



Does my leader care about my subgroup? A multilevel model of team faultlines, LMX quality, and employee absenteeism

Sophie Moser ^a, Max Reinwald ^b and Florian Kunze ^a

^aChair of Organizational Behavior, University of Konstanz, Konstanz, Germany; ^bInstitute for Leadership and Organization, Ludwig-Maximilians Universität München, Munich, Germany

ABSTRACT

This article investigates the impact of demographic team faultlines on employee absenteeism by considering the level of leader-member exchange (LMX) that supervisors develop with members from different subgroups in a team. We integrate faultline research with the literature on LMX differentiation to build an integrative multilevel model to explain individual absenteeism behaviour. Drawing from social categorization and social comparison theory, we propose that members of subgroups that receive less favourable LMX treatment than their outgroup are particularly likely to increase their absenteeism behaviour due to faultline-induced social categorization. Our predictions receive empirical support in a study with 164 employees from a German electrical engineering company. We discuss implications for the faultline and LMX literature and executives who lead diverse teams.

KEYWORDS

Diversity; team faultlines; absenteeism; leader-member exchange; multilevel

Most developed economies experience an increase in demographic workforce diversity spurred by two parallel societal trends: increasing female workforce participation (United Nations, 2020), and the demographic change leading to a growing proportion of older employees (European Commission, 2020). Consequently, social interactions in work teams—the most common organizational unit of modern companies (Wegge & Meyer, 2020) – increasingly involve employees from different gender and age groups.

The active research stream on team diversity and outcomes (e.g., Meyer et al., 2016; van Knippenberg & Mell, 2016; van Knippenberg & Schippers, 2007) mirrors the growing practical importance of age and gender diversity in teams. While research has demonstrated that particular age and gender diversity are highly salient in team interactions due to the easy accessibility and immutability of both attributes (Joshi & Roh, 2009; Ridgeway, 2002), the findings on age and gender diversity effects on team functioning are mixed (Del Triana et al., 2021; Tasheva & Hillman, 2019). To dissolve these mixed findings, scholarly attention has focused increasingly on faultlines. Faultlines, defined as “hypothetical dividing lines that may split a group into subgroups based on one or more attributes” (Lau & Murnighan, 1998, p. 328), rest on the idea that team members can share multiple attributes, which may jointly impact outcomes to a larger extent than single commonalities.

Even though narrative and meta-analytical reviews conclude that faultlines harm performance (Meyer et al., 2014; Thatcher & Patel, 2012), the research field faces its own challenges. Generally, the effect sizes of faultlines on team outcomes across studies have been conspicuously small (Meyer et al., 2015; Thatcher & Patel, 2012) and the negative rationale underlying the faultline concept is not uncontested with more recent

studies advocating the notion of faultlines as “healthy divides” (Vandebek et al., 2016).

We propose that at least three pieces are currently underdeveloped in faultline research which inhibits a better and more nuanced understanding of faultline effects. First, past research has almost exclusively focused on the team level and studied faultline effects on team outcomes (e.g., Antino et al., 2019). However, this approach fails to do justice to the multilevel nature of the faultline construct (Carton & Cummings, 2012; Meyer et al., 2016; van Dijk et al., 2017). The team-level approach assumes that a faultline triggers the same processes in all subgroups among all team members, thereby neglecting that members of different subgroups may react differently to the same team faultline. If idiosyncratic reactions to faultlines on the subgroup level remain unconsidered, they may cancel each other out when we look at faultline effects exclusively on the team level. This may particularly be the case for age-gender faultlines as age and gender are in many work contexts linked to status differences. Particularly, members with a lower ascribed status (women and older employees; Reinwald & Kunze, 2020) may experience discrimination and suffer from faultlines. Accordingly, low-status subgroups may react more negatively to a faultline than high-status subgroups. Scholars have called for multilevel conceptualizations and analyses of the faultline construct (Meyer, 2017; Shemla et al., 2016) and initial research supports the notion that the effect of team faultlines on individual-level performance can vary across team members (Meyer et al., 2015). In this paper, we follow this promising route of multilevel faultline research by considering varying individual-level reactions to age-gender faultlines.

