

# Do We Really Need Another Meeting? The Science of Workplace Meetings

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## Abstract

Meetings are routine in organizations, but their value is often questioned by the employees who must sit through them daily. The science of meetings that has emerged as of late provides necessary direction toward improving meetings, but an evaluation of the current state of the science is much needed. In this review, we examine current directions for the psychological science of workplace meetings, with a focus on applying scientific findings about the activities that occur before, during, and after meetings that facilitate success. We conclude with concrete recommendations and a checklist for promoting good meetings, as well as some thoughts on the future of the science of workplace meetings.

## Keywords

meetings, organizations, workplace

If you had to identify, in one word, the reason why the human race has not achieved, and never will achieve, its full potential, that word would be “meetings.”

—Dave Barry, American humorist (quoted in Fotsch & Case, 2016)

Meetings are an inevitable expectation for today’s workers—for better, or more often, for worse (Rogelberg, Allen, Shanock, Scott, & Shuffler, 2010). Consider the following: In the United States, there are between 11 million (Infocom, 1998) and 55 million meetings each day (Keith, 2015), with employees averaging 6 hours per week in meetings. Managers spend even more time in meetings, with averages around 23 hours per week and up to 80% of work time in meetings (Rogelberg, Scott, & Kello, 2007). These figures demonstrate the vast amount of organizational resources (e.g., employee time, salaries) that go into meetings. Indeed, meetings exist in nearly every organization regardless of culture, industry, or size. But are these meetings worth the cost?

Unfortunately, empirical evidence tends to point to widespread inefficiency when it comes to workplace meetings. Some estimates indicate that as many as half of all meetings are rated as “poor” by attendees, with organizations wasting approximately \$213 billion on ineffective meetings per year (Keith, 2015). Further,

poorly structured meetings are costly beyond “time-is-money” considerations, as employees’ negative dispositions toward meetings can negatively influence their perceptions of their work, well-being, and organizations’ bottom line (Allen, Rogelberg, & Scott, 2008).

When conducted appropriately, meetings can provide a forum for creative thinking, debate, discussion, and idea generation, resulting in clear action plans and next steps for moving work forward (Allen, Lehmann-Willenbrock, & Rogelberg, 2015). Meetings are also critical for sharing information across employees, solving problems, developing and implementing an organizational strategy, and hosting team debriefings (see Table 1). Yet, more commonly, meetings can serve to derail individual and organizational effectiveness and well-being by demanding too much of employees’ time, sometimes for little or no benefit. To address these issues, more than 100 trade publications seek to provide help for managers who run, lead, and attend meetings. However, these sources often do not account for the developing scientific field of workplace-meetings research.

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**Table 1.** Overview of Some Primary Purposes of Meetings

Purpose	Description
Share information	Information is distributed among attendees but not necessarily reacted to or acted on. Example: Team members attend weekly update meetings, providing updates about what they worked on since the last meeting.
Solve problems and make decisions	Attendees troubleshoot a new or unusual issue and may decide on how to resolve the issue. Example: A computer programming team meets to discuss ways to speed up a slow program; members assess the problem, brainstorm solutions leveraging their different expertise, and finally create a plan for implementing the solution.
Develop and implement organizational strategy	Leaders create and discuss strategic directions for the organization and how to implement changes. Example: A top management team meets to discuss organizational goals and values to establish an organizational strategy and develop plans.
Debrief a team after a performance episode	Following an event or other milestone, a team discusses and reflects on what they expected to happen, what happened, what went well, and what could have been improved. Example: Firefighters hold a team debriefing after responding to a call to learn from the event for future calls.

Given these challenges, the need to apply findings from meeting science outside the scientific realm is increasing. Accordingly, in this review, we focus on exploring the systematic, scientific study of workplace meetings. We offer an overview of the literature, drawing from almost 200 articles published in the last decade, offering the most up-to-date evidence. After exploring a brief history of meeting science, we provide an overview of considerations and best practices organized around three key phases of meetings: before, during, and after.

