Chapter 6

How Differences Make a Difference:

The Role of Team Diversity in Meeting Processes and Outcomes

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Abstract

In this chapter, we explore the role of team diversity as an input factor for organizational meeting processes and outcomes. Team diversity refers to aggregated differences among group members that can be either relations-oriented (social category diversity; e.g., age, gender, race) or task-oriented (functional diversity; e.g., education, functional background, tenure). Contingent on various contextual conditions, we posit that these two diversity dimensions may have either positive or negative effects on meeting effectiveness. Specifically, we argue that interaction processes taking place in team meetings constitute the mediating link between diversity as an input factor and meeting outcomes. Based on this assumption, we develop a model linking both types of diversity to functional versus dysfunctional interactions in meetings. We use this model to derive a number of propositions regarding the links between diversity as an input factor, interaction processes during meetings as mediating mechanisms, and meeting outcomes. By connecting the dots between team diversity and meeting dynamics, we aim to deepen our understanding of the role of participant’s diversity in meetings and inspire future research testing the suggested propositions.

Keywords: Diversity, Work Teams, Meeting Success, Team Performance, Interactions
Introduction: A Growing Number of Meetings and an Increasingly Diverse Workforce

Team meetings are ubiquitous in today’s working life. Almost all organizations rely on some form of team work (Kozlowski & Ilgen, 2006) and coordinate their team work processes, information sharing and decision making through meetings (Leach, Rogelberg, Warr, & Burnfield, 2009). Meetings are communicative events that coordinate interactions to handle organizational tasks such as information exchange, problem solving and decision making (Schwartzman, 1989). Given the large number of meetings (Rogelberg, Scott, & Kello, 2007; Scott, Shanock, & Rogelberg, 2012) and their relevance for individual (Luong & Rogelberg, 2005; Rogelberg, Leach, Warr, & Burnfield, 2006; Shanock et al., 2013) as well as organizational level outcomes (Kauffeld & Lehmann-Willenbrock, 2012), it is essential to understand which factors influence meeting success. This chapter focuses on team diversity as an important antecedent or input factor for understanding team meeting processes and outcomes.

Work teams in organizations have become increasingly diverse due to pivotal changes such as demographic shifts, globalization, interconnectedness, and cross-functional work teams (Leibold & Voelpel, 2006; Van Knippenberg & Schippers, 2007; Williams & O'Reilly, 1998). Summarizing its investigation of workforce composition, the U.S Bureau of Labor Statistics (2012, p. 1) states that “compared with the labor force of the past decades, today’s labor force is older, more racially and ethnically diverse, and composed of more women”. This development toward a more diverse workforce is expected to continue in the coming years. For instance, in organizations in the U.S., the share of older workers aged above 55 years is expected to rise from 25% in 2010 to 29% in 2020 (U.S Bureau of Labor Statistics, 2012). In a similar vein, virtually all industrialized countries are confronted with a significant rise of the percentage of employees beyond 50 years of age (European Commission, 2012; Stamov-Roßnagel & Hertel, 2010).
Furthermore, it is becoming common to find employees working in multicultural teams (Nam, Lyons, Hwang, & Kim, 2009). As forecasts show, the share of ethnic minorities in the workforce is projected to grow from 2010 to 2020 in the U.S (Shrestha & Heisler, 2011). Similarly, the European Union is actively supporting the mobility of workers both within and between member countries (Bonin et al., 2008), indicating a global trend towards a culturally heterogeneous workforce.

In the past decade, researchers and practitioners alike have emphasized the potential of diverse teams for achieving higher levels of innovativeness and performance (Childs, 2005; Herring, 2009; Park, 2008; Richard, 2000). As Mannix and Neale (2005, p. 32) state, “a belief has developed among laypeople, management scholars, and social scientists alike that diversity in teams will lead to a direct increase in the variety of perspectives brought to a problem, to opportunities for synergistic knowledge and information sharing, and hence to greater creativity and quality of team performance.” However, in recent years the initial enthusiasm about the beneficial effects of diversity has given way to a more critical view (Milliken & Martins, 1996; Jackson & Joshi, 2011; Van Knippenberg, De Dreu, & Homan, 2004). We integrate both perspectives in this chapter and argue that diversity as an input factor for meetings can be viewed as a double-edged sword (Mannix & Neale, 2005) that can have positive or negative effects on meetings, depending on a number of contextual factors.

Work group meetings in organizations are directly affected by the increasing degree of diversity in teams (Hays-Thomas, 2004). As the workforce is becoming more diverse, it stands to reason that a growing number of meetings will take place with participants of various backgrounds. Yet, despite a large body of research on team diversity and performance outcomes (for meta-analytic reviews, see Horwitz & Horwitz, 2007; Joshi & Roh, 2009; Sivasubramaniam,
Liebowitz, & Lackman, 2012), the role of diversity in the context of meetings remains largely unexplored. This is particularly surprising because both the composition of diverse work teams and the conduct of meetings share the intent of bringing together various perspectives for improved problem solving (Mannix & Neale, 2005; Rogelberg, Shanock, & Scott, 2012). We aim to close this gap by building on the input-process-output model of team performance (Hackman & Morris, 1975). We consider team diversity as an input factor that affects the nature of the processes taking place in meetings, which in turn can impact meeting outcomes. Thus, we introduce interactions as an important mediator between team heterogeneity and meeting results. The purpose of this chapter can be summarized in the following research question: How does team diversity influence meeting outcomes through its effects on interaction processes during the meeting?

