

Treat Us Fairly and We Won't Complain: Multilevel Effects of Procedural Justice on Complaining Behavior in Team Meetings

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Abstract

One reason for ineffective meetings is complaining behavior. Complaining statements emphasize negative aspects which cannot be changed and often portraying the team as a victim. Whereas several studies have highlighted the detrimental consequences of complaining, less is known about the antecedents of this counterproductive behavior during team interactions. This study addresses this research gap by providing starting points for managing complaining behavior in meetings. Through the lens of social exchange theory, we argue how individual justice perceptions and team-level justice climate create a social context for more or less complaining during meetings. Furthermore, we explore how team members' satisfaction with their supervisor mediates the relationship between procedural justice and complaining. 305 employees nested in 54 teams completed a survey concerning their justice perceptions and supervisor satisfaction. Moreover, we videotaped regular meetings of these teams and used an independent observer approach to code actual occurrences of complaining behavior. Multilevel results show that team-level procedural justice climate—but not individual justice perceptions—inhibits complaining behavior in meetings. Team-level supervisor satisfaction mediated the relationship between procedural justice climate and complaining. We discuss research implications for understanding and preventing specific counterproductive work behaviors in the team context and practical implications for managing effective meetings.

Keywords

Team Meetings, Complaining, Procedural Justice, Multilevel Modeling

1. Introduction

Meetings are regular practice in contemporary organizations (e.g., Cohen, Rogelberg, Allen, & Luong, 2011). Team meetings in particular have become an integral part of employees' work lives (e.g., Scott, Shanock, & Rogelberg, 2012). Unfortunately however, team meetings are not always successful (e.g., Schulte, Lehmann-Willenbrock, & Kauffeld, 2013). In addition to wasting time and money, ineffective meetings also negatively impact employees' well-being (Rogelberg, Leach, Warr, & Burnfield, 2006). Recent research shows that a key to understanding meeting effectiveness lies in the interaction processes that constitute team meetings (Beck & Keyton, 2009; Kauffeld & Lehmann-Willenbrock, 2012). Instead of generating new ideas and taking action, many teams spend substantial amounts of their meeting time complaining and feeling sorry for themselves (Kauffeld & Lehmann-Willenbrock, 2012). Complaining statements describe a perceived negative state, emphasizing negative aspects which presumably cannot be changed, and often portray the own team as a victim. Complaining behaviors frequently observed in team meetings include examples such as, "Nothing we have tried has ever worked out"; "It's not like anybody cares when you need something", or "And who is going to take the blame—we are" (Kauffeld & Meyers, 2009). Because complaining inhibits talk about solutions or ideas in meetings (Kauffeld & Meyers, 2009), it can jeopardize organizational success and can be viewed as a form of counterproductive work behavior (CWB; for a detailed definition, see e.g., O'Boyle, Forsyth, & O'Boyle, 2011). Although complaining can be considered a low-threshold form of CWB, its effects are similar to more general CWBs such as absenteeism, lateness, theft, bullying, insulting coworkers, excessive daydreaming, or revenge (e.g., Dalal, 2005; O'Boyle et al., 2011; Rotundo & Spector, 2010). Complaining has been linked to significant decreases in individual, team and organizational outcomes (Kauffeld & Lehmann-Willenbrock, 2012). However, despite a growing body of research on dysfunctional meeting behaviors (e.g., Beck & Keyton, 2009; Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock, Allen & Meinecke, 2014; Schulte et al., 2013), little is known about the antecedents of complaining and thus, the possible ways to help prevent complaining behavior in meetings.

In this paper, we take first steps to explore how team contextual factors can contribute to diminish complaining in teams. Taking a social exchange perspective (e.g., Cropanzano & Mitchell, 2005), we explore the role of procedural justice as a potential inhibitor of complaining. Employees react to fair procedures with positive work behavior and repay unfair procedures with counterproductive work behavior (e.g., Colquitt et al., 2013; Cropanzano, Prehar, & Chen, 2002), suggesting that procedural justice could diminish complaining as a specific form of CWB. Furthermore, we address the need to consider the team context when analyzing CWBs (O'Boyle et al., 2011) and procedural justice (Fortin, 2008; Liao & Rupp, 2005; Naumann & Bennett, 2000). Specifically, we argue that individual CWB behavior such as complaining depends not only on individual procedural justice perceptions, but also on the team context (i.e., procedural justice climate; Li & Cropanzano, 2009).

Moreover, employees often attribute injustice to their supervisor and supervisors are often blamed for unjust procedures (Rupp & Cropanzano, 2002; Simons & Roberson, 2003). Dissatisfaction has been discussed as a sufficient antecedent of complaining (Kowalski, 1996). In combining these two arguments, we highlight the role of employees' satisfaction with their supervisor. Specifically, we argue that employees' level of satisfaction with their supervisor constitutes the explanatory process underlying the link between perceived procedural (in-) justice and complaining behavior in meetings. In other words, the reason why justice perceptions are linked to individual complaining behavior may be that employees who experience procedural injustice attribute this to their supervisor and hence are less satisfied with their supervisor (cf. Colquitt, 2001; Simons & Roberson, 2003). This in turn would promote complaining behavior.

In sum, this paper offers the following contributions. First, building on social exchange theory, previous research on CWB generally and counterproductive meeting behaviors specifically, we take a multilevel perspective to examine individual procedural justice and procedural justice climate as important antecedents of complaining behavior in team meetings. Second, we explore the mediating role of supervisor satisfaction within the procedural justice-complaining relationship. And finally, beyond previous research which has predominately relied on questionnaires for examining CWB (Rotundo & Spector, 2010), we observe complaining behavior in regular organizational meetings, thereby addressing calls to include direct observations of behavior (Baumeister, Vohs, & Funder, 2007).

