

The role of follower behavior during team meetings in follower performance and team effectiveness: an observational approach

Author: Martijn Veninga
University of Twente
P.O. Box 217, 7500AE Enschede
The Netherlands

ABSTRACT,

Purpose: *The aim of this thesis is to further our understanding on the relationship between behavior and performance measures of team leaders, followers and teams on a whole. The relations between leader listening behavior and team effectiveness in the model 'leader listening behavior' – 'leader performance' – 'meeting effectiveness' – 'team performance' is analyzed as well as the relations between aggregated team self-defending behaviors and team effectiveness through the mediating variable meeting effectiveness and finally the relations between followers individually showing self-defending behaviors and team effectiveness through the mediating variable follower effectiveness. Analyzing these relationships provide insight on effective follower and team behaviors in an effort to improve performance of followers and of teams. This newly gained insight can help managers of teams improve performance and decrease the costs associated with unproductive meetings.*

Design, methodology and approach: *This thesis uses a combination of data on behaviors observed during meetings, as well as data gathered from surveys given to team leaders (N=113), followers (N=1486) and experts. Relationships between leader listening and team effectiveness as well as the relationship between the self-defending behaviors and team effectiveness were theorized to be mediated, therefore a four step mediation analysis was used to analyze these relationships.*

Findings: *Leader active listening behavior was not found to be a predictor for meeting effectiveness nor for team effectiveness. Team being uninterested was found to be a predictor for worse team effectiveness and followers giving negative feedback was found to be a positive predictor of follower performance. Leader effectiveness was found to be a strong predictor for team effectiveness as well as meeting effectiveness and follower performance.*

Discussion: *Leader performance was found to be a very strong predictor for team effectiveness, this may in part be due to the fact that both of these variables were provided by the same source (experts). Teams being uninterested during meetings were found to be a strong predictor of team effectiveness and may be a good focus point for efforts in improving team performances.*

Graduation Committee members:

Jacco Smits, MSc

Dr. Desirée van Dun

Keywords

Traditional teams, self-defending behavior, active listening behavior, team leader effectiveness, follower effectiveness, team effectiveness, meeting effectiveness.

1. INTRODUCTION:

What can we do today to help our teams perform more effectively? Group work has become a cornerstone of organizational life (Akkerman et al., 2007). The results of this study can be used in the academic world to help gain a grasp on what makes teams perform effectively, as well as in actual organizations to help managers improve team and individual performances. Meeting productivity has been a big deal in corporations for a long time. In 1997, Elsayed-Elkhouly, Lazarus & Forsythe estimated that the loss of time in unproductive meetings results in a loss of productivity of \$37 billion annually for the USA alone (Elsayed-Elkhouly, Lazarus, & Forsythe, 1997), while others suggest even bigger costs of around \$60 annually (Mosvick & Nelson, 1996). Unproductive time in meetings was found to be a very significant portion of meetings, with some survey studies finding that as much as 50% of time in meetings is unproductive (Elsayed-Elkhouly et al., 1997). This means that improvements in meeting effectiveness could definitely be made, and that making such improvements could yield significant organizational benefits.

The goal of this research is to help those managing teams improve performance of individuals in the teams, as well as the teams on a whole by answering the question ‘how are the behaviors “listening” and “self-defending” related to the performance of followers, leaders, and team effectiveness?’.

By utilizing an observational approach to indexing behavior, accurate non-biased data can be extracted on team behaviors during meetings. This serves the purpose of making the analysis more reliable by being nonbiased, as well as by allowing the research to use different sources for the different variables under question through combination with survey data by different groups of people in and around the meeting

Questions on what the organization could do to improve the effectiveness of their teams also arose at a large Dutch governmental organization, this organization works with traditional teams with a team leader and between 5 and 34 followers. Research is being done by researchers of the University of Twente on the behavior and tendencies of followers within team meetings at this institution from which conclusions will be drawn in this research with respect to effective team behavior in the traditional team context.

This paper will contribute to improving the resolution of the knowledge domain on the complex interactions underlying team effectiveness by analyzing the relationships between team leader and follower behaviors during team meetings and team effectiveness through meeting satisfaction.

2. THEORETICAL FRAMEWORK

The research question of this paper is: How do team leader displays of active listening behavior and frequency of follower self-defending behaviors affect team effectiveness.