Before we proceed further, we note that diversity can be analyzed at different levels. In this chapter, we consider diversity at the team-level; to wit, we regard diversity as an aggregated team-level construct representing the total degree of diversity among meeting participants. Rather than taking into account the differences between two persons working together (dyadic level; cf. Oosterhof, Van der Vegt, Van de Vliert, & Sanders, 2009; Rink & Ellemers, 2006; Tsui, Porter, & Egan, 2002) we focus on the overall heterogeneity between meeting participants as our definition of meetings includes at least three individuals (cf. Schwartzman, 1989). Organizational-level diversity (i.e. the degree of diversity of an entire organization; cf. Ely, 1994; Kochan et al., 2003) also strikes us as less relevant for studying meetings, since the degree of diversity in a specific meeting will likely differ from organization-level diversity. Moreover, a high degree of organizational diversity does not automatically imply that a large amount of collaboration and face-to-face interaction takes place between members with diverse
backgrounds. For instance, although an organization can generally consist of members characterized by a wide variety of demographic characteristics and functional backgrounds, meetings may take place only with a narrow circle of similar employees working on comparable tasks. Lastly, our focus is in line with previous research as investigations on team-level diversity substantially outnumber dyadic or organization level studies of diversity (Kearney & Voelpel, 2012; Van Knippenberg & Schippers, 2007).

Our aim in this chapter is to generate a conceptual starting point for empirical work on diversity as an input factor to meeting processes and performance in organizations. To do so, we transfer what we currently know about the diversity-performance relationship to the field of meeting science. We structure the remainder of our chapter into four main sections. First, we introduce the concept of diversity in groups and explain why and how diversity matters in contemporary organizational life. Second, we reflect on the importance of analyzing interaction processes to deepen our understanding of meeting experiences. Third, we bring together these two streams of research to develop a conceptual model linking diversity to interaction processes in meetings, which in turn determine meeting effectiveness. To point out the main ideas of our model, we derive a number of testable propositions. Fourth, we identify additional avenues for future research and highlight the contributions that empirical work on diversity in meetings may bring about.

**Defining Diversity: Relations- and Task-oriented Characteristics**

A plethora of suggestions has been made to define the term *diversity*. Consistent with the majority of previous studies on team diversity, we understand diversity in terms of differences among team members with respect to specific personal attributes that lead to the perception that the other is different from oneself (Harrison & Klein, 2007; Kearney & Voelpel, 2012; Jackson,
May, & Whitney, 1995; Joshi & Roh, 2009; Roberge & Van Dick, 2010). Such attributes can be either relations-oriented (social category diversity, e.g. age, gender, race) or task-oriented (functional diversity, e.g. education, functional background, tenure). Relations-oriented diversity contains the readably visible aspects of diversity because age, gender and race are mostly accessible at first glance. According to the evolutionary perspective (e.g. Buss & Schmitt, 1993) those attributes are also referred to as automatic or biologically primitive categories constituting of characteristics that played an important role in the development of mankind. For example, demographic attributes have been used in previous times to categorize individuals immediately and to assess if they belong to the same group or if they constitute a potential threat. Relations-oriented diversity attributes possess a high cognitive accessibility (Fiske, 1998), meaning that individuals are aware of these characteristics almost without thinking. Due to the unconscious nature of this type of diversity it has been widely explored in stereotype research, i.e. in studies on categorical associations such as traits or behaviors that perceivers attribute to individuals based on their demographic characteristics (Fiske & Lee, 2008). In the organizational context not only the existence of a large number of stereotypes based on age (Posthuma & Campion, 2009), gender (Kusterer, Lindholm, & Montgomery, 2013; Powell, Butterfield, & Parent, 2002) or race (Block, Aumann, & Chelin, 2012; Chung-Herrera & Lankau, 2005) has been uncovered but it was also found that these types of stereotypes are extremely persistent. Lueptow, Garovich and Lueptow (1995) reviewed 18 longitudinal studies on sex stereotypes and find a high stability in self-rated perceptions of sex-typed personality traits, i.e. in attributes that are typically ascribed to males (e.g. dominant, ambitious, self-confident) or females (emotional, affectionate, talkative). In addition, the authors analyzed longitudinal data from 3600 U.S. students surveyed from 1974 to 1991 and concluded that sex stereotypes are not only stable but even slightly
increase over time. In a more recent meta-analysis, Lenton, Bruder and Sedikides (2009) examined the efficacy of interventions aimed at reducing automatic gender stereotypes by reviewing 13 research reports containing 21 independent effect sizes. Although the researchers found a small average positive effect, they summarized that “interventions do not meet with unmitigated success. In particular, the interventions studied usually failed to reduce automatic stereotyping to zero and do not give rise to reliable counterstereotypic responding” (Lenton et al., 2009, p. 191). In summary, relations-oriented diversity characteristics are not only highly salient in everyday work life but also likely to be associated with a number of stereotypes that are difficult to change. Although individuals can try to work against the unconscious activation of relations-oriented diversity categorizations by making use of controlled mental efforts (Blair & Banaji, 1996; Brewer, 1998), automatic processing seems to be the “default mode” (Fiske & Lee, 2008, p.18) that can only be overcome by a conscious act of volition.

Although relations-oriented diversity attributes have been investigated most often in scholarly work on heterogeneous work teams (Joshi & Roh, 2009), in recent years a growing number of studies also focused on task-oriented diversity. These investigations provide evidence for the usefulness of distinguishing between relations- and task-oriented diversity to better understand the diversity-performance link (Horwitz & Horwitz, 2007; Joshi & Roh, 2009). Task-oriented diversity encompasses job-related attributes such as tenure (i.e. the number of years an individual has been employed by a company), education (i.e. educational attainments and/or the educational specialization), or functional background (i.e. previous positions in the company). This type of diversity is also referred to as deep-level diversity since the constituting elements are not directly visible but nevertheless highly relevant for organizational work processes (Kearney & Voelpel, 2012). Task-related aspects are associated with the cognitive resource base
of teams since individuals varying in skills and experience are likely to have access to a larger amount of knowledge than homogeneous teams (Joshi & Roh, 2009). Beyond this two-fold classification of diversity, some scholars propose more fine-grained conceptualizations (e.g. Harrison & Klein, 2007) or apply a very broad understanding of diversity including differences in personality traits, attitudes, or values (e.g. Bell, 2007; Bradley, Klotz, Brown, & Postlethwaite, 2013; Russo, 2012; Tekleab & Quigley, 2014; Trimmer, Domino, & Blanton, 2002). In this chapter however, we keep with the more common distinction between relations- and task-oriented diversity.

