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# On Leading Meetings: Linking Meeting Outcomes to Leadership Styles

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**Abstract**

Leading meetings represent a typically and frequently performed leadership task. This study investigated the relationship between the leadership style of supervisors and employees' perception of meeting outcomes. Results showed that participants reported greater meeting satisfaction when their meeting leader was assessed as a considerate supervisor, with the relationship between considerate leadership style and meeting satisfaction being mediated by both relational- and task-oriented meeting procedures. The results, however, provide no support for initiating structure being associated with meeting effectiveness measures. More generally, the findings imply that leadership behavior is a crucial factor in explaining important meeting outcomes.

**Keywords**

leadership, consideration and initiating structure, meeting satisfaction, meeting effectiveness

## Introduction

Supervisors are often required to regularly meet with their employees, with meetings representing one of the most typical and frequently performed leadership tasks (Rogelberg, Leach, Warr, & Burnfield, 2006; Van Vree, 1999). The ubiquity of supervisors' meeting-related activities is rather unsurprising, as meetings serve as a critical venue for accomplishing work-related goals (Tracy & Dimock, 2004). While conservative estimates suggest that the typical employee spends an average of 6 hours per week in scheduled meetings (Rogelberg et al., 2006), supervisors frequently devote considerably more time to meetings. Van Vree (1999) reports, for example, that managers in large organizations spend as much as 75% of their time both preparing for and executing workplace meetings. Therefore, it is also unsurprising that effective meeting leadership is at the forefront of current scholarly discourse regarding improvements in meeting quality (Allen & Rogelberg, 2013; Odermatt, König, & Kleinmann, 2015; Rogelberg, Shanock, & Scott, 2012).

Given the necessity for better understanding the relationship between meeting leadership and employees' perceptions of meeting outcomes, the central goal of this study is to link employees' perceptions of satisfaction and effectiveness in *team* meetings to two leadership styles: consideration (i.e., friendly and interpersonally supportive supervisory behavior) and initiating structure (i.e., task-oriented and directed supervisory behavior; Fleishman, 1953; Judge, Piccolo, & Ilies, 2004). We also explore mediators that may explain how, and why, leadership style relates to employees' perceptions of team meeting outcomes. We propose that leadership style influences the extent to which meeting leaders initiate specific meeting procedures during team meetings, namely, task- and relational-oriented meeting procedures.

We aim to contribute to both meetings scholarship and leadership scholarship in two key ways. First, this study builds on and extends prior research on meetings by focusing on the role of *leadership style*. Although the current literature highlights the vital role that leaders play in designing and running effective meetings (Leach, Rogelberg, Warr, & Burnfield, 2009), there is little direct empirical evidence for the role that meeting leaders' behavior plays in explaining meeting outcomes. Similarly, there have been few attempts to link findings from the meeting context to common leadership concepts. To this end, we also provide additional insights into what constitutes effective leadership by examining the role of consideration and initiating structure within the team meetings context.

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Second, this study builds on and extends prior literature on consideration and initiating structure. Theoretically, it is reasonable to expect that consideration and initiating structure will exert a robust influence on meeting attendees' ratings of meeting satisfaction and effectiveness (Judge et al., 2004; Yukl, 2006). Prior research has shown, for example, that the effectiveness of a leader, in terms of motivating and satisfying employees, can be influenced by the degree to which leadership behaviors match the requirements of a particular workplace setting (Lambert, Tepper, Carr, Holt, & Barelka, 2012). The role of consideration and initiating structure in meetings, however, might be quite different in comparison with other leadership tasks.

## Theoretical Background and Hypotheses

### *Meeting Procedures and Meeting Outcomes*

*Relational- and Task-Oriented Meeting Procedures.* Research indicates that specific procedures within meetings allow them to run smoothly and enhance attendees' perceptions of the meeting quality (Baran, Shanock, Rogelberg, & Scott, 2012; Leach et al., 2009). Nixon and Littlepage (1992), for example, found that participants' evaluation of meeting effectiveness was correlated with their ratings of open communication, task-oriented focus, systematic approach, and timeliness. Generally, a predominant theoretical perspective is that effective meetings integrate two fundamental types of procedures that should be considered or managed carefully: task- and relational-oriented procedures (Beck & Keyton, 2009; Niederman & Volkema, 1999; Yukl, 2006).

Within meetings, task orientation is evidenced by providing structure that emphasizes systematic communication and analysis of information, so that attendees remain focused on accomplishing necessary tasks, while minimizing interpersonal disruptions (Beck & Keyton, 2009; Yukl, 2006). Thus, explicit structured facilitation can have a positive influence on groups' goal attainment (Nixon & Littlepage, 1992). Allen, Rogelberg, and Scott (2008) found that people perceived meetings as more dreadful when these meetings lacked structure or organization. Similarly, Kauffeld and Lehmann-Willenbrock (2012) found that attendees were more satisfied with meetings when these meetings involved functional interactions, such as problem solving and action planning. In contrast, relational orientation concerns interpersonal relations, and emphasizes the personal need for acceptance, respect, and involvement (Niederman & Volkema, 1999; Yukl, 2006). Relatedly, Beck and Keyton (2009) found that meetings are locations where relationships are defined between and among members, and where these relationships are interpreted by members. Meeting attendees, for example, value process fairness, such as having their input considered and having influence over decisions (Briggs, Reinig, & de Vreede, 2006). Similarly, Kauffeld and Lehmann-Willenbrock (2012) found that dysfunctional communication, such as criticizing others or complaining, is negatively related to meeting productivity and satisfaction.

