

WHAT CHARACTERIZES EFFECTIVE MANAGEMENT TEAMS? A RESEARCH- BASED APPROACH

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Most organizations use management teams at different levels in the hierarchy to oversee and coordinate their businesses. Such teams typically make decisions, solve problems, coordinate tasks, and keep one another informed, and they can strongly influence the performance of an organization. Hence it is vital to identify factors that are associated with effective management-team performance. Based on a review of international research on management and decision-making teams from the early 1980s through today, we have identified a number of variables that seem to be important for the effectiveness of management teams. The variables are organized into 4 different categories: (a) *input factors*, which are relatively stable characteristics of the team and its environment (team purpose, team tasks, team size, team composition, and reward systems); (b) *process factors*, which refer to how the team works (meeting goals, focused communication, handling of task and relationship conflict, dialogical communication, political behavior, behavioral integration, external relationships, team learning behavior, and team leadership); (c) *emergent states*, which are cognitive, motivational, and affective states that emerge from the team members' interaction (team psychological safety, team cohesion, and functional team norms); and (d) *output factors*, which describe the different kinds of outcomes achieved by the team (task performance and individual well-being and growth). In this paper, we discuss the empirical research behind each of the variables and how the variables are associated with management-team effectiveness.

Keywords: management team effectiveness, team performance

Most organizations use management teams to manage and coordinate their businesses—both at the top and lower levels throughout the organizational hierarchy (Bang & Øverland, 2009; Nadler, Spencer, & Associates, 1998; Overfield, 2016). Leading team researchers Wageman and Hackman (2010) define a management team as “a group of individuals, each of whom has a personal responsibility for leading some part of an organization, [and] who are interdependent for the purpose of providing overall leadership for a larger enterprise” (p. 477). A management team generally

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consists of a senior manager and the managers that report directly to him or her. The team meets regularly with its main goal being to provide strategic, operational, and institutional leadership for the organizational unit it heads (Wageman, Nunes, Burruss, & Hackman, 2008). Thus each member is not only responsible for his or her own unit or function but also explicitly wears another “hat”—that of corporate leadership (Ancona & Nadler, 1989).

Management teams typically set overall goals, strategies, and priorities and make decisions vital to the organization. Its members discuss issues, solve problems, give one another advice, and monitor ongoing processes within the organization. Management-team members inform one another about important issues and help ensure that the organization’s various processes and units are aligned and interact efficiently (Bang & Øverland, 2009; Wageman et al., 2008). According to Wageman et al. (2008), a management team can “provide the flexibility to transcend the traditional silo mentality that pervades many organizations and to effectively manage the important but often ambiguous white spaces that lie between those silos” (p. xiii). An effective management team makes a positive contribution to the organization’s value-creation process; it creates added value relative to what could be achieved if the managers were to operate as isolated individuals. Hence management teams hold the potential to strongly influence the performance of an organization (Flood, MacCurtain, & West, 2001; Hambrick & Mason, 1984).

There are a number of review articles and textbooks presenting research-based models of variables associated with team effectiveness in work teams in general (e.g., Bettenhausen, 1991; Cohen & Bailey, 1997; Curphy & Hogan, 2012; Gladstein, 1984; Guzzo & Dickson, 1996; Hackman, 2002; Ilgen, Hollenbeck, Johnson, & Jundt, 2005; Katzenbach & Smith, 1993; Kozlowski & Ilgen, 2006; Mathieu, Maynard, Rapp, & Gilson, 2008; Rico, de la Hera, & Urbietta, 2011; Sundstrom, McIntyre, Halfhill, & Richards, 2000; Thompson, 2015). However, there are very few books or articles that present a research-based and comprehensive model of the variables that are relevant specifically for the effectiveness of management teams. Two notable exceptions are Wageman et al. (2008) and Overfield (2016), who both suggested integrated frameworks of variables influencing performance in management teams. Neither of these two frameworks, however, was developed through a broad and systematic review of research on management teams and decision-making groups. They both built on Hackman’s (2002) generic team-effectiveness model, with variables identified as vital to team effectiveness in all types of teams—not management teams in particular. The aim of this article, therefore, is to suggest a research-based, integrated model of variables that predict effectiveness in management teams specifically, based on a broad review of international research on management teams and decision-making teams from the early 1980s through today. The article does not intend to describe how to develop or improve these variables but will provide organizational consultants, human-resource professionals, and managers with a menu of research-based factors to help management teams succeed. Readers interested in knowing more about how to develop effective management teams should consult, for example, Curphy and Hogan (2012); Overfield (2016); Schwarz (2013), and Wheelan (2016).

We have organized the variables into a model in which we distinguish among the following factors:

- *Input factors*, which are relatively stable characteristics of the management team and the team’s environment. These variables can be seen as the basic conditions for effective teamwork.
- *Processes*, which refer to how the management team works. Processes include both task-related processes (how the members work together on team tasks) and interpersonal processes (what happens on the psychological level when members work together).
- *Emergent states*, which are “properties of the team that are typically dynamic in nature and vary as a function of team context, inputs, processes, and outcomes” (Marks, Mathieu, & Zaccaro, 2001, p. 357). They describe cognitive, motivational, and affective states that emerge in the team and can be considered indicators of team viability (de Wit, Greer, & Jehn, 2012; Hackman, 2002).
- *Output factors*, which describe two different kinds of outcomes achieved by the management team—task performance and individual well-being and growth.

As can be seen from Figure 1, the four classes of factors are interrelated and will influence one another: Input factors will influence processes, emergent states, and output factors; the output factors will influence and be influenced by emergent states; and the emergent states will influence the team processes and may after a time even become stable characteristics of the management team. In the following we start at the right side of the model and discuss what it means to be an effective management team (output factors) and which factors can be viewed as indicators of team viability (emergent states). Then we move on to explore the basic conditions for becoming an effective management team (input factors) and discuss how effective management teams work and communicate (process factors).

What Kind of Results Do Effective Management Teams Achieve?

According to Harvard professor J. Richard Hackman's categorization of team outcomes (Hackman, 2002; Wageman, Hackman, & Lehman, 2005; Wageman et al., 2008), management teams are effective to the extent that they achieve satisfying results in the following three areas: task performance, individual well-being and growth, and team viability. Management teams should therefore simultaneously focus on "it"—accomplishing task results that represent added value for the organization; "I"—facilitating learning, growth, and development that represent added value for the individual team members; and "we"—fostering group psychological states that increase the team's capacity to work interdependently in the future and that represent added value for the functioning of the management team (Overfield, 2016). Following de Wit et al. (2012), we suggest that the "we" factor (team viability) should be considered a special type of outcome, different from task performance and individual well-being and growth. Team viability can be seen as *emergent states*: cognitive, motivational, and affective states that emerge as a product of the context, interaction, and input factors of the team (Marks et al., 2001). Although management teams are primarily meant to create added value for the organization and the members of the team, they should also foster team viability, because it will greatly affect both the team's task performance and individual members' well-being and growth.