**Diversity as an Input Factor for Meetings: Burden or Blessing?**

Since the beginning of diversity research, scholars have been interested in the effects of diversity on team performance. To explain potential performance effects of team diversity, two theoretical perspectives can be distinguished that result in contradictory predictions regarding the effects of team diversity on team processes and outcomes (Williams & O'Reilly, 1998). First, social identity theory (Tajfel & Turner, 2004) assumes that individuals define their identity by continuously comparing themselves to others. Over time, individuals develop an implicit self-categorization consisting of characteristics from a number of social categories. Others are compared to this self-image and distinguished into similar ingroup members or distinctive outgroup members. In order to maintain a positive self-identity, individuals tend to view ingroup members as more subjectively positive than outgroup members (Fiske & Lee, 2008). In addition, as stated in the similarity-attraction paradigm (Byrne, 1971), persons generally prefer others similar to themselves to those who possess different characteristics. For example, in the organizational context evidence shows that recruiters assess job interviews more positively and
provide a larger amount of offers to applicants who are similar to their own race than to dissimilar individuals (Goldberg, 2005).

This perspective possesses a number of potential implications for the consideration of diversity as an input factor in team meetings. To begin with, the tenets of social categorization theory imply that among diverse meeting participants, individuals build (mental) sub-groups within the team (Van Knippenberg & Schippers, 2007). Sub-group members who are similar to oneself are favored over others and chosen as preferred interaction partners, resulting in a narrowed “sub-circle” of members contributing to the meeting. In contrast, contributions of dissimilar sub-groups are prone to overly critical evaluations through the biased lens of categorization stereotypes (Polzer, Milton, & Swann Jr., 2002). As a consequence, group cohesion may decrease and emotional conflict is more likely to occur (Pelled, Eisenhardt, & Xin, 1999). Not only the frequency and openness of information exchange may be negatively affected in meetings with diverse participants, but also the development of shared meaning can be impaired (Sivasubramaniam et al., 2012). Shared meaning concerns the overlap among member’s definition of the tasks that need to be solved within the meeting and the processes that should be used to reach this aim. Research on spatially dispersed teams indicates that a failure to establish a common understanding can result in serious breakdowns in collaboration (Cramton, 2001; Maynard, & Gilson, 2014). Although dispersed teams differ from meeting groups with regard to their mode of communication, they are similar in that they need to coordinate their actions within defined time frames in order to reach objectives that are comparable to face-to-face meetings (e.g. solving problems, exchanging information). Thus, we assume that the implementation of common views also plays a pivotal role in meetings. In sum, the implications
of social categorization theory imply that diversity impairs the social interaction processes in heterogeneous meeting groups and therefore negatively impacts meeting outcomes.

In contrast to this view, the information/decision-making perspective of diversity (Williams & O’Reilly, 1998) argues that diversity has a positive influence on performance. In comparison to homogeneous teams, members of diverse groups can combine their extended range of knowledge to achieve improved performance, especially on complex tasks (Hambrick, Cho, & Ming-Jer, 1996; Jackson & Joshi, 2011). In addition, not only the quantity of available skills and expertise is likely to be larger than in homogenous groups but also the quality of information processing may be of higher value. This superiority results from the fact that participants have to discuss their different viewpoints more thoroughly to agree on a common understanding than groups that share comparable backgrounds (Van Knippenberg et al., 2004). The resulting larger amount of knowledge exchange and deeper processing of information in turn are assumed to have positive effects on team performance (Joshi & Roh, 2009). When applied to the context of meetings, the information/decision-making perspective suggests that diverse participant groups can utilize a large information pool to work on the meeting aims. Since meetings exist for facilitating decision making, discussing problems and solving crises (Schwartzman, 1989), a broad range of members' expertise can improve these processes, provided that their expertise is relevant for the meeting and combined in a purposeful way. Although diverse meeting groups may need more time to deal with conflicting perspectives, this can be an advantage in the long run, since task-related conflict has been found to enhance team performance (Jehn, Northcraft, & Neale, 1999). Constructive arguments can prevent groups from narrow perspectives, agreeing on solutions too quickly, or developing group think, thus avoiding the selection of strategies that were successful in the past but are not appropriate for the current
meeting goal (cf. Hackman & Morris, 1975). In addition, intensive discussions among meeting participants may increase involvement, which in turn is related to (perceived) meeting effectiveness (Leach et al., 2009). In summary, according to the information/decision-making perspective diverse teams have access to a larger knowledge base and make use of deeper elaboration processes than homogenous meeting groups. This information advantage in turn should result in better meeting outcomes.

Having introduced both perspectives on diversity, we note that a preference for one or the other approach lacks scientific grounds for two reasons. First, few scholars have empirically compared the relative explanatory power of both perspectives in the same study (e.g., Kearney & Gebert, 2009; Kearney, Gebert, & Voelpel, 2009). Instead, previous studies have tended to simply assume that whenever the diversity-performance association is negative, social categorization processes must have taken place (Van Knippenberg & Schippers, 2007). In other words, previous investigations of diversity have not explicitly tested the occurrence of social categorization processes, but rather interpreted the negative relationship between diversity and performance as indirect evidence for social categorization processes. Similarly, studies that identified a positive diversity-performance link have argued that considerable information elaboration must have taken place to develop above average solutions, without explicitly testing whether such elaboration actually occurred in the group (Kearney & Voelpel, 2012).