Taken together, previous research suggests that the meeting process must be carefully considered and managed, with the procedures used within meetings having important implications for perceived meeting quality (Nixon & Littlepage, 1992). Moreover, frameworks of group performance (e.g., Mathieu, Maynard, Rapp, & Gilson, 2008) show that leadership is an important group and task attribute, which can greatly affect group processes. Indeed, there is mounting evidence that a leader's behavior, with regard to supervising a group of subordinates, influences both the performance within the group, and the group's performance on a whole (cf. Kozlowski & Ilgen, 2006; Mathieu et al., 2008). Accordingly, meeting leaders likely have a strong influence over the process and function of meetings, and play a key role in facilitating a meetings' success by either initiating, or neglecting, relevant task- and relational-oriented procedures.

*Meeting Outcomes.* Previous research suggests that participants' meeting *satisfaction* is an important component of meeting success. Using affective events theory, Rogelberg, Allen, Shanock, Scott, and Shuffler (2010) assert that, within organizations, meetings are powerful affect-generating events that meaningfully contribute to overall job satisfaction. Specifically, they found that meeting satisfaction positively predicted job satisfaction, above and beyond individual difference variables and traditional facets of job satisfaction. In contrast to meeting satisfaction, attendees' perceptions of meeting *effectiveness* can also deliver another important indicator of immediate meeting success. Perceived meeting effectiveness can be measured with respect to what was created or achieved during a meeting (Briggs et al., 2006); for example, the achievement of individual or work-group goals. Therefore, attendees' perceptions of meeting effectiveness is another important meeting criterion, particularly as employees often complain that meetings constrain and waste their time (Allen et al., 2008). Alternatively, if employees perceive that a meeting is beneficial for their current work tasks, for example, if employees attend a meeting where they receive important task-relevant information, they may be more inclined to view meetings as a valuable resource for task completion.

### *Consideration as Leadership Style in Meetings*

Leading meetings raises several concerns for meeting leaders such as handling and managing relational- and task-oriented procedures. However, leaders' assumptions about their roles, purposes, and behavior reflect their interest in

completing assignments and getting the work done (Bass, 1990). Moreover, leaders' consideration and initiation of structure seems to be highly stable and consistent from one situation to another (e.g., Taylor, Crook, & Dropkin, 1961). Taken together, this suggests that supervisors' general inclinations regarding consideration and initiating structure also transfer to, and emerge within, the meetings context. In other words, it is likely that supervisors enact their in-meeting roles and leadership functions in different ways (Yukl, 2006), with each supervisors' general leadership style affecting how successful they are at satisfying their subordinates various meeting-related needs. Specifically, we propose that supervisors' leadership styles affect their focus of attention, and direct them toward enacting in-meeting activities that correspond with their leadership style.

In line with previous research showing that consideration is strongly related to follower satisfaction and motivation (Judge et al., 2004), it can be assumed that meeting leaders high on consideration are especially concerned with identifying and satisfying meeting attendees' needs (Fleishman, 1973). They likely create a supportive meeting environment, characterized by warmth, friendliness, and helpfulness, by being approachable, showing concern and respect for attendees, treating all attendees as equals, and looking out for the welfare of the group (Bass, 1990). Moreover, Reinig, Briggs, Shepherd, Yen, and Nunamaker's (1995) research on computer-assisted decision-making software showed that meeting productivity did not necessarily lead to satisfaction. More specifically, while members were satisfied with the outcome and goals reached in these meetings, they felt flat with regard to affect because they lacked an affective reward or sense of emotional gratification. These results highlight the importance of friendly and interpersonally supportive supervisory behavior. Therefore, we hypothesize the following:

**Hypothesis 1a:** Consideration will be positively related to meeting satisfaction.
**Hypothesis 1b:** Consideration will be more strongly related to meeting satisfaction than to reported meeting effectiveness.

Furthermore, leaders high on consideration may show specific concern for attendees' needs for acceptance, respect, and involvement (Fleishman, 1953; Judge et al., 2004). In a meeting, consideration can be expressed through attempts to ensure that all participants have opportunities to participate, by considering the interests of all participants, and by establishing good communication and cooperation practices. These behaviors may increase subordinates' sense of belonging, and the extent to which they feel valued by others and that they are part of an appealing group. In turn, this may also increase their feelings of individual and group achievement and autonomy. In sum, these relational behaviors can meet one or more needs of attendees, including needs for valuing, social status, and belonging (Malouff, Calic, McGrory, Murrell, & Schutte, 2012). Therefore, we propose that supervisors who are generally more considerate will also be more focused on the handling of relational-oriented procedures in meetings, and that the initiation of these procedures, in turn, will lead to an increase in subordinates' meeting satisfaction. Therefore, we hypothesize the following:

**Hypothesis 2:** The relationship between consideration and meeting satisfaction will be mediated by relational-oriented meeting procedures.

