

3-24-2018

Let's get this meeting started: Meeting lateness and actual meeting outcomes

Joseph A. Allen

University of Nebraska Omaha, josephallen@unomaha.edu

Nale Lehmann-Willenbrock

University of Hamburg, nale.lehmann-willenbrock@uni-hamburg.de

Steven G. Rogelberg

University of North Carolina at Charlotte, srogelb@uncc.edu

Follow this and additional works at: <https://digitalcommons.unomaha.edu/psychfacpub>



Part of the [Psychology Commons](#)

Recommended Citation

Allen, Joseph A.; Lehmann-Willenbrock, Nale; and Rogelberg, Steven G., "Let's get this meeting started: Meeting lateness and actual meeting outcomes" (2018). *Psychology Faculty Publications*. 199.
<https://digitalcommons.unomaha.edu/psychfacpub/199>

This Article is brought to you for free and open access by the Department of Psychology at DigitalCommons@UNO. It has been accepted for inclusion in Psychology Faculty Publications by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.



Let's Get This Meeting Started:

Meeting Lateness and Actual Meeting Outcomes

Joseph A. Allen*
Associate Professor
Department of Psychology
University of Nebraska at Omaha
6001 Dodge St
Omaha, NE 68182
Email: josephallen@unomaha.edu

Nale Lehmann-Willenbrock
Professor of Industrial/Organizational Psychology
University of Hamburg
Von-Melle-Park 5, room 3027c
20146 Hamburg, Germany
Phone: +49 40 42838-3607
Email: nale.lehmann-willenbrock@uni-hamburg.de

Steven G. Rogelberg
University Professor and Director, Organizational Science
University of North Carolina at Charlotte
9201 University City Blvd.
Charlotte, NC 28223
Email: srogelb@uncc.edu

* indicates corresponding author

**Let's Get This Meeting Started:
Meeting Lateness and Actual Meeting Outcomes**

Abstract

Meeting lateness is pervasive and potentially highly consequential for individuals, groups, and organizations. In Study 1, we first examined base rates of lateness to meetings in an employee sample and found that meeting lateness is negatively related to both meeting satisfaction and effectiveness. We then conducted two lab studies to better understand the nature of this negative relationship between meeting lateness and meeting outcomes. In Study 2, we manipulated meeting lateness using a confederate and showed that participants' anticipated meeting satisfaction and effectiveness was significantly lower when meetings started late. In Study 3, participants holding actual group meetings were randomly and blindly assigned to either a ten minutes late, five minutes late, or a control condition ($n = 16$ groups in each condition). We found significant differences concerning participants' perceived meeting satisfaction and meeting effectiveness, as well as objective group performance outcomes (number, quality, and feasibility of ideas produced in the meeting). We also identified differences in negative socioemotional group interaction behaviors depending on meeting lateness. In concert, our findings establish meeting lateness as an important organizational phenomenon and provide important conceptual and empirical implications for meeting research and practice.

Keywords: Meetings; lateness; meeting satisfaction; group processes; group performance

In most organizational settings, wasting time is generally deemed counterproductive and unacceptable. Widely used concepts such as just-in-time production, lean manufacturing, continuous improvement processes, and Kaizen are aimed at streamlining workflow, increasing efficiency and productivity, and saving time (e.g., Imai, 2012; Liker & Franz, 2011; Marks & Mirvis, 2011). However, in the case of meetings, wasted time seems to be an accepted norm, especially when it comes to meeting lateness (Rogelberg et al., 2014). Namely, lateness to meetings appears common and rarely sanctioned in organizational settings. Yet, despite the growing scientific literature on workplace meetings and their effects on employee attitudes, behaviors, and organizational outcomes (e.g. Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock, Allen, & Belyeu, 2016; Rogelberg, Leach, Warr, & Burnfield, 2006), meeting lateness has received little attention to date, though it may have a number of detrimental effects on individual attendees as well as the social interaction dynamics in meetings.

A previous exploratory study showed that personal definitions of meeting lateness were mostly, but not exclusively, temporally based, with the majority of the survey participants considering someone late if that person arrived five to ten minutes after the scheduled beginning of the meeting (Rogelberg et al., 2014). In a second study, the authors found that personal meeting lateness behavior were negatively correlated with meeting satisfaction, suggesting some attitudinal underpinnings of lateness to meetings. Furthermore, when others were late, individual employees reported feeling frustrated, concerned, distracted, or in the very least felt uncertain as to why the others did not show up on time (Rogelberg et al., 2014). Similarly, Mroz and Allen (2017) found that individuals have strong reactions to others when they arrive late to a scheduled meeting. Specifically, individuals indicated they were angrier and sought ways to punish late meeting attendees when the reason for arriving late was within the late person's control. These

earlier findings suggest adverse individual outcomes of meeting lateness, which may include both affective and cognitive components. Moreover, given the negative individual reactions to others' lateness as indicated by these two earlier studies, we might expect that social dynamics within the meeting, in terms of actual behavioral interactions among meeting attendees, may also shift as a result of meeting lateness.

In this paper, we build on recent findings on the prevalence of meeting lateness (Rogelberg et al., 2014) and consider the manifold adverse effects of meeting lateness in terms of attendees' affective, cognitive, and behavioral reactions to meeting lateness. The set of studies presented here specifically focuses on within-meeting behavioral reactions to lateness as well as key meeting outcomes. Importantly, we consider both the individual experiences resulting from meeting lateness and the social effects of this phenomenon. First, in terms of individual attitudes and experiences affected by meeting lateness, we argue that meetings that start late are experienced as substantially less satisfying and less effective by individual attendees.

Second, we also consider *social* consequences of meeting lateness in terms of group interaction processes. Specifically, we argue that a meeting starting late will not only affect individual attendees' perceptions, but may also alter their behavior. We particularly focus on negative socioemotional communication here, which includes behaviors such as interrupting one another, criticizing others, or engaging in side conversations (e.g., Kauffeld & Lehmann-Willenbrock, 2012). As these meeting behaviors take place in a social context, they can in turn affect other attendees' behaviors, thus potentially resulting in negative downward spirals (e.g., Kauffeld & Meyers, 2009; Lehmann-Willenbrock & Kauffeld, 2010). Such negative interaction dynamics may start when attendees are kept waiting, and may spill over into the actual meeting itself (cf. effects of pre-meeting talk; Allen, Lehmann-Willenbrock, & Landowski, 2014).

Taken together, the three studies presented in this paper focus on the effects of lateness to meetings as an everyday temporal phenomenon and contribute to the literature and to our understanding of meetings and meeting lateness as follows. First, in developing a scientific account of meeting lateness, we draw from and integrate previous theorizing and empirical work on the social effects of counterproductive behavior in the workplace (for an overview, see Robinson, Wang, & Kiewitz, 2014), as well as previous insights regarding group processes and communication dynamics during group meetings (e.g., Kauffeld & Lehmann-Willenbrock, 2012; Meinecke & Lehmann-Willenbrock, 2015). Second, across three empirical studies that include both field and laboratory data, we identify individual and social outcomes of meeting lateness. Third, across these three studies, we employ both survey methods and in-depth qualitative and quantitative analyses of the communication processes during periods of meeting lateness.

To examine how and why meeting lateness impairs meeting effectiveness, we present the results of a correlational study of employees' experiences with meetings and two laboratory meeting experiments. Prior to conducting the two lab studies, we felt it useful to establish the base rates of individual lateness to meetings in the field as well as the negative relationship between meeting lateness and meeting outcomes in order to position meeting lateness as a relevant phenomenon for organizational research. Following this correlational study of meeting lateness in the field (Study 1), the first experiment investigates the extent to which a late start creates anticipations of a bad meeting (Study 2). Next, we experimentally manipulate the extent of meeting lateness in real time in order to examine how lateness potentially affects both individual meeting satisfaction and team performance outcomes (Study 3). As such, we investigate meeting lateness prospectively (Study 2 concerning an upcoming meeting) and in real time (Study 3 concerning a meeting they actually hold that starts on time or late).

Meeting Lateness and Perceived Meeting Outcomes

Lateness to work in more general terms has been discussed as a benign form of withdrawal behavior (e.g., Koslowsky, Krausz, Aizer, & Singer, 1997). Not only can lateness be costly to organizations (e.g., Imai, 2012), but lateness also carries a signaling quality to others. Koslowsky (2000) discusses the negative psychological message inherent in being late, which can signal disrespect for work and can potentially inspire others to be similarly neglectful. In a recent study by Mroz and Allen (2017), they found that individuals make strong negative attributions directed towards those who arrive late to a scheduled meeting. In line with this argument, being late to work has been linked to decreases in employee morale and work motivation (Cascio, 1991), and has even been discussed in terms of time theft (Liu & Berry, 2013). In the context of being late to meetings, time theft not only concerns the organization as a whole, but particularly the other meeting attendants who are often kept waiting.