Second, although a large body of research has investigated the connection between (team-level) diversity and performance, to date there is no consensus whether the diversity-performance link is positive or negative. Whereas some studies reported a positive effect of diversity on performance (Herring, 2009; Hoogendoorn, Oosterbeek, & Van Praag, 2013; Richard, 2000), others provided evidence for a negative relationship (Ancona & Caldwell, 1992;
Baugh & Graen, 1997; Leonard, Levine, & Joshi, 2004). Yet, other studies found no relationship between diversity and performance at all (e.g., Webber & Donahue, 2001). As a result of these mixed and inconclusive findings, a number of researchers have pointed out a need to develop more complex models that take into account context variables to understand how and under what circumstances diversity can improve performance (e.g. Kearney & Voelpel, 2012; Kochan et al., 2003; Van Knippenberg & Schippers, 2007).

Scholarly work that has considered situational variables when investigating the diversity-performance-link relies on the so-called contingency approach (Luthans, 1973). According to this perspective, diversity does not have a universal effect on processes and outcomes but should be seen in context (Joshi & Roh, 2009; Webber & Donahue, 2001). For example, Van der Vegt, Van de Vliert and Xu (2005) showed that culture influences the link between task-oriented diversity and innovative climate at various sites of a multinational company. They found that organizational tenure and functional background were negatively related to innovative climate in high-power-distance countries, i.e., in societies in which members tend to accept hierarchical authority, considerable status differences, and inequality between individuals (Hofstede, 1991). In contrast, these diversity attributes were positively related to the locations’ innovative climate in low-power-distance countries (Van der Vegt et al., 2005).

Transferring this context-dependent understanding of the diversity-performance link to the area of meetings, we argue that a heterogeneous group composition does not directly determine outcomes but that it impacts team communication processes. We focus on interaction processes as crucial contingency variables since the primary aim of meetings is the purposeful organization of interactions (Schwartzman, 1989, p. 61). Thus, analyzing on-going interactions in meetings is a promising avenue to connect the dots between diversity as an input factor and a
range of output factors like meeting effectiveness or participant’s satisfaction (cf. Hackman & Morris, 1975). Even though studies on the relationship between diversity and team communication are rare, first results indicate a high value of observing interactions to gain insights into the effects of diversity on dynamic team processes. For instance, Nam et al. (2009) found that culturally diverse teams differed from homogenous teams with regard to the amount of task-related and socio-emotional communication used in an experimental decision-making task. In the following, we build on these findings and explicate why the analysis of functional and dysfunctional interactions in meetings is pivotal for understanding meeting effectiveness.

**The Role of Interaction Processes in Meetings**

Meetings are defined by their communicative character, i.e. by “multiparty talk that is episodic in nature” (Schwartzman, 1989, p. 7). Thus, to be able to explain what happens in meetings and how these processes are related to outcomes, it is necessary to trace interaction patterns taking place in meetings (Lehmann-Willenbrock, Allen, & Kauffeld, 2013). However, although work in the field of small groups and decision-making represent research streams that would be expected to have developed a comprehensive knowledge base of meetings, these scholarly directions have actually overlooked the subject (Rogelberg et al., 2012; Schwartzman, 1989). Only recently, a research stream on meetings in general (Luong & Rogelberg, 2005; Rogelberg et al., 2006; Rogelberg et al., 2007; Scott et al., 2012; Shanock et al., 2013) and meeting interaction processes in particular (Beck & Keyton, 2009; Gorse & Emmitt, 2007; 2009; Kauffeld & Meyers, 2009; Lehmann-Willenbrock, Allen, & Meinecke, 2014; Schulte, Lehmann-Willenbrock, & Kauffeld, 2013) has emerged. Among others, Kauffeld and Lehmann-Willenbrock (2012) suggested differentiating functional and dysfunction interaction in order to investigate communication processes in meetings. The authors analyzed 92 regular team
meetings in organizations and showed that functional interaction processes were closely related to both team and organizational outcomes. On the other hand, dysfunctional interaction resulted in lower meeting effectiveness.

We build on this differentiation between functional and dysfunctional interactions and refer in the following to a recently developed scheme for group interaction analysis, act4teams (see also Meinecke & Lehmann-Willenbrock, in this volume), to explain the sub-facets of both interaction types. The instrument is based on existing classification systems for intergroup communication (Bales, 1950; 1980; Futoran, Kelly, & McGrath, 1989; Marks, Mathieu, & Zaccaro, 2001) and has been successfully applied in a number of studies (Kauffeld, 2006; Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock & Kauffeld, 2010; Lehmann-Willenbrock, Meyers, Kauffeld, Neininger, & Henschel, 2011). Functional interactions are those activities in meetings that help to organize team members, tasks and tools, facilitate information and knowledge exchange as well as improve the socio-emotional climate in the meeting.

Four facets of functional interactions can be distinguished (e.g.; Kauffeld & Lehmann-Willenbrock, 2012; see also Meinecke & Lehmann-Willenbrock, in this volume). First, problem-focused communication describes behaviors like identifying a problem, cross-linking it to other areas and developing ideas to solve the problem. These actions not only facilitate solution generation, but also enhance knowledge sharing (Mesmer-Magnus & DeChurch, 2009). Second, positive procedural communication such as pointing out the topic, clarifying statements, managing the time or making suggestions for further procedures support the structuring and coordination of meetings. Third, action-oriented communication is related to proactive behavior, i.e. “a future-focused, change-oriented way of behaving” (Parker, Bindl, & Strauss, 2010). Examples are taking on responsibility for tasks or engaging in action planning. Proactive
behavior has been shown to positively affect individual (Crant, 1995) and unit performance (Crossley, Cooper, & Wernsing, 2013), indicating its potential usefulness for enhancing meeting effectiveness.