Output # 1: Task Performance—Added Value for the Organization

The first criterion for being an effective management team is that the results produced by the team make a significant and positive contribution to the success of the organization—in other words that the results create substantial added value for the organization. The term *added value* is drawn from the literature on business strategy and describes the additional value that goods or services gain when they are exposed to a business activity (Kay, 1993). Nadler (1998) referred to this criterion as

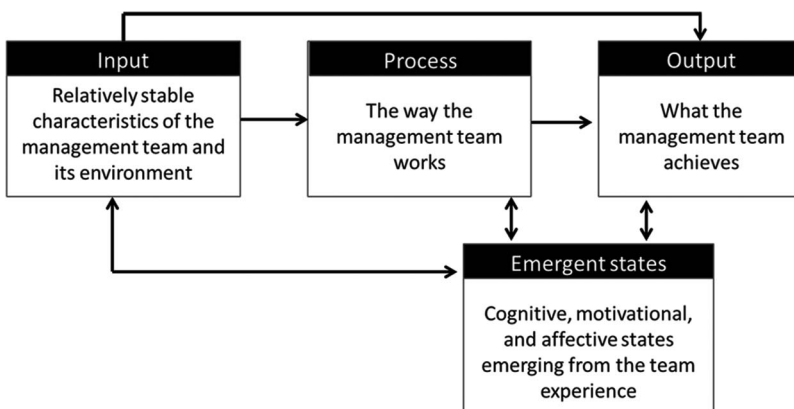


Figure 1. Overview of the management-team effectiveness model.

production of results, which reflects “the team’s ability to effectively meet the demands of its role” (p. 23). What kind of task results should effective management teams produce? Nadler (1998) talked about the management team’s ability to maintain organizational performance in the face of strategic and environmental challenges. More specifically, production of results is about “the quality of decision making, the ability to implement decisions, the outcomes of teamwork in terms of problems solved and work completed, and finally, the quality of institutional leadership provided by the team” (pp. 23–24).

Building on the work of Drath et al. (2008) on the outcomes of leadership, we suggest that effective management teams typically create at least three types of outcomes that represent important added value for the organization: direction, alignment, and commitment. *Direction* refers to “a reasonable level of agreement in the collective about the aim, mission, vision, or goal” (p. 647) of the organization in which the team is embedded. Effective management teams set the direction for the organization and make sure it is shared and equally understood by team members. *Alignment* refers to “the organization and coordination of knowledge and work” (p. 647), meaning that goals, processes, and strategies of the different organizational units are well coordinated and operate efficiently together. *Commitment* refers to “the willingness of individual members to subsume their own efforts and benefits within the collective effort and benefit” (p. 647). Effective management teams create commitment to goals and decisions, which increases the chances for successful implementation of these goals and decisions.

Output # 2: Individual Well-Being and Growth—Added Value for the Team Members

The second criterion for an effective management team is that the team contributes to the individual member’s well-being, motivation, learning, and growth (Hackman, 1990). According to Wageman et al. (2008), management teams are “wonderful avenues for learning—for expanding knowledge, acquiring new skills, and exploring fresh perspectives on the world” (p. 11). Management teams may create added value for the members both when they meet for regular team meetings and in between those meetings. Effective management meetings provide team members with relevant information and valuable advice, energize and motivate, and help the members become better at doing their assigned jobs. Well-functioning management teams can be a source of emotional support for the individual members and can stimulate an increased level of interaction among interdependent team members between team meetings. Members coordinate and align their actions when necessary, consult with one another on difficult matters, learn from each other, share resources, and help one another.

Emergent States—Added Value for the Management Team

In addition to adding value for the organization and for the individual team member, effective management teams work in ways that enhance members’ capability to work together interdependently in the future. A management team consists of members who are (to a greater or lesser degree) interdependent in achieving common goals and whose success depends on their ability to cooperate and coordinate their actions. It is therefore vital that the team develops into a psychologically safe, cohesive group, with a set of norms that stimulates collaboration and effective functioning (Boone & Hendriks, 2009; Carmeli, 2008; Wageman et al., 2008). Team psychological safety, team cohesion, and a set of functional team norms are all emergent states that will greatly affect the team members’ capability to work interdependently in the future.

Team Psychological Safety

Effective management teams are characterized by high levels of psychological safety, which we define as “a shared belief that the team is safe for interpersonal risk-taking . . . and that the team will not embarrass, reject, or punish someone for speaking up” (Edmondson, 1999, p. 354). Team psychological safety grows when members feel able to express their opinions, to disagree with one

another, to ask “stupid” questions, and to make themselves vulnerable to one another (Edmondson, 1999; McAllister, 1995). In her study of 51 decision-making teams, Edmondson (1999) found that the greater the level of psychological safety, the greater the chances that members would learn from their mistakes—a factor that contributed to improving team performance. Bradley, Postlethwaite, Klotz, Hamdani, and Brown (2012) found that psychological safety facilitates the performance benefits of task conflict in project teams. Simons and Peterson (2000) investigated the effect of team trust (a conceptual sibling to team psychological safety) in 70 top-management teams and found that teams with a high level of trust were better at distinguishing between tasks and relationship conflicts than teams with low levels of trust. In their recent review article, Edmondson and Lei (2014) summed up the last six decades of research on the importance for people to feel psychologically safe at work in order to grow, learn, contribute, and perform effectively in a rapidly changing world.

Team Cohesion

Team spirit, *group cohesiveness*, or *esprit de corps* are all terms that cover the phenomenon referred to in group psychology as *group* or *team cohesion*. The concept refers to the extent to which members identify themselves with the group and feel that they are a “we” or a unit, rather than isolated individuals. We define team cohesion as “the strength of the bonds linking individuals to and in the group” (Forsyth, 2010, p. 9). According to Mullen and Copper (1994), group cohesiveness can be divided into three components: interpersonal attraction, group pride, and commitment to the task and decisions. In a meta-analysis of 64 empirical studies of group cohesion, Beal, Cohen, Burke, and McLendon (2003) found a strong positive relationship between all three components of group cohesion and team output. Commitment to the task was the strongest determinant of the team’s output, followed by group pride and, finally, interpersonal attraction. Creating team cohesion is particularly important (but also challenging) in management teams, since they commonly experience “centrifugal forces” and fragmentation that drive the team members apart (Hambrick, 1995).

Functional Team Norms

An effective management team will have developed a set of functional norms. Team norms are “the emergent, consensual standards that regulate group members’ behaviors” (Forsyth, 2010, p. 145) and are often perceived as the informal and unspoken rules of the team. Wageman et al. (2005) emphasized the importance of instilling team norms that foster effective performance processes early on in the life of the team. Functional team norms “actively promote continuous scanning of the performance situation and proactive planning of group performance strategies, and . . . clearly specify those behaviors that are out of bounds for the team” (p. 378). Team norms can be described as part of a team’s *shared mental models*—a set of knowledge, attitudes, and norms that is sufficiently shared to enable the various aspects to function together effectively (Cannon-Bowers, Salas, & Converse, 1993; Klimoski & Mohammed, 1994). When the members of a management team have overlapping shared mental models, they will be able to foresee each other’s responses more easily and coordinate more effectively than management teams whose members do not share the same mental models. This also allows them to achieve better outcomes together.

Basic Conditions for Effectiveness in Management Teams

The basic conditions for team effectiveness (input factors) include relatively stable factors of the management team itself as well as its environment. These factors affect the quality of team output

either directly or indirectly through the impact they have upon team processes. Five input factors appear to be particularly important: a clear team purpose, appropriate team tasks, appropriate team size, a balanced team composition, and team-reinforcing reward systems.