In addition to time theft, meeting lateness has the potential to create individual stress experiences by creating ambiguity and raising concerns when the individual who is waiting wonders why the other person may be late (e.g., because they do not care about the meeting; because they do not appreciate the ones who are waiting; because something else happened that the individual does not know about; etc.). Ruminating about these potential attributions of lateness may inadvertently create interpersonal strain. As Rogelberg et al. (2014) point out, punctual attendees may feel resentment towards those who are late, particularly in light of the fundamental attribution error (i.e., a tendency to attribute others' behavior to stable dispositions rather than situational characteristics; Ross, 1977). Because in organizational practice there tends to be no time for late attendees to explain why they are late, misattributions of late behavior are likely and the resulting resentment can linger. Moreover, attributions of others' lateness include

rudeness and disappointment, which indicates deteriorating interpersonal relationships as a result of meeting lateness (Rogelberg et al., 2014).

Taken together, lateness to meetings should negatively affect individual perceptions of meeting satisfaction. Moreover, previous research shows that not only meeting satisfaction, but also perceived meeting effectiveness and even employee wellbeing substantially suffers when a meeting is characterized by dysfunctional or disruptive meeting behaviors such as running off topic, criticizing others, or complaining (e.g., Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock & Kauffeld, 2010; Lehmann-Willenbrock et al., 2016). Being late to meetings can be understood as one such disruptive meeting behavior. Furthermore, meeting lateness can result in less available time for the meeting at hand which can negatively affect the collective ability to achieve meeting results and negatively affect an attendee's perception of effectiveness.

We thus hypothesize:

H1: Meetings that start late are perceived as (a) less satisfying and (b) less effective than meetings that start on-time.

Importantly, the foregoing arguments not only relate to actual experiences of the negative effects of meeting lateness, but also to individuals' anticipations of negative effects once meeting lateness occurs. Such anticipations are important because they can affect the actual individual performance that ensues. For example, related previous experimental research on rudeness has shown that routine task performance, creative performance, and helpfulness decrease even when participants only imagined others' rude behavior (Porath & Erez, 2007). In considering the effects of meeting lateness, we believe individuals will anticipate the meeting being less effective and less satisfying once meeting lateness occurs, and we hypothesize:

H2: Meeting lateness leads to lower anticipated (a) meeting satisfaction and (b) meeting effectiveness.

Social Effects of Meeting Lateness: Group Processes and Outcomes

In addition to the individual outcomes of meeting lateness, we also consider social consequences of lateness for group processes and group performance. Specifically, we expect that the affective, cognitive, and behavioral reactions to lateness result in lower group performance (i.e., an additive effect as multiple attendees are impacted by lateness). Input-process-output models of group performance speak to this by describing group inputs as key determinants of group outcomes via group interaction processes (e.g., Hackman & Oldham, 1980; Kozlowski & Bell, 2013). Meeting lateness can be considered as one such input factor that changes the way a group or team interacts (i.e., group processes), which in turn affects outcomes of the interaction (i.e., group and meeting effectiveness). Hence, the input-process-output perspective of team effectiveness suggests that lateness will not only have negative effects on individual attendees' attitudes and experiences, but also impair group processes and performance outcomes.

Effects of lateness on group processes

In terms of social effects of meeting lateness, we first focus on group members' communicative behaviors and emergent communication patterns in response to experiencing meeting lateness (i.e., effects of lateness on the process component of team effectiveness; e.g., Kozlowski & Bell, 2013). To this end, we integrate arguments from the literature on co-worker counterproductive behavior, group norms, and negative socioemotional communication dynamics in groups.

As a first explanation why meeting lateness can have social consequences in group settings, previous research suggests that being exposed to coworkers' deviant behavior (such as being exposed to others' lateness) affects individual employees. A comprehensive literature review by Robinson and colleagues (2014) discusses how the counterproductive behaviors of coworkers affect employees not only directly (i.e., when they are a target of the misbehavior, such as in the case of incivility) but also indirectly, either through vicarious or ambient impact. Importantly, the outcomes of such indirect consequences impact not only include affective and attitudinal responses, but also the actions of those employees that hear about others' counterproductive behavior such as meeting lateness (i.e., vicarious impact) or are placed in an environment characterized by meeting lateness (i.e., ambient impact). For example, employees who observe others' rudeness are less likely to help others and tend to lower their performance efforts (Porath & Erez, 2007). Employees working in teams where antisocial behavior is common will more easily show such negative social behaviors themselves (Robinson & O-Leary-Kelly, 1998; see also Robinson et al., 2014, for additional examples).

A related, second line of research that suggests negative social consequences of meeting lateness concerns group norms—the informal, typically unspoken, yet powerful rules that regulate group members' behavior (e.g., Forsyth, 2010). Group norms are intricately linked to social interaction in groups and teams, given that norms can be conceptualized as “group identity-based codes of conduct that are understood and disseminated through social interaction” (Rimal & Real, 2003, p. 185). Group norms are relevant to the study of meeting lateness on because they can help explain the potential detrimental effects on group member behaviors and interaction processes within the meeting. When employees are (repeatedly) exposed to meeting lateness, this may establish a norm for counterproductive behavior in the group (cf. O'Boyle,

Forsyth, & O'Boyle, 2011), which should be reflected in terms of negative group interaction dynamics.

In terms of group interaction dynamics following meeting lateness, we focus on negative socioemotional communication. From a communication perspective, negative socioemotional behaviors are indicative of a bad team climate and entail specific communicative acts such as interrupting one another, engaging in side conversations, criticizing others, or backbiting (e.g., Lehmann-Willenbrock, Beck, & Kauffeld, 2016; Lehmann-Willenbrock & Kauffeld, 2010). Interruptions occur when a conversational turn cannot be finished because a speech act is cut off by another speaker (e.g., Goldberg, 1990). Criticizing or backbiting behaviors occur when points about others are made aggressively (Cooke & Szumal, 1994). For example, these might include statements such as "That guy is an idiot", or "You don't know what you're talking about". Finally, side conversations occur when two or more group members whisper or talk quietly among each other on the side, such that the conversational content is not shared with the entire group (Kauffeld & Lehmann-Willenbrock, 2012). Side conversations typically signal disinterest in those interaction partners who are not included in the side conversation (Swaab, Philips, Diermeier, & Medvec, 2008).

Negative socioemotional communication has been linked to deteriorating group dynamics and group performance more broadly. For example, offending statements are linked to personal conflicts that negatively impact team performance (e.g., De Dreu & Weingart, 2002). Moreover, side conversations can demonstrate disinterest in the team interaction more generally (Swaab et al., 2008). Given the experimental nature of this study, we have a unique opportunity to film and observe groups while they wait for their late attendee, as well as during the actual meeting itself. We can then code for the occurrence of negative socioemotional behaviors with the postulation

that those behaviors will be substantially higher under conditions of meeting lateness. We consider both the waiting period (prior to the meeting, due to lateness) and the actual meeting itself in this regard.

For the pre-meeting phase, when groups are kept waiting due to meeting lateness, we expect that the frequency of negative socioemotional behaviors will increase throughout the waiting period. In line with earlier work on the effects of meeting lateness (Rogelberg et al., 2014), as the lateness period extends and lateness increases, group members will likely feel more annoyed, which they will express in terms of more negative socioemotional communication over time.

H3: During extended periods of meeting lateness, meeting participants increasingly engage in negative socioemotional communication, such that the frequency of observable negative socioemotional behaviors is higher in later (i.e. second five minutes) compared to earlier (first five minutes) moments of waiting for others.

Moreover, when comparing meetings that start late versus on time, the differences in how the stage is set for the meeting should also result in different communication patterns within the meeting. This idea of “setting the tone” has been discussed in the context of team interaction patterns more broadly, and previous empirical work supports this notion (Zijlstra, Waller, & Phillips, 2012). Previous research on pre-meeting experiences also suggests that what happens prior to a meeting significantly affects the meeting experience itself (Allen et al., 2014). When meetings start late, the negative tone set during the pre-meeting phase may spill over into the meeting itself, such that we expect a higher degree of negative socioemotional interaction in meetings that start late compared to meetings that begin on time. Moreover, we expect that these differences in the overall frequency of negative socioemotional communication will be

substantiated at the behavioral event level in terms of temporal interaction sequences of socioemotional behavior in the lateness but not in the on-time condition. Put formally,

H4a: Negative socioemotional behaviors are more frequent when meetings start late than when they begin on time.

H4b: The increase of negative socioemotional interaction under conditions of meeting lateness is substantiated at the behavioral event level, such that negative socioemotional behaviors will trigger negative socioemotional sequences when meetings start late (but not when they begin on time).

Effects of lateness on objective group outcomes

Beyond the hypothesized effects of meeting lateness on behavioral processes within the meeting, we also consider social effects of lateness in terms of group outputs, or objective performance outcomes. Previous research has hinted at this possibility, suggesting that lateness will impair objective outcomes of group meetings. Indeed, Rogelberg et al. (2014) have argued that lateness can be particularly harmful in the context of team meetings that are aimed at creating group products and decisions. Many team meetings are held in order to pool team members' expertise, solve problems, and generate creative ideas (e.g., O'Neill & Allen, 2012). Late employees tend to hold up progress (Dishon-Berkovits & Koslowsky, 2002). This can then lead to compressed time windows and additional time pressure to address the agenda at hand. Time pressure as a result of meeting participants being late may give rise to decision-making biases that are known to be deleterious to group performance, such as group think, incomplete dissemination/processing of information, or false consensus (e.g., Janis, 1972; Jones & Roelofsma, 2000; Sunwolf & Frey, 2005). Further, time delays due to meeting lateness can also create pacing issues in meetings that hurt group performance (Labianca, Moon, & Watt, 2005).

