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Effectiveness in top management group meetings: The role of goal clarity, focused communication, and learning behavior

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To explore the relationship between goal clarity, focused communication, learning behavior, and team effectiveness (i.e., task performance, relationship quality, and member satisfaction), self-report and observer data from eight top management groups that processed 56 agenda items during meetings were analyzed. We found that goal clarity and focused communication was positively related to team effectiveness. The effect of goal clarity on team effectiveness was partially mediated by focused communication. Speaking up when a goal was unclear increased focused communication, task performance and relationship quality. Speaking up when the discussion was off track was not related to task performance and member satisfaction, and was negatively related to relationship quality. These findings have implications for how to conduct an effective management meeting.

Key words: Top management group, team effectiveness, goal theory, learning behavior.

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INTRODUCTION

"The era of the executive team has begun." (David A. Nadler)

As business environments become more complex, organizational leadership roles have been transformed from the work of a single leader at the apex of an organization to the collective work of a group of executives – the top management group (Nadler, Spencer & Associates, 1998, p. 2). The top management group (TMG), commonly defined as "the senior leadership group of an institution or organization; synonymous with all of the leaders' direct reports" (Katzenbach, 1998, p. 217), meets regularly to solve problems, coordinate activities, inform each other, and decide on matters of strategic importance. Empirical studies of factors that contribute to productive discussions, effective problem solving, and sound decisions in the context of top management meetings are sparse. Even though there are studies of what meeting participants *perceive* as problematic in meetings in general (e.g. Mosvick & Nelson, 1996; Myrsiades, 2000; Niederman & Volkema, 1999; Nixon & Littlepage, 1992; Romano & Nunamaker, 2001), we have found no field studies of the association between *actual* meeting behavior and team effectiveness – neither in general meetings, nor in top management meetings. This is puzzling because senior executives report that they spend from 60–80% of their time in scheduled and unscheduled meetings (Mosvick & Nelson, 1996; Øverland, 2009; Tobia & Becker, 1990). Studies also show that managers experience at least a third of meeting times as unproductive (Elsayed-Elkhouly, Lazarus & Forsythe, 1997; Øverland, 2009). The estimated cost of unproductive meetings in the United States alone is $60 billion a year (Mosvick & Nelson, 1996). Thus, there seems to be potential financial benefits for organizations to increase the effectiveness of meetings, in general, and top management meetings, in particular.

In this study we explore the relationship between having a clear goal for a particular agenda item, staying on topic when discussing that agenda item and team effectiveness in top management meetings. In addition, we address the effect of two types of learning behaviors: speaking up when one experiences a goal as unclear, and speaking up when one experiences communication as unfocused. The importance of clear goals and learning behavior is firmly grounded in two psychological theories: Locke and Latham's *Goal Theory* (e.g. Locke & Latham, 1990, 2006), and Argyris and Schön's *Action Science Theory* (e.g. Argyris & Schön, 1996; Edmondson, 1999). More generally, we therefore aim to add to the body of research within these two areas, showing how goal theory and action science theory is relevant to effectiveness in top management group meetings.

Theoretical background and hypotheses

Team effectiveness. We build on Hackman's (2002) three-dimensional concept of team effectiveness: task performance, relationship quality, and member satisfaction. When discussing a specific agenda item during a management meeting*, task performance* is the degree to which the productive output of a team (e.g., solutions to problems, decisions, ideas) meets or exceeds the goal of bringing up that issue. *Relationship quality* is the degree to which team members treat each other in a manner that enhances their "capability to work together interdependently in the future" (Hackman, 2002, p. 27). *Member satisfaction* is the degree to which a discussion of an agenda item "contributes positively to the learning and personal well-being of individual team members" (Hackman, 2002, p. 28). Note that when we use the term "team effectiveness" herein, we are referring to all three of these dimensions collectively.

Goal clarity and focused communication. TMG members have different perspectives of information because they represent different parts of an organization, and they often have varying functional backgrounds. Such heterogeneity may create tension

with regard to group identity as well as types of goals set and prioritized (Hambrick, 1994; van Knippenberg, De Dreu & Homan, 2004). Thus, it is sometimes difficult to align TMG members when they discuss a topic during a management meeting.

Goal clarity and focused communication are two key components of this challenge. Inspired by Locke and Latham (1990), we define *goal clarity* as the degree to which each group member understands why the issue is important or relevant to discuss in the management meeting, what the issue presenter wants to achieve by bringing up the issue, and what he or she wants the group to focus on. *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.