Input # 1: Clear Team Purpose

Effective management teams will have established a clear team purpose, a mandate, or a mission and a set of goals that are shared and understood by all team members. The team purpose defines why the management team exists, what added value it is expected to create for the organization and for each team member, what results it is responsible for achieving, and the key deliverables from the team (Curphy & Hogan, 2012; Latham, 2003; Wageman et al., 2008). A clear purpose and set of specific goals define the tasks and issues that should—and should not—be addressed by the management team. The team purpose is not equivalent to the organization's overall mission, and it is not the sum of the members' individual goals. Rather, it defines what specifically the management team is particularly suited to achieve that cannot be accomplished by the individual members alone and that contributes to the achievement of the organization's goals and strategies (Wageman et al., 2008).

In their study of 80 Norwegian top-management teams, Bang and Øverland (2009) identified seven typical team purposes: (a) to set the overall direction for the organization; (b) to create alignment, coordination, and collaboration among organizational units; (c) to develop, change, and transform the organization; (d) to give advice and assistance to fellow team members; (e) to provide decision support and increase decision quality; (f) to increase commitment to decisions and ensure decision implementation; and (g) to create motivation, energy, and emotional support among team members and in the organization.

There are a number of empirical studies that show a robust and positive relationship between clearly stated purposes/goals and performance—both on the individual and on the group level (Locke & Latham, 2006, 2013). We know from laboratory and field studies that specific and ambitious goals lead to better outcomes than goals that are vague and easily achievable (Locke & Latham, 1990; O'Leary-Kelly, Martocchio, & Frink, 1994; Weldon, Jehn, & Pradhan, 1991; Weldon & Weingart, 1993). O'Leary-Kelly et al. (1994) found, for example, that the mean performance level of groups that had goals was almost 1 standard deviation higher than the performance of groups that had no goals.

A clear purpose increases management-team performance because it makes it easier to determine whether a given task falls within the scope of the team, and it motivates the members to work harder and be more focused over a longer time. In addition, a clear purpose activates knowledge and strategies that are relevant to what the team wants to achieve, leading to a greater degree of overlap in members' understanding of the task they are to carry out (Locke & Latham, 1990).

Wageman et al.'s (2008) research on more than 120 senior-management teams showed that a team purpose should be consequential, challenging, and clear. They found that in the best management teams the members had a "crystal clear sense of the team's unique added value in advancing the organization's strategy" (p. 17). When asked what the purpose of their team was, members could articulate those major strategic and tactical decisions for which they were collectively responsible as a team.

Input # 2: Appropriate Team Tasks

Effective management teams spend their time on important tasks that are clearly related to the organization's strategy and the purpose of the management team (Wageman et al., 2008). Appropriate tasks are important ones that need the attention of the whole management team and could not be handled better elsewhere in the organization. The topics brought up in management-team meetings include a proper balance of administrative, operative, and strategic issues, as well as information, discussion, and decision-making.

What kinds of work are typical for management teams? Wageman et al. (2008) identified four major types of work done in management teams, although the teams differed with respect to the extent they performed each of these types of work.

Information. Members exchange important information, with the purpose of making “the individual leaders better informed, better aligned, and more able to do their jobs superbly” (Wageman et al., 2008, p. 36).

Consultation. Members discuss key issues, consult each other on dilemmas and problems they face, and act as a sounding board for decisions each of them is responsible for making.

Decision-making. Members discuss and agree on critical decisions that are highly consequential for the organization.

Coordination. Members of most management teams are interdependent at some level and must involve one another and collaborate to accomplish their goals. They come together to coordinate activities, decisions, and processes happening in each of the units represented in the management team.

Wageman et al. (2008) found that truly great senior-management teams work on tasks that are perceived as meaningful and require collaboration between members, that have direct consequences for the effective leadership of the organization, and that are clearly related to the team’s purpose and to the organization’s missions and strategy. They found a strong tendency for poor and mediocre management teams to struggle with overly simple and trivial tasks, instead of grappling with intellectually demanding and complex tasks.

Input # 3: Appropriate Team Size

Effective management teams are not too big—at least if they aim to be more than just a purely informational team. The ground rule is “the smaller, the better,” or to put it more precisely, the team should be “the smallest you can for the work to be done” (Wageman et al., 2008, p. 116). There is a long tradition of research into how members perform when the size of the team increases. More than 100 years ago, Max Ringelmann (1913) showed that a team’s productivity does not necessarily increase linearly in proportion to its size (see Kravitz & Martin, 1986). Four decades ago Ivan Steiner (1972) carried out a series of experiments with different-sized groups and reached the same conclusion as Ringelmann: The group’s productivity tends to diminish as more people join the group. Steiner called this phenomenon *process loss*, because the processes that gradually emerge in the team as it grows in size generally have an inhibiting effect on its productivity.

Wageman et al. (2008) found that the best management teams in their study consisted typically of no more than eight members. However, the optimal size depends on the purpose of the team and the kinds of tasks the management team is working on. If it is primarily a body for information exchange, the size may not matter much because the members will not be particularly interdependent to achieve team goals. If the aim is to use the management team for activities in which members must interact to achieve team outcomes—for example, to comprehensively discuss issues, solve complex problems, or create deep commitment to decisions—size-related process losses will probably start to occur if the group exceeds six to seven members (Hackman, 2002; Thompson, 2015). Wageman et al. (2008) stated that they “have seldom seen [management] teams of more than eight or nine members operate as true decision-making teams. When team membership gets into double digits, the space needed for real interdependence, meaningful contribution, and team decision-making tends to be squeezed out” (p. 19).

In her study of 329 management teams and project groups, Wheelan (2009) found that teams with three to six members judged their output and functioning to be markedly better than groups with seven or more members. If teams grow bigger than this it becomes more difficult to work as an integrated group, fewer members get to speak, the number of minutes at the disposal of each member decreases, and the number of free riders increases. Espedalen (2016) found a significant and negative relationship between team size and team performance in his study of 215 management teams.

Although studies clearly indicate that process losses occur when team size increases, the relationship between top-management team size and *firm performance* is more complicated. In a

meta-analysis of 27 empirical studies, Certo, Lester, Dalton, and Dalton (2006) found no relationship between the size of top-management teams and firm performance, measured by return on equity and return on assets. Halebian and Finkelstein (1993) even found a positive relationship between top-management team size and firm performance for businesses operating in a turbulent environment. Hence, although large management teams increase the risk of process losses, one should be careful not to draw firm conclusions about the consequences for business performance of having a large management team.

Input # 4: Balanced Team Composition

Effective management teams are composed of the right mix of people (Carpenter, Geletkanycz, & Sanders, 2004; Hambrick & Mason, 1984; Homberg & Bui, 2013; Wageman et al., 2008). Two aspects of team composition have received particular attention in research: team members' competencies and personalities, and the degree of team diversity or heterogeneity.

Appropriate competencies and personalities. Effective management teams comprise members with appropriate competencies (knowledge, skills, and abilities) and with personalities, attitudes, and values that support effective team functioning (Wageman et al., 2008). This is the essence of upper-echelons theory (Hambrick, 2007; Hambrick & Mason, 1984), which states that the personality, experiences, and values of top-management team members will determine how they interpret situations, and hence the types of strategic choices and decisions made by their management teams. Ultimately the quality of these choices and decisions will influence firm performance. A number of studies carried out since Hambrick and Mason's introduction of upper-echelons theory in 1984 add support to their work (see Carpenter et al., 2004; Finkelstein, Hambrick, & Cannella, 2009; Jackson, 1992).