## The Science of Meetings

Meetings are a unique context—intertwined with, yet distinct from, broader work on groups and teams—with wide-ranging implications for how individuals within organizations perform in their roles and develop attitudes about coworkers, the work itself, and the organization. Meeting science is the systematic study of what occurs before, during, and after meetings; the outcomes of meetings; and how meetings fit within broader organizational contexts (Olien, Rogelberg, Lehmann-Willenbrock, & Allen, 2015; see Table 2). Although meeting science certainly complements and informs the science of teams, especially given the widespread use of meetings by teams, meeting science is context specific. The science of meetings focuses on the specific, dynamic context in which teams and groups operate. This is not to say that every meeting is the same, but that the meeting context is a common period of concentrated team interaction, where outcomes can be pivotal for directing future interactions, and is therefore especially important to understand.

Meeting science sprang from early work by Schwartzman (1986) and Boden (1994), who argued for meetings

and talk in organizations as an object of study, rather than a medium through which to study other topics. Therefore, much of meeting science focuses on meetings in which talk is the action—where people make decisions, discuss a problem, and search for solutions. Following this early work, meeting science began to develop as researchers from various fields applied new methods and techniques to the systematic study of meetings (cf. Allen et al., 2015). These initial efforts defined a meeting as any prescheduled, work-focused gathering of at least two people (Schwartzman, 1986), while more recent conceptualizations explain that meetings need not be prearranged, but the discussion must be more structured than a simple talk among coworkers (Rogelberg, Leach, Warr, & Burnfield, 2006). However, not all meetings are created equal. Many of us can imagine what characterizes a meeting as “bad,” such as starting the meeting late, having no clear agenda, getting off topic, being too long, failing to establish clear next steps or action items, and multitasking among the attendees (e.g., e-mailing) during the meeting. In contrast, effective meetings should include key personnel who possess the functional expertise required for the task at hand, should provide relevant and important information, are conducted in a timely and punctual manner, and are productive (Allen et al., 2012).

## Applying Meeting Science to Ensure Good Meetings: Key Questions and Considerations

Expanding from these early studies, meetings research has begun to produce best practices for before, during, and after the meeting. In the following sections, we examine these different meeting phases, highlighting

**Table 2.** Before, During, and After Meetings: Key Findings From Three Areas of Meeting Science

Context and key finding	Reference
Before meetings: meeting design and composition	
Frequency, diversity, and preparation	
Attending many meetings, especially bad meetings, may increase employee stress, fatigue, and perceived workload.	Luong & Rogelberg (2005)
Functionally diverse groups can generate better solutions during problem solving because of their ability to consider a greater range of possible solutions.	Horwitz & Horwitz (2007)
Attendees should come to the meeting prepared and read the agenda to improve meeting quality and discussion.	Cohen, Rogelberg, Allen, & Luong (2011)
During meetings: individual actions, interpersonal interactions, and leader behaviors	
Individual actions	
Arriving late to a meeting spurs negative social reactions and behavioral intentions and reduces objective meeting quality.	Allen, Lehmann-Willenbrock, & Rogelberg (2018); Mroz & Allen (2017)
High-performing employees participate more than low-performers in meetings.	Sonnentag (2001)
Interpersonal interactions	
Humor and laughter patterns stimulate positive behaviors and group performance.	Lehmann-Willenbrock & Allen (2014)
Complaining is contagious, and groups with complainers perform poorly.	Kauffeld & Lehmann-Willenbrock (2012)
Leader behaviors	
Managers can build employee engagement by making meetings relevant, short, and participatory.	Allen & Rogelberg (2013)
Interactional fairness in meetings can make attendees' participation in meetings more likely.	Kauffeld & Lehmann-Willenbrock (2012)
After meetings: proximal and distal outcomes	
Proximal	
Meetings help set or adjust strategic directions for organizations.	Jarzabkowski & Seidl (2008)
Debriefing meetings help build and reinforce an organization's climate for safety.	Dunn, Scott, Allen, & Bonilla (2016)
Distal	
Positive team interactions in meetings predict organizational success.	Kauffeld & Lehmann-Willenbrock (2012)
Satisfaction with meetings is related to overall job satisfaction.	Rogelberg, Allen, Shanock, Scott, & Shuffler (2010)

evidence-based practices to ensure meeting effectiveness, which are summarized in the form of a checklist in Table 3. Additionally, each section opens with key questions generated from thinking about meetings as existing in three phases: before, during, and after the meeting (Allen et al., 2015).

### ***Before the meeting: meeting design and preparation***

Key questions: How should meetings be structured? When should we have a meeting? Who should attend meetings?