### *Initiating Structure as Leadership Style in Meetings*

In line with previous research showing that initiating structure is strongly related to individual and group performance (Judge et al., 2004), it can be argued that initiating structure will be positively related to meeting effectiveness. Specifically, meeting leaders high on initiating structure are likely to be focused on task-oriented procedures, and be concerned with directing and controlling the meeting activities (Bass, 1990). For example, meeting leaders likely focus on time and resource management, ensuring that discussions are structured, focused, and goal-oriented, and providing relevant information so that goals can be achieved in an effective manner.

However, by going beyond this compelling prior evidence (i.e., that an initiating structure leader will have positive effects on group performance) and by carefully considering meetings as a leadership task, several arguments arise that suggest that the role of initiating structure in meetings is less clear. First, there are different formal tools that make it less necessary for leaders to display structuring behavior during the meeting. For example, an agenda can contain a variety of information, such as a list of the topics that participants are expected to address, individual responsibilities for these topics, and time estimates. Previous research has revealed that having an agenda, in and of itself, is positively related to an increase in meeting quality (Cohen, Rogelberg, Allen, & Luong, 2011; Leach et al., 2009; Nixon & Littlepage, 1992). Agenda information allows participants to prepare in advance for a meeting, and assists meeting leaders in communicating with attendees prior to the start of the meeting about how the meeting will take place and what expectations are associated with it. In sum, one could argue that the structure of meetings may operate somewhat independently, or even irrespective of in-meeting behaviors, in effect limiting the extent to which differences in leaders' in-meeting behaviors affect perceptions of meeting effectiveness.

Second, meetings typically represent a leadership situation that is characterized by a high level of interaction (Schwartzman, 1989). Consequently, meeting leaders have to incorporate multiple expectations and interests, align

individual goals with a shared meeting goal, and establish a positive climate of support and respect (Zaccaro, Rittman, & Marks, 2001). Because problems and disagreements can threaten the achievement of meeting goals (Amason, 1996), a meeting leader cannot simply ignore them. Instead, meeting leaders must work to manage them. Conflict management, however, encompasses a wide range of activities, including communication, dealing with emotions, and understanding positions. Consequently, considerate leadership behaviors, which have a stronger interpersonal orientation, may be most useful in addressing in-meeting interpersonal problems and disagreements.

Third, meetings usually serve multiple purposes like solving problems, finding consensus, and making decisions (Allen, Beck, Scott, & Rogelberg, 2014), with leadership style likely influencing the extent to which a meeting leader provides attendees with direction. Specifically, a leader who is perceived to exhibit high levels of initiating structure would likely provide a great deal of direction to attendees. This, in turn, could also reduce the attendee's felt responsibility by taking away his or her autonomy (Dale & Fox, 2008). In sum, initiating structure likely influences group interactions in meetings, through the amount of thinking needed to generate solutions. This could potentially make it difficult to achieve all meeting goals.

Accordingly, we conclude that the effect of initiating structure is less predictable. However, given the compelling meta-analytic findings (Judge et al., 2004) providing support for the effect of initiating structure on group performance, we hypothesize the following:

**Hypothesis 3a:** Initiating structure will be positively related to reported meeting effectiveness.

**Hypothesis 3b:** Initiating structure will be more strongly related to reported meeting effectiveness than to meeting satisfaction.

**Hypothesis 4:** The relationship between initiating structure and reported meeting effectiveness will be mediated by task-oriented meeting procedures.

## Method

### Participants

We gathered data from a total of 63 team meetings, which constituted a total of 359 meeting participants, from different organizations in Switzerland. All meetings were led by a supervisor, and included at least four team members who discussed work-related matters. The most common employment sectors included in the sample were finance/insurance (40%), manufacturing (20%), and health care (13%). Eight team meetings were excluded because of incomplete data. The final usable sample included 55 meetings consisting of 55 meeting leaders (i.e., supervisors) and 322 meeting participants (87.3% response rate at the meeting level). The average number of participants per meeting group was 6.7 people ($SD$ = 2.47). We received, on average, 5.9 responses per meeting group ($SD$ = 1.94). Thus, the within-group response rate was 88.1%. All meetings were announced in advance and took place regularly. The main purposes of the meetings were to exchange information, to discuss organizational, team and/or personal news, and to discuss work activities (e.g., capacity and workload issues). The majority of the participants reported that the assessed meeting represented a typical team meeting led by the supervisor.

The mean age of the meeting participants was 40.7 years ($SD$ = 11.07), and approximately half of the sample (52%) was male. The majority of participants were employed full time (71%; $n$ = 229). The average tenure with their current work organization was 8.9 years, and the average work experience with their current supervisor was 2.8 years. The majority of the participants reported that they had often or daily contact with their supervisor (93%; $n$ = 298). The meeting leaders (i.e., supervisors) included 42 males and 13 females ranging in age from 26 to 63 years, with a mean age of 43.8 years ($SD$ = 7.80). The average tenure with their current work organization was 10.3 years. Their average duration of experience as a supervisor was 9.4 years, ranging from just a few months to 25 years. Their average experience in leading meetings was 11.8 years.