According to Bubshait & Farooq, “active listening” could be an important influence on meeting performance (Bubshait & Farooq, 1999). This is in line with findings by Seers who came to the conclusion that coworker satisfaction was related to leader-member exchange quality (Seers, 1989), and that coworker satisfaction was related to meeting effectiveness (Seers, Petty, & Cashman, 1995). According to Stevens & Campion, “to listen nonevaluatively and to appropriately use active listening techniques” is a requirement for teamwork (Stevens & Campion, 1994). Also Coven et al. noted in 2007 that “listening and open communications were two interventions that led to his sense of inclusion”, giving reason to believe that active listening by the team leaders could be associated with higher meeting effectiveness (Coven et al., 2007). Furthermore, Ames, Maissen & Brockner conducted a study in 2012 on the mediating effect of listening on the positive relationship between the Big Five dimension and influence of leaders, finding that listening behavior is a positive predictor of influence (Ames, Maissen, & Brockner, 2012). And according to Yukl & Yukl, “influence is the essence of leadership” (Yukl & Yukl, 2002). This leads to the development of the first hypothesis that will be tested in the current study:

H1: There is an indirect positive relationship between active listening behavior by team leaders and team effectiveness, via the mediators leader effectiveness and meeting effectiveness.

Another important group of behaviors shown during meetings was found to be self-defending behaviors. In the codebook used for this research, self-defending behaviors are defined as being expressly negative, counteractive communication (Hoozeboom & Wilderom, 2015). Self-defending behaviors have found to be negatively related to team effectiveness. For example, Fredrickson & Losada found that a ratio between supporting comments to attacking/disagreeing of 2.9 is associated with high performing teams (Fredrickson & Losada, 2005), indicating that negative, counteractive communication like the self-defending behaviors described in this paper are associated with lowered team effectiveness through lowered meeting effectiveness.

Kauffeld & Lehmann-Willenbrock found in 2012 that there is a negative relationship between counteractive statements during meetings and meeting effectiveness (Kauffeld & Lehmann-Willenbrock, 2012). Being uninterested/ignoring problems in the form of “no interest in change” was found to be negatively correlated with meeting satisfaction and organizational success (Kauffeld & Lehmann-Willenbrock, 2012). The researchers also found that better meetings were associated with higher team productivity, and worse meetings were associated with lower team productivity (Kauffeld & Lehmann-Willenbrock, 2012). They

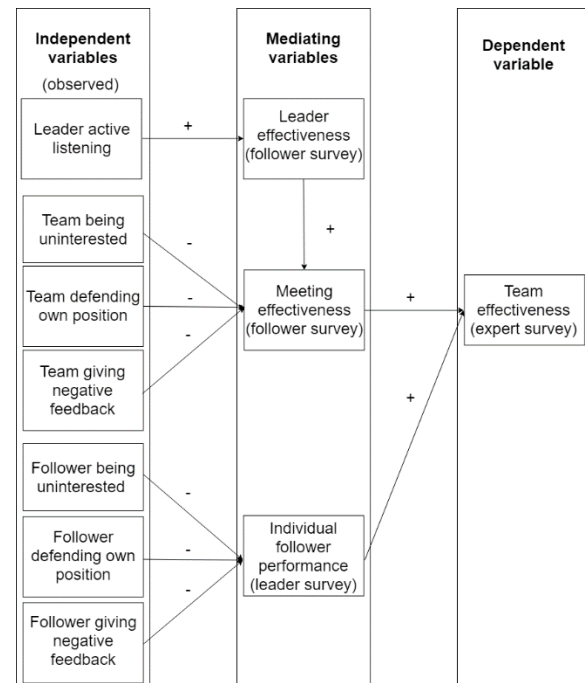
hypothesized that negative socioemotional statements such as disinterest were negatively linked to team success and found support in their paper. Negative socioemotional interaction was associated with decreased meeting satisfaction and lower organizational performance. This leads to the development of the second hypothesis that will be tested in the current study:

H2: There is an indirect negative relationship between teams showing self-defending behaviors of “being uninterested”, “defending own position” during meetings and team effectiveness via the mediator meeting effectiveness.

On the subscale of follower performance, few studies were found that support the idea that self-defending behaviors have an influence on team effectiveness through follower performance. Previous research has shown that patterns of interaction among team members are highly generalizable antecedents of team effectiveness (Waller, Gupta, & Giambattista, 2004).

Given the negative effects of self-defending behaviors on meeting effectiveness and team effectiveness as explained in hypothesis 2, I hypothesize in this paper that follower performance is also affected by self-defending behaviors because the followers showing such behavior decreases the performance of the team as a whole. Also, Kelley noted that the ability to disagree agreeably was one of the key factors that make a follower a good follower (Kelley, 1988). Followers who show self-defending behaviors, not being agreeable, can thus be seen as low-performing. This leads to the development of the third and last hypothesis that will be tested in the current study:

H3: There is an indirect negative relationship between followers showing self-defending behaviors of “being uninterested”, “defending own position”, and “giving negative feedback” and team effectiveness via the mediator follower effectiveness.



