ScholarOne - On time online? Effects of lateness on satisfaction in virtual student meetings

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Abstract

Since the COVID-19 pandemic, student online meetings have become increasingly common. This study investigates whether previously found negative effects of meeting lateness on meeting satisfactions can be found in the context of virtual student meetings. In an online study, students from Germany and Italy (N = 279) rated their last meeting experience. We investigate the prevalence of delays in student online meetings and their relationship with participants’ process and outcome satisfaction. About 26 % of virtual student meetings were delayed. Satisfaction with the process and output was significantly lower in late (vs. on-time) meetings. No differences between countries were found.

Keywords: online meeting, meeting satisfaction, meeting lateness, student meetings, country comparison

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Abstract

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On time online? Effects of lateness on satisfaction in virtual student meetings

In the wake of the COVID-19 pandemic, higher education institutions were challenged to implement new digital teaching and learning methods (Mishra et al., 2020). Students attended online lectures and held group project meetings via digital tools. Even before, the technology industry for online meetings had experienced tremendous growth (Sox et al., 2017) and by now digital tools to conduct meetings are commonplace (Reed & Allen, 2021). This provides many benefits (e.g., better organization, mobile working) as well as challenges (Briggs et al., 2006), such as virtual meeting fatigue (Shockley et al., 2021), underdeveloped digital skills (Bennett et al., 2008; Hatlevik et al., 2015), and access dependencies (Blanchard & McBride, 2020). The time spent in meetings has changed as well, with an increase in meeting frequency, and a 10 % decline in meeting duration, compared to the pre-pandemic period (DeFilippis et al., 2020). While a large body of literature investigates in-person meetings and their characteristics, these findings have limited applicability to virtual meetings (Reiter-Palmon et al., 2021). In this paper, we present data on virtual student meetings,
focusing on the characteristic of meeting lateness. Specifically, we investigate whether lateness in online meetings is negatively related to meeting satisfaction in an international student sample.

Theoretical background

We conceptualize meetings within the input-process-output model (IPO model; McGrath, 1964). This heuristic concept represents the relationship between input variables (input), group interactions (process), and group outcomes (output). Time factors, such as meeting lateness, and other so-called design criteria (Kauffeld & Sauer, 2021; Cohen et al., 2011) are input variables that can affect the process and output of a virtual student meeting (Leach et al., 2009), while satisfaction with the process and outcome of the meeting are components of the output of the meeting.

Internationally, about half of all meetings start late (Allen et al., 2021; Rogelberg et al., 2014). Lateness is generally viewed as counterproductive, but unlike absenteeism, it tends to be tolerated (Rogelberg et al., 2014; Dishon-Berkovits & Berkovits, 1997) and is seldomly sanctioned (Koslowski, 2000), encouraging future delay behavior (Blau, 1995). Meeting lateness has been shown to negatively impact meeting experiences (Allen et al., 2018). While previous research on meeting lateness has focused primarily on the professional context, lateness also occurs in the educational context (Back et al., 2006; Werner et al., 2014). Generally, good time management positively affects student performance (Nasrullah & Khan, 2015) and impressions from educational meetings lay the foundation for later work experience (Iksan et al., 2012). Moreover, as typical participants in psychological studies, students should be of particular interest and add other formats to previous meeting research (Rogelberg et al., 2014; Dipboye & Flanagan, 1979). Therefore, this paper will expand research questions on meeting lateness examined in the professional context to the educational context.

A subjective measure of meeting effectiveness is the satisfaction of participants with the meeting (Burba, 2017). Meeting satisfaction influences how engaged participants are with the organization and how committed they are to their work (Rogelberg et al., 2010). Moreover, meeting satisfaction is related to participant interaction in the meeting (Kauffeld, 2006) and empowerment during subsequent work processes (Allen et al., 2016). The importance here lies in the potential for current as well as future collaboration (Hackman, 2012): Those who are satisfied with the current work in the team will also be happy to work together in the future. However, studies suggest that more than half of participants are dissatisfied with their meetings (Geimer et al., 2015).