2. Theoretical Background

With up to 90% of all employees working in some kind of team (Colquitt, Zapata-Phelan, & Roberson, 2005),

the effective communication between team members is essential for the success of all kind of organizations (Sallas, Shuffler, Thayer, Bedwell, & Lazzara, 2015). To accomplish their work together, teams need to regularly coordinate their tasks, reflect their progress and plan next steps, which all is preferentially done during meetings (e.g., Sonnentag, 2001; Sonnentag & Volmer, 2009). Therefore, team meetings constitute an important situational context for understanding group processes in the workplace. Meetings are held for sharing information, discussing and solving problems, making decisions, or establishing and maintaining networks (e.g., Cohen et al., 2011). Nevertheless, more than 70% of these meetings are not perceived as productive (Belkin, 2007). Complaining behavior is one reason for unproductive meetings (Kauffeld & Lehmann-Willenbrock, 2012). It is important to distinguish between constructive complaints that might even promote problem-solving, such as complaints in terms of voice behavior (Gibney, Zagenczyk, & Masters, 2009). Instead, we conceptualize complaining behavior in the team meeting context as a distinctly destructive, negative behavior. This conceptualization is in line with previous research on team meeting processes (e.g., Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock, Meyers, Kauffeld, Neininger, & Henschel, 2011). On a related note, refraining from complaining has been described as a form of loyalty toward the organization (Lievens, Chasteen, Day, & Christiansen, 2006).

Considerable time in meetings is spent complaining instead of talking about ideas and solutions, which diminishes overall meeting effectiveness and team productivity (Kauffeld & Lehmann-Willenbrock, 2012). Within the team interaction process, complaining inhibits the development of solutions in team interactions and can also negatively impact idea implementation (Kauffeld & Meyers, 2009). For example, imagine a meeting in which one team member offers a solution to a problem. A constructive reaction would be a statement such as “That’s a good idea” (i.e., showing positivity). This reaction could then lead to further ideas or a discussion of how to implement this solution. On the other hand, imagine that the reaction to the solution offered by a team member is “Nobody ever listens to us anyway. So there is no use in trying” (complaining). This example illustrates how complaining focuses on the negative status quo and impairs team problem solving. When complaining follows an idea, it becomes highly unlikely that the suggested idea or solution will be further discussed. Instead, complaining often triggers more complaining instead of solution talk (e.g., Kauffeld & Meyers, 2009). Complaining behavior in team meetings can be seen as an example of task-related CWB (cf. Ho, 2012). CWB in general is defined as an intentional employee behavior or a reckless disregard that is harmful to the legitimate interest of an organization or its members (Dalal, 2005; O’Boyle et al., 2011). CWB negatively impacts performance and can cause enormous costs for organizations (Dunlop & Lee, 2004; O’Boyle et al., 2011). Antecedents of general CWB such as theft, absenteeism or bullying have been studied extensively (for an overview, see Dalal, 2005 or Rotundo & Spector, 2010). However, less is known about more specific CWBs relevant to particular jobs or situations (Bowling & Gruys, 2010). In this paper, we focus on teamwork as a specific organizational context and on complaining behavior in team meetings as a specific form of CWB. Complaining can interfere with teamwork and has been shown to inhibit team productivity (Kauffeld & Lehmann-Willenbrock, 2012). As such, complaining relates to task-focused CWB as described by Ho (2012), who refers to obstructionism such as slowing others down or causing them to delay action.

Although complaining behavior is increasingly recognized as an important issue for individual, team and organizational effectiveness (e.g., Kauffeld & Lehmann-Willenbrock, 2012; Kauffeld & Meyers, 2009), the antecedents of complaining remain unclear. Little is known about the potential factors that might help preventing complaining behavior in meetings. However, organizations aiming to diminish harmful complaining behavior in meetings need to gain insight into the antecedents of complaining behavior, enabling them to take active steps to prevent this specific form of CWB. One of these antecedents that might help explain why employees complain in their meetings is procedural justice.

2.1. Individual Perceptions of Procedural Justice and Complaining

Procedural justice refers to the perceived fairness of decision making processes (Colquitt et al., 2005; Fortin, 2008). To be perceived as fair, procedures should be “consistent across people and over time, free of bias, accurate (relying on good information), contain mechanisms for correcting wrong decisions, adhere to prevalent conceptions of morality and are “representative” [...], which implies process control and decision control” (Fortin, 2008: p. 95). Previous research has shown that procedural justice positively affects multiple outcomes including organizational citizenship behavior (OCB), satisfaction, commitment, trust, and performance (e.g.,

Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Fortin, 2008; Liao & Rupp, 2005). Moreover, procedural justice can diminish general CWB (e.g., Fortin, 2008; Fox, Spector, & Miles, 2001; Kelloway, Francis, Prosser, & Cameron, 2010). Meta-analytic findings show a significant relationship between procedural justice and withdrawal behaviors such as absenteeism, turnover, or neglect (Colquitt et al., 2001). In the team context, Price, Harrison and Gavin (2006) found a significant negative effect of justice perceptions on social loafing behavior in student project teams. Taken together, these previous findings suggest that procedural justice could reduce behavior that may be costly to the organization (Brockner, 2010). Moreover, CWB can be considered an employee reaction to procedures that are perceived as unfair (Thau, Crossley, Bennett, & Sczesny, 2007). In the context of team meetings, complaining as a specific form of CWB might occur because employees experience a lack of procedural justice. In other words, when we feel that our employer is not treating us fairly, we will be more likely to complain in our meetings—instead of coming up with ideas and solutions that would benefit the organization. This assumption is in line with social exchange theory (e.g., Thau et al., 2007). Favorable or unfavorable behavior of employees could depend on the social exchange relationships of employees with for example their supervisors or the organization (e.g., Cropanzano & Mitchell, 2005). Following the assumptions of social reciprocity, the behavior of one person (e.g., the supervisor) leads to an appropriate reaction of another person (e.g., individual team members; Cropanzano & Mitchell, 2005). In other words, positive behavior by supervisors should promote positive reactions by employees (e.g., OCB), whereas negative behavior of the supervisor should lead to negative reactions (e.g., CWB). Previous research shows that justice is an important factor for understanding reciprocal employee behavior (see Colquitt et al., 2013, for an overview). Fair treatment can foster beneficial behavior such as OCB, whereas unfair treatment of employees can lead to CWB (Colquitt et al., 2013; Dalal, 2005; Fortin, 2008; Kelloway et al., 2010). Following this line of argumentation, procedural justice might also inhibit complaining behavior in meetings as a situation-specific form of CWB. Thus, we hypothesize:

H1: Individual perceptions of procedural justice are linked to less complaining behavior in team meetings.