Leveraging what is known about factors that contribute to employee perceptions of meeting effectiveness, psychologists who study meetings have considered design

characteristics that promote effective team meetings. Design characteristics concern structural factors related to the meeting. For example, circulating a written agenda before the meeting, going over a verbal agenda at the start of the meeting, starting and ending the meeting on time, and ensuring that the meeting room and equipment are appropriate and high quality improve employees' perceptions of meeting effectiveness (Leach, Rogelberg, Warr, & Burnfield, 2009). In terms of meeting structure, meetings should operate according to an agenda that all attendees have access to prior to the meeting, allowing them to make necessary preparations (Cohen, Rogelberg, Allen, & Luong, 2011). Another important question to consider before a meeting is whether a meeting is necessary. Many meetings occur when another form of communication would be more effective. Meetings that exist simply to

**Table 3.** Checklist of Factors That Promote Good Meetings

Context and checklist item	Source for further information
	Before-meeting considerations
Meeting design	
Call a meeting only when necessary.	Luong & Rogelberg (2005)
Schedule meeting length to fit with meeting goals; avoid long meetings.	Leach, Rogelberg, Warr, & Burnfield (2009)
Keep meeting size small by including only those people whose expertise and knowledge are required.	Boivie, Bednar, Aguilera, & Andrus (2016)
Match technology to meeting objectives—use rich media (e.g., videoconferencing, teleconferencing) for virtual attendees.	Allison, Shuffler, & Wallace (2015)
Leader and attendee responsibilities	
Set clear goals and desired outcomes for the meeting.	Leach et al. (2009)
Prepare an agenda that is circulated in advance.	Leach et al. (2009)
Make sure the meeting is relevant to everyone invited.	Allen & Rogelberg (2013)
Come prepared by reviewing the agenda.	Cohen, Rogelberg, Allen, & Luong (2011)
Ensure that technology is working and ready to go prior to the meeting start time.	Allison et al. (2015)
	During-meeting considerations
Attendee responsibilities	
Arrive early (or on time).	Allen, Lehmann-Willenbrock, & Rogelberg (2018); Mroz & Allen (2017)
Avoid complaining, dominating communication behavior, and inappropriate verbal statements.	Kauffeld & Lehmann-Willenbrock (2012)
Avoid doing unrelated activities and nonparticipation.	Odermatt et al. (2018)
Leader responsibilities	
Follow an agenda that lays out clear goals and outcomes for the meeting.	Leach et al. (2009)
Start the meeting on time.	Rogelberg et al. (2014)
Avoid distractions and multitasking during the meeting.	Odermatt et al. (2018)
Allow attendees to participate in the decision-making process. If a decision is already made, let everyone know.	Mroz, Yoerger, & Allen (2018); Yoerger, Crowe, & Allen (2015)
Actively encourage everyone to participate.	Malouff, Calic, McGrory, Murrell, & Schutte (2012)
Intervene when interpersonal communication patterns become dysfunctional.	Odermatt et al. (2018)
	After-meeting considerations
Short term	
Send meeting minutes and action items out immediately following meeting.	Cohen et al. (2011)
Briefly assess meeting satisfaction and quality immediately following meetings to inform future meeting design.	Rogelberg, Allen, Shanock, Scott, & Shuffler (2010)
Long term	
Incorporate meeting satisfaction as a component of organization-wide employee engagement and satisfaction surveys.	Rogelberg et al. (2010)
Have leaders critically examine routine meetings to determine their necessity and value.	Luong & Rogelberg (2005)

share routine, nonurgent information that does not involve problem solving, decision making, or discussion should be avoided.

The second decision that meeting facilitators must make prior to a meeting is who should attend. People often attend meetings that are not relevant to their

work, and they do not add much to the meeting itself. Meeting leaders should consider the roles and contributions of all members who are anticipated to attend a meeting by answering questions such as what the goal of the meeting is, what expertise is needed to meet this goal (Allen et al., 2008), and how frequently we need

to meet to achieve our goal (Luong & Rogelberg, 2005). As with any form of goal setting, difficult (yet achievable) and specific goals for meetings should lead to higher meeting success (Locke & Latham, 2006). Ensuring that all of the people invited to the meeting have meaningful contributions to make based on their roles or expertise can also impact their subsequent attitudes toward workplace meetings and their overall job satisfaction. As Allen and Rogelberg (2013) found, employees who view their manager-led meetings as relevant experience a greater sense of psychological meaningfulness in the meetings, which, in turn, results in more highly engaged employees. However, not all premeeting preparations reside with the meeting facilitator. Meeting attendees can also promote meeting success by reviewing the agenda before the meeting so they are prepared to offer their input. Nonetheless, the decisions made prior to a meeting can only set the meeting up for success; what happens during the meeting is where the real challenge of meeting effectiveness comes into play (see Table 2 for an overview).