Meeting lateness as an input variable is related to negative interpersonal relationships, lower group cohesion and lower meeting effectiveness as process and output variables (Allen et al., 2021; Koslowsky, 2000; Rogelberg et al., 2014). If delays occur, meeting participants are more likely to be frustrated (Mroz & Allen, 2017). In an experimental laboratory study, students showed more negative socio-emotional behaviors (e.g., interrupting each other) in meetings that started late (Allen et al., 2018). If meeting lateness occurs, the resulting overlength (i.e., making up for the delay) often creates stress for participants to complete routine activities and decreases their subsequent work engagement (Lehmann-Willenbrock et al., 2017). This meeting recovery syndrome poses a health risk (Schulte et al., 2013) and can lead to turnover intentions on the part of participants (Rogelberg et al., 2006; 2010) and poor decision-making in organizations (Tropman, 2014). It demonstrates that meeting lateness as a seemingly trivial violation of meeting rules can have wide-ranging consequences.

Although meeting research often draws on the construct of satisfaction, there has been no consistent approach to measuring it (Briggs et al., 2012; Mejias, 2007). Some studies describe meeting satisfaction merely as a special facet of general job satisfaction (Cohen et al., 2011), while others use an affective approach (Reinig, 2003) in which satisfaction with the meeting process (SP) and satisfaction with the meeting outcome (SO) are differentiated. SP refers to satisfaction with the interactions during the meeting, while SO describes the participants’ attitude towards the achieved goals. The separate measurement of process and outcome satisfaction is not consistently practiced (e.g., Rogelberg et al., 2010; Wageman et al., 2005), even though
Briggs and de Vreede (1997) and Reinig (2003) warn that the lack of distinction can lead to false predictions. Satisfaction with the process does not necessarily establish satisfaction with the outcome (and vice versa). In addition to SP and SO, the perceived goal attainment of the participants (PGA; perceived net goal attainment) is measured. PGA includes the change in judgment of the likelihood of achieving goals within a given time period (e.g., the duration of a meeting; Briggs et al., 2003).

**Current study**

In the current study, we extend previous research on the relationship between meeting lateness and meeting satisfaction to the study of virtual student meetings (Lehmann-Willenbrock & Allen, 2020). We conduct an online survey in an international student sample (Germany and Italy) to gain insights into the prevalence of meeting lateness in virtual student meetings as well as its relationship with meeting satisfaction. Additionally, we explore how students appraise meeting lateness. Derived from previous research on meeting lateness, a lateness rate of about 40% is expected (Allen et al., 2021). However, due to the flexibility of student compared to professional life, somewhat weaker correlations of lateness with the process and output variable of meeting satisfaction are expected than is known from the workplace (Werner et al., 2014).

**Hypothesis 1**: Lateness occurs widely (40%) in virtual student meetings.**Hypothesis 2**: Satisfaction with perceived meeting process (SP) will be significantly lower in late meetings than in on-time meetings.**Hypothesis 3**: Satisfaction with perceived meeting outcome (SO) will be significantly lower for late meetings than for on-time meetings.**Hypothesis 4**: Perceived goal achievement (PGA) is significantly lower in late meetings than in on-time meetings.

Perceptions of lateness are not the same everywhere (van Eerde & Azar, 2020; White et al., 2011). Across contexts and cultures, different values are shaped to guide individual experiences (Minkov & Hofstede, 2012; Javidan et al., 2006). However, practices shared in the globalization process are increasingly aligning experiences (Adler & Aycan, 2018). In a study by Allen and colleagues (2021), no differences in meeting lateness across five countries were found, including Italy and Germany. For the younger generation, the confluence can be assumed to be even stronger (Eringa et al., 2015).

**Comparisons**: There is no difference in the association of meeting lateness with the constructs of meeting satisfaction between the countries Italy and Germany.

**Method**

An online survey was conducted as commonly used in meeting research (for advantages and disadvantages, see Wagner-Schlewsky & Hering, 2019). Previous studies on meeting lateness suggest that results from experimental settings (e.g., Allen et al., 2018) and online surveys (e.g., Allen et al., 2021) are equally valid. The survey was conducted using the tool soSci-Survey (Leiner, 2019) and followed a 2x2 between-subjects design (meeting: on time vs. late; country: Germany vs. Italy). Participants could choose between a German, English, or Italian language version of the survey. Participation in the survey was possible over a two months period from March to May 2022. Data collection and data analysis procedures in this study were approved by the Ethics Committee [details omitted for double-anonymized peer review] (proposal 297). The study was preregistered [link omitted for double-anonymized peer review]. All materials, raw data files, as well as the used analysis script can be found in our OpenScienceFramework project: https://s.gwdg.de/FEIU7k [anonymized link for peer-review].