### Procedure

To recruit respondents, we identified organizations through phone books and websites, and contacted them through cold calls. As an incentive to participate, supervisors were offered the general study results and team members' aggregated ratings of leadership style, meeting satisfaction, and meeting effectiveness. To help mitigate common method bias concerns, we used the split-sample technique (Rousseau, 1985). Thus, to measure all the study variables among the meeting participants, half of the participants in each meeting completed a different version of the questionnaire. Version A ($n$ = 160 participants) included the assessment of leadership style of supervisor. Version B ($n$ = 162 participants) contained the assessment of meeting procedures and outcomes. The independent variables (i.e., leadership ratings) were taken from one half of each meeting group, and the mediator and dependent variables (i.e., meeting ratings) were taken from the other half of each meeting group. By using different sources of data collection, we reduced the potential for common method variations, such as cognitive consistency and hypothesis-guessing effects (Podsakoff & Organ, 1986).

Supervisors were instructed to distribute the two versions of the questionnaire randomly and equally to the team members. Team members completing a leadership questionnaire (Version A) filled out the questionnaire either

before or after the meeting, whereas team members completing a meeting questionnaire (Version B) filled out the questionnaire after the meeting. Supervisors were instructed to inform team members that their responses would remain confidential. This message was reinforced on the questionnaire, where it was stated that individual responses would not be disclosed to anyone within their organizations and that only the aggregated data would be considered relevant. Completed surveys were mailed directly to the research team in postage-paid envelopes.

## Measures

*Consideration and Initiating Structure.* To assess the leadership behavior of supervisors, we used a German version (Heinitz, 2006) of the Leader Behavior Description Questionnaire (LBDQ), originally developed by Halpin (1957). Considerable evidence of the validity and reliability of the LBDQ has been compiled (Judge et al., 2004). Consideration was measured with 15 items and initiating structure was measured with 12 items. We removed three items (i.e., "he rules with an iron hand," "he criticizes poor work," and "he speaks in a manner not to be questioned") from the original LBDQ initiating structure scale as these items involving some punitive aspects of leader behavior (Schriesheim, House, & Kerr, 1976). Such punitive items are likely to distort those components of the scale which are more clearly indicative of initiating structure (e.g., clarifying of subordinate roles, determining standards, and assigning tasks), thereby creating unintended effects in the relationship to both consideration and outcome measures (Schriesheim et al., 1976). These three items have also been removed in the revised Form XII of the LBDQ (Stogdill, 1963). Respondents were asked to rate the frequency with which their supervisor engaged in each of the behaviors on a 5-point scale ranging from 1 (*never*) to 5 (*always*).

*Meeting Satisfaction.* To measure meeting satisfaction, we used a scale developed by Rogelberg et al. (2010). Participants were asked to indicate the extent to which six adjectives described their meeting (i.e., stimulating, boring, unpleasant, satisfying, enjoyable, and annoying). Ratings were made using a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). After reverse scoring negatively worded items, an average score was computed across the six items.

*Reported Meeting Effectiveness.* Reported meeting effectiveness was assessed using a three-item measure from Leach et al. (2009). Participants were asked to rate the effectiveness of their meeting in terms of "achieving your own work goals," "achieving your colleagues' work goals," and "achieving your organizational unit's goals." Ratings were made using a 5-point scale ranging from 1 (*extremely ineffective*) to 5 (*extremely effective*). An average score was computed across the three items.

*Meeting Procedures.* To assess participants' perceptions of task- and relational-oriented meeting procedures, we used a scale developed by Odermatt, König, and Kleinmann (2016). The perception of task-oriented procedures was measured with five items ("the course of the meeting had a clear structure," "the exchange of information was results-oriented," "participants' contributions were to the point," "the individual points were processed in an efficient manner," and "topic-relevant information was exchanged") and the relational-oriented procedures scale also includes five items ("there were open discussions," "the interests of the various meeting participants were taken into consideration," "decisions were made by consensus," "the personal opinion could be fully introduced," and "people listened to the contributions of meeting participants carefully"). Participants responded on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Since all four meeting constructs have been assessed by the same group of participants (i.e., questionnaire Version B), we conducted a set of confirmatory factor analyses using maximum likelihood estimation to evaluate the discriminant validity between our four meeting measures. Three models were tested and compared by using data at the individual level. The first model was composed of four factors representing the two outcome variables and the two mediator variables. The results supported the proposed factor structure modeled in this study: $\chi^2(146) = 250.74$, $p < .001$, comparative fit index (CFI) = .90, Tucker–Lewis index (TLI) = .88, and root mean square error of approximation (RMSEA) = .07. The proposed four-factor model provided a better fit (all $p$s $< .001$) than a two-factor model in which the two mediating constructs (task- and relational-oriented meeting procedures) were combined into one mediating factor and the two outcome constructs (meeting satisfaction and meeting effectiveness) were combined into one outcome factor, $\chi^2(151) = 360.45$, $p < .001$, CFI = .80, TLI = .77, and RMSEA = .09. The four-factor model also demonstrated a better fit to the data than a specified one-factor model which included all four constructs as a single factor, $\chi^2(152) = 391.73$, $p < .001$, CFI = .77, TLI = .74, and RMSEA = .10. Overall, the proposed model including four factors presented the most satisfactory indices. This indicates that the study variables are statistically distinct and the measurement was considered adequate to proceed with the hypotheses tests.