Are there any personality traits more often associated with outstanding team performance than others? Studies have found that members' average scores on the personality traits of conscientiousness and agreeableness are particularly associated with team performance (Bell, 2007; LePine, Buckman, Crawford, & Methot, 2011; Prewett, Walvoord, Stilson, Rossi, & Brannick, 2009). Recently, Colbert, Barrick, and Bradley (2014) found that top-management team members' average level of the personality trait conscientiousness was positively related to organizational performance. More generally, studies show that group members' job-specific skills and their cognitive and interpersonal abilities are strongly related to the quality of the group's output—independently of where in the hierarchy the group is located (see, e.g., LePine, Hollenbeck, Ilgen, & Hedlund, 1997; Terborg, Castore, & DeNinno, 1976; Tziner, 1988).

Based on their studies of senior-management teams around the world, Wageman et al. (2008) underlined the importance of finding team members who have the ability to engage in constructive debate, who understand their role as maximizing the effectiveness of the organization as a whole, and who can handle cognitive complexity and synthesize complex information from different sources. In addition, they found that members of outstanding management teams were far more empathic and showed more integrity than members of mediocre or poor teams. Empathic team members were able to consistently understand the content and meaning of other members' expressed concerns. Members showed integrity by not agreeing to something about which they had unexpressed reservations, by consistently implementing team decisions even when they resented the decision, by keeping discussions in the team meetings confidential and not gossiping about who argued for which position, and by standing loyally behind the team's decisions when they got back to their own units.

Balanced diversity. Effective management teams comprise members who elicit the best from one another. They are diverse enough to supplement and stimulate the team and similar enough to understand each other and interact well (Wageman et al., 2005, 2008).

Numerous studies addressing the optimal level of diversity (also referred to as *heterogeneity*) in teams have been carried out since the 1950s (see Bowers, Pharmed, & Salas, 2000; Jackson & Joshi, 2011; Nielsen, 2010; van Knippenberg & Schippers, 2007; Williams & O'Reilly, 1998). The results of the studies suggest that the relationship between diversity and output is complex and that diversity can be a double-edged sword. Sabina Nielsen (2010) reviewed 60 empirical studies of the conse-

quences of diversity in top-management teams and found that the results pointed in all directions. When looking at the relationship between diversity in top-management teams and company performance, researchers have found everything from positive associations (e.g., [Carpenter, 2002](#)), to no relationship (e.g., [West & Schwenk, 1996](#)), to negative associations (e.g., [Michel & Hambrick, 1992](#)). Nielsen's finding is partly supported by diversity researchers [Jackson and Joshi \(2011\)](#). After reviewing research done on the effect of diversity on different kinds of work groups between 1995 and 2010, they concluded that there did not appear to be any systematic association between demographic diversity (sex, age, and ethnicity) and team performance. In the case of task-orientated diversity, however, there does seem to be a weak but positive relationship, as some studies have indicated that diversity of position, education, and tenure has a positive association with team performance. Nonetheless, Jackson and Joshi were quick to point out that these correlations are not robust enough to allow one to say how task-related diversity will affect any given team.

In recent years, the challenges of finding a systematic relationship between diversity and team output have led to a growing interest in identifying moderating factors that might explain the conditions in which diversity would reflect either positively or negatively on team performance. Although this research is still at an early stage, some preliminary findings can serve to indicate factors that may affect the extent to which diversity will or will not be an asset for a management team.

One possible moderator is the degree of team orientation among members. [Boone and Hendriks \(2009\)](#) found that differences in the functional backgrounds of team members have a particularly positive effect on the group's output when management-team members are team-oriented. This result is supported by [Mohammed and Angell \(2004\)](#), who found that the members' degree of team orientation was important for preventing gender diversity from causing relationship conflict. Similarly, studies show that management teams capitalize on team members' different perspectives much more effectively if the members are good at examining, exchanging, and thoroughly discussing task-relevant information with each other and if members value different points of view ([Homan, van Knippenberg, Van Kleef, & de Dreu, 2007](#)).

Another potential moderator is the time that members have spent together. [Harrison, Price, Gavin, and Florey \(2002\)](#) examined the effect of surface-level diversity (gender and age differences) and deep-level diversity (differences of personality, values, and attitudes) on group cohesion. They found that "surface-level differences were less important and deep-level differences were more important for groups that had interacted more often" (pp. 103–104). The longer the team had worked together, the less impact surface-level differences had and the more impact deep-level differences had on group cohesion.

Studies also have indicated that management teams with high consensus about the organization's goals capitalize on the differences between team members to create high-quality decisions ([Michie, Dooley, & Fryxell, 2002](#)). Finally, team ability to capitalize on the members' different functional backgrounds seems to be affected by the extent to which the members are in the same physical location, as opposed to being geographically dispersed ([Cannella, Park, & Lee, 2008](#)).

Input # 5: Team-Reinforcing Reward Systems

Effective management teams are rewarded for the results achieved by the team and for cross-functional collaboration between members. [Wageman et al. \(2008\)](#) found that "the best senior leadership teams implement reward strategies that recognize and reinforce team members for delivering on the team's accountabilities" (p. 14). They suggested different means to reinforce team behaviors, such as monetary rewards, recognition, public acknowledgment, and symbolic actions. The point is to make significant and valued rewards contingent on the management team's achievements.

However, most organizations have reward systems reinforcing individual contributions and outcomes. Although acknowledging the importance of individually based compensation systems, [Wageman et al. \(2005\)](#) claimed that "rewards and recognition to individuals should never be disincentives for task-oriented collaboration among team members" (p. 378). The members should be rewarded both for their collaborative behavior when working together to achieve the team

purpose and for the outcomes the team achieves collectively. In this way, the members are encouraged to think “we” instead of “I.” In a recent study of highly interdependent teams, [Pearsall, Christian, and Ellis \(2010\)](#) found that a combination of team and individual rewards was more positively related to team performance than either purely team rewards or purely individual rewards.

Processes That Influence Management-Team Effectiveness

The term *processes* refers to what happens within the management team and between its members, as well as between the management team and its environment when the team is working. This includes both task-related processes (how the members work together on team tasks) and interpersonal processes (how members communicate and relate to each other as they work together). We have identified eight processes that appear to be particularly significant for management-team effectiveness.

Process # 1: Clearly Stated Meeting Goals

Effective management-team meetings are characterized by clearly stated meeting goals. These goals should ensure that all members know why an issue is being brought up, what the members should focus on, and what the team is expected to achieve during discussion of an issue ([Bang, Fuglesang, Ovesen, & Eilertsen, 2010](#)). According to [Tobia and Becker \(1990\)](#), everyone presenting an issue at a meeting should clarify these things beforehand: What ultimately do I want to achieve by bringing up this issue in the meeting? What, specifically, must be accomplished by the end of discussion of this issue? When we have finished discussing the issue, how will we know whether the discussion was a success? Clear meeting goals can be communicated both in the agenda and in the verbal presentation of the different issues at the management meeting ([Mosvick & Nelson, 1996](#); [Wageman et al., 2008](#)). Is the goal to share information about an important topic (information issue), to discuss a complex issue and elicit different views and ideas from the team (discussion issue), or to reach agreement on a decision (decision issue)?