Second, most past faultline studies have ignored the role of leadership in studying faultline effects. In their seminal review paper, Thatcher and Patel (2012) strongly advocate integrating the faultline and leadership literature and initial research (Kunze & Bruch, 2010; Schölmerich et al., 2016) has shown that specific leader qualities (e.g., diversity beliefs) or leadership styles (e.g., transformational leadership) have the potential to buffer the adverse effects of faultlines. However, the few studies on leadership in faultline teams considered leadership aspects only at the team level and neglected that leaders do differentiate their behaviours (e.g., Liu et al., 2021). Established work on leader-member exchange (LMX; Buengeler et al., 2021; Dansereau et al., 1975) shows that leaders engage in different social exchanges with their followers, which leads to varying qualities of the relationships between the leader and each team member (Graen & Uhl-Bien, 1995). We expect that leaders also develop different exchange relationships across subgroups. For instance, leaders may differentiate their behaviour across subgroups because of limited time and resources to maintain high-quality relationships with all followers (Nishii & Mayer, 2009) and the leader may care more for the subgroup most similar to him/her (Greer et al., 2012; Meyer et al., 2015). By integrating the aspect of leader differentiation with our multilevel faultline perspective, we offer a more nuanced understanding of how members of different subgroups react to a faultline. Specifically, we argue that a subgroup that maintains better relationships with the leader benefits from a higher social status thereby reducing adverse faultline effects for members of the focal subgroup.

Third, faultline research has a traditionally restricted criterion space, focusing mostly on indicators of team effectiveness. Currently, the notion has arisen that social connections and demographic dissimilarity at work profoundly influence individuals' health and satisfaction (Hoppe et al., 2014; Meyer, 2017; Richman & Leary, 2009), which is why the integration of further outcome variables is urgently needed. Since Schulte et al. (2020) recently showed that the perceived fragmentation of a work team into subgroups impacts team members' mental health, the extension of faultline research to further health variables seems logical. Hence, we introduce absenteeism as an objective health indicator to faultline research because being absent from work is a pertinent problem in diverse teams and comes with significant costs for companies and individuals (e.g., Reinwald & Kunze, 2020).

In sum, we propose a multilevel leadership perspective on faultlines and individual absenteeism in which the effect of demographic team faultlines based on age and gender on team members' absenteeism depends on each subgroup's LMX quality. We propose that faultlines can spur social categorization processes (Turner, 2010), resulting in subgroup formation. Additionally, we assume that based on social comparison theory (Festinger, 1954), the received LMX quality exemplifies the status of a subgroup and thus affects if faultlines lead to team member absenteeism.

With this research, we make several contributions. First, we add to the faultline literature by advancing a multilevel perspective on how team faultline structures affect subgroups' processes and individual outcomes. Thereby, we contribute to the emerging idea that the impact of faultlines may vary within

teams (van Dijk et al., 2017), which might explain the field's inconclusive findings. As a second contribution, we integrate faultline research with the literature on LMX differentiation (Henderson et al., 2009; Martin et al., 2017) to investigate if varying leadership relationships in a team affect subgrouping processes and individual outcomes. In doing so, our study offers novel insights into LMX differentiation and adds to the debate about when and for whom LMX differentiation is harmful (Martin et al., 2017). Third, we add absenteeism as a new health-related outcome variable to the faultline literature, that has so far predominately focused on effectiveness outcomes, such as performance (van Knippenberg et al., 2011), innovation (Xie et al., 2015) or strategic change (Richard et al., 2019). By relying on objective absenteeism data, we follow the call by Wegge et al. (2008) to assess the impact of diversity on objective health indicators and follow the notion of social relationship as a driver of health ("social cure"; S. A. Haslam et al., 2018).