*Control Variables.* In our analyses, we controlled for several background variables that could potentially bias the regression coefficients. First, we controlled for the experience the supervisors had in leading meetings (in months). Second, because group size, team members' organizational tenure,

**Table 1.** Descriptive Statistics and Variable Intercorrelations.

| Variable | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Meeting satisfaction | 4.11 | 0.36 | (.78) | | | | | | | | | | |
| 2 Reported meeting effectiveness | 3.80 | 0.42 | .49** | (.83) | | | | | | | | | |
| 3 Relational-oriented meeting procedures | 4.24 | 0.39 | .68** | .36** | (.80) | | | | | | | | |
| 4 Task-oriented meeting procedures | 4.11 | 0.42 | .61** | .58** | .51** | (.84) | | | | | | | |
| 5 Consideration | 3.98 | 0.35 | .45** | .15 | .40** | .29* | (.91) | | | | | | |
| 6 Initiating structure | 3.76 | 0.35 | .07 | .24 | .14 | .22 | .23 | (.84) | | | | | |
| 7 Meeting size | 6.65 | 2.47 | −.03 | −.15 | −.16 | .03 | −.04 | −.14 | | | | | |
| 8 Mean organizational tenure (in months) | 107.17 | 67.57 | −.32* | −.12 | −.23 | −.14 | −.34* | .02 | .18 | | | | |
| 9 Mean dyadic tenure (in months) | 33.36 | 27.74 | −.02 | −.06 | −.11 | −.06 | −.29* | −.21 | −.20 | .38** | | | |
| 10 Frequency of interaction[a] | 3.58 | 0.35 | −.22 | .07 | −.13 | −.06 | −.12 | .19 | −.20 | .05 | −.12 | | |
| 11 Experience in leading meetings (in months) | 140.98 | 90.81 | −.03 | −.29* | −.01 | −.07 | −.08 | −.24 | .00 | .18 | .49** | −.18 | |

*Note.* $N = 55$ meetings. Alpha reliabilities (in parentheses) are reported on the diagonal.
[a]Mean level of interaction between leader and team members: 1 = *never*, 2 = *rarely*, 3 = *often*, 4 = *daily*.
*$p < .05$. **$p < .01$.

tenure with supervisor (dyadic tenure), and frequency of interaction with supervisor in some cases related to team processes and performance (e.g., Guzzo & Dickson, 1996), we also included these variables as controls in our hypothesis tests. Meeting size refers to the actual number of meeting participants. Mean organizational tenure refers to the average length of time (in months) the team members had been in the organization. Mean dyadic tenure refers to the average time (in months) the supervisors and team members worked together. Frequency of interaction refers to the level of interaction between supervisor and team members.

### *Within Group Agreement and Aggregating of Data*

To assess the appropriateness of aggregating individual team members' survey responses to the meeting level, it was necessary to examine both within-group agreement and between-group differences. We calculated $r_{wg(J)}$ values (James, Demaree, & Wolf, 1984), which indicate the degree of agreement among members within meetings, as well as intraclass correlation coefficients (ICCs; Bliese, 2000), which represent the ratio of between-group variance to total variance (ICC1) and the reliability of the meeting-level means (ICC2), respectively. The values were as follows: consideration, $r_{wg(J)} = .97$, ICC1 = .26, ICC2 = .52; initiating structure, $r_{wg(J)} = .96$, ICC1 = .26, ICC2 = .51; meeting satisfaction, $r_{wg(J)} = .89$, ICC1 = .17, ICC2 = .39; reported meeting effectiveness, $r_{wg(J)} = .87$, ICC1 = .15, ICC2 = .47; task-oriented meeting procedures, $r_{wg(J)} = .99$, ICC1 = .33, ICC2 = .60; and relational-oriented meeting procedures, $r_{wg(J)} = .95$, ICC1 = .21, ICC2 = .44. The test statistics ($F$ ratios) associated with the ICC1 values were statistically significant at the .05 level for all variables with the exception of meeting effectiveness. Overall, these results justified aggregating responses to the meeting level and we aggregated the individual-level data to the meeting level by computing the average score among multiple members of each meeting group before testing the hypotheses.

## Results

Table 1 presents the means, standard deviations, internal reliabilities, and correlations among the principal study variables. The average values for meeting satisfaction ($M$ = 4.11) and reported meeting effectiveness ($M$ = 3.80) are higher than might have been expected as they contrast with the general negative representation of meetings in the literature. However, data obtained from our study were comparable with that reported by other research (e.g., Leach et al., 2009). As expected, both task- and relational-oriented meeting procedures had significant positive correlations with meeting satisfaction and reported meeting effectiveness. Consideration and initiating structure showed a nonsignificant correlation ($r = .23$, $p = .09$).