Prior research indicates that a positive relationship exists between specific, challenging goals and task performance, both for individuals and for groups (for reviews of the research, see Locke & Latham, 1990; 2002; O'Leary-Kelly, Martocchio & Frink, 1994; Weldon & Weingart, 1993). However, we have not found any empirical studies that address this relationship in the specific context of management meetings, or for the types of unstructured tasks that are typically required of TMGs (Edmondson, Roberto & Watkins, 2003). Still, we know that both *absence of clear goals* and *getting off the subject* are often perceived as problematic in meetings. (e.g. Di Salvo, Nikkel & Monroe, 1989; Mosvick & Nelson, 1996; Myrsiades, 2000; Niederman & Volkema, 1999; Nixon & Littlepage, 1992; Romano & Nunamaker, 2001). In a recent study, Øverland (2009) found that "Too many digressions from the topic" and "Unclear goal and purpose of bringing up issues in the meeting" were the two most frequently cited sources of productivity loss in top management groups in Norway. We therefore propose that in management meetings, there is a positive relationship between goal clarity and focused communication on one side, and task performance on the other side.

Establishing a clear goal and keeping the discussion on topic may also strengthen the relationships between TMG members by suppressing competing goals and interests, and by demonstrating the interdependence among members to attain a common goal. Research shows that cooperative goal interdependence is associated with better relationships between group members (e.g. Deutsch, 1973; Johnson & Johnson, 1989; Tjosvold & Deemer, 1980). Group members who exert focused efforts toward a common goal emphasize a collaborative process that solidifies relationships. This notion is supported by the classic study by Sherif, Harvey, White, Hood, and Sherif (Sherif et al 1961) where the introduction of super-ordinate goals that required cooperation between group members led to improved relationships among conflicting groups. We therefore propose that in management meetings there is a positive relationship between goal clarity, focused communication and team member relationship quality.

Also, goal clarity and focused communication may contribute to member satisfaction during management meetings. Di Salvo, Nikkel and Monroe (1989) found that frustration experienced by group participants involves "issues such as the purpose, goal, and agenda for the meeting receiving inadequate attention" (p. 560). Mosvick and Nelson (1996) found "getting off subject:

rambling, redundant, digressive talk" to be the far most personally bothersome problem that occurred during business meetings. We therefore propose a positive relationship between goal clarity, focused communication and member satisfaction in a management meeting. In sum, we suggest that being explicit about the goal of raising an issue in a management meeting, and staying focused on the topic while discussing the issue, are positively associated with all three dimensions of team effectiveness.

Hypothesis 1 (H1): There is a positive relationship between goal clarity and team effectiveness in management meetings.

Hypothesis 2 (H2): There is a positive relationship between focused communication and team effectiveness in management meetings.

We suggest that focused communication partially mediates the relationship between goal clarity and team effectiveness. That is, the positive association between clear goals and team effectiveness can be partly accounted for by an increase in focused communication due to clear goals. Hence, focused communication can serve as a mechanism whereby goals affect team effectiveness. In support of this notion, Locke and Latham (1990) stated that goals affect performance via four mechanisms: by mobilizing effort, by directing attention towards goal-relevant activities and away from goal-irrelevant activities, by influencing people to persist until goal achievement, and by facilitating task-relevant knowledge and strategies. A clearly formulated goal at the beginning of a discussion may help the TMG members not to drift off to other topics, and instead stay focused on the relevant discussion topic, which may ultimately lead to increased task performance, relationship quality, and member satisfaction.

Hypothesis 3 (H3): The association between goal clarity and team effectiveness is partially mediated through focused communication.

Two examples of learning behavior: speaking up about unclear goals, and speaking up about unfocused communication. Unclear goals and unfocused communication may not be detrimental to group effectiveness, as long as they are discovered and acted upon. When one or more group members experience such failures, they have an opportunity to learn by detecting and correcting the error (Argyris, 1993). They may show what Edmondson (1999) calls learning behavior, which is defined as "an ongoing process of learning and action, characterized by asking questions, seeking feedback, experimenting, reflecting on results, and discussing errors or unexpected results of actions" (p. 353). Based on organizational learning theory (Argyris & Schön, 1978; Edmondson, 1999), we propose that asking questions and giving or seeking feedback when a goal is experienced as being unclear, or when communication is experienced as being off topic, may help the TMG to become more focused during the discussion, and, subsequently, to increase team effectiveness. However, we suggest that the effect of speaking up will be moderated by the degree of goal clarity or focused communication. That is, speaking up about unclear goals will be associated with focused communication and team effectiveness, but only to the extent that a goal is experienced as unclear by the group. If a goal is experienced as clear and a group member for some reason starts to comment upon lack of goal clarity, we propose that the level of focused communication and team effectiveness will decrease.

Hypothesis 4 (H4): Goal clarity will moderate the relationship between speaking up about unclear goals and focused communication.

Hypothesis 5 (H5): Goal clarity will moderate the relationship between speaking up about unclear goals and team effectiveness.

Similarly, speaking up when the discussion wanders off track or when group members get long-winded may help the TMG to detect and correct the sidetracking, redirect the communication back on track, and thus increase team effectiveness, but only to the extent that communication is experienced as unfocused by the group. If, for some reason, a group member is commenting upon the communication when the communication is actually experienced as on track by the group, team effectiveness will suffer.