Research shows that clear meeting goals are highly related to meeting effectiveness ([Bang et al., 2010](#); [Mosvick & Nelson, 1996](#); [Myrsiades, 2000](#); [Niederman & Volkema, 1999](#); [Sheridan, 1989](#)). In a Norwegian study of top-management-team meetings, [Bang et al. \(2010\)](#) found a strong and positive relationship between goal clarity in management meetings and three measures of team effectiveness: task performance, team viability, and member satisfaction. The positive effect of goal clarity on team effectiveness was partially a result of clear goals bolstering focused discussions during the management meeting. In a study of more than 1,600 managers and technical professionals, [Mosvick and Nelson \(1996\)](#) found that not having any clear goals, purpose, or meeting agenda were among the most personally bothersome problems that the participants encountered in business meetings. This finding corroborates a study of 80 top-management teams in large Norwegian organizations in the private and public sectors, in which unclear meeting goals were among the most frequently cited sources of productivity loss in management meetings ([Bang & Øverland, 2009](#)).

Although the main responsibility for ensuring clear meeting goals lies with the person presenting the agenda issue, other members of the team can also play an active role in clarifying goals. [Bang et al. \(2010\)](#) found a positive effect when members spoke up when they felt goals were unclear, thereby making communication more focused as well as increasing task performance and relationship quality. However, members often do not speak up because they feel that it is embarrassing to appear ignorant, that speaking up might seem threatening, or that it is futile to ask for clarification ([Argyris, 1990](#); [Bang, 2012](#)).

Process # 2: Focused Communication

Effective management teams keep communication focused on the task during team meetings. Focused communication refers to “the degree to which group members stick to the issue during a management meeting; that is, whether a group refrains from digressions and/or goal-irrelevant behaviors” ([Bang et al., 2010](#), p. 254). When communication is focused in a meeting, members stay

on targeted goals presented for each agenda item and concentrate on essential issues. Long-windedness and digressions are avoided, and discussions are well summarized and concluded (Bang et al., 2010; Wageman et al., 2008).

Unfocused communication is obviously a source of frustration in meetings. Tobia and Becker (1990) claimed that “nothing can sandbag a meeting faster than a person who chases tangents or refuses to keep quiet” (p. 36). Norwegian top-management teams highlighted digressions as the most common source of productivity loss in management meetings (Bang & Øverland, 2009), while Mosvick and Nelson (1996) found that the most frequently mentioned meeting problem among 1,600 managers and technical professionals was getting off topic with rambling, redundant, and digressive talk.

A number of empirical studies have indicated that task-focused communication is positively associated with task performance, team viability, and member well-being in meetings (Bang et al., 2010; Di Salvo, Nikkel, & Monroe, 1989; Elsayed-Elkhouly, Lazarus, & Forsythe, 1997; Green & Lazarus, 1991; Myrsiades, 2000; Nixon & Littlepage, 1992; Tobia & Becker, 1990; Wageman et al., 2008). Bang et al. (2010) found a strong positive association between the degree of focused communication and the quality of the outcomes achieved during discussions in top-management meetings: The more the members were able to remain focused on the goal of discussing a task, the higher the level of task performance, relationship quality, and individual satisfaction in a meeting. This finding corroborated Amason, Thompson, Hochwarter, and Harrison (1995), who found that focused management teams define problems and find solutions quicker than less focused teams.

Unfocused communication can often be likened to what happens when you shoot a billiard ball and it strikes several other balls. The billiard-ball effect occurs when “the initial statement [in a discussion] is reacted to differently by each participant, who, in turn, makes comments that take the discussion in different directions, changing the topic and causing new reactions with each remark” (Mosvick & Nelson, 1996, p. 36). This effect is further reinforced as the size of the management team increases, and it manifests itself in different phenomena, such as *information queuing*, where members store up comments while waiting to speak and offer those comments, often inappropriately, after the original topic has moved on; *topic jumping*, where members introduce new topics into the discussion even though previous topics have not yet been fully discussed; *solution jumping*, where members begin to discuss proposed solutions before the problem has been properly defined; and *talking on different abstraction levels*.

Process # 3: Communication That Capitalizes on the Differences Between Team Members

Effective management teams discuss complex issues in ways that make them capitalize on the team members’ different skills, knowledge, interests, values, and personalities, rather letting the differences become a source of irritation and personal conflict. Several studies have addressed this topic and they indicated that there are at least two “communication keys” to capitalizing on team diversity (see, e.g., Amason, 1996; Bang & Midelfart, 2010; Bradley, Anderson, Baur, & Klotz, 2015; de Dreu & Weingart, 2003; de Wit et al., 2012; Eisenhardt, Kahwajy, & Bourgeois, 1997; Isaksen & Sandnes, 2011; Jehn, 1995; van Knippenberg, de Dreu, & Homan, 2004; Weingart, Behfar, Bendersky, Todorova, & Jehn, 2015). Both keys are rooted in John Stuart Mill’s (1989) famous quote: “Since the general or prevailing opinion on any subject is rarely or never the whole truth, it is only by the collision of adverse opinion that the remainder of the truth has any chance of being supplied” (p. 53).

Moderate task conflict combined with low levels of relationship conflict. The first key is to stimulate task conflict without triggering relationship conflict. Studies have indicated that teams with members who dare to disagree and have lively discussions about complex issues are more likely to make better decisions than teams with low levels of task conflict—as long as they manage to keep relationship conflicts at a low level (see, e.g., Amason, 1996; Jehn, 1995). Relationship conflict is defined as “interpersonal incompatibilities among group members, which typically includes tension, animosity, and annoyance” (Jehn, 1995, p. 258) and is shown to be consistently negatively related to team performance (de Wit et al., 2012). Tolerance for task conflict, however,

may stimulate a free exchange of views among the members and ensure that the task under discussion is illuminated by the different viewpoints represented.

De Wit et al., (2012) carried out a meta-analysis of 116 empirical studies on the effect of task and relationship conflict in 8,880 different work groups. Interestingly, they found no support for a general positive association between task conflict and team outcomes. The researchers did, however, find clear support for the idea that a moderate level of task conflict was positively related to team outcomes if the team was able to keep the level of relationship conflict low. Also, they found that task conflict was more positively related to the performance of top-management teams than to the performance of teams further down the organizational hierarchy. A possible explanation could be that top-management teams are better than lower-level teams at preventing task conflict from turning into destructive relationship conflicts because senior executives are more politically savvy.

Dialogue. The second key to capitalizing on differences between team members is dialogical communication—also known as *constructive controversy* (see Johnson, Johnson, & Tjosvold, 2000). William Isaacs (1999) defined dialogue as “a shared inquiry, a way of thinking and reflecting together” (p. 9). When the underlying dynamic in a meeting involves learning and understanding more about something, or generating new perspectives on the basis of the experience and knowledge of each member, the conversation is characterized by dialogue (Ellinor & Gerard, 1998). This type of communication represents an alternative to traditional debate, where the goal is to be right or win over the other rather than to examine various points of view and find new solutions that encompass several perspectives.

In a study of 75 Norwegian management teams, Bang and Midelfart (2010) examined the relationship between dialogue and team effectiveness in management meetings. Dialogue was operationalized in terms of four components: *learning orientation*—a belief that one can learn from others on the team; *open and respectful disagreements*—showing respect for others and not belittling them while disagreeing; *inquiry and exploration*—exploring different views and opinions presented in the meeting; and *building on each other’s views*—listening to and trying to integrate other’s views when presenting one’s own views. The researchers found a strong positive relationship between the degree of dialogue and team effectiveness (task performance, team cohesion, and member satisfaction) in management-team meetings, even when controlling for the level of conflict in the team (Bang & Midelfart, 2010).