Hypothesis 1a stated that consideration would be positively linked to meeting satisfaction. To test this relationship, we conducted a hierarchical regression analysis with entered control variables in the first step. In accordance with Hypothesis 1a, consideration was a significant predictor of meeting satisfaction ($\beta = .41$, $p < .01$) accounting for 14% of the variance (see Table 2). Furthermore, we expected that consideration would correlate more strongly with meeting satisfaction than with reported meeting effectiveness (Hypothesis 1b). We tested whether the correlation of consideration with

**Table 2.** Results of Hierarchical Regression Analyses for Predicting Meeting Satisfaction and Reported Meeting Effectiveness.

| | Meeting satisfaction | | | | | Reported meeting effectiveness | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | $R^2$ | $\Delta R^2$ | B | *SE* B | β | $R^2$ | $\Delta R^2$ | B | *SE* B | β |
| Step 1 | .15 | .15 | | | | .11 | .11 | | | |
| Meeting size | | | .01 | .02 | .05 | | | −.01 | .03 | −.08 |
| Mean organizational tenure | | | .00 | .00 | −.25 | | | .00 | .00 | −.11 |
| Mean dyadic tenure | | | .00 | .00 | .23 | | | .00 | .00 | .14 |
| Frequency of interaction | | | −.15 | .14 | −.14 | | | −.02 | .17 | −.01 |
| Experience in leading meetings | | | .00 | .00 | −.09 | | | .00 | .00 | −.29 |
| Step 2 | | | | | | | | | | |
| Consideration | .29** | .14** | .42 | .14 | .41** | | | | | |
| Initiating structure | | | | | | .14 | .03 | .23 | .17 | .19 |

*Note.* *SE* = standard error. *N* = 55 meetings. All coefficients are reported for the final step.
**$p < .01$.

meeting satisfaction and the correlation of consideration with reported meeting effectiveness differed significantly. The results revealed that the correlations differed significantly ($z = 2.285$, $p < .05$), supporting Hypothesis 1b. In contrast, we found no support for the assumed effect in Hypothesis 3a: There was no significant relationship between initiating structure and reported meeting effectiveness (β = .19, $p = .19$; see Table 2). Consequently, testing Hypothesis 3b became redundant.

To examine the meditational hypotheses, we followed common guidelines for examining mediator effects (Baron & Kenny, 1986; MacKinnon, Coxe, & Baraldi, 2012). We controlled in the first step for meeting size, mean organizational tenure, mean dyadic tenure, frequency of interaction, and experience in leading meetings. We found that consideration had a significant effect on both meeting satisfaction (β = .41, $p < .01$) and relational-oriented meeting procedures (β = .35, $p < .05$). The effect of consideration on meeting satisfaction also decreased and became insignificant (β = .20, *ns*) when controlling for relational-oriented procedures, indicating that relational-oriented procedures completely mediated the relationship between consideration and meeting satisfaction. Taken together, these results provide support for Hypothesis 2 (see Figure 1). Again, following the conventions for assessing mediation effects (Baron & Kenny, 1986), we tested if task-oriented procedures mediate the relationship between initiating structure and reported meeting effectiveness (Hypothesis 4). However, we found no significant association between initiating structure and reported meetings effectiveness, or between initiating structure and task-oriented procedures (see Figure 2). Therefore, there is no support for Hypothesis 4.

Because the assumption of normality of the sampling distribution of the indirect effect is typically violated in small samples (Preacher & Hayes, 2008), we additionally followed the bootstrapping approach outlined by Preacher and Hayes (2008) as another test of the indirect effect. We used Preacher and Hayes' (2008) SPSS macro, controlling for meeting size, mean organizational tenure, mean dyadic tenure, frequency of interaction, and experience in leading meetings. The mediation effect for consideration was also

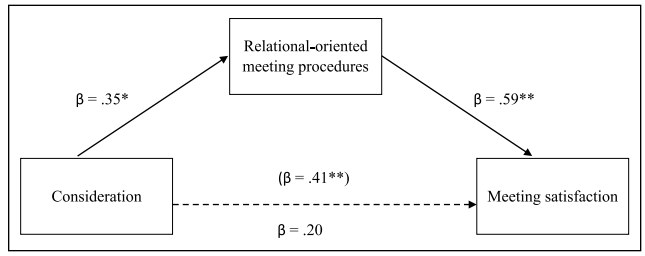


**Figure 1.** Relational-oriented meeting procedures mediated the relationship between consideration and meeting satisfaction (Hypothesis 2).
*Note.* Path values represent the standardized regression coefficients. The value in the parenthesis indicates the total effect of consideration on meeting satisfaction. Control variables included meeting size, mean organizational tenure, mean dyadic tenure, frequency of interaction, and experience in leading meetings.
*$p < .05$. **$p < .01$.

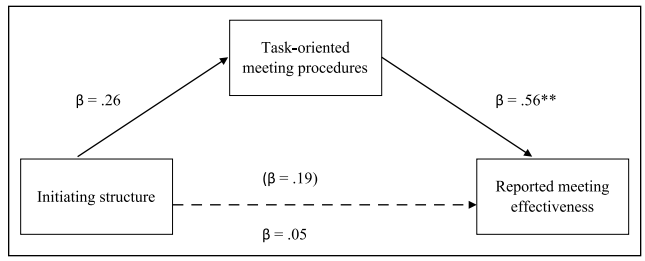


**Figure 2.** Task-oriented meeting procedures did not mediate the relationship between initiating structure and reported meeting effectiveness (Hypothesis 4).
*Note.* Path values represent the standardized regression coefficients. The value in the parenthesis indicates the total effect of initiating structure on reported meeting effectiveness. Control variables included meeting size, mean organizational tenure, mean dyadic tenure, frequency of interaction, and experience in leading meetings.
**$p < .01$.