**Sample**

According to an a priori power analysis calculated using G*Power (Faul et al., 2009) for a two-factor analysis of variance, at least a total of $N = 128$ participants were required ($f = .25, 1-\beta = .80, \alpha = .05$). We expected a moderate effect size and approximately equal group sizes in each design cluster (cf. Allen et al., 2021).
Participants were recruited online via posts published on web portals. After opening the survey link, participants selected their preferred language (German, English, Italian). Participation was not compensated. Completion of the survey was estimated to take five minutes, though participants took about 2.5 minutes on average \( (M = 165.48 \text{ seconds}; SD = 63.82) \).

The link to the questionnaire was accessed a total of 709 times during the survey period of which 482 surveys were started. Overall, 303 participants fully completed the survey (37.14 % drop out), of which 279 participants (77.42 % women, 20.07 % men, 1.43 % diverse, 1.08 % no gender; age: \( M = 25.1 \text{ years}, SD = 4.82, \text{ range: 19-57 years} \) ) were included in the analysis. Participants were excluded if no written consent was given \( (n = 2) \) or if participants did not study in either Italy or Germany \( (n = 22) \). All included participants gave written consent to participate in the survey. Of the 279 participants, 141 had studied in Germany and 138 in Italy during the last six months; 141 participants (50.54 %) chose the German version of the survey, 129 participants (46.24 %) chose Italian, and 9 participants chose the English version. Participants studied law, economics, and social sciences (29.03 %), humanities (25.81 %), mathematics and natural sciences (11.11 %), human medicine and health sciences (9.68 %), engineering (2.51 %), arts and art science (1.79 %), agriculture, forestry, nutrition and veterinary medicine (1.43 %), sports (0.72 %), and other disciplines (17.92 %).

**Operationalization and measurement**

To reflect the diversity of meeting formats, *meetings* were broadly defined as the ”most recent online meeting in an educational context that lasted longer than 15 minutes and involved at least three people.” A similar description can be found in prior research (e. g., Crowe et al., 2019; Allen et al., 2021).

Participants’ *meeting satisfaction* was assessed using Briggs et al.’s (2003) twelve-item comprehensive scale. For the analyses, the four-item subscales of SP, SO and PGA were treated as individual constructs. This validated scale has already been used across countries (cf. Briggs et al., 2006; Reinig et al., 2009). Items were answered using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree).

*Meeting lateness* was operationalized as a dichotomous item (”Did the meeting start late?”). This is also found in other studies (e.g., Rogelberg et al., 2014), where the duration of the delay was to be entered as free text rather than given as a cut-off (e.g., five- or ten-minute delay in Allen et al., 2018). Expanding on Allen et al.’s (2021) operationalization, participants were asked to name reasons for the delay as an exploratory variable that was not presumed to be person-specific. The subjective perception of lateness was exploratively addressed (”A lateness of . . . minutes in an online meeting in an educational context represents unpunctuality for me.”). Similar approaches can be found in Rogelberg et al. (2014) and van Eerde and Azar (2020).

*Cultural context* was operationalized in line with Allen et al. (2021) study via the following item: ”In which country did you mainly study in the last six months?” As control variables, the number of participants, meeting duration, and number of meetings per week were recorded as control variables. Demographic variables (i.e., age, gender, study major) were also collected.

The questionnaire was initially prepared in English and translated to German and Italian by the first author. Translations were validated using a simple back-translation (Wendt-Hildebrand et al., 1983) by independent translators who had the linguistic qualifications and a required cultural understanding. A pilot test was carried out to test the functionality and comprehensibility of the questionnaire.