This finding corroborates a study by Isaksen and Sandnes (2011), who found a significant positive association between dialogue and task performance during the discussion of 49 agenda issues in management-team meetings. The two dialogue components with a particularly strong effect on task performance were (a) the extent to which the members explored each other’s points of view and (b) whether they managed to build on each other’s contributions in the management-team meetings.

Constructive controversy—a conceptual sibling of dialogue—exists “when one person’s ideas, information, conclusions, theories, and opinions are incompatible with those of another, and the two seek to reach an agreement” (Johnson, 2008, p. 3). According to Johnson (2008), communication in constructive controversy is characterized by team members expressing their views openly, listening with curiosity to others’ views even if they disagree, trying to see the issue from the opposing perspective, being willing to change one’s mind, disagreeing without implying that the other is incompetent, and being able to both bring out differences in positions (differentiation) and combine various positions into one new, creative position (integration).

Johnson and Johnson (2007) found strong support for a positive relationship between constructive controversy and the quality of decision-making, interpersonal attraction among team members, and self-esteem in individual team members.

Process # 4: Absence of Political Behavior

Organizations in general and management teams in particular are described as arenas of political game playing, power struggles, and political behavior (Buchanan, 2008; Ferris & Hochwarter, 2011; Kacmar, Andrews, Harris, & Tepper, 2013; Mayes & Allen, 1977; Pfeffer, 1981, 1992). We define political behavior in management teams as “the observable, but often covert, actions by which

executives enhance their power to influence decisions” (Eisenhardt & Bourgeois, 1988, p. 737). These actions are most often aimed at advancing or protecting the self-interests of individuals or groups, and they are taken to obtain ends not sanctioned by the organization or to obtain sanctioned ends through influence means that are not sanctioned (Allen, Madison, Porter, Renwick, & Mayes, 1979; Mayes & Allen, 1977; Tziner, Latham, Price, & Haccoun, 1996).

Although political behavior and power struggles exist to some degree in every organization and in subgroups of organizations, studies indicate that effective management teams are characterized by low levels of politics. Eisenhardt and Bourgeois (1988) examined the extent, content, and consequences of political behavior in eight top-management teams in Silicon Valley, California. They identified four typical examples of political behavior: unofficial alliances and coalitions between some of the team members; secret lobbying and attempts to covertly influence central decision-makers; filtering or withholding information; and filtering what should be discussed in the team and which decisions should be made outside the team.

The researchers found that political behavior in management teams was associated with poor firm performance as measured by sales volumes, sales growth, and return on sales. They attributed these findings to the fact that political game-playing diverts time and attention away from the managers’ areas of responsibility, important information is not presented during the decision-making processes, communication barriers arise in the team, and the team becomes more rigid and less flexible. Dean and Sharfman (1996) found the same pattern in their studies of 52 decisions made in 24 different companies. The more the management teams engaged in political behavior, the less likely the decisions made were to achieve the goals management had set for the task. In a recent study of political behavior in 155 Norwegian management teams, Thanh (2016) found a strong negative association between political behavior and task performance and between political behavior and individual well-being and growth. She also found that team cohesion mediated the effect of political behavior on both types of team performance, indicating that increased levels of politics decrease team cohesion, which in turn has negative effects on team outcomes.

Nevertheless, it is difficult to give an unambiguous answer to the question of whether political behavior is good or bad for an organization. It depends on the actions defined as political behavior, the kinds of consequences considered, and the situations in which people engage in political behavior. Buchanan (2008) interviewed 250 British managers about their experience of political behavior in organizations. When asked what activities the managers saw as examples of political behavior, they included both relatively acceptable and less acceptable activities. For example, networking, befriending people with power in the organization, using key players to support initiatives, and giving way on smaller issues to win on bigger ones were seen as acceptable. Among the less acceptable activities were using misinformation to confuse others, breaking rules and regulations to achieve a goal, withholding important information, retaining damaging communications to blackmail others, and spreading false rumors. It is therefore hardly surprising that he found that political behavior can have both positive and negative consequences. Ferris and Hochwarter (2011) even claimed that, in certain situations, it can be appropriate to engage in political behavior—for example when the organization is in the process of being destroyed by a manager and it is impossible to achieve one’s goals through normal, open channels.

Process # 5: Behavioral Integration

To describe what he claimed to be the most important process characterizing effective management teams, Hambrick (1994) suggested an all-compassing metaconstruct: behavioral integration. It refers to “the degree to which the group engages in mutual and collective interaction” (Hambrick, 1994, p. 188)—in other words, exhibiting a high degree of *team functioning* or *teammess*. Behavioral integration has three major elements: (a) quantity and quality (richness, timeliness, accuracy) of information exchange, (b) collaborative behavior, and (c) joint decision-making. Thus, a behaviorally integrated team is one where team members share vital information, cooperate with each other, and make decisions together.

Hambrick (1994) claimed that management teams are often subject to centrifugal forces that drive the members apart—for example, individual and competing goals and interests—and that these forces make it difficult for a team to behave as a collaborative and well-coordinated unit. If a management team is to start behaving like a real team, it must support forces that drive members together and help them to both feel like and operate as an integrated whole.

Is behavioral integration vital for team effectiveness in all kinds of management teams? Not necessarily. Research has indicated that behavioral integration is particularly important for management teams where the members are highly interdependent to achieve common goals. However, behavioral integration can be counterproductive if there is no or little interdependence between members of the team. Barrick, Bradley, Kristof-Brown, and Colbert (2007) found that top-management teams in which the members were heavily interdependent to achieve team goals performed best when they were very cohesive and communicated closely with one another (indicators of behavioral integration). On the other hand, they discovered that top-management teams with little interdependency among members achieved better results with low levels of cohesiveness and communication. In other words, it can be inefficient to spend time creating a behaviorally integrated management team if the members are not interdependent to achieve common goals.

The degree of behavioral integration is influenced by a number of factors: the tenure of the management-team leader, the team leader's collectivistic orientation, the goal-preference similarity among members, the similarity of members' education levels, and the size of the management team (Simsek, Veiga, Lubatkin, & Dino, 2005). Studies have indicated that behavioral integration is positively related to a management team's decision quality (Carmeli & Schaubroeck, 2006) and firm performance (Carmeli, 2008) and is negatively related to team affective conflicts (Mooney & Sonnenfeld, 2001) and organizational decline (Carmeli & Schaubroeck, 2006).

Process # 6: Active External Relationships

Although good internal functioning is vital for management-team effectiveness, effective teams must also have an active relationship with their environment, often referred to as *team boundary spanning*. In line with the research literature on team boundary spanning, we define active external relationships as “behaviors intended to establish relationships and interactions with external actors that can assist their team in meeting its overall objectives” (Marrone, Tesluk, & Carson, 2007, p. 1424). Team external activities fall into three main categories (Ancona & Caldwell, 1992; Marrone, 2010; Marrone et al., 2007): information gathering, external representation, and task coordination.

Information-gathering activities (scouting) happen when the team scans the environment—both inside and outside the organization—for information and expertise necessary to achieve its goals. A management team may typically gather information to make high-quality decisions; scan the environment for trends, market opportunities, or threats; or clarify expectations from stakeholders superior to or below the management team.

External-representation activities occur when the team seeks resources and external constituent support and informs other groups in the organization about its activities. Management teams typically inform the organization about their decisions, work to gain support for projects and decisions from other stakeholders in the organization, and try to appear successful to management teams higher up.