**Table 3.** Standardized Indirect Effect of Consideration on Meeting Satisfaction Through Relational- and Task-Oriented Meeting Procedures.

| | | | Bootstrapping BC, 95% CI | |
|---|---|---|---|---|
| | Estimate | *SE* | *LL* | *UL* |
| Relational-oriented meeting procedures | 0.15 | 0.07 | 0.03 | 0.31 |
| Task-oriented meeting procedures | 0.09 | 0.05 | 0.01 | 0.22 |
| Total indirect effect | 0.24 | 0.09 | 0.07 | 0.41 |

*Note.* *SE* = standard error; BC = bias-corrected; CI = confidence interval; *LL* = lower limit; *UL* = upper limit. *N* = 55 meetings.

supported by the results of bootstrapping: The total standardized indirect effect of consideration on meeting satisfaction via relational-oriented meeting procedures had a bootstrapped estimate of β = .21 (*SE* = .09) and a 95% bias-corrected confidence interval [.04, .39] excluding zero. Accordingly, the bootstrap results provide additional support for Hypothesis 2. However, the bootstrap results did not support a mediation effect in terms of initiating structure and task-oriented meeting procedures (Hypothesis 4). Interestingly, testing a multiple mediation model suggested both task- and relational-oriented procedures as mediators of the relationship between consideration and meeting satisfaction (see Table 3). An explanation for this result may be that task- and relational-oriented meeting behaviors are often connected. For example, a leader might try to solve an emotional dispute by mandating that all meeting participants follow a set list of speakers to ensure that no one is interrupted. In this example, the leader would structure the meeting (i.e., initiates structure) with the goal of treating all team members fairly (i.e., consideration).

## Discussion

This study focused on the relationship between the leadership style of a meeting leader and the actual enactment of leadership during a meeting. Specifically, we investigated the relationship between the leadership style of supervisors (i.e., consideration and initiating structure) and employees' perceptions of satisfaction and effectiveness in team meetings. Furthermore, we explored the role of leadership in stimulating task- and relational-oriented procedures during the meeting. Overall, the findings indicate that leadership behavior is a crucial factor in explaining meeting outcomes. This has been theoretically assumed (Yukl, 2006), but to date untested within the meeting context. Moreover, prior to this study, the mediating mechanism for the relationship between the leadership styles and relevant outcomes in meetings had been neglected in the literature. Our study sought to address these gaps in the current literature by providing deeper insights into the kinds of leadership behaviors that are beneficial for leading meetings, and by offering a first test of the mediating mechanism underlying these relationships.

More specifically, our findings suggest that consideration is a crucial aspect in meetings. In line with our proposed hypotheses, we found that considerate leadership behavior was positively related to meeting satisfaction. Participants' reported greater satisfaction with their meeting when their meeting leader was rated as a considerate supervisor. Moreover, we found that the relationship between considerate leadership behavior and meeting satisfaction was mediated by relational-oriented procedures, suggesting that this leadership style contributes to an increase in meeting satisfaction through relational-oriented procedures. Generally speaking, our results suggest that considerate leaders are more successful in handling relational-oriented meeting procedures (e.g., open communication and cooperation within the meeting, respectful and equal participation), while also being better equipped to ensure that the personal needs of attendees (i.e., involvement and acceptance) are satisfied. Therefore, our study also provides further empirical evidence that the processes important for group/team effectiveness (e.g., Campion, Papper, & Medsker, 1996) also play an important role within the meetings context. Interestingly, our findings also revealed that leaders high on consideration were not only successful in handling relational-oriented procedures but also in handling task-oriented procedures. This leads us to speculate that leaders who feel that consideration is important will be more successful at balancing both task and relationship concerns when leading meetings.

Additionally, we linked meeting research with general leadership research. Not only does this connection improve our understanding of how leader behavior influences meetings, but it may also provide deeper insights into the phenomenon of leadership. The results of this study complement previous leadership research (Judge et al., 2004) by providing further evidence of the important role of consideration for employee satisfaction in particular work settings. In particular, employees pay attention to the interpersonal treatment they receive from organizational authorities (Lind & Tyler, 1988), as fair and respectful treatment conveys to employees that they are appreciated and valued.

In sum, the results of this study highlight the importance of considering situational conditions for understanding leadership effectiveness, especially in terms of the actual work

that is performed (e.g., DeChurch, Hiller, Murase, Doty, & Salas, 2010). In contrast to the concept of consideration and initiating structure (Fleishman, 1953) and some previous empirical findings (Judge et al., 2004), the results provide no support for the assumption that initiating structure is associated with meeting effectiveness measures. This might be explained by the fact that meetings constitute specific leadership situations where task accomplishment is determined by several issues (e.g., conflict management, dealing with emotions, and understanding positions) that require, in particular, a considerate leadership style as considerate leaders show a stronger interpersonal orientation (e.g., consulting with people about decisions that will affect them, encouraging cooperation and teamwork; Yukl, 2006). Another reason might be that meetings already have a structured form, so there may be limits to finding differences depending on who leads it. The path–goal theory of leadership (House, 1971), for example, proposes that the degree of inherent structure in a task moderates leadership effectiveness. Generally, the more complex and multifaceted a task is, the more difficult it is to determine what needs to be done and the more initiating structure is necessary. Team meetings, however, usually have elaborate rules and regulations (e.g., using tools as agendas) dictating how the work should be done. Overall, our results showed that a particular leader behavior is potentially only effective in certain situations, or at some point in the leadership process but not at others.