Hypothesis 6 (H6): The degree of focused communication will moderate the relationship between speaking up about unfocused communication and team effectiveness.

METHOD

Sample

Data were collected from members of eight TMGs that worked in eight separate public sector organizations in Norway. In addition, members from two other TMGs completed a pilot questionnaire. The organizations represented a variety of professional fields, such as health, education, research, financial services, consumer goods, and agriculture. Inclusion criteria required a TMG to be part of a public sector organization with at least 100 employees, and the group needed to have clear membership criteria (Hackman, 2002; Nadler, Spencer & Associates, 1998). In addition, a TMG must have met at least once a month during the course of a year. The average size of a TMG was 7.6 people (ranging from 5 to 11), and the average member's age was 49 years (SD = 7.4 years). Thirty-eight percent of group members were female, but only one of the CEOs were female. Across TMGs, we analyzed discussions of 56 agenda issues with an average of 7 issues per TMG (ranging from 3 to 10 issues). Each TMG was observed during three or four meetings. The 56 agenda issues lasted from 10 to 161 minutes with an average of 42 minutes (SD = 29 minutes).

We recruited the TMGs by contacting a number of CEOs on the telephone, asking them to take part in a study of effectiveness in top management meetings. We then presented our project to the 11 TMGs that showed interest in participating in the study, and informed them that participation required all group members to consent; 10 of the 11 TMGs agreed to participate. The TMGs were not informed about the specific variables or hypotheses in the study, but were told that we explored different factors contributing to an effective management meeting.

Procedures

Data were collected during management meetings. Agenda issues selected for analysis met the following criteria: (1) processing of an issue involved discussion that consisted of more than purely informational matters; (2) the discussion issue lasted for at least 10 minutes so we had ample opportunity to evaluate the quality of group interaction; and (3) the discussion had an identifiable result that could be evaluated by group members.

For each agenda issue analyzed, the meeting was temporarily suspended after the TMG had finished discussing the issue, and the managers responded to a questionnaire that used a seven-point Likert scale (1 = not at all, 7 = to a large degree) for all items in the questionnaire. Group members then continued on to the next agenda issue. This cycle continued until the TMG had finished all of the items on their agenda. Consequently, the questionnaire response rate was 100%.

Measures

Gathering reliable and valid data from TMGs is difficult because of time constraints during meetings, and because the process of answering the questionnaire may affect the dynamics of a meeting. We aimed to sample the group process temporally as close as possible to actual member interactions with a brief questionnaire.

Our questionnaire was developed in three phases. First, we reviewed relevant research to help define and operationalize constructs, and to search for existing scales and items which could be used to measure our variables. Items from English scales were translated to Norwegian by a bilingual researcher. Second, we observed and videotaped the management meetings of two pilot TMGs during a three-month period to adapt item wording to the nomenclature of the meetings. Finally, to obtain feedback and assess psychometric qualities we tested our questionnaire on three level 2 management groups not included in the final sample. The final version of our questionnaire comprised seven scales with three items per scale. Individual team members rated qualities of the discussion on all items, and mean ratings across all judges were used as measures for the completed discussion. Reliability estimates and mean intergroup agreement coefficients – r_{wg} (James, Demaree & Wolf, 1984) – for all measures are reported in Table 1.

Task performance was measured with three items: (1) To what extent did the group's discussion lead to a positive outcome? (2) To what extent did you accomplish the purpose of bringing up the issue? (3) To what extent did the group manage to contribute to progression in the issue?

The use of team members' own evaluations of both criterion and predictor variables may represent a methodological problem due to common-source variance (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Hence, we added an additional measure of task performance that was independent of the team members' evaluations. Videotapes of the 56 agenda issues were divided between two pairs of observers (28 agenda issues per pair). Each observer transcribed their videotapes and independently rated the degree of task performance for each agenda issue.

Table 1. *Means, standard deviations, scale reliabilities,* r_{wg}, *and zero-order correlations for all measures (*N = 56*)*

Variable	M	SD	1	2	3	4	5	6	7	8
1. Goal clarity	5.5	1.00	0.84							
2. Focused communication	5.9	0.65	0.45***	0.82						
3. Speaking up about unclear goals	2.2	1.21	−0.81***	−0.27*	0.81					
4. Speaking up about unfocused communication	1.5	0.50	−0.26	−0.70***	0.28*	0.83				
5. Observer rated task performance	5.2	1.28	0.30*	0.38**	−0.21	−0.13	0.80†			
6. Member rated task performance	5.7	0.64	0.54***	0.60***	−0.23	−0.31*	0.41**	0.86		
7. Relationship quality	5.9	0.52	0.40**	0.52***	−0.17	−0.53***	0.21	0.74***	0.83	
8. Member satisfaction	4.9	0.57	0.52***	0.32*	−0.42***	−0.29*	0.03	0.43***	0.58***	0.84
r_{wg}			0.75	0.80	0.75	0.89	NA	0.84	0.84	0.73