While the first three types of functional meeting communication are associated with task-oriented interactions (i.e. with behaviors focusing on achieving goals; Bales, 1950), the fourth facet, positive relational interactions, represents the socio-emotional side of communication. Examples are statements providing support to other meeting members, active listening or humor. These verbal expressions focus on the interpersonal relationships among participants and can improve group cohesion which in turn positively influences group performance (Chang & Bordia, 2001; Evans & Dion, 2012). As an illustration, Gorse and Emmitt (2009) found in an analysis of interactions in construction project meetings that projects completed within budget are characterized by a larger amount of socio-emotional interaction than projects exceeding their budget. In a similar vein, Troth, Jordan, Lawrence and Tse (2012) reflect on the role of emotional skills in group work and provided evidence that team-level emotional skills positively predicted team task performance.

However, recent research suggests that positive relational interactions are not always beneficial, but can also be linked to lower meeting satisfaction (Kauffeld & Lehmann-Willenbrock, 2012). This finding may be explained by the potential of socio-emotional statements to create mood convergence in groups, which can be both positive and negative and manifest in observable behavioral expressions (Bartel & Saavedra, 2000). Moreover, positive socioemotional interactions such as stating agreement can support not only positive, but also negative meeting behaviors. For example, previous research found that complaining statements were often followed by a supportive statement, such that positive socio-emotional statements
promoted the next complaining statement and resulted in the emergence of negative complaining cycles in the observed team meetings (Lehmann-Willenbrock et al., 2011). This process can reduce meeting satisfaction and team performance.

It is important to note that these previous studies on meeting interactions have investigated established homogenous teams in organizations, in which positive socio-emotional statements may be less necessary for effective collaboration (Kauffeld & Lehmann-Willenbrock, 2012). In contrast, socio-emotional communication may be of higher importance for heterogeneous groups to be able to build trust and team cohesiveness through interactions in order to act successful (Hsin Hsin, Shuang-Shii, & Shu Han, 2011; Saonee, Manju, Suprateek, & Kirkeby, 2011). This is especially important in the context of meetings where diverse participants have to work together immediately and cannot take a lot of time that may be needed to adjust as a team (Watson, Kumar, & Michaelsen, 1993). Thus, we assume that expressing positive relational statements is advantageous for heterogeneous groups to develop a psychologically safe climate, i.e. a “shared belief that the team is safe for interpersonal risk taking” (Edmondson, 1999, p. 354), which in turn can enhance performance (Roberge & Van Dick, 2010).

In contrast to this positive side, dysfunctional interactions refer to verbal contributions that undermine effectiveness in meetings and increase the likelihood of negative outcomes such as dissatisfaction with the meeting, insufficient results and – in the long-term – lower organizational performance. We distinguish between three broader facets of dysfunctional interaction behaviors in meetings (Kauffeld & Lehmann-Willenbrock, 2012; see also Meinecke & Lehmann-Willenbrock, in this volume). First, negative procedural communication encompasses behaviors that interrupt the meeting flow and results in a disorganized course of events. It comprises the telling of examples or stories not connected to the meeting goals,
unstructured statements off topic or “monologue marathons” (Sirianni, 2004, p. 58). Second, counteractive behaviors are related to obstructive actions that slow down meeting progress. Examples include disinterest in ideas or change, complaining, or denying responsibility (Kauffeld & Meyers, 2009; Lehmann-Willenbrock & Kauffeld, 2010; Schulte et al., 2013). Third, negative socio-emotional communication comprises statements that represent disinterest and adverse social relationships. Behaviors such as criticizing or interrupting other participants and having side conversations not related to the meeting can impair team climate and inhibit problem solving (Kauffeld & Lehmann-Willenbrock, 2012).

To sum up, the communicative nature of meetings (Schwartzman, 1989) calls for research focusing on interactions to understand their outcomes. Empirical evidence supports a positive link between functional interactions and meeting effectiveness. Furthermore, the harmful link between dysfunctional interaction and performance has not only been proven in previous studies but was even found to outweigh the beneficial impact of positive meeting communication (Kauffeld & Lehmann-Willenbrock, 2012). Given the importance of meeting interactions, it is surprising that the role of diversity as an input factor for meeting interactions has not been explored systematically to date. In the next section, we propose a conceptual model as a first step to address this gap.

**Diversity as an Input Factor in Meetings: A Conceptual Model**

To the best of our knowledge, meetings research to date has not explored the role of diversity as an input factor for meeting interactions and outcomes. We have introduced the differentiation between relations-oriented (e.g. age, gender, race) and task-oriented (e.g. education, functional background, tenure) diversity on the one hand and functional versus dysfunctional meeting interaction on the other hand. In the following, we connect the dots...
between the two types of diversity, team interactions and meeting outcomes. With regard to meeting outcomes, we focus on meeting satisfaction as a subjective indicator of team members' subjective evaluations of the meeting experience and team performance following the meeting (cf. Kauffeld & Lehmann-Willenbrock, 2012). Given the communicative nature of meetings (Schwartzman, 1989), we extrapolate that the key to understanding the diversity-performance link in meetings lies in the analysis of interaction processes. Additionally, a number of context factors influencing the relationship between diversity as defining input factor, processes and outcomes must be taken into account. Our assumptions are summarized in Figure 6.1. In the following, we explain this model and derive a number of testable propositions.