Moreover, time pressure due to meeting lateness can derail the meeting processes necessary for running satisfying and effective meetings (Lehmann-Willenbrock, Allen, & Kauffeld, 2013; Kauffeld & Lehmann-Willenbrock, 2012; Sonnentag, 2001).

Taken together, we expect that meeting lateness will not only impair individual experiences of the meeting and behavioral dynamics within the meeting, but should also be reflected in terms of lower objective group performance outcomes. We therefore hypothesize:

H5: Meeting lateness results in inferior group performance compared to on-time meetings.

Study 1: Meeting Lateness Field Study

Using a diverse sample of working adults from the United States who regularly attend work meetings as a part of their job, participants completed a brief online survey on Amazon's Mechanical Turk (MTurk), a panel sample tool used by researchers across disciplines (Buhrmester, Kwang, & Gosling, 2011; Horton, Rand, & Zeckhauser, 2011; Huang, Bowling, Liu & Li, 2014; Karim, Kaminsky, & Behrend, 2014; Rand, 2012; Shapiro, Chandler, & Mueller, 2013). Additionally, we followed current conventions concerning best practices for using Mturk (Cheung, Burns, Sinclair, & Sliter, 2016). Participants with more than 50% missing data or who did not attend meetings regularly (i.e. defined as weekly) were dropped from the sample, leaving a final usable sample of 252 participants. Of these, 56.9% were female. Participants had an average tenure of 5.5 years and average age of 36.9 years. Participants held a variety of different jobs including retail manager, sales manager, educator, sales specialist, social worker, writer/filmmaker, clerk, construction worker, delivery specialist, cashier, IT manager, data entry specialist, and so on.

Participants were asked to report on their experiences in their most recent meeting. The survey was designed such that the respondents were asked to think of their last meeting, provide ratings of various aspects of the meeting, and at the end of that section, respond to a question concerning whether the meeting started on time versus 5 minutes or 10 minutes late (Rogelberg et al. 2014). Placement of the lateness question in this way helped to ensure priming effects were not influencing the ratings of the meeting generally. Response options included “No, everyone was on time”, “Yes, five minutes late”, and “Yes, ten minutes late”. Based on this variable, we broke our sample down into three groups for analysis purposes including the control (i.e., started on time) ($n = 123$), the meeting began five minutes late ($n = 93$), and the meeting began ten minutes late ($n = 36$). The use of five minutes as a time increment distinguishing between on time versus late is consistent with recent research on meeting lateness (Rogelberg et al., 2014). We also asked about the specific purpose(s) for which participants’ recent meeting had been held, using a recent taxonomy of meeting purposes (e.g., “Discussed an ongoing project”; “Discussed technology concerns”; “Discussed quality, policy, and compliance”; “Discussed a change in process”; “Discussed employment contract issues”; or “Discussed a problem and potential solutions”; Allen, Beck, Scott, & Rogelberg, 2014). In addition, we asked for demographic information as well as organizational descriptors.

Also, *meeting satisfaction* (Rogelberg, Allen, Shanock, Scott, & Shuffler, 2010) and *meeting effectiveness* (Rogelberg et al., 2006) were assessed by asking participants to rate their last meeting. Instructions read, “Please indicate your agreement with the following words or phrases concerning your last meeting”. Six items were used to assess meeting satisfaction including “satisfying” and “stimulating” and an additional nine items were used to assess

meeting effectiveness including “effective” and “productive use of time”. Alpha reliability estimates for this sample were .92 and .90, respectively.

Results of Study 1

The results indicate that meeting lateness was quite prevalent in this sample with slightly more than half of all meetings rated starting five or more minutes late (51.2%). Table 1 provides a summary of the cross-tabs analysis and shows some interesting patterns, though none of the observed differences reached statistical significance ($p > .05$). The results by organizational type indicate that the public sector had 56.2% late meetings compared to nonprofit at 53.8% and for-profit firms at 48.2%. Though not statistically significant, the results by organizational size suggest that mid-sized firms have more late meetings than smaller or larger firms in our sample. Finally, the pattern of results by job level suggests that managers experience fewer late meetings than those at lower levels in organizations generally. Moreover, we found no significant relationships between the different meeting purposes as indicated by the meeting taxonomy items and meeting lateness. This suggests lateness to workplace meetings occurs regardless of the specific purpose for which a meeting is held.

 Insert Table 1 about here

Next we tested the extent to which meeting lateness showed differences across the outcomes of interest and in the direction hypothesized. We provide means, standard deviations, and intercorrelations of all measures in Table 2. Based on these analyses, it appears as though job level was significantly related to both meeting satisfaction and effectiveness. Additionally, given the correlation between meeting satisfaction and effectiveness as well as the potential concerns related to common method bias (Conway & Lance, 2010), we used a CFA to test the

measurement model and confirm that meeting satisfaction and effectiveness were distinctly measured. Results indicated that a two-factor solution had a better fit than a one-factor solution as demonstrated by the chi-square test showing a significant reduction in chi-square value from the one-factor to the two-factor model ($\Delta\chi^2 = -173.25, p < .05$) As such, ANCOVA were used to investigate the mean differences in meeting satisfaction and effectiveness across the late conditions while controlling for job level. Before testing, it was noted that the means and standard deviations suggested that meeting satisfaction for the control group had the highest mean level ($M = 3.61, SD = .87$) with the five minutes late condition being second highest ($M = 3.04, SD = .89$) and the ten minutes late condition being the lowest ($M = 2.85, SD = .91$). The meeting effectiveness followed similar trends with participants scoring the greatest anticipated meeting effectiveness in the control group ($M = 3.93, SD = .95$) with the five minutes late condition being the second highest ($M = 3.66, SD = .73$) and the ten minutes late condition reporting the lowest mean levels ($M = 3.25, SD = .97$).

 Insert Table 2 about here

Two ANCOVAs were used to test mean differences in meeting satisfaction and meeting effectiveness across the groups. For meeting satisfaction, significant mean differences were found ($F(2, 38) = 9.77, \text{partial } \eta^2 = .28, p < .05$) and the lateness condition explained 28% of the between subjects variance in meeting satisfaction. Post hoc analyses using the Tukey test showed that compared to the control condition, the five minutes late group and the ten minutes late group had significantly lower meeting satisfaction. For meeting effectiveness, significant mean differences were found ($F(2, 61) = 8.80, \eta^2 = .20, p < .05$) and the lateness condition explained 20% of the between subjects variance in meeting effectiveness. Post hoc analyses showed that

compared to the control condition, the five minutes late group did not experience significantly lower meeting effectiveness, however, the ten minutes late group showed significantly lower meeting effectiveness. These results provide general support for H1 that late meetings are perceived as less satisfying and effective than on-time meetings.

Study 2: Meeting Lateness Anticipation Lab Study

Study 2 was conducted using undergraduate students attending a Midwestern United States university. The initial sample consisted of 78 participants (61% female). The participants were recruited through the psychology department's participant pool and given class credit. The mean age of the students was 19.6 ranging from 18 to 36 years old. The sample consisted of participants who classified themselves as Caucasian/White (66.7%), Asian (16.7%), Hispanic (5.1%), African American (2.6%), or as another ethnicity (2.6%).

Participants signed up for the study sessions using an online interface. Each session was capped at six participants and only sessions that had four or more were included in the study. In Study 1, participants were greeted upon entering the meeting conference room. The proctor then introduced the subject of discussion and told the participants that the meeting was a competition for the best ideas and suggestions for improving the university's general education curriculum. The participants were informed that the meeting would not begin until everyone had arrived. They were randomly assigned to one of three conditions. In the control condition ($n = 21$), the confederate arrived and the meeting began on time. The five minutes late condition ($n = 25$) began once the confederate arrived after five minutes. The ten minutes late condition ($n = 22$) began once the confederate arrived after ten minutes. The participants were required to wait for the confederate to arrive. Note that steps were taken to ensure the confederate was identical across conditions (e.g., same person, same clothes, same book bag, and so forth). Specifically,

the confederate was a male upper-level undergraduate student and all participants were lower-level undergraduate students. During the debriefing, participants were asked if they recognized anyone as a confederate and in no cases did participants recognize the confederate from classes or as a research assistant. Once the confederate arrived or everyone was present in the control condition, the proctor handed out the agenda with discussion topics along with a paper survey concerning how the meeting would proceed. They were told that once everyone completed the survey, the meeting would begin. However, rather than actually holding the meeting, participants were dismissed after everyone completed the paper survey containing the measures below.

Meeting satisfaction (Rogelberg, Allen, Shanock, Scott, & Shuffler, 2010) and *meeting effectiveness* (Rogelberg et al., 2006) were assessed using the same items as in Study 1, except that the instructions were modified to reflect anticipation of the upcoming meeting. Instructions read, “Please indicate your agreement with the following words or phrases that describes how today’s meeting will likely be”. Alpha reliability estimates for this sample were .74 and .83, respectively.