**Analysis**

Statistical analysis was performed using the open-source software R (R Core Team, 2017). The detected statistical outliers \( (n = 11 \text{ cases considering an interquartile range of } 1.5) \) were not excluded for the main analysis, as indicated in the preregistration (even when excluded, the results do not change notably).
Assumptions of the two-factor ANOVA (Hays, 1978) were checked. A left skewed distribution is present for all constructs of meeting satisfaction. The data is not normally distributed according to the Shapiro-Wilk test (for SP, SO and PGA: \( p < .001 \)). The variances are also not equal according to Levene’s test (exemplary for PGA: interaction \( F(3, 275) = 4.622, p = .004 \); PE land \( F(1, 277) = .005, p = .942 \); PE delay \( F(1, 277) = 13.089, p = .0004 \)). Further challenges arise from the unbalanced design that could not be influenced due to the correlative nature of our study. Consequently, the planned analysis was discarded and a non-parametric procedure was applied with the correction of degrees of freedom according to Box (1953), in which no such distributional assumptions apply (Seistock et al., 2021). An overview of the procedure and the functions is given by Lüpsen (2021a; 2021b).

## Results

### Meeting characteristics

The number of meeting participants ranged from 3 to 200 people (\( M = 18.99, SD = 27.24 \)). Meetings lasted from 15 to 480 minutes (\( M = 93.44, SD = 68.16 \)). Per week, students attended about 3 meetings (\( M = 3.17; SD = 2.90 \)). Students reported using the following communication tools: ZOOM (41.58 %), Microsoft Teams (21.86 %), Google Meet (16.85 %), BigBlueButton (13.62 %), Cisco Webex Meeting (2.87 %), Skype (0.72 %), GoToMeeting (0.36 %), and TeamViewer (0.36 %; 1.79 % other tools).

### Meeting lateness and temporal design characteristics

Only 73 (26.16 %) meetings started late which was significantly lower than the expected 40 % (\( p < .001 \)). Therefore, Hypothesis 1 could not be supported. Delays were between 1 and 30 minutes long (\( M = 9.25, SD = 5.48 \)) and were addressed in 24 of 73 meetings (32.87 %). As reasons for the delay, 60 participants (82.19 %) named the absence of individual persons. Delays were also caused by technical reasons (19.18 %) or a preliminary discussion (19.18 %), missing materials (1.37 %) and other reasons (e.g., misunderstandings; 6.85 %). Meetings were terminated at the scheduled time in 133 cases (47.67 %; before the scheduled time: 7.16 %; later: 19 %). 73 people (26.16 %) stated that there was no predetermined end. Participants indicated that they classify a meeting as late if it starts between zero and 180 minutes after the scheduled time (\( M = 11.82, SD = 12.61 \)). The country-specific characteristic values are shown in Table 1.

| Country-specific values of meeting characteristics and meeting lateness |
|--------------------|--------------------|
| **Germany**        | **Italy**          |
| Size               | 16.79 people (\(SD = 21\)) | 21.24 people (\(SD = 21\)) |
| Duration           | 103.37 minutes (\(SD = 75.8\)) | 83.3 minutes (\(SD = 57.8\)) |
| Frequency          | 3.59 meetings per week (\(SD = 3.18\)) | 2.74 meetings per week (\(SD = 3.18\)) |
| Late Start         | 32-times (22.7 %) with 7.88 (\(SD = 6.22\)) minutes; addressed 17-times (53.1 %) | 32-times (22.7 %) with 10.32 (\(SD = 4.64\)) minutes; addressed 7-times (23.4 %) |
| End                | 39.0 % planned, 29.1 % not determined, 8.5 % earlier, 23.4 % later | 39.0 % planned, 29.1 % not determined, 8.5 % earlier, 23.4 % later |
| Subjective Tolerance Threshold | 7.53 minutes (\(SD = 4.27\)) | 7.53 minutes (\(SD = 4.27\)) |

Note: Delays of students in Germany are assessed as such significantly earlier (\( t(151.38) = -6.033; p < 0.001 \)) and addressed more frequently (\( \chi^2(1) = 9.04, p < .005 \)) than by students in Italy.
Meeting satisfaction

The results of the construct-specific satisfaction measurement can be seen in Table 2 and Figure 1 for the groups with and without delay in Germany and Italy. The correlations between the control variables and meeting satisfaction were only small. The explained variance amounted to less than 5% (exemplary for PGA: participants: $R^2 = -.002, p = .516$; duration: $R^2 = .004, p = .913$; frequency: $R^2 = -.004, p = .894$). Hence, we assume only a weak relationship between the control variables as further meeting characteristics and meeting satisfaction.