2.2. Procedural Justice Climate and Complaining

O'Boyle et al. (2011) point out that “CWBs occur within a collective context; they are individual behaviors performed within a group context rather than individual ones” (O'Boyle et al., 2011: p. 52). In the team context, this implies that individual behavior is shaped by group norms or expectations of other team members (Piro-la-Merlo, Härtel, Mann, & Hirst, 2002). Concerning procedural justice perceptions, the team context may have an impact as well. In addition to individual experiences and perceptions of procedural justice, employees may also react negatively to unfair treatments of other teammates (third-party fairness; see Skarlicki & Kulik, 2005 for an overview), or to others' perceptions of procedural fairness. Therefore, to understand the role of procedural justice in the context of complaining behavior in team meetings, it is not enough to consider individual-level antecedents of complaining as a specific CWB. Rather, we need to consider the potential negative effect of procedural justice climate on complaining behavior, above and beyond the effect of individual procedural justice perception.

Procedural justice climate refers to “a distinct group level cognition about how a work group as a whole is treated” (Naumann & Bennett, 2000: p. 882). Previous research suggests that team-level procedural justice climate plays an important role for understanding negative work outcomes. Procedural justice climate can lower team absenteeism (Colquitt, Noe, & Jackson, 2002) and provide a buffer against employee health issues such as anxiety or depression (Spell & Arnold, 2007). Moreover, meta-analytic findings indicate a significant negative relationship between procedural justice climate and withdrawal (Whitman, Caleo, Carpenter, Horner, & Bernerth, 2012). However, previous studies often focused on the team-level only (i.e., examining procedural justice climate without considering individual perceptions of procedural justice). To date, the effect of procedural justice climate on CWBs is yet to be examined in more detail, particularly in terms of potential additional effects of procedural justice climate on CWBs beyond the effect of individual justice perceptions.

Whereas little is known about the potential effects of team-level procedural justice climate on CWBs, several previous studies have investigated the impact of justice climate on positive work outcomes (for an overview, see Colquitt et al., 2005; Li & Cropanzano, 2009). Procedural justice climate has been linked to increased team performance (Colquitt et al., 2002) and OCB (Ehrhart, 2004). Furthermore, multilevel analyses integrating both individual and team-level procedural justice perceptions have found that procedural justice climate promotes employees' job satisfaction (Liao & Rupp, 2005; Mossholder, Bennett, & Martin, 1998), OCB (Liao & Rupp,

2005), commitment (Shin, Du, & Choi, 2014) as well as general helping behavior (Naumann & Bennett, 2000), above and beyond the variance explained by individual procedural justice perceptions.

To sum up, previous research has identified positive effects of procedural justice climate (in addition to individual justice perceptions) on positive work outcomes such as OCB (Liao & Rupp, 2005) and negative effects of team-level procedural justice climate on negative work outcomes (e.g., Colquitt et al., 2002). However, less is known about the additional effect of procedural justice climate in addition to effects of individual perceptions of procedural justice on negative work outcomes, i.e., CWBs. Considering that these negative behaviors can have a higher impact on performance than OCB (Dunlop & Lee, 2004), this is an important oversight. Based on previous studies showing independent effects of individual procedural justice and team-level procedural justice climate on positive outcomes (e.g., Mossholder et al., 1998; Naumann & Bennett, 2000) and first results showing the importance of the team context (i.e., procedural justice climate) for more general CWBs (e.g., Spell & Arnold, 2007; Whitman et al., 2012), we expect that procedural justice climate can impact complaining behavior above and beyond individual procedural justice perceptions.

H2: Team-level procedural justice climate is linked to less complaining behavior in team meetings, above and beyond the effect of individual procedural justice perceptions.

2.3. The Mediating Effect of Satisfaction with the Supervisor

To understand the effects of (un-)fair treatments on work outcomes, it is important to have a closer look at possible mediators of these relationships (Kuenzi & Schminke, 2009; Zapata-Phelan, Colquitt, Scott, & Livingston, 2009). Previous research indicates a mediating role of employees' satisfaction with their supervisor in the relationship between procedural justice perceptions and individual work outcomes such as commitment (DeConinck & Stilwell, 2004; Simons & Roberson, 2003). These previous findings suggest that satisfaction with the supervisor could play an important role in the context of procedural justice and complaining behavior as well.

Several previous studies have shown that individual procedural justice perceptions relate to employees' satisfaction with their supervisor (e.g., Colquitt, 2001; Maier, Streicher, Jonas, & Woschée, 2007; Phillips, Douthitt, & Hyland, 2001). A possible explanation for this finding could be that supervisors are the most obvious source of injustice in the workplace (Rupp & Cropanzano, 2002), and employees tend to blame supervisors for unfair treatment received by the organization (Simons & Roberson, 2003). In other words, the link between procedural justice and satisfaction with the supervisor could be due to employees seeing their supervisor as a representative of the organization (e.g., Eisenberger et al., 2010; Simons & Roberson, 2003).

DeConinck and Stilwell (2004) further established the positive link between procedural justice and satisfaction with the supervisor and also found a significant negative effect of supervisor satisfaction on withdrawal (DeConinck & Stilwell, 2004). Moreover, Mount, Ilies and Johnson (2006) found a direct link between job satisfaction and CWB. Although they considered general job satisfaction rather than satisfaction with the supervisor, their findings still inform our present research because satisfaction with the supervisor has been identified as a facet of general job satisfaction (e.g., DeConinck & Stilwell, 2004; Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002). These previous findings suggest that supervisor satisfaction could play an important role in the context of individual perceptions of procedural justice and complaining as a specific form of CWB.