Demographic and control variables. Participants were asked about their age, gender, and ethnicity. We considered the following as potential control variables: age, gender, ethnicity, and group size. As none of these variables showed meaningful correlations with any of our variables of interest (i.e., meeting satisfaction and effectiveness), we did not consider them in the analyses testing the hypothesis (Becker, 2005).

Lateness manipulation check. We asked participants if anyone showed up late. Instructions read, “did anyone arrive late to the meeting today?”. Response options included, “no, everyone was here on time”, “yes, someone was five minutes late”, and “yes, someone was ten minutes late”. The lateness manipulation check showed that all participants were aware of

the lateness conditions and, without exception, they recognized which condition they had been in (i.e. on time, five minutes late, ten minutes late).

Results of Study 2

Because participants in the late conditions were able to interact and potentially build group entitativity, we decided to analyze the data using multi-level modeling (MLM) using HLM software thereby accounting for the nesting effects of group assignment. A grouping variable was used for coding 1 as control, 2 as five minutes late, and 3 as ten minutes late; this grouping variable was used for subsequent mean analyses and was dummy coded with the control condition serving as the reference group. Although participants were randomly assigned to conditions, it is noteworthy that none of the demographic variables were correlated with the outcome variables. Before testing, it was also noted that the means and standard deviations suggested that the anticipated meeting satisfaction for the control group had the highest mean level ($M = 3.30$, $SD = .34$) with the five minutes late condition being second highest ($M = 3.02$, $SD = .53$) and the ten minutes late condition being the lowest ($M = 2.94$, $SD = .51$). The anticipated meeting effectiveness followed similar trends with participants scoring the greatest anticipated meeting effectiveness in the control group ($M = 3.41$, $SD = .50$) with the five minutes late condition being the second highest ($M = 3.14$, $SD = .68$) and the ten minutes late condition reporting the lowest mean levels ($M = 3.11$, $SD = .62$).

MLM using HLM 7.0 software was used to test mean differences in anticipated meeting satisfaction and anticipated meeting effectiveness across the groups (i.e. compares all groups simultaneously). The first step in our multilevel analysis was to examine whether there was meaningful variance in the Level-1 variables (individual level) due to the Level-2 factor (group). In order to test this, we conducted a null model analysis for each Level-1 variable and calculated

the ICC(1) values, which indicated that there was significant between-group variation in each of our Level-1 variables of interest. The ICC(1) values for anticipated meeting satisfaction and effectiveness were .32 and .45, respectively. These values indicate that 32% and 45% of the variance in these variables are due to Level-2 (i.e., group) factors.

Table 3 presents the results of the multilevel analysis predicting anticipated meeting satisfaction and effectiveness. As hypothesized (H2a and H2b), meeting lateness appeared to predict a reduction in both anticipated meeting satisfaction and effectiveness, but only for the ten minute late condition ($b_{02} = -.38$ and $-.57$, respectively, $p < .05$), as compared to the control condition. These results provide general support for our hypothesis that individuals anticipate that a late starting meeting is going to be anticipated as less satisfying (H2a) and less effective (H2b) than an on-time meeting.

 Insert Table 3 about here

Study 3: Meeting Lateness and Actual Meeting Outcomes Lab Study...

For Study 3, we recruited groups of undergraduate students attending a Midwestern United States university. The sample consisted of 270 participants (66.7% female). Participants were randomly assigned to one of three conditions: control ($n = 90$), five minutes late ($n = 88$), or ten minutes late ($n = 92$). There were sixteen groups per condition and each group was comprised of 5 or 6 participants depending upon participant availability. The mean age of the sample was 19.2 years with a range from 17 to 38 years old. The sample consisted of participants who classified themselves as Caucasian/White (75.2%), Asian (11.9%), Hispanic (5.2%), African American (2.2%), Pacific Islander (0.7%), or as another ethnicity (2.6%).

The same opening procedure was used in Study 3 as in Study 2, with one modification. There were no confederates involved in any of the conditions. The participants in the two late conditions were simply told that they were waiting for another participant to arrive. Then, after the pre-defined time (i.e. five or ten minutes), the researcher indicated they could go ahead and start without the late participant. The reason that confederates were not used in this study was to avoid extraneous variables that differences in their behavior might have introduced. However, it should be noted that this changes the manipulation such that the late individual is actually a “no show”.

In terms of the meeting, students were informed that the college was revising the general education requirements and that they were seeking recommendations from current students through these small group discussion meetings. We chose a 30-minute time frame for the meetings, with a hard-stop, consistent with the minimum length of many organizational meetings as well as frequent practices (e.g., Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock & Allen, 2014; Schulte, Lehmann-Willenbrock, & Kauffeld, 2013). However, the actual duration of each meeting depended on the condition. Participants in the control group started on time and were given 30 minutes, participants in the five minutes late group started late and were given 25 minutes, and participants in the ten minutes late group started late and were given 20 minutes. Time taken on the task, within condition, was accounted for in the analytic strategy as explained below to help rule it out as a confounding factor.

To assess *Meeting satisfaction* (Rogelberg et al., 2010) and *meeting effectiveness* (Rogelberg et al., 2006) we used the same measures as in Study 1, but rather than anticipating the meeting, participants rated the meeting they just had. Alpha reliability estimates for this sample were .77 and .85, respectively.

To assess *Demographics and control variables* and the *lateness manipulation* check we used the same measures as in Study 2. Similar to Study 2, none of the demographics and control variables (i.e., age, gender, ethnicity, and group size) related to the outcome variables and were therefore not included in the models testing the hypotheses (Becker, 2005).

Time on task was measured as the total time from when the meeting started to when the participants stopped working on the meeting tasks and agenda.

Coding pre-meeting interaction behavior. We conducted an in-depth social interaction analysis of the pre-meeting phases in the 10-minutes-late condition. As noted earlier, we focused our analysis on this particular experimental condition because we expected that participant reactions to meeting lateness would be strongest in this condition, and because the relatively longer pre-meeting phase in this condition would provide sufficient data points for an in-depth analysis of the behavioral processes when waiting for late meeting attendees. Indeed, the 5-minute late condition just lacked much interpersonal exchange.

To analyze these processes, we used the act4teams coding scheme for team interactions (e.g., Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock & Allen, 2014). Given our theoretical framework and particular study aim, we focused our analysis on negative socioemotional behaviors observed in the pre-meeting period of these groups. The categorization of dysfunctional socioemotional behaviors which we used in this study was developed in previous field research (Kauffeld & Lehmann-Willenbrock, 2012) and has been used extensively in recent team process research (e.g., Goh, Fisher, & Sommer, 2015; Lehmann-Willenbrock et al., 2013; Meinecke & Lehmann-Willenbrock, 2015). Negative socioemotional communication in meetings includes behaviors such as interruptions, criticizing others, and side conversations that exclude other meeting participants (e.g., when two attendees are whispering among each

other). Similar to previous research (Kauffeld & Lehmann-Willenbrock, 2012), we summarized these different negative socioemotional behaviors to one overall frequency measure per observed group.

Four extensively trained raters coded the 10-minute pre-meeting segment in each of the sixteen videos of the 10-minute late condition. They also coded the interaction during the actual meeting itself in both the 10-minute late and the control condition. Coders were naive to the study hypotheses. Behavior unitizing and coding was performed according to the rules of the act4teams coding scheme (e.g., Kauffeld & Lehmann-Willenbrock, 2012) implemented by using INTERACT software (Mangold, 2010). In accordance with the act4teams coding scheme, a new unit was assigned whenever a new behavior started (i.e., more fine-grained than unitizing according to speaker turns). For example, within the same speaker turn, there might be an interruption followed by a criticizing statement.

When using software-supported coding from live video, units are identified according to time rather than words. Concerning inter-rater reliability, as it is not possible for two raters to unitize a video at the exact same nanosecond, behavioral units were identified by only one raters, whereas the behavioral annotations were performed by two separate raters (for a similar procedure, see Lehmann-Willenbrock, Allen, & Kauffeld, 2013). We obtained an overall inter-rater reliability of $\kappa = .89$. Any disagreements between the raters were resolved by discussions.

For the 10-minutes late condition, we first compared frequencies of negative socioemotional behaviors in the first five minutes to those frequencies observed in minutes 6-10 of the pre-meeting waiting period. Next, we investigated frequencies in negative socioemotional communication in the actual meetings of these groups, compared to the groups in the control condition. Finally, we used lag sequential analysis (e.g., Bakeman & Quera, 2011; Lehmann-

Willenbrock et al., 2013) to examine how differences in the behavioral frequencies were substantiated in terms of emergent behavioral patterns at the event level in each of the conditions.

Group performance was assessed using three metrics. First, we totaled the number of ideas generated by each group. Second, using independent raters, we coded each idea in terms of quality and feasibility. The independent raters were trained research assistants. Training consisted of reviewing current curriculum guidelines at the University where the participants were recruited as well as meeting with the curriculum advisory board concerning current ideas being considered by the college. For quality, coders rated each suggestion as either 1 for high quality or 0 for low quality. Quality was defined for this study as, “A recommendation for adjusting the core curriculum that is a product of clarity, relevance, and length; high grade, superiority, or excellent”. For feasibility, coders rated each suggestion as either 1 for high quality or 0 for low quality. For this study, feasibility was defined as, “A recommendation for adjusting the core curriculum that is capable of being done, effected, or accomplished; something that could be done both logically and possibly in comparison to similar curricula”. Raters were asked to rate every idea generated by the groups and raters were naïve to group condition (i.e. raters did not know which groups were from which condition). Initial agreement was 82% on quality coding and 87% on feasibility coding. Additionally, Cohen’s Kappa was computed and inter-rater reliability appeared to be satisfactory ($K = .78$ for quality and $K = .83$ for feasibility). Discrepancies were then discussed and a final decision was agreed upon concerning each idea. Finally, composites of quality and feasibility were computed.