As in all research, the present study is not without potential limitations. First, whereas the design of the study lessened the occurrence of common method variance by using different sources for assessing the leadership style and the meeting variables, the study's cross-sectional nature prevented us from establishing the causal direction implied by our mediation models. Future research should endeavor to temporally separate the measurement of leadership style, meeting procedures, and outcomes to maximize the potential for causal inference. Second, we used group-rating means for our analysis. Although in line with sample sizes reported in previous group research, our study could be criticized for the relatively small sample size of 55 teams. However, aggregating individual data to the meeting level should result in more reliable data because errors caused by individual idiosyncrasies should have been at least partly leveled off. Third, although previous research has shown that meeting satisfaction and reported meeting effectiveness are two important indicators of immediate team meeting success (e.g., Leach et al., 2009; Rogelberg et al., 2010), future research might benefit from using additional meeting outcome measures, for example, measuring more long term effects (e.g., implementation of decisions). Fourth, in line with previous meeting research, our sample was a convenience sample of working adults and we investigated team meetings as they represent a common and typical form of meetings. Thus, further research is needed to investigate whether the obtained results generalize to other types of meetings. A final potential limitation is the extent to which our results generalize to other workforce populations as the sampled meetings were all located in Switzerland. Nonetheless, companies in Switzerland often employ supervisors and employees with varying cultural backgrounds (cf. Bundesamt für Statistik, 2014). Thus, we do not feel that cultural context has unduly influenced our findings. Nevertheless, future research that considers cross-cultural issues would improve the generalizability of our findings and provide additional valuable insights.

Our results also suggest directions for future research. Since this is an initial attempt at understanding how the leadership styles of meeting leaders' affect meeting procedures and outcomes, we considered only one common leadership concept. However, it would be useful to understand how other common leadership concepts affect meeting procedures and outcomes. An examination of servant leadership (e.g., Panaccio, Henderson, Liden, Wayne, & Cao, 2015), shared leadership (e.g., Drescher, Korsgaard, Welpe, Picot, & Wigand, 2014), and leader–member exchange (e.g., Zagenczyk, Purvis, Shoss, Scott, & Cruz, 2015) seem particularly well-suited for exploration given their emphasis on relationships, communication, and interpersonal dynamics. The results of the present study reveal that the relationship between leadership style and meeting outcomes were mediated by meeting procedures. However, it is necessary to gain further insight into how leaders' behaviors are expressed in meetings as well as before and immediately after the meeting. For example, research could not only investigate in greater depth how meeting leaders ensure that communication is open, or how they encourage attendees to participate, but also what types of premeeting behaviors a leader with a particular overall style engages in. In addition, extending the above approach beyond face-to-face meetings and into virtual meetings given their uniqueness and frequency, would be particularly useful (Gilson, Maynard, Young, Vartiainen, & Hakonen, 2015). Finally, examining meeting performance outcomes such as creativity and innovation (cf. Jiang, Gu, & Wang, 2015) in relation to leadership styles is warranted.

Finally, our findings have several practical implications. The results indicate that supervisors need to be acutely aware of how their behaviors influence meetings. This awareness enables them to choose to behave in ways that improve the meeting experience for their supervisees during, prior to, and after the meeting. The study results suggest that supervisors should pay particular attention to employees' need for respectful and fair interpersonal treatment. Moreover, organizations can support their supervisors in running effective meetings by providing them with skills' training where they can develop and improve their ability to run meetings and manage group processes effectively. Such training could include tactical topics, such as

the strategic use of agendas and time management (Aksoy-Burkert & König, 2015), but also extend to managing discussion in an inclusive way and effective facilitation which is not typically done in meeting training programs. What is perhaps even more important is for supervisors to receive feedback on their meeting performance and facilitation through surveys or observers (Rogelberg, Scott, & Kello, 2007). Without such information, the ability to enact change is low. In addition, organizations could incorporate meeting management into its mentoring and coaching programs for current supervisors. By focusing on important leader skills from the very beginning of an employee's tenure with an organization, the potential gains from high-quality meetings can be realized early on and occur more frequently. Organizations will also benefit monetarily from educating their supervisors on methods for leading meetings successfully, as ineffective meetings are costly (Rogelberg et al., 2012) and dissatisfaction with meetings can lead to employee frustration (Rogelberg et al., 2006). Finally, previous research has shown that meetings play an important role in building high-quality relationships with their employees (Baran et al., 2012). Thus, supervisors should consider meetings as critical tasks and evaluate their performance in meetings regularly (Rogelberg et al., 2012).

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