Diversity and meeting effectiveness

As suggested by several scholars, relations-oriented and task-oriented diversity may have different effects on outcome variables (e.g., Horwitz & Horwitz, 2007; Roberge & Van Dick, 2010; Webber & Donahue, 2001). We assume that relations-oriented diversity is not necessarily connected to the amount of meeting-relevant knowledge, since it only describes socio-demographic characteristics of meeting participants which do not automatically imply a diversity of cognitive perspectives or dissimilar levels of information. For example, consider a meeting with gender diverse participants who all share the same educational background, come from the same department and possess a comparable amount of task-relevant information. In this context, gender is likely not a relevant diversity category for improving the available knowledge base in the meeting. Instead, relations-oriented diversity can lead to social categorization processes in such a context, meaning that meeting participants define themselves in differentiation to others—
a process that is often based on easily accessible categories like age, gender and race (Messick & Mackie, 1989; Williams & O’Reilly, 1998). Individuals who share relations-oriented diversity attributes such as having a similar age or ethnical background frequently develop similar attitudes and values (Williams & O’Reilly, 1998). For instance, studies in the tradition of generational cohort theory find significant differences in worldviews between generations, i.e., groups of individuals sharing a particular span of birth years and social or historical experiences during their formative years (Cogin, 2012; Glass, 2007). To illustrate the relevance of this idea for meeting processes, imagine two meeting attendees who are close to one another in age. They will likely share other similarities such as comparable experiences within the organization, similar family situations, or even the same hobbies. As a result, and in line with the similarity-attraction paradigm (Byrne, 1971), these two meeting attendees should feel closer to one another and easily find a joint communication mode. In contrast, meeting participants who are perceived as different are likely to be ascribed negative attributes (Joshi & Roh, 2009). By building sub-groups, open communication in meetings can be impaired, thus reducing the amount of exchanged information and slowing down meeting progress. In addition, a meeting group with a high degree of relations-oriented diversity may be confronted with more relations-oriented conflict, which can be detrimental to performance (De Dreu & Weingart, 2003).

However, when considering task-related rather than relations-oriented diversity, a different picture emerges. Recall that task-related attributes are assumed to be connected to the available knowledge base of a group (e.g. Horwitz & Horwitz, 2007; Joshi & Roh, 2009). As such, meeting participants who differ with regard to their functional background, education or tenure will likely possess different cognitive resources that can be combined to develop sophisticated solutions in meetings.
Meta-analytic results support our argument concerning the differential effects of relations- versus task-oriented diversity on performance outcomes. Joshi and Roh (2009) analyzed the results of 39 studies with 9,757 teams and found that on the one hand, relations-oriented team diversity negatively affected performance. In particular, while gender and race showed small negative effects, age diversity had the most disadvantageous effect on performance across the 39 studies in their sample. Similarly, recent research highlights the potential performance threats of age-diverse teams (Kunze, Boehm, & Bruch, 2011; 2013). For task-related diversity on the other hand, the meta-analysis by Joshi and Roh (2009) found performance benefits, especially concerning functional diversity. In a different meta-analysis of 35 peer-reviewed studies, Horwitz and Horwitz (2007) reached similar conclusions. They found a small but not significant negative effect for demographic diversity and a larger positive effect for task-related diversity (cf. also Bell, Villado, Lukasik, Belau & Briggs, 2011).

Although these previous findings relate to groups in general rather than meetings as particular sites of social interaction in organizations, they do suggest that diversity will have an effect on meeting outcomes. Thus, when we relate these previous findings to the context of meetings, we can extrapolate the following:

**Proposition 1a:** Meeting attendees' relations-oriented diversity (e.g., age, gender, race) has a negative impact on meeting satisfaction and performance.

**Proposition 1b:** Meeting attendees' task-oriented diversity (e.g., education, functional background, tenure) has a positive impact on meeting satisfaction and performance.

**Mediating mechanisms: Meeting interaction processes**

Having discussed the direct link between relations- versus task-oriented diversity and meeting satisfaction and meeting performance outputs, we now turn to the pivotal role of
interactions as a mediating process in the diversity-outcome link (cf. Hackman & Morris, 1975). A mediator is a process variable that determines the existence of a relationship between an input and an output variable (e.g., Hayes, 2013). In the context of meetings, mediating mechanisms are important to understand why and how input factors such as diversity characteristics impact meeting outcomes. In line with previous research on the social processes and interaction dynamics during meetings (e.g., Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock et al., 2013), we assume that the nature of meeting interactions can explain the link between input factors (team diversity) and outcomes (meeting satisfaction, team performance). We know from previous research that functional and dysfunctional interaction processes differentially shape meeting outcomes (cf. Kauffeld & Lehmann-Willenbrock, 2012). Functional meeting interaction (problem-focused, positive procedural, action-oriented and positive socio-emotional communication behaviors) are supposed to be connected to the information/decision-making perspective of diversity. The defining characteristics of functional meeting interaction—such as describing and connecting problems or developing solutions—coincide with the main properties of information elaboration, in terms of processing task-relevant knowledge, combining ideas and collaborating to come to a joint decision or (Van Knippenberg et al., 2004). Thus, if diverse meeting attendees engage in functional communication, they should be able to make use of their large knowledge pool, compared to more homogenous groups of meeting attendees (Williams & O'Reilly, 1998). The combination of different perspectives from diverse participants can unlock creativity potentials and enhance the creation of (radical) innovations (Díaz-García, González-Moreno, & Sáez-Martínez, 2013). A diversity of opinions can thus promote open information exchange to foster idea generation, one of the main reasons for using meetings in organizations (e.g. Gorse & Emmitt, 2009; Schwartzman, 1989). Moreover, the need to integrate
different perspectives or opinions may trigger task-related interactions that are needed for resolving task- or process-related conflict. For example, meeting attendees with different functional background and resulting differences in perspectives may disagree on ways to improve organizational processes, or they may disagree about the quality of different solutions. Task-related conflict can be a constructive way of avoiding group thinking (i.e., the tendency to agree on an opinion of course of action without realistically appraising alternative solutions; Moorhead & Montanan, 1986). As such, task-related conflict can improve decision making, and ultimately promote performance in groups (e.g., De Dreu & Weingart, 2003; Schulz-Hardt, Brodbeck, Mojzisch, Kerschreiter, & Frey, 2006). Accordingly, meetings with a high degree of information elaboration through functional interactions are likely to unleash beneficial effects of diversity.