Results of Study 3

Group interaction behaviors when meetings start late. To examine the effects of meeting lateness on negative socioemotional communication practices, we first considered the waiting period (i.e., experiences of meeting lateness) in the 10-minutes late condition. Across all groups ($n = 16$) in the 10-minutes-late condition, we observed an overall frequency of 55 negative socioemotional behaviors in the second half of the waiting period (minutes 6 to 10), compared to 22 of these negative socioemotional behaviors during the first five minutes. To rule out the possibility that the observed difference was merely due to an increase in speech acts over time, we calculated the percentage of negative socioemotional behavior (relative to all observed behaviors) for the two respective time periods. A Wilcoxon Signed Ranks test for related samples showed a significant increase in these percentages in the percentage of negative socioemotional behaviors during minutes 6-10 compared to the first five minutes of the waiting period ($Z = -2.60, p < .01$), which lends support to H3. Table 4 further illustrates this finding.

 Insert Table 4 about here

Next, we compared the frequency of observed negative socioemotional behaviors during the actual meeting, in the 10-minutes late condition versus the control condition respectively. To account for differences in meeting duration, we related all of the observed frequencies (e.g., absolute number of interruptions in each group) to a 20-minute period by dividing the absolute frequency of each behavior by the time on task and multiplying by 20 (for a similar procedure, see Lehmann-Willenbrock & Allen, 2014). Based on these relative frequencies and thus controlling for meeting duration, criticizing statements were not more frequent in meetings that started late ($t = 1.10, ns$). However, for side conversations, we did observe a higher rate of occurrence in meetings that started late, although this difference was only marginally significant ($t = 1.71, p < .10, df = 27$). We also observed a significantly higher rate of interruptions in the

groups that started ten minutes late, compared to those who started on time ($t = -2.51, p < .05, df = 27$). These findings lend some support to H4a.

Emergent interaction patterns. We focused on those negative behaviors where we did observe significant differences in the overall frequencies (i.e., interruptions and side conversations) and explored how these behaviors were embedded in the team interaction flow in the two different conditions. In the following, any z-value larger than 1.96 indicates that an observed Lag1 sequence of behavior (e.g., solution—interruption) occurred above chance.

We first considered behavioral sequences resulting in interruptions. In the 10-minutes late condition, interruptions were triggered by the following behaviors: Prior interruptions ($z = 5.35$), goal orientation ($z = 2.80$), and prior solutions ($z = 2.49$). Hence, in the lateness condition, interruptions interfered with positive procedural behaviors (goal orientation, such as leading back to the topic) as well as problem-solving. In the control condition, these behavioral sequences were not statistically significant. In comparison with interruptions, side conversations occurred somewhat more randomly throughout the meetings. We did observe a significant Lag1-sequence of procedural suggestions followed by side conversations in the 10-minutes late condition however ($z = 3.51$). Hence, when a group member tried to structure the meeting by providing a procedural suggestion (e.g., “Let’s talk about ... next”), group members tended to engage in side conversations rather than responding to this constructive behavior. Again, this behavioral sequence did not emerge in the control condition. Taken together, these findings show how the higher overall frequency of negative socioemotional behaviors was substantiated by distinct emergent behavioral patterns when meetings start late, thus lending support to H4b.

Effects of lateness on objective group performance outcomes. Because of the design of Study 3, we were able to re-test H1a and H1b as well as H5, which stated that meeting lateness

reduces meeting satisfaction, meeting effectiveness, and group performance. Table 5 contains means and standard deviations for variables for focal outcomes of meeting effectiveness, meeting satisfaction, and group performance.

 Insert Table 5 about here

For the re-test of H1a and H1b, we proceeded similarly to Study 2 and used multi-level modeling (MLM) using HLM software thereby accounting for the nesting effects of group assignment. The same grouping variable was used in Study 3 as in Study 2 to categorize meetings as beginning on time, five minutes late, or ten minutes late and was dummy coded with the control condition serving as the reference group. The ICC(1) values for meeting satisfaction and effectiveness were .27 and .39, respectively. These values indicate that 27% and 39% of the variance in these variables are due to Level-2 (i.e., group) factors. Table 6 presents the results of the multilevel analysis predicting meeting satisfaction and effectiveness. As hypothesized (H1a and H1b), meeting lateness appeared to predict a reduction in both meeting satisfaction and effectiveness, but only for the ten minute late condition ($b_{02} = -.41$ and $-.28$, respectively, $p < .05$), as compared to the control condition.

 Insert Table 6 about here

For H5 concerning group performance, MANOVA was used to test mean differences in quality, feasibility, and number of ideas across all the groups. MANOVA is the appropriate analysis in this case because group performance was objectively rated (quality and feasibility) or counted (number of ideas) at the group level (i.e. no individual ratings of group performance by group members). Significant mean differences were found in number of ideas ($F(2, 45) = 3.85, p < .05$), quality of ideas ($F(2, 45) = 4.14, p < .05$), and feasibility of ideas (F

(2, 45) = 3.83, $p < .05$) and the lateness condition explained 16%, 14%, and 15% of the variance in the three group performance variables, respectively. Post-hoc analyses show that compared to the control condition, only the ten minute late groups resulted in significantly lower levels of number of ideas, quality, and feasibility.

Although the findings support H5, an important potential second explanation needed to be investigated. Due to the nature of the manipulation and the design of the experiment, groups were constrained concerning the maximum amount of time they could spend on the meeting task. Granted, this is what typically happens in the workplace as meetings that start late often have to end at the allocated time despite this tardiness. Interestingly, within conditions, there was still considerable variation around time-on-task. Specifically, the standard deviations for group time on task by condition illustrate the variability described (On time $SD = 3.05$, 5 minutes late $SD = 2.44$, and 10 minutes late $SD = 4.32$). This provided an opportunity to examine whether time-on-task rather than lateness per se explains our findings. Importantly, time on task did not correlate with meeting satisfaction, effectiveness, or group performance within each condition, respectively.

General Discussion

Although meeting lateness is a prevalent phenomenon in the workplace, there are few other previous research efforts aimed at understanding the effects of meeting lateness on employee attitudes and behavior (see Rogelberg et al., 2014, for an exception). Overall, the foregoing studies used a combination of descriptive base rates, experimental designs, and quantitative interaction process analysis to converge upon our general conclusion that meeting lateness is a frequent phenomenon that negatively impacts participants' attitudes and experiences, group interaction processes in the meeting, and group performance outcomes.

Theoretical implications

Our overall findings have meaningful theoretical implications for individuals, groups, and social behavioral interaction in general. First, in terms of negative consequences for the *individual*, our findings consistently show that people anticipate and actually experience lower meeting satisfaction and effectiveness when meetings start late. The experimental studies show that meeting lateness has a meaningful negative impact on participants' attitudes about the meeting and its results, both in terms of post meeting experiences in the field (Study 1) and in terms of anticipated meeting effectiveness (when experimentally inducing meeting lateness; Study 2). These findings are consistent with and support the attribution theory mechanisms ascribed by Mroz and Allen (2017). According to Mroz and Allen (2017), individuals draw negative attributions towards individuals that arrive late and our findings confirm that these attributions also impact general attitudes towards the meeting experience.

Second, the negative effects on actual group performance when we manipulated meeting lateness (Study 3), as well as our in-depth interaction process analysis of the deteriorating group interaction dynamics following meeting lateness, highlight the detrimental *social* consequences of meeting lateness. Specifically, our findings concerning the pre-meeting phase (i.e., where participants waited for the late individual) show that participants engaged in negative socioemotional behaviors (such as criticizing others or interrupting one another) at an increasing rate as lateness dragged on. This suggests that participants got increasingly frustrated and upset the longer they were kept waiting for the late attendee. The transcript in Table 4 is exemplary of a core observation that we made when coding the groups' behaviors during this waiting period: Whereas groups were initially polite and just generally wondering about the purpose of their

meeting, they tended to grow continuously more annoyed as the waiting period for the presumably late meeting attendee grew longer.

Our comparison of negative socioemotional communication practices within the actual meeting further substantiates these findings, showing that meetings that started late suffered from a significantly higher rate of interruptions in particular. Meetings that started late were also characterized by emergent temporal patterns of negative socioemotional behavior, compared to meetings that started on time. As such, it seems that the negative interaction dynamics established in the waiting period (in the case of meeting lateness) can spill over into the actual meeting itself. Such a spillover effect aligns with the idea that early interaction patterns can set the stage for subsequent interaction behavior (Zijlstra et al., 2012), as well as with earlier findings on the relevance of pre-meeting communication for the actual meeting itself (Allen et al., 2014). The substantiation of these negative communication practices in terms of emergent sequential patterns at the behavioral event level further underscores the negative social consequences of meeting lateness.

