

RESEARCH ARTICLE

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

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## Summary

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 2 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 were significantly lower when meetings started late. In Study 3, participants holding actual group meetings were randomly and blindly assigned to either a 10 min late, 5 min 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

group performance, group processes, lateness, meetings, meeting satisfaction

## 1 | INTRODUCTION

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 5 to 10 min after the scheduled beginning of the meeting (Rogelberg et al., 2014). In a second study, the authors found that personal meeting lateness behavior was 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 that 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 premeeting 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).

## 2 | 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 also 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 also 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 indicate 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, Allen, et al., 2016; Lehmann-Willenbrock & Kauffeld, 2010). 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 that 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 that 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.*

### 3 | 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.

#### 3.1 | 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 et al. (2014) discusses how the counterproductive behaviors of co-workers 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, Phillips, 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, 2003). 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 premeeting 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 5 min) compared to earlier (first 5 min) 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 premeeting experiences also suggests that what happens prior to a meeting significantly affects the meeting experience itself (Allen, Beck, Scott, & Rogelberg, 2014). When meetings start late, the negative tone set during the premeeting 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).*

### 3.2 | 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 (Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock, Allen, & Kauffeld, 2013; 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.*

## 4 | 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, 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 Mechanical Turk (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 or 10 min late (Rogelberg et al., 2014). Placement of the lateness question in this way helped to ensure that priming effects were not influencing the ratings of the meeting generally. Response options included “No,

everyone was on time," "Yes, 5 min late," and "Yes, 10 min 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 5 min late ( $n = 93$ ), and the meeting began 10 min late ( $n = 36$ ). The use of 5 min 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, et al., 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.

## 5 | 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 that lateness to workplace meetings occurs regardless of the specific purpose for which a meeting is held.

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 Confirmatory Factor Analysis 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, analysis of covariance was 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 5-min-late condition being second highest ( $M = 3.04$ ,  $SD = .89$ ) and the 10-min-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 5-min-late condition being the second highest ( $M = 3.66$ ,  $SD = .73$ ) and the 10-min-late condition reporting the lowest mean levels ( $M = 3.25$ ,  $SD = .97$ ).

**TABLE 1** Base rate analysis of meeting lateness

	Lateness category		
	% on time start	% 5 min late	% 10 min 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	-

Note. Diagonal values are the internal consistency estimates for each scale.  $N = 252$ .

\* $p < .05$  (two-tailed).

Two analysis of covariances were used to test mean differences in meeting satisfaction and meeting effectiveness across the groups. For meeting satisfaction, significant mean differences were found,  $F(2, 38) = 9.77$ , 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 5- and 10-min-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 5-min-late group did not experience significantly lower meeting effectiveness; however, the 10-min-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.

## 6 | 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 5-min-late condition ( $n = 25$ ) began once the confederate arrived after 5 min. The 10-min-late condition ( $n = 22$ ) began once the confederate arrived after 10 min. The

participants were required to wait for the confederate to arrive. Note that steps were taken to ensure that the confederate was identical across conditions (e.g., same person, same clothes, same book bag, etc.). 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 et al., 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.

### 6.1 | 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).

### 6.2 | 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, 5 min late, and 10 min late).

## 7 | 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 multilevel 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 5 min late, and 3 as 10 min 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 5-min-late condition being second highest ( $M = 3.02$ ,  $SD = .53$ ) and the 10-min-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 5-min-late condition being the second highest ( $M = 3.14$ ,  $SD = .68$ ) and the 10-min-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 10-min-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.

## 8 | 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 ( $n = 90$ ), 5 min late ( $n = 88$ ), or 10 min late ( $n = 92$ ). There were 16 groups per condition, and each group was composed of five or six 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 predefined time (i.e., 5 or 10 min), the researcher indicated that 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-min 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 min, participants in the 5-min-late group started late and were given 25 min, and participants in the 10-min-late group started late and were given 20 min. 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

**TABLE 3** Multilevel regression results of the relationship between meeting lateness and anticipated perceived meeting outcomes

	Perceived meeting satisfaction		Perceived meeting effectiveness	
	b	SE	b	SE
Intercept ( $b_{00}$ )	3.32**	.12	3.38**	.13
Level 2 predictors				
5 min late ( $b_{01}$ )	-.29	.16	-.22	.17
10 min late ( $b_{02}$ )	-.38*	.15	-.57**	.17

Note. 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. Level 1,  $N = 73$ ; Level 2,  $N = 15$ .

\* $p < .05$ ./ \*\* $p < .01$ .

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.