Task-coordinator activities take place when the team shares resources and information, coordinates activities, and collaborates with other groups in the organization to accomplish team goals. Management teams may share goals with other management teams in the organization and need to coordinate their actions to succeed.

Studies have indicated that all three types of external activities are positively related to team effectiveness (see Ancona, 1990; Ancona & Caldwell, 1992; Choi, 2002; Faraj & Yan, 2009; Gladstein, 1984; Marrone et al., 2007). In a multilevel review of research on team boundary spanning, Marrone (2010) found that “the positive impact of team boundary spanning on team outcomes, including team innovation, efficiency, and goal attainment, has been solidly established” (p. 92).

Process # 7: Team Learning Behavior

Members of effective management teams engage in team learning behavior. They learn from their mistakes and successes by regularly reflecting on the quality of the team's goals, processes, and outcomes and change their way of working accordingly. This type of team process has been described as *organizational learning* (Argyris & Schön, 1996), *learning behavior* (Carmeli, Brueller, & Dutton, 2009; Edmondson, 1999; Gibson & Vermeulen, 2003), *reflexivity* or *team reflexivity* (de Dreu, 2002; Schippers, Den Hartog, & Koopman, 2007; Schippers, Edmondson, & West, 2014; Schippers, West, & Dawson, 2015; West, 1996), *systematic reflection* (Ellis, Carette, Anseel, & Lievens, 2014), or *team learning* (Bell, Kozlowski, & Blawath, 2012; Edmondson, 2002; Edmondson, Dillon, & Roloff, 2007). Team learning is essentially about "the extent to which teams reflect upon and modify their functioning" (Schippers et al., 2007, p. 189). More specifically, it is "an ongoing process of reflection and action, characterized by asking questions, seeking feedback, experimenting, reflecting on results, and discussing errors or unexpected outcomes of actions" (Edmondson, 1999, p. 353). Researchers have claimed that the ability to learn may be one of the most important competitive advantages for teams and organizations and that teams cannot survive in dynamic and competitive environments unless they are able to learn and adapt (Cannon & Edmondson, 2001; Naot, Lipshitz, & Popper, 2004).

Empirical field studies of real teams have indicated a positive relationship between team learning behavior and team effectiveness (Bell et al., 2012; Edmondson et al., 2007). According to a recent review article, "Team learning has been identified as an important mechanism through which teams develop their performance capabilities, adapt to changes in their environment, and renew and sustain their performance over time" (Bell et al., 2012). For example, Edmondson (1999) found in a study of 51 teams in manufacturing firms that team learning behavior was strongly associated with team performance, while a study of 39 top-management teams in the Irish software industry by MacCurtain, Flood, Ramamoorthy, West, and Dawson (2010) showed that team learning was positively related to organizational outcomes. In a recent meta-analysis, Tannenbaum and Cerasoli (2013) found that organizations can improve individual and team performance by approximately 20 to 25% by using properly conducted debriefing sessions or "after-action reviews."

What promotes team learning in management teams? Management teams can stimulate team learning by designing various types of learning arenas (Lipshitz, Popper, & Friedman, 2002). This may involve evaluations at the end of team meetings (after-action reviews), regular evaluations of how the team is working, or annual measurements of the quality of the team's processes and results. Team psychological safety (the shared belief that a group is safe for interpersonal risk-taking) is a vital precondition for learning to take place (Edmondson, 1999).

The attitudes and behavior displayed by the team leader are important conditions for the emergence of psychological safety (Edmondson, 2003). The leader's behavior and attitudes will affect the team's tolerance for mistakes, critical feedback, disagreement, and voice behavior (Garvin, Edmondson, & Gino, 2008). It is particularly important for the leader to show that he or she wants to dedicate time and attention to learning activities and for learning behavior to be rewarded and recognized (Popper & Lipshitz, 2000). By serving as a role model for constructive learning behavior, the leader can infuse the management-team culture with attitudes that encourage learning (Schein, 2010; Shteynberg, Hirsh, Galinsky, & Knight, 2014).

Process # 8: Effective Team Leadership

Effective management teams are characterized by effective leadership. The team researchers Zaccaro, Rittman, and Marks (2001) have even argued that "effective leadership processes represent perhaps the most critical factor in the success of organizational teams" (p. 452). The leader of the management team plays a particularly significant role in team performance because he or she has more access to power and influence than other team members (Yukl, 2013). The leader's choices and actions are therefore likely to have a greater impact than those of the other members. In addition, the leader has particular responsibility for defining purpose and goals and for developing and structuring the team in such a way that these goals can be achieved (Zaccaro et al., 2001).

Two different views seem to prevail in the research on effective team leadership: the leadership-style approach and the functional-leadership approach. The former focuses on what characterizes the *leadership style* of effective team leaders. The assumption is that effective leaders have a certain way of leading that sets them apart from ineffective leaders (see, e.g., Bass, Avolio, Jung, & Berson, 2003; Schaubroeck, Lam, & Cha, 2007; Wang, Oh, Courtright, & Colbert, 2011). This perspective coincides with much of the general leadership research done since the early 1950s (Yukl, 2013).

Many studies indicate that certain leadership styles are associated with effective team performance. Burke et al. (2006) analyzed 50 empirical studies of the relationship between managers' leadership styles and three criteria for team effectiveness: the members' experience of how effective the team was, quantitative measures of the team's productivity, and team learning. The leadership styles of managers were classified into two broad categories: task-focused leadership and person-focused leadership. Task-focused leadership facilitates "understanding task requirements, operating procedures, and acquiring task information" (Burke et al., 2006, p. 291), and it includes transactional leadership, initiating structure, and boundary spanning (active external relationships). Person-focused leadership facilitates "the behavioral interactions, cognitive structures and attitudes that must be developed before members can work effectively as a team" (Burke et al., 2006, p. 291), and it includes transformational leadership, supportive leadership, empowering leadership, and motivational leadership. The researchers found support for a positive relationship between both task-focused and person-focused leadership styles and team performance. The study also indicated that it is important to embrace both task-focused and person-focused leadership styles if the team leader wishes to contribute to high team effectiveness.

According to the *functional approach*, the leadership role is "to do, or get done, whatever is not being adequately handled for group needs" (McGrath, 1962, p. 5). Hackman and Walton (1986) stated that "if a leader manages, by whatever means, to ensure that all functions critical to both task accomplishment and group maintenance are adequately taken care of, then the leader has done his or her job well" (p. 75). How the team leader achieves this, what leadership style is used, and whether the leader does it personally or has others do it is of lesser significance (Hackman, 2002; Zaccaro et al., 2001). What is most important is that the team leader identifies the needs of the team to operate effectively and ensures this is taken care of. Effective leaders therefore have a constant overview of the challenges the management team must handle in order to achieve excellent results. They have the skills needed to cope with these challenges, and they ensure that the challenges are, in fact, handled (Kozlowski & Ilgen, 2006).

Through their years of research on management teams, Wageman and Hackman (2010) identified five vital functions team leaders must fulfill to create an effective management team: (a) creating a clear, shared purpose for the team, which defines what the team should as a team provide to essential leadership for the organizational unit it heads; (b) crafting an agenda for team meetings, so that the work of the team is always focused on meaningful, interdependent activities; (c) shaping team members' understanding of their double responsibilities—both for the overall organizational performance and for the performance of the unit they lead; (d) articulating, sanctioning, and modeling explicit norms that promote attention to team purposes and strategies and that minimize politics in the management team; and (e) coaching the team on how to collaborate effectively and deal constructively with differences in members' individual interests.