Note: Estimates of reliabilities (Cronbach's alphas) are on the diagonal. NA = not applicable.
† Average reliability estimated by ICC between pairs of observers.
* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

The procedure for rating task performance was as follows. First, raters recorded the result of a discussion of an agenda issue; that is, what a TMG accomplished. Then, raters compared the result with the goal stated at the beginning of the discussion. The match between goal and result was scored on a seven-point Likert scale (1 = bad match/low task performance, 7 = perfect match/high task performance). After rating all videotapes, each observer pair discussed agenda issues for which scores deviated two or more points on the Likert scale in an attempt to reach a consensus rating. If no consensus was reached, raters retained their original ratings. The final task performance score for each agenda item consisted of an average of the two ratings. The mean intra-class correlation (ICC) between the raters was 0.66 ($p \leq 0.01$) before their consensus discussions, and 0.80 ($p \leq 0.001$) after their consensus discussions. ICC was computed based on the assumption that the resulting score would be an average of scores from two observers.

The relationship quality scale was based on Barsade, Ward, Turner, and Sonnenfeld's (2000) scale entitled "Satisfaction with team interpersonal relations." We adjusted the wording of items to fit the setting of a management meeting: (1) To what extent are you satisfied with the way you were treated by the other members of the management group? (2) To what extent are you satisfied with the way you were treated by the CEO during the discussion of the issue? (3) To what extent are you satisfied with how the interpersonal relationships developed throughout the discussion process?

The three items that measured *member satisfaction* were based on Hackman's (2002) description of member satisfaction as a component of team effectiveness: (1) To what extent did the discussion contribute to your professional or personal development? (2) To what extent did you personally benefit from the discussion? (3) To what extent did you experience participating in the discussion as meaningful?

Items measuring *goal clarity* were inspired by Locke and Latham's (1990) three-dimensional goal construct: (1) To what extent was the goal of bringing up the issue clearly stated? (2) To what extent was it clear which questions the management group should address in their discussion of the issue? (3) To what extent did you feel a need to clarify the purpose of discussing the issue in the management group (*r*)?

The three items that measured *focused communication* were inspired by studies of effectiveness problems in meetings conducted by DiSalvo *et al.* (1989), Mosvick and Nelson (1996) and Nixon and Littlepage (1992): (1) To what extent did the group stick to the matter? (2) To what extent did certain group members show a tendency to wander off track (*r*)? (3) To what extent did the group spend time discussing matters that did not concern the issue (*r*)?

Speaking up about unclear goals was measured with the following items: (1) To what extent did anyone ask clarifying questions about the goal of addressing the issue in the management group? (2) To what extent did anyone comment upon the purpose of addressing the issue in the management group? (3) To what extent did anyone express that the goal of addressing the issue in the management group was not clearly stated?

Speaking up about unfocused communication was measured with the following items: (1) To what extent did anyone state that the discussion went off track? (2) To what extent did anyone state that there were too many digressions during the discussion of the issue? (3) To what extent did anyone state that certain group members should stick to the matter?

As shown in Table 1, estimates of reliability were satisfactory high for all scales (Cronbach's α ranging from 0.81 to 0.86).

In accordance with Edmondson *et al.* (2003), we assume that group processes and group performance vary within a TMG pending on the nature of the task. Therefore, *agenda issue* was our primary unit of analysis, meaning that goal clarity, focused communication, speaking up, and team effectiveness were measured for each of the 56 agenda issues studied. ANOVAs with measures dependent of TMG and issues as observational units ($n = 56$), showed substantial within-TMG variance for all measures. Averaging across measures, only 43% of the variance in the evaluation was explained by differences between TMGs. The substantial between issues variance and the high agreement among judges within issues (r_{wg} ranging from 0.73 to 0.89, see Table 1) support the use of agenda issues as our unit of analysis.

Statistical analyses

Bivariate correlations were computed as Pearson's *r*. To examine the proposed hypotheses, multiple regression analyses were performed. To reduce multi-colinearity in analyses involving interaction terms, and to ensure that interaction terms could be interpreted as in ordinary ANOVA, all variables were standardized with a mean of 0 and variance of 1 (*z*-scores). SPSS (version 16.0) was used for all analyses.

Due to the hierarchical nature of the data (issues within TMGs), hierarchical analyses – for example by fitting hierarchical linear models – would have been preferable by allowing us to study variability in parameters across TMGs. Our hypotheses, however, necessitate fitting three and four parameter models at level 1 and to obtain stable estimates we would thereby need a substantial number of observations. In this study, as in most studies in this field of research, methodological and practical problems limit the possibility of assuring a sufficient number of observations – both at level 1 (number of issues) and level 2 (number of TMGs).

