

**Limitations and Directions for Future Research**
Although we took great care in crafting the design of the study and vigilantly anticipated potential hazards regarding data collection, the study is not without limitations. First, the use of undergraduate students potentially limits the generalizability of the conclusions. It would be interesting to know if the adverse effects of incivility captured here have had the same impact on a more sophisticated sample of managerial-level organizational professionals. There are reasons to believe it might not. Incivility is prevalent within organizations and most mid-career employees are exposed to rude behavior fairly often. Therefore, the effect of incivility might be mitigated as individuals become more accustomed to this type of treatment. This would be an interesting avenue for future research to explore. Specifically, it would be fascinating to design a longitudinal study of incivility, monitoring its effects on individuals over time and under conditions of varying levels of ambient incivility in order to flesh out whether or not the negative effects documented in this study would be mitigated under different circumstances. Despite this potential limitation, we believe this research demonstrates an important first step in showing the harmful effects of workplace incivility.

Another potential limitation of this study is its focus on task performance as the primary dependent variable of interest. The aim of the study was restricted in its attention to capturing this sole outcome of incivility, which had benefits as well as limitations. One reason for the restricted number of dependent variables used here was to maintain a methodically ‘clean’ experimental design. For instance, any other dependent variables would have had to be measured immediately after the manipulation, which would have created a gap between when participants received the rude treatment and when they completed the anagram activity (which already took 10 minutes). The concern was that it could potentially weaken the study’s ability to capture the negative effects of task performance if participants had to wait too long before completing the
measure of task performance. Therefore, in this study, we decided to focus this round of data collection on task performance, while holding other interesting dependent variables (i.e. creativity, helpfulness, prosocial behavior, etc.) for subsequent future studies. However, the disadvantage is that the data is somewhat limited in its breath or the scope of information it provides on the negative effects of incivility. This could be a very fruitful avenue for future incivility research.

While rudeness is known to have adverse consequences, existing research has been dominated by studies of rude behavior in face-to-face encounters at work, despite evidence suggesting that important differences exist between face-to-face and computer-mediated interactions. Another very interesting avenue for future research on this topic is investigating the adverse consequences of cyber incivility on social media. The prevalence of using social media at work is growing exponentially and it is a medium that is not immune to transmitting rudeness. Therefore, future research should investigate incivility through other forms of communication (i.e. applications such as WhatsApp, Twitter, Instagram, Facebook, Snap Chat, etc). There are several reasons to suspect that the consequences of incivility through these social media platforms may even be more devastating than email. Future research should try to flesh out these differences and the impact of such behavior on its users.

In conclusion, our research indicates that email rudeness can detrimentally influence employees by decreasing their task performance and that both face-to-face and email rudeness have harmful consequences for third parties through their negative influence on performance evaluations. Together, these results contribute to our understanding of email rudeness, highlight important distinctions between it and face-to-face rudeness, and possess theoretical implications for the fields of cyber incivility, communication studies, and information technology.
References


Table 1

**Means, Standard Deviations, and Correlations among Study 1 Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Email Rudeness</td>
<td>1.47</td>
<td>.50</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Perceived Rudeness</td>
<td>3.19</td>
<td>2.08</td>
<td>.89</td>
<td>(.93)</td>
<td></td>
</tr>
<tr>
<td>3. Task Performance</td>
<td>5.96</td>
<td>2.14</td>
<td>-.40</td>
<td>-.09</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note.* $N = 254$. Reliabilities are on the diagonal in parentheses. Correlations greater than .13 are significant at $p < .05$. Correlations greater than .17 are significant at $p < .01$. 
Table 2: Study 1 ANOVA, where Dependent Variable is Task Performance

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F-Stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message content: rude email vs. neutral email</td>
<td>1</td>
<td>67.43</td>
<td>15.10</td>
<td>.00</td>
</tr>
<tr>
<td>Message medium: rude email vs. rude face-to-face</td>
<td>1</td>
<td>32.85</td>
<td>7.28</td>
<td>.01</td>
</tr>
<tr>
<td>Residual</td>
<td>252</td>
<td>4.51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $N = 254$. P-values are two-tailed. Our dependent variable is task performance, calculated as the total number of anagrams correctly solved in 10 minutes.
Table 3

*Means, Standard Deviations, and Correlations among Study 2 Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Email Rudeness</td>
<td>1.41</td>
<td>.89</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Perceived rudeness</td>
<td>2.72</td>
<td>1.83</td>
<td>.83</td>
<td>(.93)</td>
<td></td>
</tr>
<tr>
<td>3. Performance evaluation</td>
<td>4.59</td>
<td>1.27</td>
<td>-.18</td>
<td>-.20</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note.*  N = 256. Reliabilities are on the diagonal in parentheses. Correlations greater than .17 are significant at p < .05. Correlations greater than .23 are significant at p < .01.
Table 4: Study 2 ANOVA, where Dependent Variable is Performance Evaluation

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F-Stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message content: rude email vs. neutral email</td>
<td>1</td>
<td>8.64</td>
<td>5.42</td>
<td>.02</td>
</tr>
<tr>
<td>Message medium: rude email vs. rude face-to-face</td>
<td>1</td>
<td>1.02</td>
<td>.64</td>
<td>.43</td>
</tr>
<tr>
<td>Message content x message medium</td>
<td>1</td>
<td>.00</td>
<td>.00</td>
<td>.96</td>
</tr>
<tr>
<td>Residual</td>
<td>253</td>
<td>1.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $N = 256$. P-values are two-tailed. Our dependent variable is the evaluation of the speakers performance, calculated as the rating of the speakers performance.