Discussion

Based on a review of international research on management and decision-making teams from the early 1980s through today, we have identified a number of important predictors for the performance of management teams (see Figure 2) and organized the factors into an input-process-emergent states-output model.

At least two questions arise when examining the model—one concerning the number of variables, and the second concerning the model's relevance for management teams at all levels in the hierarchy. First, can the model be simplified and reduced to a set of fewer variables? The current model consists of a rather large number of variables, and even if they differ in theoretical content,

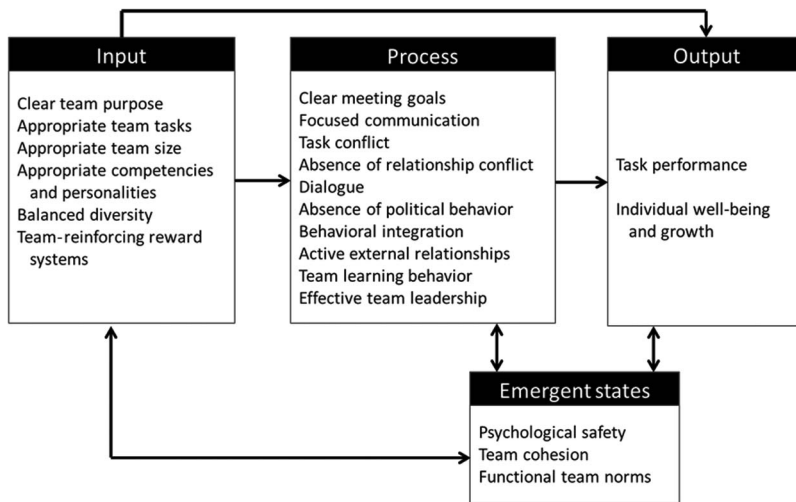


Figure 2. The management-team effectiveness model.

many of the factors correlate significantly and sometimes highly with each other. These correlations are expected according to both theory and empirical studies of the relationships among them—for instance, among team psychological safety, team learning behavior, and team leadership (Edmondson, 1999; Edmondson & Lei, 2014). When identifying factors that are particularly important for management-team effectiveness, we have not selected variables that are independent from each other. The two main criteria have been that (a) the variable has shown to be a robust predictor of management-team effectiveness in a number of empirical studies and that (b) the variables included in the model should be theoretically different from each other. To reduce the number of variables predicting management-team effectiveness, future studies should try to identify a set of independent predictors that are robustly associated with effectiveness in management teams. Inspired by the leading theory of personality (McCrae & Costa, 2003; Widiger, 2017), one could, for instance, search for a “Big Five of management team effectiveness.” Actually, Salas, Sims, and Burke (2005) proposed a theoretical model of “Big Five” in teamwork, and they encouraged researchers to do empirical studies to identify a set of core components of teamwork. Another way of reducing the complexity of the model could be to prioritize which of the variables have the strongest empirical support for predicting effectiveness in management teams. There are, for example, relatively few empirical studies supporting the importance of team-reinforcing reward systems, team tasks, focused communication, and political behavior, compared to the large amount of research on the importance of a clear purpose and goals, psychological safety, team cohesion, behavioral integration, team learning behavior, effective team leadership, and the absence of relationship conflict. More studies are needed to find out which of these variables are most potent in predicting management-team performance, as well as which of the variables would “survive” if they were entered simultaneously into a regression model.

The second question that arises when examining the model presented in Figure 2 is to what extent the variables apply equally well to management teams at all hierarchical levels? The core idea behind the concept of a *leadership pipeline* is that there are different challenges and requirements meeting managers at different organizational levels (Charan, Drotter, & Noel, 2011). Management teams comprising leaders in the C-suite will probably encounter challenges of a much more strategic nature and spend more time setting the direction of the company, compared to front-line management teams, which are responsible for implementing the strategy and turning it into practical actions. This difference can be reflected in the content of the team purpose and the tasks that are considered appropriate for the management team. There are also studies indicating that top-management teams are better at capitalizing on task conflict (de Wit et al., 2012) and also more

characterized by political behavior (Pfeffer, 1992), compared to lower-level management teams. However, even if the content of the different variables in the model may differ with organizational level, we suggest that all the variables can be seen as generic to management-team performance because they describe a reality that meets every management team, independent on their level in the hierarchy.

The model of management-team effectiveness discussed in this paper has implications for both researchers and practitioners. First, although the search for variables predicting and explaining management-team effectiveness will and should continue to evolve, this paper shows that the research community has identified a number of variables showing a robust relationship with team effectiveness in management teams. Hence, we do not need to start from scratch in our search for an empirically based research model of team effectiveness in management teams.

Second, all the input and process variables presented here are described mainly in terms of their main effects on different indicators of management teams' outcomes. However, the model invites us to examine the relationship between different predictor variables and team outcomes. Which variables might serve as mediators and moderators in this relationship? Although we can find some empirical team studies examining mediated and moderated relationships between predictor and outcome variables in management-team research (see, e.g., Bang et al., 2010; Carmeli & Halevi, 2009; Edmondson, 1999; Jehn, Northcraft, & Neale, 1999; Schippers, Den Hartog, Koopman, & Wienk, 2003; Simons & Peterson, 2000), we are still at an early stage in our understanding of these relationships. It would, for instance, be interesting to know more about why team size is detrimental to team effectiveness and what variables mediate the negative effect of size on effectiveness. Will increased team size always be detrimental to team effectiveness, or are there factors that moderate this relationship? Could, for instance, effective leadership or high levels of psychological safety moderate the relationship between size and effectiveness? There are many theoretically interesting and untested relationships among variables of the management-team-effectiveness model that could benefit from further research.

Third, practitioners such as managers and organizational consultants can use the team-effectiveness model as a map for evaluating and developing their management teams. The variables in the model can act as a framework when leaders discuss and analyze how their management teams function and when they identify strengths and areas of improvement for their teams. Management teams may also systematically evaluate themselves through a web-based questionnaire (*effect—Effective Management Team Profile*; <https://www.cut-.com/solutions/effective-management-teams/>) designed to measure the variables described in this paper.

Which of the variables in the model are most commonly experienced as problematic in organizations? Based on our more than 20 years of experience as organizational psychologists helping management teams to develop, we have identified four clusters of typical problems facing management teams:

1. Members do not know the purpose, goals, and tasks of the team. There is a lack of clear team purpose and appropriate team tasks.
2. Team meetings are ineffective. There is a lack of clear meeting goals, focused communication, task conflict and dialogue, active external relationships, team learning behavior, and effective team leadership.
3. The team is not a real team but rather a collection of individual managers. There is a lack of team cohesion, behavioral integration, team-reinforcing reward systems, and functional team norms.
4. The team experiences relationship conflicts and low levels of team psychological safety and trust. There is a lack of appropriate competencies and personalities and of balanced diversity, and there are high levels of relationship conflict and political behavior.

When helping management teams to develop, we often end up dealing with all of these topics, starting with clarifying the team's purpose, goals, and tasks and continuing with creating more effective team meetings. Through this process and by working through particularly challenging issues among the team members, cohesiveness, team psychological safety, and healthy relationships often will emerge.

We hope this article will inspire researchers to continue to identify factors that affect management-team effectiveness and examine how different factors moderate and mediate team relationships. We also hope that managers and consultants will use the article as inspiration for developing more effective and better functioning management teams.

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