RESULTS

H1, predicting a positive association between goal clarity and team effectiveness, is fully supported. As shown in Table 1, goal clarity is positively and significantly correlated with all three measures of team effectiveness: observer rated task performance ($r = 0.30$, $p \leq 0.05$), member rated task performance ($r = 0.54$, $p \leq 0.001$), relationship quality ($r = 0.40$, $p \leq 0.01$), and member satisfaction ($r = 0.52$, $p \leq 0.001$). H2, predicting a positive relationship between focused communication and team effectiveness, is also fully supported. Table 1 shows that focused communication is positively and significantly correlated with observer rated task performance ($r = 0.38$, $p \leq 0.01$), member rated task performance ($r = 0.60$, $p \leq 0.001$), relationship quality ($r = 0.52$, $p \leq 0.001$), and member satisfaction ($r = 0.32$, $p \leq 0.05$). Hence, being explicit and clear on the goal of bringing up an issue in the management meeting, and staying focused on the goal during the discussion significantly predicts the level of team effectiveness of TMG meetings.

To examine H3, predicting that the association between goal clarity and team effectiveness is partially mediated by the degree of focused communication, we followed Baron and Kenny's (1986) procedure for examining mediator effects. As shown in Table 2, when controlling for focused communication, the regression coefficient for the relationship between goal clarity and observer rated task performance drops from $B = 0.30$ ($p \leq 0.05$) to $B = 0.16$ (*n.s.*), indicating that focused communication mediates the relationship. For the relationship between goal clarity and member rated task performance, the regression coefficient drops from $B = 0.54$ ($p \leq 0.001$) to $B = 0.34$ ($p \leq 0.01$), indicating a partially mediated relationship. The regression coefficient for the association between goal clarity and relationship quality drops from $B = 0.40$ ($p \leq 0.01$) to $B = 0.21$ (*n.s.*) when controlling for focused communication, indicating that focused communication functions as a mediator between goal clarity and relationship quality. The regression coefficient for the relationship between goal clarity and member satisfaction drops from $B = 0.52$ ($p \leq 0.001$) to $B = 0.48$ ($p \leq 0.001$) when controlling for focused communication. This change is small and not statistically significant, and does not support the hypothesis that focused communication is mediating this relationship. Hence, H3 is supported for two of the three team effectiveness indicators. Sobel tests (Sobel, 1982) of the mediated effects supported the general pattern of results (see Table 2).

Table 2. *Focused communication as mediator of the relationship between Goal clarity and measures of Team effectiveness (standardized regression coefficients,* N = 56)

	Observer rated task performance	Member rated task performance	Relationship quality	Member satisfaction
1. Main effects of Goal clarity on measures of Team effectiveness	0.30*	0.54***	0.40**	0.52***
2. Main effects of Focused communication on measures of Team effectiveness	0.38**	0.60***	0.52***	0.32*
3. The effects of Goal clarity on measures of Team effectiveness when controlling for Focused communication	0.16	0.34**	0.21	0.48***
4. The effects of Focused communication on measures of Team effectiveness when controlling for Goal clarity	0.31*	0.44***	0.43***	0.10
Sobel test of mediation	1.89 ($p < 0.06$)	2.69 ($p < 0.01$)	2.49 ($p < 0.01$)	0.77 ($p < 0.44$)

Notes: The main effect of Goal clarity on Focused communication was 0.45 (see Table 1).

* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, all variables are standardized.

We followed Baron and Kenny's (1986) procedure to examine the moderator effect of goal clarity on the relationship between speaking up about unclear goals and focused communication (H4). To demonstrate a moderator effect, an interaction (the product of two independent variables) must be statistically significant when simultaneously controlling for the effect of the two independent variables (Baron & Kenny, 1986). To aid interpretation of interaction effects, the statistically significant effects are visualized in Figs. 1 and 2. Estimated standardized values on the dependent variables are plotted by high and low values of the independent variables. High and low levels were pragmatically defined as +1 and –1 standard deviation.

As shown in Table 3, goal clarity moderates the relationship between speaking up about unclear goals and focused communication (B = –0.35, $p \leq 0.001$).

When the goal for an agenda issue is unclear, speaking up about unclear goals is associated with more focused communication than not speaking up. Likewise, when goal clarity is high, the effect of speaking up about unclear goals is negative for the degree of focused communication. Hence, speaking up must be *contingent on goal clarity* to have a positive effect on focused communication (see Fig. 1).