Concerning the justice-CWB link at the team-level, previous research also points to a mediating role of satisfaction with the supervisor. Simons and Roberson (2003) found that the effect of procedural justice on commitment was mediated by satisfaction with the supervisor when examining these constructs at the business-unit level. Similarly, Patterson, Warr and West (2004) found that average job satisfaction mediated the effects of different organizational climate constructs (e.g., innovation and flexibility or performance feedback) on productivity. Moreover, meta-analytic findings indicate that the effects of broader climate constructs on job performance, well-being and withdrawal are mediated through job satisfaction (Carr, Schmidt, Ford, & DeShon, 2003).

Taken together, these previous findings hint at possible explanatory mechanisms at both the individual-level and the team-level. At the individual-level, they suggest a mediating role of satisfaction with the supervisor in the link between individual perceptions of procedural justice and complaining. At the team-level, they hint at a mediating role of average satisfaction with the supervisor in the link of procedural justice climate and complaining. Thus, our final hypothesis posits:

H3: The relationship between procedural justice and complaining behavior in team meetings is mediated by satisfaction with the supervisor, both at the individual (H3a) and at the team-level (H3b).

3. Method

3.1. Sample and Procedure

Data were collected from two medium-sized organizations from the automotive and the electrical industry in Germany. The final data set comprised 305 employees nested in 54 teams. In a cross-sectional design, all participants completed questionnaires and were videotaped during regular team meetings. Teamwork was implemented for approximately 10 years in the organizations. There were no hierarchies between team members in the team meetings.

The average team consisted of 5.6 team members. The majority of the sample was male (88.7%), which is representative for the examined industry. Average age was 36 years ($SD = 10.37$), varying from 17 to 62 years. Average organizational tenure was 10.7 years ($SD = 8.97$).

3.2. Measures

Procedural justice. We measured individual perceptions of procedural justice adapting the German version of Colquitt's (2001) seven item scale (Maier et al., 2007) ($\alpha = .79$). Maier et al. (2007) state that their items could be adapted to the specific context of the study. Thus, we replaced the general term "procedure" with the term "teamwork" to represent the focus of our current study. Furthermore, we changed the item wording from past to present tense. A sample item was, "To what extent can you as a team member contribute your ideas and opinions during teamwork?". All items were answered on a 5-point Likert scale ranging from 1 (not at all) to 5 (very much).

Procedural justice climate. Following the approach of Colquitt et al. (2002), procedural justice climate could be measured by calculating the group mean value for the individual perceptions of procedural justice in each team. However, using the group mean in multilevel modeling could lead to biased estimates of the true team-level effect (Preacher, Zyphur, & Zhang, 2010). Thus, we followed the assumption of Preacher and colleagues (2010) and used latent group means to measure procedural justice climate.

Satisfaction with the supervisor. Satisfaction with the supervisor was measured using three items of the German version (Schmidt & Kleinbeck, 1999) of the subscale of the Job Diagnostic Survey (Hackman & Oldham, 1975; $\alpha = .87$). A sample item was "How satisfied are you with the amount of support and guidance you receive from your supervisor?". All items were answered on a 6-point Likert scale ranging from 1 (not at all satisfied) to 6 (fully satisfied).

Complaining. Data were collected during regular team meetings. All teams in our sample were holding meetings at least once a month. These team meetings were a substantial teamwork component implemented in both organizations as part of the Continuous Improvement Process (CIP, e.g., Liker & Meier, 2006). We videotaped one meeting for each of the 54 teams in our sample. There was no supervisor present. Participants were assured that the videotaped data would remain confidential, in order to ensure realistic data. Behavioral coding was performed using the act4teams coding scheme for team meetings (see Kauffeld & Lehmann-Willenbrock, 2012 or Meinecke & Lehmann-Willenbrock, 2015, for detailed descriptions of this coding scheme and its application) and INTERACT software (Mangold, 2010). Using this coding scheme, we obtained the overall frequency of individual complaining statements for each team member. As we defined complaining as a low-threshold form of CWB, it is important to mention that all statements comprising a problem or a part of a problem would be coded as a problem-focused statement (e.g., naming a problem, describing a problem, linking problems with consequences). Only if team members deplored or emphasized the negative status quo and their perceived victim role without naming a problem, the statement was coded as complaining, in accordance with the literature on complaining behavior during meetings (e.g., Kauffeld & Lehmann-Willenbrock, 2012; Kauffeld & Meyers, 2009; Lehmann-Willenbrock, Meyers, Kauffeld, Neininger, & Henschel, 2011).

After receiving extensive training, five coders rated the videos. A subset of the data was coded twice to obtain information about interrater reliability. We used Fleiss' Kappa coefficient (Fleiss, Nee, & Landis, 1979), which permits measurement of agreement among more than two coders. This measure reached a level of $\kappa = .81$ ($p < .01$). Because the length of the meetings varied, the overall frequency of complaining observed for each participant was divided by the length of the meeting in minutes and then multiplied by 60 for standardization.

Control variables. Age, sex and organizational tenure were considered as control variables at the individual-level as well as company at the team-level. Furthermore, previous studies demonstrated additional effects of

average team tenure (Carboni & Ehrlich, 2013) as well as average team age (Schulte et al., 2013), which were therefore also added at the team-level in the analyses.