Note: sources of variables are given in brackets

Figure 1: Theoretical framework model

3. METHODOLOGY

In this research, survey results will be used in combination with a dataset based on coded video-observations. These video-observations have been coded using the Observer XT (Noldus, 1991) behavioral coding software on the hand of a 15-page validated codebook to obtain accurate data on team behaviors (Hoozeboom & Wilderom, 2015). This software helps researchers accurately code video data into workable behavioral categories. The surveys were filled in by the team leaders and followers directly after the meetings.

3.1 Sample

A dataset gathered at a large Dutch governmental organization was used. The dataset contains coded behavioral data from both employees and team leaders during meetings at the institution. Behaviors coded and used in this research include the listening behavior of team leaders and self-defending behavior types of employees. Also included in the dataset are answers from followers, team leaders and experts on a survey. The survey included questions on employee performance, leader performance, meeting effectiveness and team effectiveness which are the primary focus in this research.

The sample consists of 113 team leaders (81 males, 28 females, 4 missing) leading teams with an average size of 14.5 (ranging from 5 to 34; SD = 6.1) and 1486 followers (858 males, 477 females, 151 missing). Team leaders had an average age of 51.16 years (ranging from 27 to 64; SD = 7.44), followers had an average age of 49.07 (ranging from 18 to 69; SD = 10.62). The average time employees have

been working at the organization was 24.1 years (ranging from 0 to 53: SD = 13.8), with the average time in the current team being 3.8 years (ranging from 0 to 38: SD = 5.1).

The sample contains a good mix of educational levels. 4 have finished high school, 58 have finished LBO, 606 have finished MBO, 431 have finished HBO, 23 have a BSc degree, 265 have an MSc degree and 22 have finished a Ph.D., there are 213 missing values.

3.2 Research design

The length of the meetings differs. Therefore, to get a proper view on whether the behavior types are common or uncommon during the meeting, the amount the behavior types are shown is translated into a percentage. The behaviors coded in the program are mutually exclusive and exhaustive, creating a data set that has the percentage of all the behaviors combined sum up to 100%. This allows us to analyze the relative amount that behaviors are shown in meetings to other behaviors, while at the same time making the data comparable between meetings.

3.2.1 Measures

The items on the survey were tested for reliability by analyzing their Cronbach's alpha. Cronbach's alpha indicates reliability with a value above .7 generally accepted as reliable (Nunnally, 1978). Gender was coded 1 (male) and 2 (female).

Team leader listening. In the codebook used for this research, listening is defined as "listening, verbal and non-verbal. Showing that the speaker has been understood" (Hoozeboom & Wilderom, 2015). This behavior was coded for team leaders only and expressed as a percentage of the total meeting that this behavior was observed. The mean of this variable is 53.4% (ranging from 17.0% to 93.2%: SD = 15.29%).

Team leader effectiveness. Team leader effectiveness was based on answers provided on the survey by experts. Answers were given ranging from 1 (very bad) to 10 (very good). The reliability of the answers provided by the experts was investigated by correlating it with answers on the same questions provided by followers ($r = .314, p < .01$). The results of both sets of questions on the same team leaders were significantly correlated indicating that the answers provided by the experts are reliable. 9 questions developed by (Bass & Avolio, 1995) were used to rate the effectiveness of the team leaders. Examples of questions used are "my leader leads a group that is effective", and "my leader is effective in meeting my job-related needs". Cronbach's alpha was very high ($\alpha = .94$), showing a reliable scale.

Follower negative feedback. This behavior is defined in the codebook as "to judge the behavior of other followers, to criticize" (Hoozeboom & Wilderom, 2015). This behavior was coded and used in the analysis for all followers. As the behavior type is not often shown, the variable has been

coded to only be indicating whether the behavior was shown "1", or not shown "0". The mean of this variable is .24 (ranging from 0 to 1: SD = .43) this means that 24% of the coded members have shown this behavior.

Follower being uninterested. This behavior is defined in the codebook as "not showing interest, problems of followers are not taken seriously, wanting to get rid of something quick and non-critically" (Hoozeboom & Wilderom, 2015). This behavior was coded and used in the analysis for all followers. As the behavior type is not often shown, the variable has been coded to only be indicating whether the behavior was shown "1", or not shown "0". The mean of this variable is .15 (ranging from 0 to 1: SD = .35) this means that 15% of the coded members have shown this behavior.