On average, participants rated their satisfaction with the meeting process (SP) as 4.71 ($SD = 1.44$) on a 7-point Likert scale. According to the Box F test, participants of meetings that started late were less satisfied with the meeting process ($F (1, 275) = 6.98, p = .008$) though the effect is small ($\eta^2_{\text{partial}} = .025$). Therefore, Hypothesis 2 was accepted. Neither significant differences between countries ($F (1, 275) = .02, p = .887$) nor an interaction effect ($F (.94, 275) = 2.53, p = .113$) could be found.

Participants rated their satisfaction with the meeting outcome (SO) as 4.77 on average ($SD = 1.50$). Participants in meetings that started late were less satisfied with the meeting outcome, according to the Box F test ($F (1, 275) = 5.16, p = .023$) with a small effect ($\eta^2_{\text{partial}} = .019$). Therefore, Hypothesis 3 was accepted. Neither significant differences between countries ($F (1, 275) = .02, p = .874$) nor an interaction effect ($F (.94, 275) = 1.71, p = .191$) could be found.

Participants rated their individual goal achievement (PGA) as 4.67 on average ($SD = 1.48$). According to the Box F test, participants rated PGA lower if they had participated in a meeting that started late ($F (1, 275) = 5.77, p = .017$). The effect was small ($\eta^2_{\text{partial}} = .021$). Therefore, Hypothesis 4 was accepted. Neither significant differences between countries ($F (1, 275) = .36, p = .549$) nor an interaction effect ($F (.93, 275) = .35, p = .539$) could be found. In summary, no differences regarding all three variables SP, SO and PGA were found between the national samples, which means that hypothesis 5 can be accepted.

Table 2

<table>
<thead>
<tr>
<th>Overview of average meeting satisfaction per group</th>
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<tbody>
<tr>
<td>Germany</td>
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<tr>
<td>On-time</td>
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<tr>
<td>SP</td>
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<tr>
<td>SO</td>
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<tr>
<td>PGA</td>
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</tbody>
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Figure 1

Meeting satisfaction with the process (SP), with the outcome (SO), and with the perceived net goal-attainment (PGA) in the respective groups.

[insert Figure 1 here]

Discussion

This study aimed to extend research on the relationship between meeting lateness and meeting satisfaction to virtual student meetings. In an online survey conducted in an international sample of German and
Italian students, the prevalence of meeting lateness and meeting satisfaction were assessed, differentiated into satisfaction with the process, with the outcome, and with personal goal attainment.

**Prevalence of Meeting Lateness**

Every fourth virtual student meeting starts late, even though the lateness rate is below the 40% found across analog meetings in the professional context (cf. Allen et al., 2021). Therefore, we reject Hypothesis 1. One explanation for the low prevalence of meeting lateness rate could be that students tend to have fewer meetings during the week so that each meeting can be scheduled more easily (cf. Rogelberg et al., 2006). However, no correlation between the surveyed meeting characteristics (i.e., meeting frequency, duration, and size) and the occurrence of meeting lateness was found. This contradicts Rogelberg and colleagues’ (2014) hypothesis of cumulative individual lateness, according to which the probability of lateness should increase with the number of participants. Virtual student meetings seem to be typically larger than in the professional context (DeFilippis et al., 2020) and at the same time less dependent on the appearance of all participants (Hambrick et al., 1996). It could be that the operationalization of a meeting was understood to also include lectures and seminars. Moreover, due to the online context, the operational definition of meeting lateness here refers to the timed start of the meeting and not only to the arrival of individual participants. Socio-contextual factors, such as type of meeting (e.g., lecture vs. group-project meeting) and participants status (lecturer vs. student) are therefore subordinated to temporal factors. The perception of time constructs in this framework differs from that of traditional work experience, so delays may not be directly appraised as such (White et al., 2011). For example, a meeting might start late due to a pre-meeting conversation among the project group. However, this pre-meeting conversation may also provide a bridging effect that positively impacts the meeting experience while additional participants arrive (Yoerger et al., 2018). Therefore, an objective delay of five minutes need not correspond to a subjective delay of five minutes (White et al., 2011).