3.3. Statistical Analysis

To account for the hierarchical structure of our data (i.e., individuals nested in teams) and to test the hypothesized individual-level as well as team-level effects, we applied multilevel modeling. All multilevel analyses were performed with Mplus version 6.12 (Muthén & Muthén, 1998-2010). We used the maximum likelihood estimation with robust standard errors (MLR) and full-information maximum likelihood (FIML) for all analyses. To test our hypotheses, we applied two multilevel regression models (H1 and H2) and one multilevel mediation model (H3). In all models, we entered the above mentioned control variables at the appropriate level (i.e., age, sex, and tenure at the individual-level and company, average team age, and average team tenure at the team-level). To test our first hypothesis, the relationship between individual-level procedural justice and individual complaining behavior in meetings was investigated (Model 1). In a next step, we added procedural justice climate as a team-level predictor of complaining in teams to test our second hypothesis (Model 2). Finally, to test our mediation hypothesis (H3), we followed the multilevel structural equation modeling approach (MSEM) by Preacher, Zyphur, and Zhang (2010). This approach allowed us to partition the variance into an individual-level and a between-level component and thereby to examine mediation relationships at both the individual-level and the team-level simultaneously. Given that (1) our hypotheses included both individual-level and team-level assumptions and (2) all variables were measured at the individual-level, we applied a 1-1-1 model with fixed slopes (cf. Preacher et al., 2010).

4. Results

Means, standard deviations, and the intercorrelations of all scales are presented in **Table 1**.

4.1. Data Aggregation

To justify the aggregation of individual measured data to the team-level, we calculated the intraclass coefficient ICC (1), the group mean reliability ICC (2) and the interrater agreement index $rwg(j)$ for both procedural justice and satisfaction with the supervisor. The ICC (1) values for procedural justice (ICC (1) = .32) and satisfaction with the supervisor (ICC (1) = .26) indicate, that a meaningful part of the variance of the individual values is explained by team membership (Bliese, 2000). The ICC (2) values for procedural justice (ICC (2) = .73) and satisfaction with the supervisor (ICC (2) = .68) are also above the cutoff value of 0.60 (Glick, 1985). Finally, the calculated $rwg(j)$ values indicate very strong (procedural justice $rwg(j)$ = .95) and strong (satisfaction with the supervisor $rwg(j)$ = .83) interrater agreement (LeBreton & Senter, 2008). These results justify the aggregation of both constructs to the team-level and underline the importance of using multilevel analysis to account for dependencies within a team's data set.

4.2. Hypothesis Testing

To test our first hypothesis, that individual perceptions of procedural justice are negatively linked to complaining behavior in team meetings, we regressed complaining on procedural justice at the individual-level. We found a significant negative relationship between individual perceptions of procedural justice and complaining behavior ($B = -2.17, p < .05$, see model 1 in **Table 2**), which supports H1.

Table 1. Descriptive statistics and intercorrelations.

	<i>M</i>	<i>SD</i>	1	2	3
1) Procedural justice	3.662	.567		.497***	-.393***
2) Satisfaction with the supervisor	4.224	1.083	.372***		-.381***
3) Complaining	2.399	6.205	-.227***	-.156**	

Note: $N = 305$ team-members, $N = 54$ teams. Individual-level correlations are reported below the diagonal and team-level correlations are reported above the diagonal. Complaining behavior calculated as overall frequency per 60-minute period in the meeting. ** $p < .01$; *** $p < .001$ (two-tailed).

Table 2. Estimates for multilevel regression analysis predicting complaining behavior in team meetings.

Variable	Model 1		Model 2	
	Estimate	90% CI	Estimate	90% CI
Individual-level				
Age	.069 (.120)	[-.002, .140]	.064 (.114)	[-.006, .135]
Sex	.286 (.016)	[-2.007, 2.578]	.204 (.011)	[-2.147, 2.554]
Tenure	.013 (.019)	[-.064, .090]	.018 (.027)	[-.059, .095]
Procedural justice	-2.171 (-.207)	[-3.721, -.621]	-1.362 (-.110)	[-3.169, .444]
R^2	.064		.028	
Team-level				
Company	-1.057 (-.308)	[-3.258, 1.143]	-.683 (-.156)	[-2.801, 1.436]
Average age	-.044 (-.139)	[-.243, .155]	-.138 (-.341)	[-.335, .059]
Average tenure	.087 (.290)	[-.099, .273]	.123 (.324)	[-.057, .303]
Procedural Justice climate			-5.208 (-.798)	[-8.046, -2.371]
R^2	.086		.568	

Note: Individual-level $N = 288$; team-level $N = 54$. Standardized estimates are shown in parentheses. 90% confidence intervals (CI) were chosen to correspond to one-tailed hypothesis tests (see Preacher et al., 2010).

We further hypothesized an additional effect of procedural justice climate (H2). Therefore, we added a regression analysis of procedural justice climate on complaining to model 1 (see model 2 in Table 2). We found a significant negative relationship between procedural justice climate and complaining behavior ($B = -5.208$, $p < .01$), supporting Hypothesis 2. However, the relationship between individual perceptions of procedural justice and complaining was not significant any more ($B = -1.362$, n.s.). Thus, the negative effect of individual procedural justice perceptions on complaining behavior could not be found when considering the negative relationship of procedural justice climate on complaining behavior.

Furthermore, we predicted that satisfaction with the supervisor mediates the relationship between procedural justice and complaining as well as the relationship between procedural justice climate and complaining (H3). Following the multilevel structural equation modeling approach (MSEM; 1-1-1 model with fixed slopes) of Preacher, Zyphur and Zhang (2010), we added satisfaction with the supervisor as a mediator at both levels. Because individual perceptions of procedural justice had no significant effects on complaining behavior when including procedural justice climate, it was not surprising that we found no significant mediation effect of satisfaction with the supervisor at the individual-level (see Table 3). H3a was rejected. However, we found a significant positive effect of procedural justice ($B = .570$, $p < .01$), age ($B = .013$, $p < .05$) and organizational tenure ($B = -.017$, $p < .05$) on satisfaction with the supervisor at the individual-level.