### ***During the meeting: critical leader and attendee actions***

Key questions: What can leaders do during the meeting to ensure that it runs smoothly? What can attendees do? How should attendees interact?

During the meeting, the behaviors exhibited by attendees and leaders, and interpersonal interactions that occur among attendees, can facilitate or hinder meeting effectiveness. For example, Sonnentag (2001), in an early study in this area, reported that high-performing and low-performing employees act differently in meetings. High performers contribute more than low performers by helping to set goals, facilitating group understanding of work problems and seeking feedback. Likewise, expert employees—those who are highly functional in a given area—also contribute more to meetings than nonexperts (Sonnentag & Volmer, 2009). Additionally, there are universal actions, such as arriving to the meeting on time (Mroz & Allen, 2017), paying attention, and avoiding distracting behaviors (e.g., emailing, instant messaging), that are important for all meeting attendees.

Because people do not exist in a vacuum, and much of what we do and think is influenced by the social context and the behavior of others, meeting success is also shaped by the behaviors and interaction patterns that emerge among group members (Lehmann-Willenbrock, Meyers, Kauffeld, Neininger, & Henschel, 2011). By targeting communication patterns within meetings, several studies have linked behavioral

patterns to outcomes of interest. For example, people who participate in a meeting by bringing up problems relating to poor work processes or performance feel less negative about their work a day after the meeting (Starzyk, Sonnentag, & Albrecht, 2018). On the other hand, when one person starts to complain in a meeting by expressing so-called “killer phrases” that reflect futility or an unchangeable state (e.g., “nothing can be done about that issue” or “nothing works”), other meeting attendees begin to complain, which starts a complaining cycle that can reduce group outcomes (Kauffeld & Lehmann-Willenbrock, 2012).

Furthermore, humor and laughter patterns in meeting interactions seem to stimulate positive meeting behaviors, such as praising other people, encouraging people to participate, and proposing solutions to problems, that predict team performance concurrently and even 2 years later (Lehmann-Willenbrock & Allen, 2014). Leveraging this knowledge, meeting attendees should take stock of the negative impacts that complaining can have on meeting success, while meeting facilitators should work to quell complaining as early as possible. Meeting success often rests on the swift intervention and clear direction that meeting leaders provide.

During meetings, leaders play an unequivocal role in establishing the meeting tone and focus. After establishing and circulating an agenda in the premeeting phase, the facilitator is also responsible for setting a clear purpose at the meeting onset and following the agenda during the meeting to ensure that it stays on track. Leaders who make meetings relevant to subordinates, allow people to speak freely and to participate in making decisions, and use time in meetings wisely can foster engagement among their subordinates (Allen & Rogelberg, 2013). Meeting leaders should also be readily equipped to recognize dysfunctional behaviors among attendees (e.g., complaining) and then to intervene at the appropriate time to refocus the meeting. For example, if complaining begins, the meeting leader should not participate in the complaining but instead try to move discussion back to agenda items.

### ***After the meeting: considerations for follow-up and lasting impact***

Key questions: What are our actions from here? How do we ensure follow through? How do meetings impact the attendees and the organization? What are the immediate and distal outcomes?

While much of meeting success depends on the preparatory steps taken prior to a meeting and the actions of leaders and followers during the meeting, ensuring meeting effectiveness does not end there. Indeed, actions

taken well after a meeting ends can make or break attendees' perceptions of meeting success. Therefore, it is critical that meeting organizers follow through on meeting objectives by sending meeting minutes to all relevant parties as a record of decisions made during the meeting, the action plan for next steps, and the designated roles and responsibilities assigned to achieve meeting outcomes (Cohen et al., 2011). Sending minutes also provides meeting details to anyone who was unable to attend and facilitates attendee follow-through. In addition to these actions, leaders must also seek out employee feedback regarding meeting satisfaction to help mitigate the negative perceptions associated with meetings.