Follower defending own position This behavior is defined in the codebook as "defending self-interest or stance, blaming others, stressing own importance" (Hoozeboom & Wilderom, 2015). This behavior was coded and used in the analysis for all followers. As the behavior type is not often shown, the variable has been coded to only be indicating whether the behavior was shown "1", or not shown "0". The mean of this variable is .21 (ranging from 0 to 1: SD = .41) this means that 21% of the coded members have shown this behavior.

Follower effectiveness. Follower effectiveness was calculated based on answers on the survey provided by team leaders on 4 questions based on a paper by (Gibson, Cooper, & Conger, 2009). Answers were given ranging from 1 (very bad) to 10 (very good). Cronbach's alpha was very high ($\alpha = .95$), showing a reliable scale.

Meeting effectiveness. Meeting effectiveness was based on three questions of the survey answered by followers. An example of the questions used is "the meetings are a more satisfying experience than a frustrating one(Nixon & Littlepage, 1992)". The other questions were taken from papers by (Engleberg & Wynn, 2007) and (Baran, Shanock, Rogelberg, & Scott, 2012). Answers were given ranging from 1 (very bad) to 7 (very good). Cronbach's alpha was very high ($\alpha = .95$), showing a reliable scale. The answers to these questions were averaged to create a single variable indicating the total consensus of meeting effectiveness amongst followers in each team.

Team effectiveness. Team effectiveness was rated by team leaders, followers, and experts. The variable is an aggregated value of the answer to four questions on the survey based on a paper by (Gibson et al., 2009) given by experts. Answers were given ranging from 1 (very bad) to 10 (very good). In the final analysis, the answers given by experts were used. Cronbach's alpha was very high ($\alpha = .93$), showing a reliable scale.

Team behaviors The behaviors of "giving negative feedback", "being uninterested" and "defending own

position” were also aggregated on the team level. This was done so relationships between team behaviors and team effectiveness could be analyzed. In these team variables: Team negative feedback, Team being uninterested and Team defending own position, the percentage that followers showed each behavior was summed up to get a percentage of how much entire teams showed this behavior. The percentages could in theory range from 0%: not shown at all during the meeting, to 100%: only behavior shown during the entire meeting. Actual statistics for these behaviors are as follows:

Behavior	Mean	Min	Max	Std. Deviation
Team negative feedback	2.45%	0%	28.43%	4.36%
Team being uninterested	1.89%	0%	30.79%	4.21%
Team defending own position	1.30%	0%	18.32%	3.05%

Table 1: Descriptive statistics for team behaviors

4. RESULTS

4.1 Bivariate tests

Hypothesis 1 proposed an indirect relationship between team leader active listening behavior and team effectiveness through the mediating variables leader effectiveness and meeting effectiveness. various interesting correlations in this group of variables were found. Team effectiveness was positively correlated with meeting effectiveness ($r = .34, p < .01$) and leader effectiveness ($r = .79, p < .01$). Meeting effectiveness was found to be positively correlated with leader effectiveness ($r = .27, p < .01$).

Hypothesis 2 proposed an indirect relationship between teams showing self-defending behaviors and team performance through meeting effectiveness. As described earlier, team effectiveness was positively correlated with meeting effectiveness ($r = .34, p < .01$), but no further correlations were found for this hypothesis. Interestingly, leader effectiveness was found to be negatively correlated with the team being uninterested ($r = -.33, p < .01$).

Hypothesis 3 proposed an indirect relationship between followers showing self-defending behaviors and team effectiveness via the mediating variable follower effectiveness. Followers giving negative feedback was found to be positively correlated with follower performance ($r = .06, p < .05$). Furthermore, follower performance was found to be positively correlated with team effectiveness ($r = .13, p < .01$).

Some other interesting correlations found that were not hypothesized include leader gender being correlated with meeting effectiveness ($r = .21, p < .05$), and team effectiveness ($r = -.07, p < .05$).

Follower performance was found to be positively correlated with their gender ($r = .08, p < .05$) and negatively correlated with their age ($r = -.09, p < .01$).

Leader effectiveness was negatively correlated with the leader giving negative feedback ($r = -.21, p < .05$).

The extent to which the team shows disinterest was positively correlated with the team showing the behavior of defending own position ($r = .31, p < .01$) and the team leader giving negative feedback ($r = .22, p < .05$).