After entering satisfaction with the supervisor as a team-level predictor, the effect of procedural justice climate on complaining behavior was no longer significant ($B = -2.169$, n.s.). On the other hand, the effect of procedural justice climate on satisfaction with the supervisor ($B = .981$, $p < .01$) as well as the effect of satisfaction with the supervisor on complaining ($B = -2.128$, $p < .01$) were significant. A higher procedural justice climate was linked to a higher team-level satisfaction with the supervisor, which in turn was linked to less complaining behavior in the team meetings. The indirect effect of procedural justice climate on complaining via satisfaction with the supervisor was also significant ($B = -2.088$, $p < .05$; see Table 3). In addition, we found a significant relationship between company ($B = .332$, $p < .05$) and satisfaction with the supervisor. The identified mediating effect of satisfaction with the supervisor at the team-level lends support to H3b (see Figure 1).

5. Discussion

In this paper, we examined complaining as a situation-specific form of CWB. Complaining frequently occurs in

Table 3. Multilevel mediation results.

	indirect effects	90% CI
Individual-level mediation		
Procedural justice → satisfaction with the supervisor → complaining	-.003	[-.603, .597]
Team-level mediation		
Procedural justice climate → satisfaction with the supervisor → complaining	-2.088	[-4.163, -.013]

Note: Both mediation models were calculated simultaneously (cf. 1-1-1 MSEM Model of Preacher, Zyphur & Zhang, 2010); control variables (age, sex, tenure, company, average team age, and average team tenure) were entered in the analyses at the respective level. CI = confidence interval.

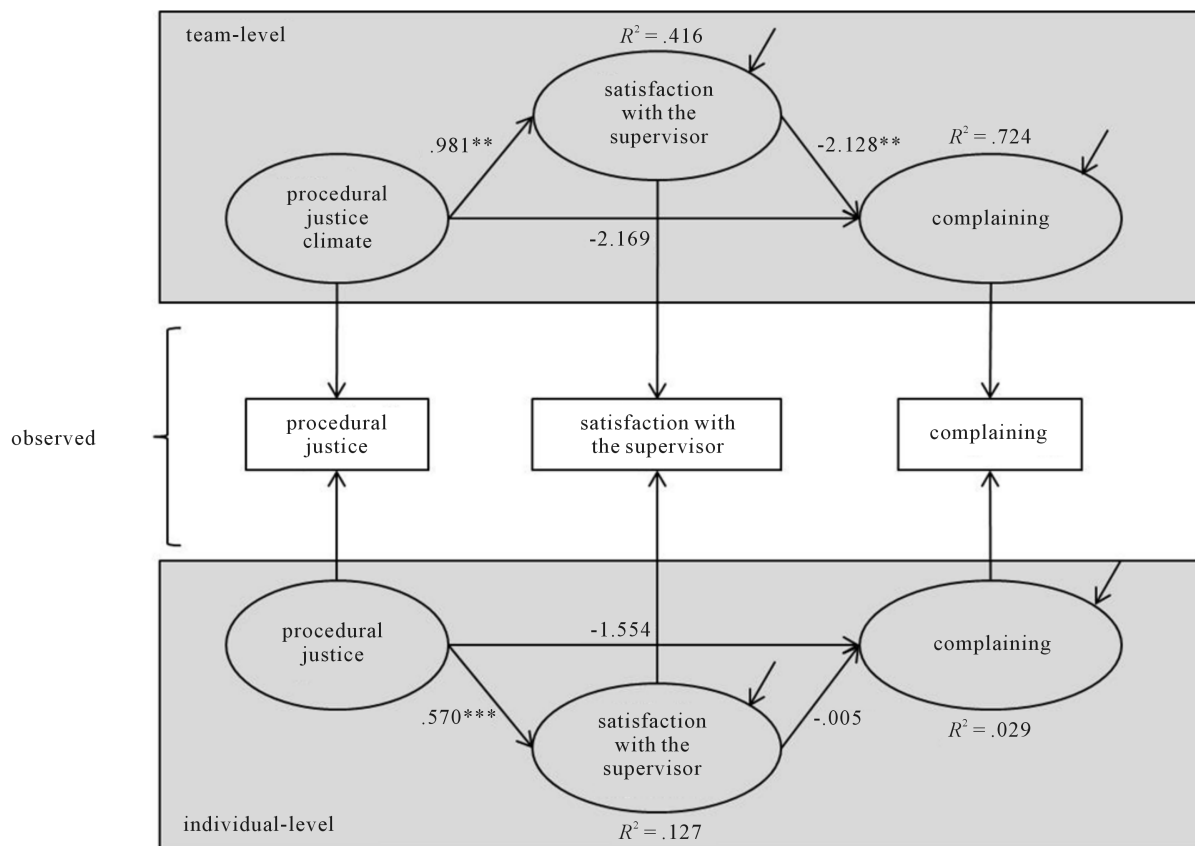


Figure 1. Multilevel Mediation Model: 1-1-1 model with fixed slopes (cf. Preacher et al., 2010). Control variables (age, sex, tenure, company, average team age, average team tenure) were entered in the analyses at particular levels. Results for indirect effects are shown in Table 3. Individual-level $N = 305$; team-level $N = 54$. ** $p < .01$; *** $p < .001$ (one-tailed).

team meetings, impairs team problem-solving processes (e.g., Kauffeld & Meyers, 2009), and harms both team and organizational outcomes (Kauffeld & Lehmann-Willenbrock, 2012). By developing a multilevel model of procedural justice and complaining behavior, we took first steps towards a better understanding of the antecedents of complaining behavior, and thus toward finding ways to prevent complaining in team meetings. As expected, we initially found a significant effect of individual justice perceptions on complaining behavior, such that individual team members complained less when they felt that they were treated procedurally fairly. However, when we accounted for team-level justice climate in a multilevel model, the effect of individually perceived procedural justice on complaining behavior disappeared. Instead, we found complaining behavior was predicted by team-level procedural justice climate. This finding suggests that procedural justice climate impacts complaining behavior in team meetings over and above individual justice perceptions.