H5, predicting that goal clarity moderates the relationship between speaking up about unclear goals and team effectiveness, is confirmed for two of the three team effectiveness indicators. Table 3 shows that goal clarity moderates the relationship between speaking up about unclear goals and observer rated task performance (B = –0.30, $p \leq 0.01$), speaking up about unclear goals and member rated task performance (B = –0.37, $p \leq 0.001$), and speaking up about unclear goals and relationship quality
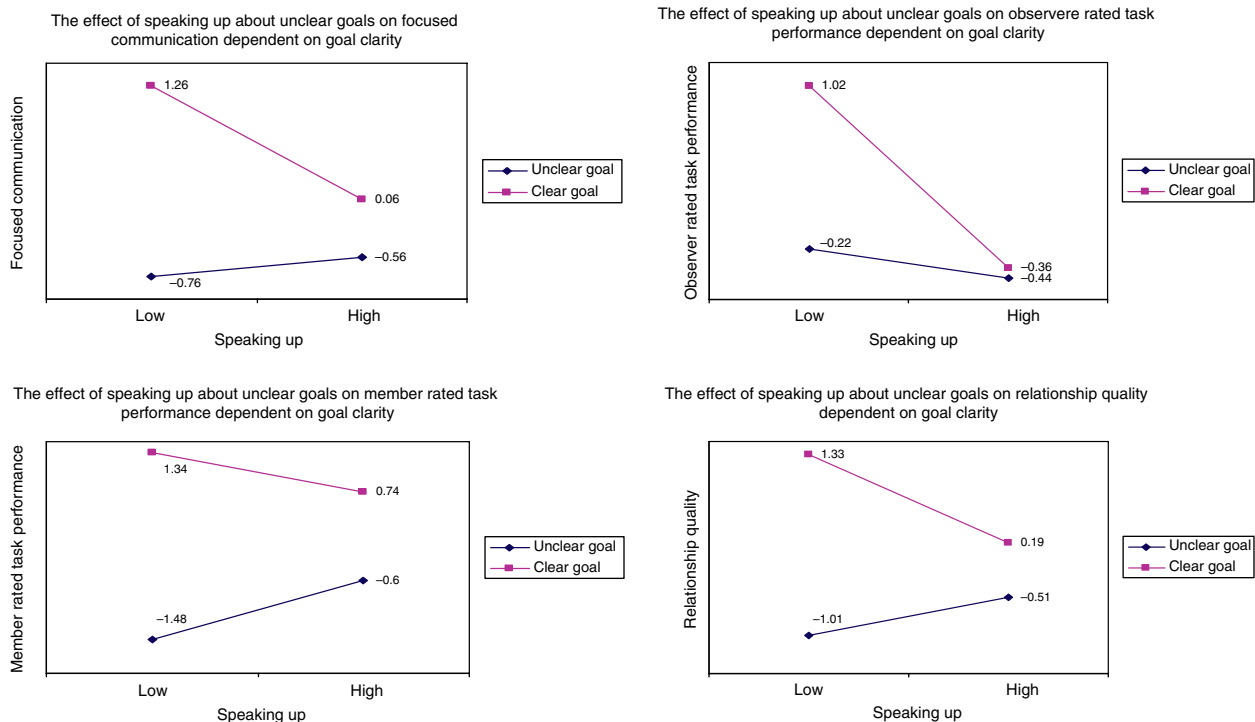

Fig. 1. The effects of speaking up about unclear goals on focused communication, task performance and relationship quality dependent on goal clarity (standardized scores).

Table 3. *Goal clarity as moderator of the relationships between speaking up about unclear goals and five dependent measures*

Dependent measures	Step	Speaking up (SU)	Goal clarity (GC)	GC by SU interaction	R^2	R^2 change
Focused communication	1	0.29	0.69**		0.23	
	2	−0.25	0.66***	−0.35***	0.47	0.23***
Observer rated task performance	1	0.09	0.37		0.09	
	2	−0.37	0.35	−0.30**	0.26	0.17**
Member rated task performance	1	0.64**	1.07***		0.43	
	2	0.07	1.04***	−0.37***	0.70	0.26***
Relationship quality	1	0.47*	0.78***		0.24	
	2	−0.16	0.76***	−0.41***	0.55	0.31***
Member satisfaction	1	0.00	0.53*		0.27	
	2	−0.14	0.52*	−0.09	0.29	0.02

Notes: Regression coefficients and R^2 from hierarchical regression analyses with main effects entered in first step and the interaction term in second step ($N = 56$).
* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, all variables are standardized.

Table 4. *Focused communication as moderator of the relationships between speaking up about unfocused communication and team effectiveness*

Dependent measures	Step	Speaking up (SU)	Focused communication (FC)	FC by SU interaction	R^2	R^2 change
Observer rated task performance	1	0.26	0.55**		0.17	
	2	0.13	0.53**	−0.20	0.20	0.03
Member rated task performance	1	0.21	0.72***		0.38	
	2	0.15	0.71***	−0.09	0.39	0.01
Relationship quality	1	−0.34*	0.29		0.32	
	2	−0.57**	0.25	−0.34*	0.38	0.06*
Member satisfaction	1	−0.12	0.24		0.12	
	2	−0.29	0.21	−0.26	0.16	0.04

Notes: Regression coefficients and R^2 from hierarchical regression analyses with main effects entered in first step and the interaction term in second step ($N = 56$).
* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, all variables are standardized.