Theory and hypothesis development

Age-gender faultlines in teams and individual absenteeism

The majority of faultline studies focus on surface-level demographic faultlines. Due to their frequent usage in the research field, age-gender faultlines can be considered standard faultlines (Choi & Sy, 2010; Leicht-Deobald et al., 2021; Schölmerich et al., 2016). Age-gender faultlines capture a team's age and gender configuration by measuring to what extent gender is aligned or dis-aligned with age (Kunze & Bruch, 2010; Lau & Murnighan, 2005). For instance, an age-gender faultline in a team is strong if the male team members are relatively old and the female team members are relatively young. In contrast, a weaker faultline is present when male and female members are of similar age.

Age and gender are the two most apparent socio-demographic attributes (Choi & Sy, 2010) which are directly recognizable and cognitively accessible during the first encounters (Schölmerich et al., 2016). As they are pervasive and immutable (Joshi & Roh, 2009), they shape individuals' social identity (Carton & Cummings, 2012; Ridgeway, 2002) and are in work settings strongly associated with role models and prejudices (Eagly & Karau, 2002; Posthuma & Campion, 2009). Thus, they have the potential to drive immediate social categorization effects (Fiske, 1998; Richard et al., 2019) that can increase absenteeism.

We suggest that in teams with strong age-gender faultlines, social categorization processes are likely to occur. The idea of social categorization (Turner, 2010) is grounded in the social identity theory (Tajfel, 1982), which argues that it lies in human nature to define the self through belonging to a group. Thereby, humans tend to affiliate with those similar to themselves (Byrne, 1971). This tendency in a team results in categorizing of in- and outgroup members, which translates into subgroups. As humans furthermore strive for positive self-esteem (Tajfel & Turner, 1986), they try to differentiate themselves positively from others. Members favour their subgroup (the ingroup) at the outgroup's expense. The two demographic attributes age and gender are likely sources for such subgroup

formations as they are easily accessible, immutable, and culturally meaningful (Fiske, 1998; Schölmerich et al., 2016). Such salient socio-demographic attributes are highly relevant to social identity processes (Carton & Cummings, 2012) and provide the foundation for prototypical assumptions about the outgroup (Pelled et al., 1999; van Knippenberg et al., 2004). Furthermore, age and gender are associated with hierarchies in status and power (Nishii & Mayer, 2009) as certain societal groups, e.g., young or female individuals, are traditionally treated as having lower status (Alderfer & Smith, 1982).

Still, past research suggests that age and gender differences are not necessarily salient and thus do not always result in subgroup formation (Jehn & Bezrukova, 2010). Although these categorization processes can occur in age-gender faultline teams, we question the assumption made in previous research that all subgroups in an age-gender faultline team respond similarly (e.g., Molleman, 2005). Since opposing effects on individual absenteeism may cancel each other out within a team, we refrain to hypothesize a unitary direct effect that claims to apply to an entire team. Taking a multilevel perspective, we suggest that in- versus outgroup perceptions become more likely when – right besides age and gender – the LMX quality received from the team leader additionally varies between in- and outgroup. This idea aligns with previous research that analysed how leadership behaviour moderates the impacts of age-gender faultlines (Kunze & Bruch, 2010).

Research has emphasized that the personal impact of discrimination within a team might depend on the individual's social status within the team (van Dijk & van Engen, 2013). A subgroup's relative LMX quality is an indicator of the subgroup's social status within the team (Nishii & Mayer, 2009) and might therefore be an important factor for faultline-driven absenteeism behaviours. In the following section, we outline why subgroups' received LMX quality is essential for the effect of age-gender faultlines on absenteeism.

The moderating effect of LMX quality

In a team with a strong age-gender faultline, at least two subgroups (e.g., old male members vs young female members) might emerge (Sidanius & Pratto, 2001). It is then possible that the team leader engages in high-quality relationships with one subgroup (e.g., the old males) and maintains a low-quality relationship with the other subgroup (e.g., the young females). In this scenario, the probability of social categorization within the team raises because the comparative fit increases (van Knippenberg et al., 2011): Due to the team leader's differentiating behaviour, subgroups differ in terms of age, gender, and LMX quality. Additionally, the differential treatment may serve as a faultline trigger (Chrobot-Mason et al., 2009) and activate a previously dormant faultline (Meyer et al., 2015). While status differences between old and young or men and women might already exist due to social circumstances (Fiske, 2017), LMX differentiation by a legitimized authority such as the team leader might make this status hierarchy an accepted norm (Ridgeway & Correll, 2006).