One additional critical application of the science of meetings after they occur is in the seeking and incorporating of attendee feedback to inform future meeting design. Because researchers have found that more time spent in meetings is associated with greater fatigue, stress, and perceived workload, it is important that feedback regarding meeting satisfaction is acquired on a regular basis, especially to identify what makes a meeting bad or unsatisfying. Indeed, Rogelberg and colleagues (2006) expanded this line of inquiry and found that bad meetings were negatively associated with well-being, whereas good meetings did not have the same detrimental effect. Further, meeting satisfaction has been noted to be a significant, distinct predictor of employee job satisfaction, even when accounting for other facets of satisfaction (e.g., satisfaction with pay, promotion opportunities, the work itself, and coworkers; Rogelberg et al., 2010). Meetings have also been linked to employee engagement, or the degree to which employees invest personal energies in performing their work (Christian, Garza, & Slaughter, 2011). Accordingly, managers who take the time to identify potential concerns or issues with current meetings may be able to better structure future meetings if they actively request and are open to feedback after the meeting.

## The Future of Meeting Science

Although current work on meetings reveals a great deal about how meetings influence individuals, teams, and organizations, emerging work suggests promising new directions for the study of meetings and further development of the science. We provide some insights into new work on meetings, as well as some suggestions on how to advance the field. First, responding to general calls to move psychological research away from surveys, innovative research in the meeting context has begun to examine video- and audio-recorded behaviors in meetings. By focusing on behaviors, researchers can begin to examine specific, behaviorally based interventions to help meeting leaders and other individuals overcome poor communication problems, complaining,

and otherwise-derailed meetings. New behavioral studies of meetings also consider patterns of behaviors within groups and how those behaviors relate to individual, group, and organizational outcomes. Lehmann-Willenbrock and Allen (2018) provided an overview of these methods, classified as the modeling of temporal-interaction dynamics, and their complexities.

Second, exploration is needed regarding the impact of technology in meetings both for meeting purposes and for other purposes. Technology can be pivotal for bringing attendees together from around the world via virtual meetings (Allison, Shuffler, & Wallace, 2015), but it can also be a major distraction. Having phones or laptops available during meetings may encourage multitasking, resulting in inattention and distraction, but the effect is not yet clear. Work is currently underway that seeks to address how meeting attendees respond to others using cellphones and laptops during meetings, either for personal or business-related responses, but additional research is needed to better understand what the right role may be for technology.

Third, and perhaps most importantly, meeting science needs additional conceptual and theoretical clarity. To fully emerge as a science in workplace meetings, meeting science must grapple with the questions of why and how meetings work and impact other individuals, beyond reliance on the variety of current theories. For example, one theoretical orientation for conceptualizing the role of meetings in organizations is meetings as stressors (Scott, Allen, Rogelberg, & Kello, 2015). Work in this vein (e.g., Luong & Rogelberg, 2005; Rogelberg et al., 2006) has often used conservation-of-resources (COR) theory (Hobfoll, 1989). In brief, COR theory proposes that individuals experience psychological stress when valued resources are lost or threatened. In the case of meetings, the resources are often time for work and a sense of goal accomplishment (Mroz & Allen, 2017). Another theoretical approach is to conceptualize meetings as rituals wherein groups and organizations form cultures, identities, and climates (Scott et al., 2015). Nonetheless, the articles reviewed here occasionally suffer from a lack of theory or theories that are mostly mundane and do not directly explain what is observed. Unifying meetings-oriented theories that focus on multiple levels of analysis could overcome these limitations.

## Recommended Reading

Allen, J. A., Lehmann-Willenbrock, N., & Rogelberg, S. G. (Eds.) (2015). (See References). An edited book with many chapters on meeting science.

Cohen, M. A., Rogelberg, S. G., Allen, J. A., & Luong, A. (2011). (See References). An article that examines the idea that how meetings are designed can influence perceived meeting quality.

Lehmann-Willenbrock, N. L., & Allen, J. A. (2018). (See References). An article describing how to study and analyze behavioral patterns within groups—an emerging area of meeting science.

Schwartzman, H. B. (1986). (See References). The original article based on the book by the same author that was the first scientific study of "the meeting."

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