Our findings regarding the deteriorating interaction dynamics within the late-starting meeting itself are especially critical given previous research on negative communication dynamics in meetings, which has shown that dysfunctional meeting behaviors such as criticizing or complaining can pull groups into downward negative spirals and sap cognitive resources from more productive efforts such as problem solving (e.g., Lehmann-Willenbrock & Kauffeld, 2010; Lehmann-Willenbrock et al., 2011; Schulte et al., 2013). Additionally, our finding that meetings starting ten minutes late significantly impaired meeting processes and meeting effectiveness whereas “mild” meeting lateness (i.e., five minutes late) did not appear to affect meeting effectiveness suggests that the magnitude of lateness is an essential characteristic to consider

when examining meeting lateness (and perhaps other forms of lateness in the workplace), both empirically and theoretically. An ancillary explanation for these findings concerns the role of group norms. That is, starting a meeting ten minutes late apparently violates norms for appropriate behavior in organizations related to group meetings, whereas starting five minutes late may still be within the bounds of acceptable group behavior. To explore these arguments, future research could focus on group norms more immediately and also consider how prior group lateness affects individual lateness to meetings (cf. Blau, 1996).

Limitations and future directions

The studies presented here have several limitations worth mentioning. In a nascent research area such as meeting lateness, these limitations point to excellent opportunities for additional exploration. First, all meeting groups in both Study 2 and Study 3 were formed ad hoc and recorded in a laboratory situation. Although the use of students in groups and teams research has a long history in the social and organizational sciences and while it appears that lab-based work is indeed quite generalizable (Greenberg, 1987; Camerer, 2011), examination of meetings in organizations holds great merit. To manage this limitation, we presented Study 1 that served to establish the existence of a relationship between meeting lateness and meeting outcomes among employees in the “real world”. Further, others would argue that the pairing of field data and experiments as reported here is a strength. For example, meta-analytic research shows greater correspondence between paired lab and field study effects among I-O psychology studies than other areas of psychology (Mitchell, 2012). Additionally, getting permission to manipulate lateness in an organization may be problematic. After-all, the current findings suggest that manipulating lateness in an organization would upset people, waste their time, and hamper productivity. One option may be to perform a reflective diary study where individuals rate a

series of meetings. Such a study would ideally contain both on-time and late meetings and allow for natural comparisons of the respective meeting processes and outcomes.

Another issue around generalizability concerns the operationalization of lateness as either five minutes or ten minutes late. Although this is consistent with previous research (Rogelberg et al., 2014) and some defined timespan must be selected when doing an experiment, future research should expand the lateness variable (e.g., by adding more experimental conditions). Doing so would allow for a more nuanced investigation of lateness and when the negative effects start to emerge. Moreover, a broader range of experimental conditions could address the idea of a plateau effect of meeting lateness. For example, the negative effects of meeting lateness, in terms of negative communication practices (such as negative socioemotional behavior; see Study 3) and deteriorating group processes more generally may intensify when lateness increases, but only up to a point. For example, when a meeting attendee arrives 20 or 30 minutes late, the others might decide to start without that person—or call the meeting off.

Further, the manipulation of lateness from Study 2 to Study 3 was modified. In Study 2, a confederate arrived late and participants immediately took a survey. In Study 3, no confederate arrived and then participants held the meeting and took a survey. Study 2 has a person arriving late whereas Study 3 has a “no show”. Although both situations caused the groups to start their meeting late, the latter is an extreme form of lateness because they simply go on without the person who never actually arrives. The choice of removing the confederate from Study 3 stemmed from concerns that keeping the confederate in the 48 sessions would introduce confounding factors (e.g., confederate inconsistencies, discussion of the confederate’s late behavior). Further, the studies presented here were not concerned with the cause of lateness (e.g., late arrival, a “no show”, room unavailable, and so on), but rather with the outcomes of meeting

lateness. Although our Study 2 and Study 3 findings were highly consistent with one another, future research should work to further disentangle the effects of different causes of the late start, including the difference between someone arriving late versus someone not showing up at all. Moreover, future research can consider employee responses to additional causes for meeting lateness, such as poor meeting preparation, occupied meeting rooms, and so forth.

Besides the above research ideas stemming from limitations, further future research ideas emerge given the vast potential of the meeting lateness construct coupled with its novelty. First, is there something a meeting leader can do “reset” the meeting stage after a late start? That is, meetings often start late and this may be unavoidable in some cases. The current studies did not assess meeting participants’ immediate affective reaction to the meeting starting late, but rather focused on the outcomes. Knowing how people immediately react to the lateness is a necessary first step in identifying what meeting leaders and attendees can do to mitigate the negative effects of meeting lateness. For example, previous research shows that procedural communication can inhibit negative socioemotional communication (Lehmann-Willenbrock et al., 2013), suggesting that procedural statements may serve a mitigating function against the negative effects of meeting lateness on communication practices in the meeting.

Second, another avenue for future research would be to consider the personality of the individuals experiencing lateness to meetings (i.e. the meeting leader and attendees who are waiting). For example, meeting lateness may be viewed as a counterproductive meeting behavior. Previous research on more general counterproductive work behavior has linked the personality trait narcissism to increased counterproductive behavior (Penney & Spector, 2002), whereas agreeableness and conscientiousness have shown negative linkages to counterproductive work behavior (e.g., Mount, Ilies, & Johnson, 2006). Meeting lateness as a mild form of

counterproductive behavior may be similarly affected by these personality traits. Our experiments use random assignment to conditions to help account for variations in individual differences. Future research could consider modeling personality rather than controlling for it methodologically.

Third, the current study made no explicit attempt to control for or direct participants towards who specifically was late, be that a supervisor, a colleague, or another manager. The role of the late person may very well have an impact on people's reaction to their lateness to the meeting (Mroz & Allen, 2017). It is likely that the interpersonal ramifications of arriving late to a meeting differ for employees and supervisors, but also depending upon the nature of the meeting. In a recent study by Stoverink and colleagues, the lateness of a boss was expressly manipulated as either not mattering or something worth apologizing for (Stoverink, Umphress, Gardner & Miner, 2014). These and other meeting and individual meeting participant characteristics need consideration and future research could model these differences.

Implications for practice

Several salient practical implications flow from the results of these studies. First, managers should consider the frequency of late starts they have and reflect on why this may be the case. For meeting attendee lateness, one option is to start on time regardless of those who are late. It may be that the embarrassment of arriving late will reduce the late behavior. Additionally, perhaps praise those who show up on time and talk offline with those who arrive late thus rewarding good behavior and quietly sanctioning late behavior. Perhaps most importantly, offline discussions with the chronically late meeting attendee can serve to find root causes as well as provide an opportunity to clarify expectations. For meeting leaders, knowing the negative outcomes of meeting lateness may provide some level of motivation to start the meeting on time.

Proactively, discussion of meeting start and end-time expectations could be extremely helpful for establishing desired norms.

Second, there are some process-oriented ways of managing the meeting relative to the late arrival issue. For example, meeting leaders can adjust the agenda when the meeting starts late. Specifically, they can review the agenda, deliberately jettison the less important items (e.g., items that are information and could be covered via email), and only cover the most urgent items. Then, instead of covering everything, they still provide the full amount of time necessary for the key strategic issues. Or, design the agenda so that they can start on time, but the very early issues are less strategic and less dependent on complete attendance.

Conclusion

The series of studies presented here confirms a nagging suspicion that meeting lateness is a problem not only for attendees' satisfaction but also for performance outcomes tied to meetings in a US-centric sample. As such, meeting lateness constitutes an organizational problem which is both practically and theoretically meaningful. It is our hope that these findings energize a robust program of investigating the causes and consequences of meeting lateness and helps meeting leaders and attendees cope with this ongoing apparent problem.

References

- Allen, J. A., Beck, T., Scott, C., & Rogelberg, S. G. (2014). Understanding workplace meetings: A qualitative taxonomy of meeting purposes. *Management Research Review*, *37*, 791-814. doi:10.1108/MRR-03-2013-0067
- Allen, J. A., Lehmann-Willenbrock, N., & Landowski, N. (2014). Linking pre-meeting communication to meeting effectiveness. *Journal of Managerial Psychology*, *29*, 1064-1081. doi:10.1080/00909882.2013.844847
- Bakeman, R., & Quera, V. (2011). *Sequential analysis and observational methods for the behavioral sciences*. New York, NY: Cambridge University Press.
- Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, *8*, 274-289. doi:10.1177/1094428105278021
- Blau, G. (1995). Influence of group lateness on individual lateness: A cross-level examination. *Academy of Management Journal*, *38*, 1483-1496. doi:10.2307/256867
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 349-384). San Francisco: Jossey-Bass.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, *6*, 3-5. doi:10.1177/1745691610393980