We consequently assume that in age-gender faultline teams with diverging levels of LMX quality between the subgroups, interpersonal tensions, power imbalances, and status

differences are likely to occur. Empirical results show that social categorization processes and the resulting ingroup bias trigger adverse processes such as emotional hostility and discrimination (Hornsey, 2008; Li & Liao, 2014). Having to deal with difficult social relationships within the work team, as well as facing discrimination frequently, can motivate individuals to withdraw and has the potential to eventually harm physical and mental health (Bakker et al., 2003; Schulte et al., 2020), factors which ultimately translate into increased absenteeism.

Although these destructive processes are likely to occur in such teams, we question the assumption made in previous research that both subgroups within a polarized team respond similarly (e.g., Molleman, 2005). We rather argue that the received LMX quality indicates this subgroup's social status within the team (Nishii & Mayer, 2009). Thus, to understand how team members respond to the faultline in terms of absenteeism behaviour, we need to consider how individuals perceive their own and their ingroup's LMX compared to their outgroup. Precisely, we argue: While members perceiving that they receive less favourable LMX treatment than members of the outgroup likely suffer from the categorization, the members of the better-treated outgroup are less likely to be negatively affected.

Our argumentation is rooted in social comparison theory (Festinger, 1954), which states that an individual's relative standing within a socially relevant entity is the foundation for its well-being and satisfaction. By establishing LMX relationships of different qualities, the team leader creates a hierarchy in status (Nishii & Mayer, 2009). While in most cases leaders who develop differentiated leadership behaviours along demographics are probably not even aware of it because the bias is unconscious (Greer et al., 2012) the differentiated leader treatment still falls on fruitful grounds in teams with faultline potential. In such teams, fairness concerns are particularly virulent (Buengeler & Hartog, 2015). Members who perceive that they and their ingroup colleagues receive lower LMX compared to the outgroup possess a lower status and may see themselves as the team's "hired hands". In contrast, members who observe a favourable LMX relationship between them and their ingroup colleagues enjoy high status and may see themselves as the "cadre" of the team (Dansereau et al., 1975; Liden et al., 2006).

In line with social comparison theory, an individual's relative standing within the team shapes its reaction to group processes (Buunk & Gibbons, 2007; Zhang et al., 2020). Members who observe low LMX for their ingroup are likely to suffer from discriminative offences originating from the high-status outgroup. Individuals of lower status categories tend to be uncertain and attend more to social influences such as the outgroup's discriminatory devaluing behaviour (Zhang et al., 2020). Thus, we expect the low-status subgroup members to be significantly affected by discrimination undermining their self-confidence. Poor social relations at work and the continuous encounter with discrimination threaten the physical and mental health (Bakker et al., 2003) of subgroup members – factors that result in increased absenteeism. In contrast, members of a subgroup with a high LMX are likely to be less susceptible to discriminatory offences and tensions originating from their outgroup because the latter occupies a relatively lower status. Consequently, members of the high LMX subgroup tend to be less negatively affected by the faultline-induced categorization

and are thus expected to show a less pronounced reaction to the faultline in terms of absenteeism behaviour. In summary, we propose the following hypothesis:

Hypothesis 1: LMX quality moderates the relationship between age-gender team faultlines and individual absenteeism such that the positive relationship strengthens as the LMX quality decreases.

Methods

Sample

We tested our model relying on data from a German electrical engineering company that was collected in 2020.¹ Data were obtained from two separate sources to avoid common source bias. Demographic information and leadership ratings were captured through surveys as part of the bi-annual employee satisfaction survey. We retrieved absenteeism data from the official HR records of the company.