On the opposite side, the three facets of dysfunctional interaction (destructive procedural communication, counteractive behaviors, negative socio-emotional statements) are expected to bring out the social categorization perspective of diversity. While it is intuitively appealing that losing oneself in irrelevant details and focusing on the past results in ineffective meetings (Kauffeld & Lehmann-Willenbrock, 2012), we consider harmful socio-emotional communication to be especially important in the context of diversity. Behaviors such as personally criticizing others and expressing self-promotion at the expense of others, lead to a negative atmosphere and emphasize individual differences. This impedes the ability to take advantage of differing member opinions, which implies that these meeting groups “will not be as productive at decision making or conflict resolution” (Beck & Keyton, 2009, p. 223). If conflict is not handled in a task-oriented and constructive manner but rather becomes personal and relationship-focused, it often impairs performance (De Dreu & Weingart, 2003). Moreover, the impact of social or relationship
conflict can even outweigh the previously discussed positive effects of task-related conflict (De Wit, Jehn & Scheepers, 2013; Janssen, Van De Vliert, & Veenstra, 1999). Building on these findings, we conclude that considering the nature of interactions is essential to understand the diversity-outcome link in meetings. For instance, meeting participants with different educational backgrounds may hold prejudice against one another and be reluctant to collaborate, thus engaging in a large amount of dysfunctional interaction. In this context, the potential positive effect of their enlarged knowledge base cannot be used for improved problem solving. Rather, task-oriented diversity will have a negative effect on meeting effectiveness, because dysfunctional meeting communication processes become more likely. Put formally, we suggest:

**Proposition 2a:** The link between meeting attendees' relations-oriented diversity and meeting satisfaction and performance is mediated by meeting communication.

**Proposition 2b:** The link between meeting attendees' task-oriented diversity and meeting satisfaction and performance is mediated by meeting communication.

**Meeting attendees' diversity attitudes as a contingency factor**

A fundamental requirement for the influence of diversity characteristics on meeting processes is that meeting participants are aware of these differences and regard them as meaningful in the given meeting context (Hentschel, Shemla, Wegge, & Kearney, 2013; Pelled, 1996; Van Knippenberg et al., 2004). Thus, the salience of diversity aspects determines if meeting participants differentiate between ingroup and outgroup members. For example, consider a meeting in an industrial company held for the purpose of developing the marketing strategy for a new product. If all participants but one young female from the marketing department are middle-aged male engineers with a product-development background, it is likely that age, gender and functional position are highly salient categories. In contrast, in a more
balanced setting such as in the educational sector, demographic attributes may not be as readily apparent in terms of salient diversity attributes (cf. Joshi & Roh, 2009).

However, the salience of diversity per se does not automatically result in negative effects such as intergroup bias, i.e. the preference for similar individuals and the disadvantageous treatment of outgroup members. Rather, the affective evaluation of perceived differences determines the degree of interpersonal liking, which in turn can affect the amount of emotional versus task-related conflict (Van Knippenberg et al., 2004). Subjective evaluations of diversity can be captured by measuring attitudes towards diversity. For instance, a positive view of diversity has been found to enhance performance in a brainstorming task in homogenous teams and foster positive psychological reactions to the group experiences (Nakui, Paulus, & Van der Zee, 2011). Wegge et al. (2012) summarize in their evaluation of a six-year research program on age diverse teams that a high appreciation of age diversity is a precondition for the effective functioning of heterogeneous groups (cf. also Hentschel et al., 2013).

In the context of meetings, these previous findings imply that the meeting attendees' attitudes about diversity can change the relationship between both types of diversity and the amount of functional versus dysfunctional interaction. When meeting attendees appreciate diversity, they may engage in more functional interaction with both similar and dissimilar meeting members. We expect that diversity attitudes will have an impact on both relations- and task-oriented diversity contexts in meetings. First, when a meeting group is characterized by high relations-oriented diversity, positive attitudes about diversity can promote functional meeting interaction processes, despite the differences between meeting attendees. Negative attitudes about diversity however may even exacerbate the negative effects of relations-oriented diversity on meeting outcomes, via dysfunctional meeting interaction as argued earlier. Second, in the case
of task-related diversity in meetings, positive attitudes about diversity could strengthen the potential performance benefits, via further promoting functional meeting interaction. On the contrary, we would expect that negative attitudes towards diversity inhibit the beneficial effects of task-related diversity such that task-oriented diversity may be negatively related to functional interactions and positively related to dysfunctional interactions if meeting attendees show negative attitudes towards diversity. Taken together, we assume:

*Proposition 3a:* Meeting attendees' attitudes towards diversity moderate the relationship between relations-oriented diversity and meeting communication, such that relations-oriented diversity is less harmful for meeting communication processes when attitudes towards diversity are positive.

*Proposition 3b:* Attitude towards diversity moderates the relationship between task-oriented diversity and interactions in meeting communication, such that task-oriented diversity is more beneficial for meeting communication processes when attitudes towards diversity are positive.

*Meeting motivation as a contingency factor*

Several researchers have identified task motivation as an important antecedent of collaboration effectiveness (e.g., Laran & Janiszewski, 2011) which suggests that motivation may play an important role in the context of meetings as well. Somewhat surprisingly, the influence of task motivation on performance has been “more or less neglected” in the field of diversity (Van Knippenberg et al., 2004, p. 1012). In a similar vein, research on the role of attendees' motivation to participate in a meeting is rare. Li-Ping Tang, Tollison and Whiteside (1987) operationalized meeting motivation in a field study on quality circles as the number of
members per meeting (i.e. meeting size) and the attendance rate at meetings. They find a high correlation between both parameters but results are rather disappointing with regard to the predictive power for performance outcomes. The authors argue that this is due to a number of situational factors that influence their measures of meeting motivation. For instance, meetings may be obligatory in some organizations or employee turnover can reduce the average meeting size. As a consequence, Li-Ping Tang et al. (1987) suggest using different measures of meeting motivation that are more suitable to capture intrinsic motivation. A first step in this direction can be seen in the work of Baran, Shanock, Rogelberg and Scott (2012), who investigated meeting citizenship behavior in terms of extra-role behaviors supporting meeting processes. These activities can be understood as driven by high motivation and are expected to be related to positive meeting outcomes. Similarly, productive meeting behaviors such as contributing solutions or being proactive (e.g, Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock et al., 2011) could be viewed as representations of meeting motivation. However, more direct considerations of motivation as a contingency for meeting processes and outcomes are lacking.