How often the team shows the behavior of defending their own position was positively correlated with the team giving negative feedback ($r = .22, p < .05$), it was also correlated to whether or not the team leader shows the behaviors of defending own position ($r = .19, p < .05$) and giving negative feedback ($r = .23, p < .05$).

The extent to which the team shows the behavior of giving negative feedback was positively correlated with whether or not the team leader shows the behavior of being uninterested ($r = .30, p < .01$), and whether or not the team leader shows the behavior of giving negative feedback ($r = .27, p < .01$).

Whether or not individuals show disinterest was positively correlated with whether or not they show the behaviors of both defending own position ($r = .08, p < .01$) and giving negative feedback ($r = .10, p < .01$). It was negatively correlated with their gender ($r = -.07, p < .01$) and positively correlated with age ($r = .06, p < .05$).

If individuals show the behavior of defending their own position was positively correlated with if they give negative feedback ($r = .33, p < .01$) and their age ($r = .06, p < .05$).

Whether or not individuals show the behavior of giving negative feedback was negatively correlated with their gender ($r = -.10, p < .01$) and positively correlated with their age ($r = .10, p < .01$).

Team gender was negatively correlated with team age ($r = -.35, p < .01$) and the age of the team leader ($r = -.25, p < .01$). It was positively correlated with team leader gender ($r = .41, p < .01$).

Team age was negatively correlated with team leader gender ($r = -.22, p < .05$) and positively correlated with team leader age ($r = .24, p < .05$).

Lastly, the gender of individuals in the organization was negatively correlated with their age ($r = -.24, p < .01$) and positively correlated with gender ($r = .08, p < .05$).

Variable	Source	N	Min	Max	Mean	Std. Deviation	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Team effectiveness (experts)		1606	3.67	8.25	6.93	0.86	(-0.93)													
2. Meeting effectiveness (followers)		113	2.94	6.00	4.86	0.55	.34**	(-0.87)												
3. Follower performance (team leaders)		1111	2.31	10.00	7.23	1.26	.130**	.ε	(-0.95)											
4. Leader effectiveness (experts)		112	4.78	8.89	7.26	0.78	.79**	.266**	.ε	(-0.92)										
5. Leader active listening (coded)		113	17.03	93.21	53.36	15.29	0.05	0.09	.ε	0.01										
6. Team being uninterested (coded)		113	0	30.79	1.89	4.21	-.34**	-.011	.ε	-.33**										
7. Team defending own position (coded)		113	0	18.32	1.30	3.05	-.007	-.015	.ε	-.007	-.011	.31*								
8. Team giving negative feedback (coded)		113	0	28.43	2.45	4.36	-.002	-.003	.ε	-.013	-.001	0.06	.22*							
9. Follower being uninterested (coded)		1565	0	1	0.15	0.35	0.02	-.010	0.01	-.003	-.016	-.008	0.06	.30**						
10. Follower defending own position (coded)		1565	0	1	0.21	0.41	0.02	0.03	0.02	-.002	-.008	0.12	.19*	0.15	.08**					
11. Follower giving negative feedback (coded)		1565	0	1	0.24	0.43	0.01	-.014	.06*	-.21*	-.009	.22*	.23*	.27**	.10**	.327**				
12. Team Gender (survey)		112	1	2	1.34	0.20	-.008	0.02	.ε	-.001	-.013	-.006	-.016	-.006	-.006	-.007				
13. Team Age (survey)		1456	1	2	1.35	0.48	-.07*	.21*	.08*	0.04	0.08	-.007	0.05	-.004	-.07**	0.01	0.00	-.35**		
14. Individual Gender (survey)		1412	18	69.00	49.21	10.43	0.02	-.003	-.09**	0.10	0.03	0.13	0.00	0.01	-.06*	.06*	-.10**	.41**	-.22*	
15. Individual Age (survey)		1412	18	69.00	49.21	10.43	0.02	-.003	-.09**	0.10	0.03	0.13	0.00	0.01	-.06*	.06*	-.10**	-.25**	.24*	-.24**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

ε. Cannot be computed because at least one of the variables is constant.

Table 2: Means, standard deviations and correlations of key variables

4.2 Mediation analysis

Hypothesis 1 proposes an indirect positive relationship between active listening behavior by team leaders and team effectiveness through the two mediating variables leader effectiveness and meeting effectiveness in series. Regression analysis showed that leader active listening behavior was related to team effectiveness ($\beta = .00, p > .05$). Leader active listening was also not related to leader effectiveness ($\beta = .00, p > .05$). Leader effectiveness was however related to meeting effectiveness ($\beta = .18, p < .05$), and meeting effectiveness was related to team effectiveness ($\beta = .51, p < .001$). However, a relationship between the independent variable and the dependent variable is needed for a partial or entire mediation, and as this is not present, we cannot conclude mediation (MacKinnon, Fairchild, & Fritz, 2007).