($B = -0.41$, $p \leq 0.001$). We did not find a moderating effect of goal clarity for the relationship between speaking up about unclear goals and member satisfaction ($B = -0.09$, *n.s.*).

As shown in Fig. 1, these moderator effects must be interpreted with caution. When goals are unclear, speaking up about unclear goals is associated with higher member rated task performance and relationship quality than not speaking up. However, even if the moderator effect on *observer* rated task performance is significant and in the predicted direction, Fig. 1 shows that speaking up about unclear goals is associated with lower levels of observer rated task performance than not speaking up – both for low and high levels of goal clarity. Hence, H5 is partly supported.

H6, predicting that the degree of focused communication will moderate the relationship between speaking up about unfocused communication and team effectiveness, is not supported in our study. As shown in Table 4, the interaction between focused communication and speaking up about unfocused communication is not significant for observer rated task performance ($B = -0.20$, *n.s.*), member rated task performance ($B = -0.09$, *n.s.*), or member satisfaction ($B = -0.26$, *n.s.*). We found a significant interaction effect on relationship quality ($B = -0.34$, $p < 0.05$), indicating that the degree of focused communication moderates the association between speaking up about unfocused communication and relationship quality. However, the moderator effect must be interpreted with care, as long as the main effect of speaking up

about unfocused communication is strongly negatively associated with relationship quality ($B = -0.57$, $p \leq 0.01$). Figure 2 shows that the negative effect of speaking up on relationship quality is less when communication is experienced as unfocused, compared to when communication is experienced as on track. However, the figure also shows that speaking up about unfocused communication is generally more negative for relationship quality than not speaking up.
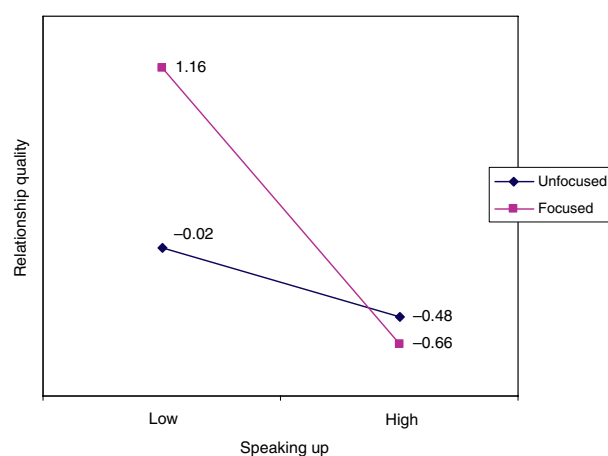

Fig. 2. The effect of speaking up about unfocused communication on relationship quality dependent on focused communication (standardized scores).

DISCUSSION

The results of our study reveal a positive relationship between goal clarity, focused communication, and team effectiveness during management meetings. The positive effect of goal clarity on team effectiveness is partially due to clear goals bolstering focused discussions during a meeting. Results also supported the importance of members' speaking up when the meeting goals were experienced as unclear, thereby making communication more focused as well as increasing task performance and relationship quality. Contrary to our expectations, speaking up when communication was perceived as off topic was not associated with most dependent variables. However, we found that speaking up was associated with lower relationship quality during the management meeting.

A clear meeting goal may help the group members to become aware when they drift off track, and encourage them to provide feedback when they experience a mismatch between a clearly articulated goal and poor performance during a meeting (Campion & Lord, 1982). Formulating a clear and common goal prior to discussion may also contribute to a shared mental model (Cannon-Bowers, Salas & Converse, 1993) among group members, which helps members stay focused. According to Rouse, Cannon-Bowers, and Salas (1992), the development of shared mental models is especially important in complex decision-making settings, such as a TMG (Edmondson *et al.*, 2003). Mathieu, Goodwin, Heffner, Salas, and Cannon-Bowers (2000) found that shared mental models among group members are positively associated with team performance and work coordination (see also Mathieu, Heffner, Goodwin, Cannon-Bowers & Salas, 2005). Working focused together towards a common goal may also strengthen a common TMG identity, while simultaneously making other institutional identities (e.g., occupational or departmental) less salient, reducing sub-group rivalries and relationship tensions (Amason, Thompson, Hochwarter & Harrison, 1995; Eisenhardt, Kahwajy & Bourgeois III, 1997b; van Knippenberg, 2000; van Knippenberg *et al.*, 2004).

Our findings imply that group members should carefully explain the goal when an issue is initially presented during a management meeting. Clear goals direct group members' attention towards task-oriented activities, strengthen group members' relationships, and elicit a deeper sense of meaningfulness as well as personal engagement during a meeting.