We expect that motivation may play an especially important role in the context of diversity and meeting processes and outcomes. In the field of diversity research, Meyer and Schermuly (2012) compared homogenous and heterogeneous groups in a computer-simulated complex problem-solving scenario and found that both high task motivation and a positive attitude towards diversity are necessary for overcoming the detrimental performance effects of diverse groups. Building on these results, we assume that the motivation to participate and contribute to the meeting also influences the link between diversity and functional versus dysfunctional interactions. Specifically, we propose the following:
Proposition 4a: Meeting motivation moderates the relationship between relations-oriented diversity and meeting communication, such that relations-oriented diversity will have less of a negative impact on meeting communication processes if attendees' meeting motivation is high.

Proposition 4b: Meeting motivation moderates the relationship between task-oriented diversity and meeting communication, such that task-oriented diversity will be less beneficial for meeting communication processes if attendees' meeting motivation is low.

Limitations and Additional Avenues for Research on Diversity in Meetings

The presented conceptual model already implies a series of testable propositions. However, our model is by no means exhaustive, and meeting researchers can explore a number of additional avenues to deepen our understanding of diversity as an input factor for meeting processes and outcomes. First, throughout the chapter we have implicitly referred to team meetings without a formal leader or manager. This focus helped us draw on previous process-analytical research on meetings that has focused on groups without hierarchy (Kauffeld & Lehmann-Willenbrock, 2012), which facilitated the derivation of our research propositions in the context of organizational meetings. However, leadership has been shown to influence the diversity-performance link (Kearney & Voelpel, 2012) as well as meeting citizenship behaviors, i.e., extra-role behaviors of participants that support meeting processes (Baran et al., 2012). Thus, if a formal supervisor is in place in meetings, our propositions may be additionally effected by leadership style (Homan & Greer, 2013; Kearney, 2008; Kearney & Gebert, 2009) as well as specific leader attitudes (Kunze et al., 2013). Future research investigating the role of leaders in shaping meeting processes and outcomes when dealing with diverse meeting
participants could deepen our understanding of the contextual factors influencing the diversity-performance link in team meetings.

Second, it would be of interest to focus on ways to improve meetings with diverse participants, for instance through team development or trainings that intend to change participant’s attitude toward diversity. Although first studies have provided evidence for the reduction of discrimination through diversity trainings (King, Dawson, Kravitz, & Gulick, 2012), we suggest that future research should look into specific training formats rather than general courses to foster functional interaction in diverse meeting groups.

Third, another area for future work is the investigation of potential curvilinear relationships between diversity, functional interactions and outcomes. Earley and Mosakowski (2009) for example found evidence for a U-function, meaning that either very homogenous or highly heterogeneous teams are more effective over time. In contrast, most other researchers support the idea of an inverted U-function (Jetten, Spears, & Manstead, 1998), indicating the existence of an optimal level of diversity that maximizes performance. Transferring this discussion to the meeting area, it would be of interest to analyze the amount of functional versus dysfunctional interactions at different levels of diversity.

Fourth, using longitudinal designs that investigate how time impacts the development of diversity salience and nature of interaction over time should lead to additional valuable insights (Marks et al., 2001). For instance, it is possible that participants negotiate their status at the beginning of a meeting (cf. Ericksen & Dyer, 2004; Polzer et al., 2002) and that these interactions determine future salience and evaluation of diversity characteristics. Moreover, the influence of diversity characteristics may lose importance over time or even shift from a negative to a positive relationship (social-contact hypothesis, Pettigrew, 1982; see also Horwitz &
Horwitz, 2007). In addition, empirical findings suggest that task- and relations-oriented diversity can differ in their effects over time (Harrison, Price, & Bell, 1998).

Lastly, scholars have suggested that industry-level contingencies influence diversity-based outcomes in team settings (Hambrick et al., 1996). In support of this notion, meta-analytical findings by Joshi and Roh (2009) show that industry-level moderators can explain significant variance in the effect size of the diversity-performance link among studies. For example, their meta-analysis revealed a positive link for relations-oriented diversity on team outcomes in the service industry but a negative effect in the manufacturing sector and high-technology industry. In contrast, the moderating effect of industry setting on the link between task-related diversity and performance is rather weak. Transferring these findings to the area of meetings, future research could investigate whether the nature of interactions taking place in team meetings with a high degree of relations-oriented versus task-oriented diversity differs depending on the specific industry setting. In a second step, future research can investigate whether these differences are in turn related to meeting outcomes.

Conclusion

Diversity can be a double-edged sword (Mannix & Neale, 2005), with either positive or negative effects on meeting processes and outcomes. When diversity characteristics are evaluated as positive and relevant for the meeting context, they may enhance the elaboration of information through functional interaction processes and thus improve meeting outcomes. However, if diversity attributes are salient in meetings and evaluated negatively, the perceived dissimilarity among participants may result in lowered interpersonal attraction. This in turn elicits emotional conflict and causes lower functioning of the team by increasing the amount of dysfunctional interaction (Pelled et al., 1999). We discussed a number of contextual factors that
explain the salience and evaluation of diversity characteristics and thus influence the proposed input-process-output relationship between diversity and meeting success.

Our proposed conceptual model implies a call to further integrate diversity and meeting research in order to gain a deeper understanding of the relationship between team member’s characteristics, categorization processes and the resulting nature of meeting interactions. Furthermore, this framework is also of interest for practitioners to guide them on what dimensions of diversity might be more important than others in determining meeting interaction processes. In summary, we are convinced that empirical work on the diversity-performance link in meetings is not only needed to improve our scientific understanding of meeting processes but also to yield advice concerning how to design meetings in an increasingly diverse work environment.
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Figure 6.1. Conceptual model linking diversity as defining input factor, interactions and outcomes in meetings.