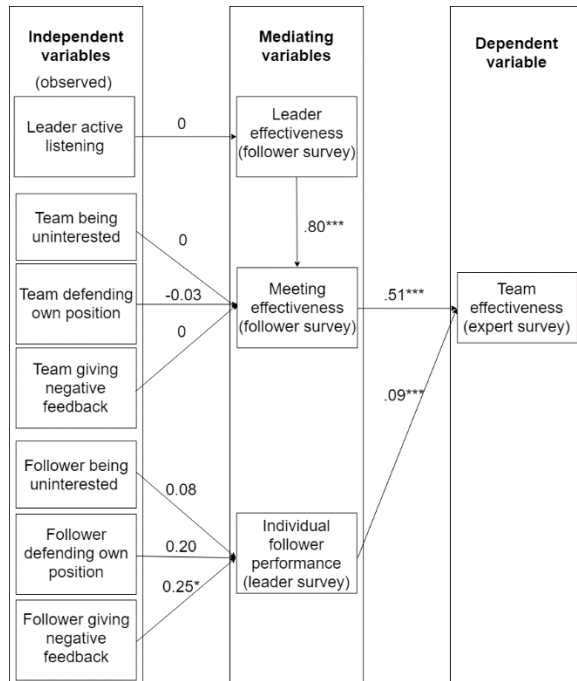
Leader effectiveness is a very strong predictor for team effectiveness ($\beta = .80, p < .001$) as model 10 shows ($R^2 = .65, F = 38.60, p < .001$). Regression model 11 ($R^2 = .68, F = 34.89, p < .001$) shows that when both leader effectiveness and meeting effectiveness are taken into account to predict team effectiveness, the beta of leader effectiveness decreases from .80 to .76, and the beta of meeting effectiveness decreases from .51 to .22. The slight decrease in leader effectiveness beta in model 11 shows a possible partial mediation of leader effectiveness on team effectiveness through meeting effectiveness. The substantial decrease in meeting effectiveness beta in model 11 means that the actual mediating effect here is the mediating effect of leader effectiveness in the relationship between meeting effectiveness and team effectiveness.

Hypothesis 2 proposes an indirect negative relationship between the three self-defending behaviors of “being uninterested”, “defending own position”, and “giving negative feedback” and team effectiveness through the mediating variable meeting effectiveness. The data does provide evidence for this claim as model 4 shows that “team being uninterested” has a negative relationship to team effectiveness ($\beta = -.07, p < .001$). When team effectiveness is then taken into consideration, the beta for “team being uninterested” decreases while revealing the positive correlation between meeting effectiveness and team effectiveness ($\beta = .47, p < .001$). the other behavior types of “team defending own position” ($\beta = .01, p > .05$) and “team giving negative feedback” ($\beta = -.01, p > .05$) do not show a mediating effect. Therefore, support is found for the behavior of being uninterested being related to team performance mediated through meeting effectiveness, but no support was found for the other two behavior types of defending own position and giving negative feedback to be related to team performance through the mediating variable meeting effectiveness.

Lastly, hypothesis 3 proposes an indirect negative relationship between follower self-defending behaviors and

team effectiveness through the mediating variable of follower performance. The data shows that the behaviors of “follower being uninterested” ($\beta = .8, p > .05$) and “follower defending own position” ($\beta = .20, p > .05$) were not significantly related to follower performance. Strikingly, the behavior of “follower giving negative feedback” was positively related to follower performance ($\beta = .25, p < .05$).

Follower performance was shown to be positively related to team effectiveness ($\beta = .09, p < .001$), but as the behaviors of “follower being uninterested” ($\beta = .05, p > .05$), “follower defending own position” ($\beta = -.01, p > .05$) and “follower giving negative feedback” ($\beta = .01, p > .05$) were not found to have a relationship to team effectiveness, the data does not support hypothesis 3, no mediation of follower effectiveness was found between follower self-defending behaviors and team effectiveness.