Furthermore, we explored the mediating role of supervisor satisfaction in the relationship between procedural

justice and complaining behavior in team meetings. In line with our initial finding that individual-level procedural justice did not affect complaining when controlling for procedural justice climate, supervisor satisfaction did not mediate this link at the individual-level. However, accounting for multilevel effects, we could show an indirect effect of procedural justice climate on complaining behavior in team meetings via satisfaction with the supervisor. Thus, if a team as a whole perceived procedures as fair, they were more satisfied with their supervisor on average, which in turn was linked to reduced complaining behavior in team meetings.

5.1. Research Implications

Our findings contribute to existing research in several ways. First, from a social exchange perspective, we argued that employees who perceive procedurally fair treatment would be less likely to show CWB such as complaining. Specifically, our findings highlight the importance of team-level procedural justice climate for understanding why individual team member show more or less complaining behavior in their meetings. The more teams perceived procedures as fair, the less team members complained in their meetings. This result aligns with previous findings on the benefits of procedural justice climate, both in terms of promoting positive work outcomes such as OCB or satisfaction (e.g., Liao & Rupp, 2005) and in terms of inhibiting negative work outcomes such as absenteeism (Colquitt et al., 2002) and health issues (Spell & Arnold, 2007). Building on and extending these previous findings, we used multilevel modeling to investigate the effects of individual procedural justice perceptions and procedural justice climate simultaneously. Our findings show that it is necessary and fruitful to do so when aiming to untangle individual and team-level antecedents of behavior in teams. Furthermore, our findings emphasize the importance of team-level constructs in the context of CWB. Our finding that only team-level procedural justice climate (but not individual justice perceptions) significantly impacted individual complaining behavior also supports the argument by O'Boyle et al. (2011) that individual CWBs are influenced by the group context.

Second, our findings build on and extend recent work regarding mediators in the link between justice and workplace behavior. In their meta-analysis, Colquitt and colleagues (2013) found that the link between justice and positive workplace behaviors (OCB and performance) was mediated by social exchange quality, whereas they could not support this mediation effect for CWBs. In fact, Colquitt et al. (2013) conclude that other mediation variables could be relevant for understanding how justice affects CWBs. Our findings identify satisfaction with the supervisor as one such mediator, which aligns with some previous research on the importance of this variable for work outcomes (DeConinck & Stilwell, 2004; Simons & Roberson, 2003). This mediating effect also substantiates previous findings on the relationship between overall job satisfaction and CWB (Lau, Au, & Ho, 2003) and demonstrates the important role of satisfaction with the supervisor as a specific facet of job satisfaction for successful meetings. Whereas Rogelberg, Allen, Shanock, Scott, and Shuffler (2010) identified meeting satisfaction as an important facet of overall job satisfaction, our results support the role of other facets of job satisfaction (i.e., satisfaction with the supervisor) for meetings. This finding also suggests that supervisors can positively influence the meeting behaviors of their team, even though they are not present in the meeting. In other words, increasing team members' satisfaction with their supervisor seems to be a promising approach for reducing complaining behavior in meetings and thus for promoting meeting effectiveness (Kauffeld & Lehmann-Willenbrock, 2012).

Third, we followed the call to analyze more situation-specific CWB (Bowling & Gruys, 2010). Whereas previous research has largely focused on more general negative behavior such as theft or lateness (for an overview, see Rotundo & Spector, 2010), we examined complaining as a specific form of CWB in the context of team meetings. With employees spending more and more time in meetings, meeting effectiveness becomes a driver of organizational success (e.g., Rogelberg, Shanock, & Scott, 2012), and complaining has been identified as a critical ingredient of unsuccessful meetings (Kauffeld & Lehmann-Willenbrock, 2012; Kauffeld & Meyers, 2009; Lehmann-Willenbrock & Kauffeld, 2010). By shedding light on the antecedents of complaining in regular team meetings, we provide first insights into ways to reduce this situation-specific CWB. Furthermore, we used behavioral observations rather than self-report measures in order to avoid social desirability bias, which is especially problematic when measuring CWB (O'Boyle et al., 2011).

Fourth, our finding that team-level, but not individual-level satisfaction with the supervisor mediated procedural justice effects on complaining carries important theoretical implications for conceptualizing procedural justice and job satisfaction in team settings. It appears to be the case that teams not only co-create their procedural justice climate, but also their level of satisfaction with their supervisor. Complaining behaviors—and per-

haps other specific CWBs as well—is embedded in and shaped by the team’s co-created climate. The supervisor as a representative of the organization (cf. [Simons & Roberson, 2003](#)) appears to channel this co-creation, which hints at interesting opportunities for future investigations of the antecedents of CWB in team settings.

Finally, our results showcase the need for multilevel modeling in justice research. When we focused solely on individual procedural justice perceptions, we found a significant negative link to complaining in meetings. However, this individual-level effect disappeared when we added procedural justice climate as a team-level predictor for complaining behavior. Similarly, [Colquitt et al. \(2005\)](#) concluded that supervisors need to treat the entire team fairly in order to motivate individual team members. The field studies included in their review showed an additional effect of procedural justice climate above and beyond the effect of individual procedural justice on outcomes such as OCB ([Naumann & Bennett, 2000](#)) or job satisfaction ([Mossholder et al., 1998](#)). Our finding that complaining does not result from individual perceptions of (low) procedural fairness, but rather from low team-level justice climate underlines the importance of the team context for understanding CWBs ([O’Boyle et al., 2011](#)). Without taking into account how the entire team is (or feels) treated, results could be misleading. This conclusion applies not only to procedural justice perceptions, but also to team members’ satisfaction with their supervisor as a mediator in the justice-complaining link. As such, our results also highlight the importance of multilevel modeling to gain insight into team dynamics (c.f., [Ilgen, Hollenbeck, Johnson, & Jundt, 2005](#); [Mathieu, Maynard, Rapp, & Gilson, 2008](#)).