The subjective appraisals of meeting lateness (i.e., “When is a meeting late?”) differed among participants in this study, even though the average tolerance threshold is comparable to the tolerance threshold of around ten minutes at the workplace (Allen et al., 2018).

In the literature on face-to-face meetings, behavior-based lateness reasons are highlighted (e.g., leaving to late for a meeting; Rogelberg et al., 2014). In the online context, one out of four surveyed participants cited environmental factors, such as technical barriers, as the cause of delay in addition to behavior-based delays. This shows that the meeting location and its accessibility is as important online as it is offline for group cohesion (Blanchard & McBride, 2020). While physical presence in the room is initially sufficient for face-to-face meetings, other connections such as to the camera and microphone must be established for online meetings to ensure full participation. This effort in turn can jeopardize the desired punctuality as a group norm and shows how essential it is to adequately address meeting design characteristics.

**Meeting Satisfaction**

The present results show that participants of delayed meetings are significantly less satisfied with the individual goal achievement as well as with the overall process and outcome. Hypotheses 2 to 4 were accepted accordingly. The small effect of lateness as a design and input variable on the process and outcome variables of session satisfaction is consistent with the findings of Allen et al. (2018; 2021). Stress and satisfaction relate equally to the key dimensions of demands and decision latitude (Sieverding et al., 2013). These are addressed in the work demands and resources model (Demerouti et al., 2001): Work and study situations consist of demands placed on employees and students and resources drawn upon to meet those demands. If delays occur, extraordinary demands are placed on participants (e.g., same tasks in less time) and freedom is restricted (e.g., fewer discussions). Perceived stress increases and satisfaction decreases. Additional resources must be activated to complete the work at hand (Schaufeli & Bakker, 2004). Follow-up deadlines are also jeopardized, creating a cycle (analogous to feedback loops in the IPOI model; cf. Ilgen et al., 2005) that can be exacerbated by persistent delays and ongoing dissatisfaction (Rogelberg et al., 2010). These results
emphasize that even in relatively flexible environments such as college, time criteria as attention-grabbing features have an influence on meeting experiences.

Country comparison

As expected, no significant differences were found between Germany and Italy with respect to the experience of delays and satisfaction in virtual student meetings. The cross-national similarities are consistent with the findings of Allen and colleagues (2021) and support the assumption that meetings as well as their design characteristics follow international standards (Adler & Aycan, 2018). In particular, responses to the COVID-19 pandemic have contributed to a high increase in the adoption of new technologies toward “mobile-chronic” temporality (Chung & Lim, 2005) and increased alignment in meeting design and participant behavior (Allen & Lehmann-Willenbrock, 2022). Students surveyed at European universities reported both satisfaction and dissatisfaction with on-time and off-time online meetings. Cultural attributions such as "the punctual German" (Hansen, 2008) do not seem to be supported by our data. On the other hand, the handling or tolerance of delays might be different between countries. The data suggest that delays are appraised as such earlier and addressed more frequently by students studying in Germany, compared to students studying in Italy.

Limitations and future directions

In this study, virtual student meetings were broadly defined as a purpose-oriented collaboration among students in virtual space. This approach has the advantage of capturing a wide spectrum of meetings – as they occur in practice – and simplifies implementation through fewer data exclusions. At the same time, different meeting types (e.g., lectures and group-project meetings) cannot be differentiated and may be differently impacted by meeting design characteristics. For example, assigning a moderator is consistently and strongly recommended in the literature, but not always the case in practice (Leach et al., 2009). In the educational context, the moderator may often coincide with the instructor, resulting in influencing factors such as a hierarchy gap (Mroz & Allen, 2017) that impact appraisals of meeting lateness and its effect on meeting satisfaction. For example, one person wrote (original English): "Delay was due to a professional duty of the professor [. . .]. For this reason, and because he is a very correct and awesome Professor, I was not disappointed for his delay." Future research might investigate how participants’ (hierarchical) relationships with each other might influence meeting lateness and satisfaction in virtual student meetings.