Note: * = $p < .05$; *** = $p < .001$; sources of variables are given in brackets

Figure 2: Theoretical framework with regression coefficients

	Leader effectiveness			Meeting effectiveness			Individual follower performance			Team effectiveness						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11					
Control variables																
Individual Gender	-0.03			0	-0.08	-0.16	-0.15	0.02	0.04	-0.13	-0.19					
Individual Age	0.01		0.16	0.02	0.00	0.01	0.02	.01*	0.01	0.00	0.00					
Team Gender	-0.21		-0.01*	-0.46		-0.10	0.02	0.02		0.00	0.00					
Team Age	-0.01		-0.01	-0.01		0.00	-0.26	-0.04		-0.10	-0.04					
Independent variables																
Leader active listening	0			0			0									
Team being uninterested				-0.07***			-0.067***									
Team defending own position				0.01			0.02									
Team giving negative feedback				-0.01			0									
Individual being uninterested					0.05				-0.01							
Individual defending own position					-0.01				-0.1							
Individual giving negative feedback					0.01				0.11							
Mediator variables																
Leader effectiveness		0.18*														
Meeting effectiveness						0.51***	0.047***									
Individual follower performance								0.09***	0.09***							
R ²	0.03	0.155	0.02	0.16	0	0.15	0.26	0.02	0.02	0.65	0.68					
R ² change				0.16	-0.16	0.15	0.11	-0.24	0	0.63	0.03					
F	0.56	2.267*	3.55**	2.35*	0.8	3.47**	3.78***	6.80***	4.06***	38.60***	34.89***					

* $p < .05$; ** $p < .01$; *** $p < .001$;

In case of leader effectiveness, meeting effectiveness and team effectiveness: individual age and individual gender refer to the age and gender of the team leader respectively

Table 3: Regression models

5. DISCUSSION

This thesis proposed a set of behaviors during meetings as related to team effectiveness. Firstly, significant results were found for a relationship between leader effectiveness and team effectiveness, and a relationship between meeting effectiveness and team effectiveness. In the model including both these predictors, the betas for leader effectiveness and meeting effectiveness decreased. This lends support to the part of hypothesis one where meeting effectiveness is proposed as a mediating variable between leader effectiveness and team effectiveness.

Hypothesis 2 proposed a negative relationship between self-defending behaviors showing on an aggregated team level and team effectiveness through meeting effectiveness. A significant relation with team effectiveness for the behavior of the team being uninterested during meetings was found, indicating that teams being uninterested during meetings is in fact negatively related to team effectiveness, just not mediated through meeting effectiveness.

Hypothesis 3 proposed a negative relation between self-defending behaviors and team effectiveness mediated by follower performance. Interestingly, the data shows a positive relationship between follower giving negative feedback and follower performance. This is the opposite effect of what was expected. Possible might be that the followers who give negative feedback are not specifically praised by their team leaders for this behavior, it is after all coded as a clear unproductive kind of behavior, not at all supportive like constructive feedback, but that showing this negative behavior is correlated strongly with also giving other kinds of feedback. Followers who feel strong enough themselves to give this negative feedback to colleagues might also feel empowered enough to give constructive feedback, driving out the negative effects of the few times they do show these negative behaviors. London & Smither talk about a feedback culture within organizations, in effect, this indicates that the work environment can influence the likelihood of feedback being given and the perception thereof (London & Smither, 2002). This means that certain environments and certain individuals may be more likely to give all kinds of feedback, positive and negative. Also, according to London, managers scoring low on conscientiousness, emotional stability, openness to experience, agreeableness or extraversion may need more time, attention and help in their use of feedback than managers who are high in these personality variables. This indicates an underlying set of personalities that may be more inclined to give any kind of feedback in general, resulting in a relationship between positive and negative feedback behavior. Finally, giving negative feedback was only observed to be 2.45% of meeting time distributed over 24% of individuals. This indicates that when the behavior is shown, it is only for short amounts of time and might be

compensated for by constructive feedback given by the same individuals.

In this research, the behavior of active listening was identified as likely to be related to team effectiveness, through the mediating variables of first leader effectiveness and then meeting effectiveness. No evidence was found in this research to support such claims, as the relationship between leader active listening behavior and leader effectiveness, as well as between leader active listening behavior and team effectiveness did not show significant results. This is in contrast to relationships found by Ames and colleagues who found that listening behavior by team leaders was a positive predictor for team leader influence (Ames et al., 2012), which is the essence of leadership (Yukl & Yukl, 2002). It may be that this relationship was not found in the current research because of the work environment under analysis. The only organization included in this research is a large Dutch governmental institution which is known for its rigidity. This may have as a consequence that enough information is needed to be relayed to team leaders outside of the meetings for team leaders to perform their job effectively without needing to pay tremendous amounts of attention during meetings. In such a scenario, the behavior of active listening would act as a hygiene factor as described by Herzberg, Mausner & Snyderman, meaning that a certain amount of active listening is necessary, but that little further benefits are achieved after this necessary amount is reached (Herzberg, Mausner, & Snyderman, 1967).