5.2. Practical Implications

Our results have several practical implications for teams, their supervisors, and organizations as a whole who aim to reduce complaining in meetings as a situation specific CWB. Notorious complaining in meetings inhibits generating ideas and initiating change processes (e.g., [Kauffeld & Meyers, 2009](#)). However, there is little to be gained from forbidding employees to complain or telling them to just “think positive”. Our findings indicate that the key to preventing complaining behavior in team meetings lies in the extent to which the entire team, rather than individual team members, experiences procedurally fair treatment. Thus, steps to reduce complaining should especially foster procedural justice climate in teams. For example, supervisors should address the team as a whole to give relevant information or feedback ([Whitman et al., 2012](#)). Furthermore, the team should be involved in decision processes, which should be consistent and neutral ([Colquitt et al., 2002](#)). Supervisors should also give team members voice, in terms of the opportunity to express their opinions and speak up before a decision is made (e.g., [Lind, Kanfer, & Earley, 1990](#)).

In addition, procedures are rated as fair if team members have the feeling that wrong decisions could be corrected ([Fortin, 2008](#)). Supervisors should therefore utilize the expertise of all team members to find the best solution for a problem and should be willing to change their mind due to new information or perspectives. Finally, supervisors could be trained in procedural justice principles ([Colquitt et al., 2002](#); [Skarlicki & Latham, 2005](#)). For example, [Cole and Latham \(1997\)](#) showed that supervisors can be trained to act in a procedurally fair manner. Their training program comprised particularly role plays and group discussions. Supervisors who participated in this program showed significantly more procedurally fair behavior afterwards ([Cole & Latham, 1997](#)). Again, our findings suggest that any attempt to foster procedural justice and thereby reduce complaining in meetings should focus on the team as a whole, rather than individual team members who might be susceptible to unfair procedures ([Liao & Rupp, 2005](#)). Finally, organizations can emphasize the importance of procedural justice climate ([Kuenzi & Schminke, 2009](#)), for example by including fair procedures in their organizational values. Workshops with the management could be used to discuss how procedural justice can be practiced in every day work. Management support for leaders to engage in fair treatments could thus foster justice climates in the whole organization.

5.3. Limitations and Directions for Future Research

Several limitations deserve mention. First, we focused on procedural justice as a possible antecedent of complaining behavior in team meetings. However, other dimensions of justice might be influential as well. Especially interpersonal justice could be an important antecedent of satisfaction with the supervisor (e.g., [Colquitt, 2001](#)). However, supporting our present findings, [Colquitt \(2001\)](#) reported a stronger relationship between procedural justice and satisfaction with the supervisor than between interpersonal justice and satisfaction with the supervisor. Furthermore, meta-analytic results identify procedural justice as a main predictor of CWB ([Co-](#)

hen-Charash & Spector, 2001). Nevertheless, future research should explore the role of other dimensions of organizational justice in the context of specific CWBs such as complaining.

Moreover, analyzing fairness in teams would also benefit from integrating intraunit justice perceptions (e.g., Li & Cropanzano, 2009). It is not only important how a team is treated by others (such as the supervisor), but also how the team members treat each other (intraunit justice; Li & Cropanzano, 2009). A recent team-level study shows effects of procedural and interpersonal intraunit justice on positive work outcomes (Cropanzano, Li, & Benson, 2011). Future research should integrate perceptions of fairness inside and outside the team to understand which fairness focus is more important for team outcomes and especially to investigate if intraunit justice is also important for individual CWBs such as complaining.

Second, we analyzed industrial teams in a cross-sectional research design. Future research should adopt longitudinal designs and analyze teams in other sectors in order to draw causal conclusions and generalize our findings to different team contexts. Nevertheless, we could establish our mediation model in a sample of real teams, instead of relying on student samples, as has often been the case in previous research on procedural justice effects (e.g., Cropanzano et al., 2011). Examining real teams in the workplace is especially important for analyzing complaining behavior, which will not likely occur in ad-hoc laboratory group settings that have no shared history or future (see also Kauffeld & Lehmann-Willenbrock, 2012). Moreover, the occurrence of CWBs such as complaining could also be influenced by social desirability or fear of reprisal (O'Boyle et al., 2011), which makes laboratory settings less suitable.

Third, we examined multilevel effects of procedural justice and satisfaction with the supervisor on the overall frequency of individual complaining behavior per meeting. This approach is in line with previous research on meeting interaction behaviors and their outcomes (e.g., Kauffeld & Lehmann-Willenbrock, 2012; Kauffeld & Meyers, 2009; Lehmann-Willenbrock, Allen, & Kauffeld, 2013; Lehmann-Willenbrock et al., 2011, 2014). However, future research could examine complaining at different times in meetings. For example, complaining at the beginning of a meeting may even be helpful to realize how bad a situation is and could thus perhaps help to decide that changes are needed. Complaining at the end of a meeting on the other hand could be especially damaging, because employees may leave the meeting without a perspective for improvement.

Finally, we operationalized complaining in team meetings by means of behavioral observation and interaction analysis. Although our blend with survey methods for analyzing procedural justice and satisfaction with the supervisor diminished potential common method bias in our findings, future research should also explore the extent to which employees' self-reported complaining aligns with observed complaining behavior. Agreement or disagreement between these two measurement approaches could also offer interesting avenues for future intervention studies aimed at reducing complaining and improving meeting effectiveness.

6. Conclusion

This study focused on complaining as a specific form of CWB and examined how procedural justice perceptions can contribute to complaining behavior in meetings. From a social exchange perspective, we argued that employees who experience procedural fairness would be less inclined to show complaining behavior. Taking a multilevel perspective, we found that team-level procedural justice climate was indeed negatively linked to individual complaining behavior in meetings. This effect was mediated by team-level satisfaction with the supervisor. Individual procedural justice perceptions, however, did not significantly impact complaining behavior when controlling for team-level procedural justice climate. Our results imply that attempts at reducing complaining as a specific form of CWB should focus on procedures that are perceived as fair not only by single team members but also by the team as a whole. Moreover, our results highlight the importance of teams' satisfaction with their supervisor as an explanatory mechanism and a means to inhibit complaining behavior.

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