Further, it should be noted that a direct comparison with face-to-face meetings was not conducted in this study due to the dynamic evolution of the COVID-19 pandemic. Neither does the current study distinguish between different dimensions of virtuality, which should be considered in future research (Handke & Kauffeld, 2019; Boos et al., 2017). Kauffeld and Sauer (2021) suggest understanding virtuality as a continuum that dynamically feeds into group development. For example, hybrid forms of collaboration (Hardwig & Boos, in press; Hoch & Kozlowski, 2014) or differing levels of media literacy of online meeting participants might be considered in future research. Additionally, a comparison between students of distance learning universities that were already designed for virtual learning and other institutions might provide further insights (Strielkowski, 2020). Participants in this study varied in their evaluation of virtual student meetings. For example, one person wrote (original Italian): "I find online student meetings, whether they are organized by an institute or by students among themselves, very useful: there is a lack of opportunity to practice more freely and also of human contact, but this lack is compensated by the convenience of studying from home." Others saw the disadvantages of virtual communication (original Italian): "Online meetings are only useful if you want to take care of your own business in the meantime. Otherwise, they’re obnoxious, nothing gets decided, and friction is exacerbated." Beyond the pandemic, it will be interesting to see how behavior and satisfaction change when participants engage with the tools on a voluntary basis rather than being forced to do so due to environmental constraints.

In the current study, meeting satisfaction was used as a subjective measure of effectiveness, while other
constructs such as entitativity (Blanchard & McBride, 2020) and group cohesion (Allen et al., 2021) were not investigated but might be fruitful avenues for future research on virtual student meetings. Methodologically, the present data is based on self-reports by study participants in online meetings. This type of survey has some weaknesses (Chang et al., 2020). As such, findings might be limited due to the data collection over international networks and the own communication channels. Laboratory studies, longitudinal designs, or structured interviews should confirm these initial findings in future work.

It should be noted that the distinction between process and outcome levels of meeting satisfaction opens up many possibilities for future research to investigate measures that might mitigate negative effects of meeting lateness during all stages of a meeting (before, during, and after). However, this will require a deeper understanding of the reasons for delays (e.g., personal vs. environmental) and the reactions of the participants. For example, it has been shown that procedural justifications for delays (e.g., “Sorry for the delay. There was an escalation in production that had to be fixed for today’s deliveries. I am now looking forward to reviewing the quarterly reports with you.”) decrease negative socio-emotional behaviors of meeting participants (Lehmann-Willenbrock et al., 2013). The use of these practices could therefore also have a mitigating effect on the consequences of meeting lateness and generate greater understanding among participants (Mroz & Allen, 2020).

This study focuses on virtual student meetings from a Western-style, monochronistic work environment. Accordingly, time is seen as economically valuable and treated in linear segments (Chung & Lim, 2005). The continued comparison between two European countries is based on the research of Allen et al. (2021), whereby geographical and not cultural boundaries were drawn. Taras et al. (2016) meta-analytically confirmed that 80% of cultural differences are found within and not between countries. Lack of differences between Italy and Germany could therefore equally mean that meeting practices are shaped by more specific environmental and contextual factors (e.g., group structure; Kauffeld, 2006) or even individual values and personality traits (e.g., Penney & Spector, 2002). Globally, there are some cultural nuances in meetings and their designs. For example, studies from South America and Africa show differences in meeting management and perceptions of time factors compared to North America and Europe (van Eerde & Azar, 2020; Kemp & Williams, 2013; White et al., 2011; Levine et al., 1980). Although the aligning globalization tendency is always emphasized (Allen et al., 2021; Nonis et al., 2005), it could be interesting to see how cross-cultural meetings, in which different “time types” meet, are affected. This research could focus on both the individual and group level and provide insights into international meeting culture and best-practices (Rui et al., 2006).

Conclusion

Although lateness in professional meetings is common, its impact on group processes and outcomes has long been neglected. Given the importance of educational meetings it is crucial that meetings are successful from the perspective of both students and universities. Meetings need to be considered in different contexts and formats. With the focus on virtual student meetings, this paper expands on traditional research on analog professional meetings and transfers its findings to new contexts. The study shows that input variables such as meeting lateness are similarly relevant for student meeting experiences, such as satisfaction with process and outcome. Taking these findings into account, student meeting design and execution should be made both more efficient and effective through strict adherence to group norms by both students and lecturers. Agreed-upon sets of rules (e.g., for canceling or rescheduling appointments) are one possible intervention for balancing the multitude of meetings in daily business.

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