Not all of the self-defending behaviors showed a significant relationship with meeting effectiveness and team effectiveness. The behaviors of defending own position and giving negative feedback, when aggregated to the team level, did not show significant relationships with either meeting effectiveness or team effectiveness. This lack of a relationship is in partial contrast to the findings by Kauffeld & Lehmann-Willenbrock who found that negative socioemotional behaviors were related to worse team meetings (Kauffeld & Lehmann-Willenbrock, 2012). A reason for this contrast could be that in the one organization under analysis in this study the specific behaviors of defending own position and giving negative feedback are not seen as solely counterproductive, because teams in this environment may need to “stand their ground”.

5.1 Limitations

The study also has some limitations. Efforts were made to ensure multiple experts rated the variables of team effectiveness and leader performance, but this was not achieved in all cases. As an indication, only 66, or slightly under 60% had 2 or more experts rate these variables. The result of this is that these variables may not give the clearest view on reality, more experts rating these variables could have resulted in more reliable data underlying the analysis. A reliability analysis on the data also shows that Cronbach's

Alpha is higher when three expert ratings are used than when only one expert rating is used, providing proof that more expert ratings could have made the performance measures more reliable.

Secondly, special care was taken in this research to ensure different sources for data underlying correlation and regression analysis. Followers were the source for meeting effectiveness and team leaders were the source for follower performance. Team effectiveness and leader effectiveness however were both sourced from experts which could have resulted in a higher correlation and stronger regression between these variables than is merited by reality.

Meeting duration is not the same for all recorded meetings (actual meeting lengths were not included in the dataset used for this thesis). This may have had an impact on the follower self-defending behavior variables as these were coded as either shown (1) or not shown (0). Longer meetings are more likely to have at least one instance of such behavior occurring meaning that longer meetings may very well have been positively correlated with self-defending behaviors shown during meetings by followers. This would have been a good control variable as it could make the relationship we are investigating more clear, but was not included in this thesis because the dataset used did not include time data of meetings.

5.2 Further research

Future research may focus on the possible relationship between followers (feeling comfortable) giving negative feedback and these followers showing the behavior of giving constructive feedback. Followers who are more inclined to give negative feedback because they feel more empowered in the organization and are not scared to show their opinion may also be more inclined to show positive feedback.

This research focusses on a single Dutch governmental organization. It might be interesting for future studies to include data from other governmental organizations, or even from governmental organizations in other countries. This could provide valuable insights into if the relationships found in this research persist in other organizational cultures as well as other national cultures. The organization under investigation in this research is seen as a very rigid organization, contrasts in relationships between meeting behaviors and rated performances with more open-minded organizations may reveal interesting contrasts.

Lastly, as a by-product of controlling for follower age, this research found follower age to be a significant negative predictor for follower performance ($\beta = -.01, p < .05$). This is a fairly large beta as age is measured in years and follower effectiveness on a scale of 1 to 10. Followers with an age 30 years older would be predicted to be .3 points less effective. This could be an interesting relationship to investigate further in future research as it could further the

understanding of team leaders in what differences in performance they can expect from different aged followers.

5.3 Conclusions and implications

Meeting effectiveness has for a long time been a focus point of improvement within organizations. Team behaviors during these meetings are critical to the effectiveness and leader effectiveness is of upmost importance to the effectiveness of the team. Valuable insights are provided in this study on the relationships between behaviors in meetings and team effectiveness. The use of an observational approach to collecting behavioral data gives a unique non-biased view on behaviors and their effects in meetings as opposed to surveying team leaders on which behaviors they like to see in followers for better team effectiveness. Teams being uninterested during meetings were found to be a strong negative predictor of team effectiveness and are a good focus point for efforts in improving team performances. Besides this, team leader effectiveness was found to be strongly related to team effectiveness, indicating that proper leadership is essential in high performance of teams. Lastly, followers giving negative feedback during meetings was found to be positively related with follower effectiveness, and is therefore an important factor to manage during meetings. The current study shows that this behavior is not necessarily bad for performance and may actually be a valuable value of followers. This study can be used in organizations to provide guidance to team leaders in which behaviors to actively seek out in their teams and which behaviors to eliminate in order to improve team effectiveness and ultimately organizational success. Also in the academic world does this research provide value as its findings help further the understanding of scholars on the relationship between behaviors during meetings and performance.

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