Our results suggest that it helps to comment on or ask for clarification about the goal of bringing up an issue in a management meeting as long as the goal is experienced by the group as unclear. If, however, a goal is experienced as clear by the rest of the group, commenting on the goal may defocus communication, and decrease both task performance and relationship quality. This may create a dilemma for a group member who experiences a goal as unclear. This dilemma may prevent group members from commenting or asking clarifying questions about the goal during a management meeting, thereby losing the opportunity for focused discussions and eventually increased team effectiveness. A clear process of feedback that is established *a priori* and agreed upon by all group members could alleviate this problem.

Surprisingly, the degree of focused communication did not moderate the relationship between speaking up about unfocused communication and team effectiveness, and speaking up was neg-atively associated with relationship quality. This implies that commenting on being off topic or unfocused may not be helpful for team effectiveness, and it may even be harmful for relationships. Does this finding suggest that group members should not comment on long-windedness and digressions during management meetings? Such conclusions are obviously premature. First, there are ways of addressing unfocused communication that may increase team effectiveness. Possibly, feedback should be provided in line with Action Theory and Model II communication (Argyris, 1993; Argyris & Schön, 1978), which combines advocacy with inquiry when communicating about complex or emotionally laden themes. This requires one to explicitly illustrate inferences with specific data, and to make the inferences explicit and open for others to validate. According to Action Science theory, people usually react less defensively when advocacy is combined with genuine inquiry because one is open to being wrong and willing to listen to others (Argyris, 1993). Second, research shows that the level of intra-group trust influences the effect of feedback behavior (Edmondson, 1999) and the way task-oriented comments are interpreted by team members (Simons & Peterson, 2000). Third, there is also the possibility of a "sleeper learning effect" when commenting on communication: members may adjust their communication style in subsequent meetings.

Methodological limitations

Our findings should be interpreted with caution. First, we used a correlational design, limiting the possibilities for causal inferences. Second, data were collected by an observer (the first author) sitting in-vivo in the TMG meetings. He observed and videotaped the sessions, and interrupted the meetings several times to ask group members to fill out the questionnaire. This may have evoked more "favorable" behavior. If so, our data will show limited variability with scores biased in a positive direction. Third, correlation coefficients may be inflated. Seven of our eight scales were measured via self-report with a single questionnaire, which may create shared-method and shared-informant confounds (Podsakoff *et al.*, 2003).

Analyses occurred on an agenda issue level with issues nested within top management groups, which also may have inflated correlation coefficients through a "management group effect." The way the variables are operationalized may also inflate correlation coefficients because there is a build-in relationship between some of the variables. Focused communication is dependent on goal clarity, speaking up about unclear goals is dependent on the degree of goal clarity, and speaking up about unfocused communication is dependent on the degree of focused communication. As for the criterion variables, relationship quality and member satisfaction are probably related to each other due to an emotional dimension of participating in TMG meetings. Even though we did not inform group members about the exact variables that we were measuring, a learning effect may have occurred.

Furthermore, group members' repeatedly responded to the questionnaire, and through this process, they may have become aware of our research interests, intensifying the relationship between predictor and criterion variables. Finally, our sample is not very large ($n = 56$), and issues for analyses were taken from

only eight TMGs from the public sector, so generalization of findings is limited.

Conclusions and future research

Our study supports prior research about the importance of having clear goals, speaking up when the goal is experienced as unclear, and being focused when working in a group. We add to this research by showing that these kinds of behaviors are important for TMGs when they discuss issues during actual management meetings, both for the level of task performance, the relationship quality among the group members, and for member satisfaction.

Our findings have implications for how to run effective management meetings. First, the goal of bringing up an issue in the meeting and what you want the management team to focus on should be clearly stated at the beginning of the discussion. Second, the meeting participants should be encouraged to speak up if they experience the goal as unclear or difficult to grasp. Third, the meeting participants should stick to the matter while discussing the topic, trying to focus their efforts on achieving the goal of bringing up the issue. Fourth, one should be careful how to frame the message when commenting upon sidetracking and long-windedness that occur during the management meeting, because the relationship quality among the team members may deteriorate as a consequence of the feedback given to the sidetracking participants.

Our results expand the areas where Locke and Latham's goal theory has proven useful, showing that explicitly stated goals are also important in settings where it is difficult to set quantifiable goals, like in a meeting. In addition, we have added evidences to Locke and Latham's claim that "goals direct attention, effort, and action toward goal-relevant actions at the expense of nonrelevant actions" (2006, p. 265) by showing that clearly stated goals increase the probability for focused communication in management meetings.

Future studies should replicate our findings with other samples in the public sector as well as in the private sector and in lower levels of the organizational hierarchy. It would also be useful to replicate our study with other types of problem-solving groups and in general meetings. To control for a possible management group effect, future studies should increase the number of groups studied. Also, studying the effect of *training* management groups in goal clarity, focused communication, and speaking up about unclear goals and unfocused communication may be useful. Adding control groups that are not trained in such meeting behavior could possibly strengthen the evidence for a causal relationship between constructs. Finally, future studies should explore the effects of varying ways to provide feedback about unfocused communication.

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