## 8.1 | Coding premeeting interaction behavior

We conducted an in-depth social interaction analysis of the premeeting phases in the 10-min-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 longer premeeting 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-min-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 premeeting period of these groups. The categorization of dysfunctional socioemotional behaviors that 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-min premeeting segment in each of the 16 videos of the 10-min-late condition. They also coded the interaction during the actual meeting itself in both the 10-min-late and the control condition. Coders were naïve to the study hypotheses. Behavior unitizing and coding were 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 interrater 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 et al., 2013). We obtained an overall interrater reliability of  $\kappa = .89$ . Any disagreements between the raters were resolved by discussions.

For the 10-min-late condition, we first compared frequencies of negative socioemotional behaviors in the first 5 min to those frequencies observed in Minutes 6–10 of the premeeting 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 interrater 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.

## 9 | RESULTS OF STUDY 3

### 9.1 | 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-min-late condition. Across all groups ( $n = 16$ ) in the 10-min-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 5 min. 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 5 min of the



waiting period ( $Z = -2.60, p < .01$ ), which lends support to H3. Table 4 further illustrates this finding.

Next, we compared the frequency of observed negative socioemotional behaviors during the actual meeting, in the 10-min-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-min 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 was 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 10 min late, compared to those who started on time ( $t = -2.51, p < .05, df = 27$ ). These findings lend some support to H4a.

## 9.2 | 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-min-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-min-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.

## 9.3 | Effects of lateness on objective group performance outcomes

Because of the design of Study 3, we were able to retest H1a and H1b and 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.

For the retest of H1a and H1b, we proceeded similarly to Study 2 and used 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, 5 min late, or 10 min late and was dummy coded with the control

**TABLE 4** Sample transcript from a group in the 10-min-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 seriously 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 premeeting (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 were 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
	5 min late	3.69	.346
	10 min late	3.36	.433
Meeting effectiveness	Control	3.61	.343
	5 min late	3.48	.301
	10 min late	3.31	.298
Quality	Control	26.0	12.19
	5 min late	18.88	8.82
	10 min late	16.43	7.71
Feasibility	Control	27.31	13.06
	5 min late	20.81	8.48
	10 min late	17.38	8.76
Number of ideas	Control	34.13	16.32
	5 min late	26.44	9.69
	10 min late	22.44	8.94

Note. N = 270; Control, n = 16; 5-min-late condition, n = 16; 10-min-late condition, n = 16.

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 10-min-late condition ( $b_{02} = -.41$  and  $-.28$ , respectively,  $p < .05$ ), as compared to the control condition.

For H5 concerning group performance, multivariate analysis of variance was used to test mean differences in quality, feasibility, and number of ideas across all the groups. Multivariate analysis of variance 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

**TABLE 6** Multilevel regression results of the relationship between meeting lateness and actual perceived meeting outcomes

	Perceived meeting satisfaction		Perceived meeting effectiveness	
	b	SE	b	SE
Intercept ( $b_{00}$ )	3.77**	.09	3.60**	.07
Level 2 predictors				
5 min late ( $b_{01}$ )	-.09	.13	-.12	.11
10 min late ( $b_{02}$ )	-.41**	.13	-.28*	.10

Note. 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. Level 1, N = 270; Level 2, N = 48.

\* $p < .05$ . \*\* $p < .01$ .

group performance variables, respectively. Post hoc analyses show that compared to the control condition, only the 10-min-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 min late  $SD = 2.44$ , and 10 min 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.

## 10 | 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.

### 10.1 | 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 postmeeting 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 premeeting 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 premeeting communication for the actual meeting itself (Allen, Lehmann-Willenbrock 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; Schulte et al., 2013). Additionally, our finding that meetings starting 10 min late significantly impaired meeting processes and meeting effectiveness whereas "mild" meeting lateness (i.e., 5 min 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 10 min late apparently violates norms for appropriate behavior in organizations related to group meetings, whereas starting 5 min 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, 1995).

## 10.2 | 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 Studies 2 and 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 although it appears that lab-based work is indeed quite generalizable (Camerer, 2011; Greenberg, 1987), 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 5 or 10 min 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 min late, the others might decide to start without that person—or call the meeting off.

Further, the manipulation of lateness from Studies 2 to 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 and 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, etc.) but rather with the outcomes of meeting lateness. Although our Studies 2 and 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, Umphress, Gardner, & Miner, 2014, the lateness of a boss was expressly manipulated as either not mattering or something worth apologizing for. These and other meeting and individual meeting participant characteristics need consideration, and future research could model these differences.

### 10.3 | 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.

## 11 | 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 U.S.-centric sample. As such, meeting lateness constitutes an organizational problem that 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 help meeting leaders and attendees cope with this ongoing apparent problem.

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