- Camerer, C. F. (2011). The promise and success of lab-field generalizability in experimental economics: A reply to Levitt and List.” In G. R. Fréchette and A. Schotter (Eds.) *The Methods of Modern Experimental Economics*, Oxford: Oxford University Press.
- Cascio, W. (1991). *Costing human resources: The financial impact of behavior in organizations* (3rd ed.). Boston, MA: Kent.
- Cheung, J. H., Burns, D. K., Sinclair, R. R., & Sliter, M. (2016). Amazon Mechanical Turk in organizational psychology: An evaluation and practical recommendations. *Journal of Business Psychology*, 1-15. doi:10.1007/s10869-016-9458-5
- Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, 25, 325–334. doi:10.1007/s10869-010-9181-6
- Cooke, R. A., & Szumal, J. L. (1994). The impact of group interaction styles on problem-solving effectiveness. *Journal of Applied Behavioral Science*, 30, 415-137. doi:10.1177/0021886394304005
- De Dreu, C. K., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: a meta-analysis. *Journal of Applied Psychology*, 88, 741-749. doi:10.1037/0021-9010.88.4.741
- Dishon-Berkovits, M., & Koslowsky, M. (2002). Determinants of employee punctuality. *Journal of Social Psychology*, 142, 723-739. doi:10.1080/00224540209603932
- Forsyth, D. R. (2010). *Group dynamics*. Belmont, CA: Wadsworth/Cengage Learning.
- O'Boyle, E. H., Forsyth, D. R., & O'Boyle, A. S. (2011). Bad apples or bad barrels: An examination of group-and organizational-level effects in the study of counterproductive

- work behavior. *Group & Organization Management*, 36, 39-69.
doi:10.1177/1059601110390998
- Goh, T. G., Fisher, C. M., & Sommer, S. A. (2015, August). To go fast, go slow: Effect of phase durations on team performance trajectories in experimentation. *Proceedings of the 75th Annual Meeting of the Academy of Management*, Vancouver.
- Goldberg, J. A. (1990). Interrupting the discourse on interruptions: An analysis in terms of relationally neutral, power- and rapport-oriented acts. *Journal of Pragmatics*, 14, 883-903. doi:10.1016/0378-2166(90)90045-F.
- Greenberg, J. (1987). The college sophomore as guinea pig: Setting the record straight. *Academy of Management Review*, 12(1), 157-159.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Horton, J. J., Rand, D. G., & Zeckhauser, R. J. (2011). The online laboratory: Conducting experiments in a real labor market. *Experimental Economics*, 14, 399-425.
doi:10.1007/s10683-011-9273-9
- Huang, J. L., Bowling, N. A., Liu, M., & Li, Y. (2014). Detecting insufficient effort responding with an infrequency scale: Evaluating validity and participant reactions. *Journal of Business and Psychology*, 1-13. doi:10.1007/s10869-014-9357-6
- Imai, M. (2012). *Gemba Kaizen: A commonsense approach to a continuous improvement strategy* (2nd ed.). New York, NY:McGraw-Hill.
- Janis, I. L. (1972). *Victims of groupthink*. Boston, MA:Houghton Mifflin.
- Jones, P. E., & Roelofsma, P. H. M. P. (2000). The potential for social contextual and group biases in team decision-making: Biases, conditions and psychological mechanisms. *Ergonomics*, 43, 1129-1152. doi:10.1080/00140130050084914

- Karim, M., Kaminsky, S., & Behrend, T. (2014). Cheating, reactions, and performance in remotely proctored testing: An exploratory experimental study. *Journal of Business & Psychology, 29*, 555-572. doi:10.1007/s10869-014-9343-z
- Kauffeld, S., & Lehmann-Willenbrock, N. (2012). Meetings matter: Effects of team meetings on team and organizational success. *Small Group Research, 43*, 130-158.
doi:10.1177/1046496411429599
- Kauffeld, S., & Meyers, R. A. (2009). Complaint and solution-oriented circles: Interaction patterns in work group discussions. *European Journal of Work and Organizational Psychology, 18*, 267-294. doi:10.1080/13594320701693209
- Koslowsky, M. (2000). A new perspective on employee lateness. *Applied Psychology: An International Review, 49*, 390-407. doi:10.1111/1464-0597.00022
- Koslowky, M., Krausz, M., Aizer, A., & Singer, A. D. (1997). Correlates of employee lateness: Some theoretical considerations. *Journal of Applied Psychology, 82*, 79-88.
doi:10.1037/0021-9010.82.1.79
- Kozlowski, S. W. J., & Bell, B. S. (2013). Work groups and teams in organizations: Review update. In N. Schmitt & S. Highhouse (Eds.), *Handbook of psychology: Vol. 12. Industrial and organizational psychology* (2nd ed., pp. 412-469). Hoboken, NJ: Wiley.
- Labianca, G., Moon, H., & Watt, I. (2005). When is an hour not 60 minutes? Deadlines, temporal schemata, and individual and task group performance. *Academy of Management Journal, 48*, 677-694. doi:10.5465/AMJ.2005.17843945
- Lehmann-Willenbrock, N. & Allen, J. A. (2014). How fun are your meetings? Investigating the relationship between humor patterns in team interactions and team performance. *Journal of Applied Psychology, 99*, 1278-1287. doi:10.1037/a0038083

- Lehmann-Willenbrock, N., Allen, J. A., & Kauffeld, S. (2013). A sequential analysis of procedural communication in organizational meetings: How teams facilitate their meetings. *Journal of Applied Communication Research, 41*, 365–388.
doi:10.1080/00909882.2013.844847
- Lehmann-Willenbrock, N., Beck, S. J., & Kauffeld, S. (2016). Emergent team roles in organizational meetings: Identifying communication patterns via cluster analysis. *Communication Studies, 67*, 37-57. doi:10.1080/10510974.2015.1074087.
- Lehmann-Willenbrock, N., & Kauffeld, S. (2010). The downside of communication: Complaining circles in group discussions. In S. Schuman (Ed.), *The handbook for working with difficult groups: How they are difficult, why they are difficult, what you can do* (pp. 33-54). San Francisco, CA: Jossey-Bass/Wiley.
- Lehmann-Willenbrock, N., Allen, J. A., & Belyeu, D. (2016). Our love/hate relationship with workplace meetings: How good and bad meeting attendee behaviors impact employee engagement and wellbeing. *Management Research Review, 39*, 1293-1312.
doi:10.1108/MRR-08-2015-0195
- Liker, J., & Franz, J. K. (2011). *The Toyota way to continuous improvement: Linking strategy and operational excellence to achieve superior performance*. Boston, MA: McGraw-Hill.
- Liu, Y., & Berry, C. M. (2013). Identity, moral, and equity perspectives on the relationship between experienced injustice and time theft. *Journal of Business Ethics, 118*, 73-83.
doi:10.1007/s10551-012-1554-5
- Mangold. (2010). *INTERACT quick start manual V2.4* (Mangold International GmbH, Ed.). Retrieved from www.mangold-international.com

- Marks, M. L., & Mirvis, P. H. (2011). Merge ahead: A research agenda to increase merger and acquisition success. *Journal of Business & Psychology, 26*, 161-168.
doi:10.1007/s10869-011-9219-4
- Meinecke, A. L., & Lehmann-Willenbrock, N. (2015). Social dynamics at work: Meetings as a gateway. In J. A. Allen, N. Lehmann-Willenbrock & S. G. Rogelberg (Eds.), *The Cambridge handbook of meeting science* (pp. 325-356). New York, NY: Cambridge University Press.
- Mitchell, G. (2012). Revisiting truth or triviality: The external validity of research in the psychological laboratory. *Perspectives on Psychological Science, 7*(2), 109-117.
- Mroz, J. E. & Allen, J. A. (2017). An Experimental Investigation of the Interpersonal Ramifications of Lateness to Workplace Meetings. *Journal of Occupational and Organizational Psychology, 90*(4), 508-534. Doi: 10.1111/joop.12183.
- O'Boyle, E. H., Forsyth, D. R., & O'Boyle, A. S. (2011). Bad apples or bad barrels: An examination of group- and organizational-level effects in the study of counterproductive work behavior. *Group & Organization Management, 36*, 39-69.
doi:10.1177/1059601110390998
- O'Neill, T. A. and Allen, N. J. (2012). Team meeting attitudes: conceptualization and investigation of a new construct. *Small Group Research, 43*, 186-210.
doi:10.1177/1046496411426485
- Porath, C. L., & Erez, A. (2007). Does rudeness really matter? The effects of rudeness on task performance and helpfulness. *Academy of Management Journal, 50*, 1181-1197.
doi:10.2307/AMJ.2007.20159919

- Rand, D. G. (2012). The promise of Mechanical Turk: How online labor markets can help theorists run behavioral experiments. *Journal of Theoretical Biology*, *299*, 172-179. doi:10.1016/j.jtbi.2011.03.004
- Rimal, R. N., & Real, K. (2003). Understanding the influence of perceived norms on behaviors. *Communication Theory*, *13*, 184-203. doi: 10.1111/j.1468-2885.2003.tb00288.x
- Rogelberg, S. G., Allen, J. A., Shanock, L., Scott, C., & Shuffler, M. (2010). Employee satisfaction with meetings: A contemporary facet of job satisfaction. *Human Resource Management*, *49*, 149-172. doi:10.1002/hrm.20339
- Rogelberg, S. G., Leach, D. J., Warr, P. B., & Burnfield, J. L. (2006). "Not another meeting!" Are meeting time demands related to employee well-being? *Journal of Applied Psychology*, *91*, 86-96. doi:10.1037/0021-9010.91.1.83
- Rogelberg, S. G., Scott, C. W., Agypt, B., Williams, J., Kello, J. E., McCausland, T., & Olien, J. L. (2014). Lateness to meetings: Examination of an unexplored phenomenon. *European Journal of Work and Organizational Psychology*, *23*, 323-341. doi:10.1080/1359432X.2012.745988
- Robinson, S. L., & O'Leary-Kelly, A. M. (1998). Monkey see, monkey do: The influence of work groups on the antisocial behavior of employees. *Academy of Management Journal*, *41*, 658-672. doi:10.2307/256963
- Robinson, S. L., Wang, W., & Kiewitz, C. (2014). Coworkers behaving badly: The impact of coworker deviant behavior upon individual employees. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*, 123-143. doi:10.1146/annurev-orgpsych-031413-091225

- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 173-220). New York, NY:Academic Press.
- Schulte, E.-M., Lehmann-Willenbrock, N. & Kauffeld, S. (2013). Age, forgiveness, and meeting behavior: A multilevel study. *Journal of Managerial Psychology*, 28, 928-949.
doi:10.1108/JMP-06-2013-0193
- Shapiro, D. N., Chandler, J., & Mueller, P. A. (2013). Using Mechanical Turk to study clinical populations. *Clinical Psychological Science*, 1, 213-220.
doi:10.1177/2167702612469015.
- Sonnentag, S. (2001). High performance and meeting participation: An observational study in software design teams. *Group Dynamics: Theory, Research, and Practice*, 5, 3–18.
doi:10.1037/1089-2699.5.1.3
- Stoverink, A. C., Umphress, E. E., Gardner, R. G., & Miner, K. N. (2014). Misery loves company: Team dissonance and the influence of supervisor-focused interpersonal justice climate on team cohesiveness. *Journal of Applied Psychology*, 99(6), 1059-1073.
- Sunwolf, & Frey, L. R. (2005). Facilitating group communication. In S. Wheelan (Ed.), *The handbook of group research and practice* (pp. 485–509). Thousand Oaks, CA: Sage.
- Swaab, R. I., Phillips, K. W., Diermeier, D., & Medvec, V. H. (2008). The pros and cons of dyadic side conversations in small groups: The impact of group norms and task type. *Small Group Research*, 39, 372-390. doi:10.1177/1088868311417186
- Zijlstra, F. R., Waller, M. J., & Phillips, S. I. (2012). Setting the tone: Early interaction patterns in swift-starting teams as a predictor of effectiveness. *European Journal of Work and Organizational Psychology*, 21, 749-777. doi:10.1080/1359432X.2012.690399

Table 1

Base Rate Analysis of Meeting Lateness

| | Lateness Category | | |
|--|--------------------------|----------------------------|---------------------------|
| | % On Time Start | % Five Minutes Late | % Ten Minutes Late |
| Overall | 48.8 | 36.9 | 14.2 |
| Organization Type | | | |
| For Profit Publicly Traded (n = 45) | 51.1 | 40 | 8.9 |
| For Profit Privately Held (n = 110) | 51.8 | 36.4 | 11.8 |
| Nonprofit Private (n = 39) | 46.2 | 41 | 12.8 |
| Public Sector (e.g., government) (n = 48) | 43.8 | 31.3 | 24.9 |
| Organization Size | | | |
| 0-50 (n = 60) | 51.7 | 35.6 | 12.7 |
| 50-250 (n = 65) | 39.1 | 37.7 | 23.2 |
| 251 and larger (n = 61) | 52.5 | 39.3 | 8.2 |
| Job Level | | | |
| Employee Associate (n = 123) | 44.7 | 39 | 16.3 |
| Supervisor (n = 51) | 47.1 | 41.2 | 11.8 |
| Manager (n = 63) | 56.6 | 30.3 | 13.2 |

Note. N = 252; small “n” indicates number of participants in that category; Organization size analyzed by quartile

Table 2

Means, Standard Deviations, and Intercorrelations of all Measures for Study 1

| | M | SD | 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|--------------------------|-------|-------|-------|-------|------|------|------|------|----|
| 1. Meeting satisfaction | 3.29 | .94 | (.92) | | | | | | |
| 2. Meeting effectiveness | 3.73 | .90 | .68* | (.90) | | | | | |
| 3. Tenure | 5.46 | 5.52 | .01 | .05 | - | | | | |
| 4. Job level | 1.94 | 1.13 | .23* | .13* | .20* | - | | | |
| 5. Age | 36.90 | 11.68 | -.02 | -.04 | .46* | .02 | - | | |
| 6. Sex | 1.58 | .49 | -.04 | .04 | .02 | -.11 | .14* | - | |
| 7. Education | 4.01 | 1.21 | .08 | .11 | .07 | .13* | .11 | -.02 | - |

Notes. Diagonal values are the internal consistency estimates for each scale. $N = 252$. * $p < .05$ (2-tailed).

Table 3

Multilevel regression results of the relationship between meeting lateness and anticipated perceived meeting outcomes

| | Perceived Meeting Satisfaction | | Perceived Meeting Effectiveness | |
|---------------------------|--------------------------------|-----|---------------------------------|-----|
| | <i>b</i> | SE | <i>b</i> | SE |
| Intercept (b_{00}) | 3.32** | .12 | 3.38** | .13 |
| <i>Level 2 Predictors</i> | | | | |
| Five Late (b_{01}) | -.29 | .16 | -.22 | .17 |
| Ten Late (b_{02}) | -.38* | .15 | -.57** | .17 |

Note. Level 1 $N = 73$; Level 2 $N = 15$. ** $p < .01$, * $p < .05$. Level-2 predictors were grand mean centered. Values (b 's) are unstandardized regression coefficients. Meeting lateness was dummy coded with on-time being the reference point.

Table 4

Sample Transcript from a Group in the 10 Minutes Late Condition (Study 3)

| Event # | Speaker | | act4teams code |
|---------|---------|---|-------------------|
| 68 | C | Huh? | Question |
| 69 | E | Does anyone know why we're doing this? | Question |
| 70 | C | It's just like - we'll have to discuss it (the meeting task at hand). | Opinion |
| 71 | B | I really could care less right now. | Feedback |
| 72 | C | [laughs] | |
| 73 | E | [laughs] | |
| 74 | C | What else do you have to do today? | Question |
| 75 | B | Sleep. | Knowledge/info |
| ... | | | |
| 130 | B | Are we <i>seriously</i> still waiting for this person! | Criticizing |
| 131 | C | Yeah. | Active listening |
| 132 | B | [mumbles] | |
| ... | | | |
| 245 | E | This is fantastic. | Criticizing |
| 246 | D | This is such a waste of time. | Criticizing |
| 247 | B | [mumbles] | |
| 248 | All | [all talking at same time] | Side conversation |
| ... | | | |

Note. Excerpt from the pre-meeting (waiting) phase. Events and annotations for verbal statements according to the act4teams coding scheme. For details on the coding scheme, see Kauffeld and Lehmann-Willenbrock (2012). Unitizing and coding was performed using INTERACT software (Mangold, 2010) rather than transcribing all verbal content; transcripts are provided here for illustrative purposes only.

Table 5

Means and Standard Deviations for Focal Variables in Study 3

| Variable | Condition | Mean | Std. Deviation |
|-----------------------|-------------------|-------|----------------|
| Meeting Satisfaction | Control | 3.78 | .395 |
| | Five Minutes Late | 3.69 | .346 |
| | Ten Minutes | 3.36 | .433 |
| Meeting Effectiveness | Control | 3.61 | .343 |
| | Five Minutes Late | 3.48 | .301 |
| | Ten Minutes Late | 3.31 | .298 |
| Quality | Control | 26.0 | 12.19 |
| | Five Minutes Late | 18.88 | 8.82 |
| | Ten Minutes Late | 16.43 | 7.71 |
| Feasibility | Control | 27.31 | 13.06 |
| | Five Minutes Late | 20.81 | 8.48 |
| | Ten Minutes Late | 17.38 | 8.76 |
| Number of Ideas | Control | 34.13 | 16.32 |
| | Five Minutes Late | 26.44 | 9.69 |
| | Ten Minutes Late | 22.44 | 8.94 |

Notes. $N = 270$; Control $n = 16$; five minutes late condition $n = 16$, ten minutes late condition $n = 16$.

Table 6

Multilevel regression results of the relationship between meeting lateness and actual perceived meeting outcomes

| | Perceived Meeting Satisfaction | | Perceived Meeting Effectiveness | |
|---------------------------|--------------------------------|-----|---------------------------------|-----|
| | <i>b</i> | SE | <i>b</i> | SE |
| Intercept (b_{00}) | 3.77** | .09 | 3.60** | .07 |
| <i>Level 2 Predictors</i> | | | | |
| Five Late (b_{01}) | -.09 | .13 | -.12 | .11 |
| Ten Late (b_{02}) | -.41** | .13 | -.28* | .10 |

Note. Level 1 $N = 270$; Level 2 $N = 48$. ** $p < .01$, * $p < .05$. Level-2 predictors were grand mean centered. Values (b 's) are unstandardized regression coefficients. Meeting lateness was dummy coded with on-time being the reference point.