Initially, all 295 employees of the company were invited to participate in our survey. The survey consisted of the study's constructs, as well as some general employee satisfaction measures of interest for the company. Survey data from 270 individuals were available, corresponding to a response rate of 91.53%. This very high response rate was achieved through the strong support of both the senior leadership team and the labour union for the employee survey. Especially blue-collar employees were repeatedly motivated to participate in the survey. While 27 of the surveyed individuals held a formal supervisor role and were removed from the analysis, 243 individuals were team members and retained. In our study, a team was defined as a group of employees that formed the company's smallest unit, worked together in the same area daily and permanently, and reported to the same team leader. From a total of 243 individuals nested in 27 teams, we had to exclude 79 individuals for which no LMX ratings were available.

Thus, our final sample consisted of 164 team members nested in 63 subgroups, which again were nested in 25 teams. The teams came from different functional areas of the company, such as production, marketing, and research & innovation. On average, teams consisted of 12 members and subgroups of 5 individuals. 30.49% of the team members were female, and the average age was 41.36 years.

Measures

Age-gender faultlines

Age-gender faultlines were calculated based on every team member's age and gender. To calculate a faultline score for each team, we relied on the average silhouette width (ASW) method developed by Meyer and Glenz (2013). The ASW algorithm is extensively applied in recent faultline work (Leicht-Deobald et al., 2021; Shin & You, 2022) and among the different algorithms that aim to capture team faultlines, the ASW algorithm has been verified as the most versatile and robust (Meyer & Glenz, 2013; Mo et al., 2019). The ASW algorithm comes with the decisive strength to not artificially limit the number of

emerging subgroups in a team to two but accounts for the possibility that teams might split up into more subgroups (e.g., young females, middle-aged males, and old females).

To calculate the overall faultline score, one needs to specify how the attributes are weighted or – in the case of this study – how many years of age differences are equal to a difference in gender. As suggested by Meyer and Glenz (2013), we weighted the attributes according to their standard deviation. The obtained faultline values varied from 0.349 to 0.761 ($mean = 0.616$; $SD = 0.103$) with higher values indicating stronger faultlines.

Absenteeism

Data about individual *absenteeism* was obtained from official HR records to rule out potential self-reporting bias. We measured absence as each employee's number of days lost over a period of four months starting from the time of the employee survey. Following prior research, *absenteeism* was measured as time lost for reasons other than approved vacation, training, maternity leave, military service, or personal day (Bacharach et al., 2010) ($mean = 24.66$, $SD = 54.05$). The count nature of the absenteeism variable (days of absence) can produce severely skewed distributions and thereby undermine the normal distribution assumption underlying standard linear regression models (Atkins et al., 2013; Long & Freese, 2006). Given a significant Kolmogorov-Smirnov test ($K-S = 0.324$; $p < 0.05$) indicating notable skewness, we accounted for the issue of a count outcome in our data analysis by using Poisson regression techniques (Long & Freese, 2006).

LMX quality

To capture each individual's *LMX quality*, we used a seven-item scale based on Scandura and Graen's (1984) traditional LMX scale. A sample item is: "I can count on my supervisor to 'bail me out,' even at his/her own expense when I really need it." The five-point Likert-type scale ranged from 1 ("strongly disagree") to 5 ("strongly agree"). In order to examine whether the seven items capture a single construct, we conducted a confirmatory factor analysis on the individual level which revealed an appropriate model fit ($\chi^2 = 83.450$; $df = 14$; $CFI = 0.934$; $TLI = 0.902$; $SRMR = 0.038$). The alpha for internal consistency of LMX quality was 0.950.

Controls

We controlled for *team size* as a central control in absenteeism research (Markham et al., 1982; Reinwald & Kunze, 2020). The underlying rationale is that larger teams are more likely confronted with individual free-riding behaviour (Alnuaimi et al., 2010), which can include absence behaviours.

Furthermore, we controlled for gender diversity and age diversity to test if faultlines explain variance above and beyond unidimensional diversity measures and account for potential correlations between the diversity measures and faultline strengths (Lau & Murnighan, 1998). Following previous research, we captured gender diversity with the Blau index (Blau, 1977) and age diversity with its within-team standard deviation (Harrison & Klein, 2007).

Analytical procedures

To address the nesting of individuals in subgroups that in turn are nested in teams, and to account for the outcome's skewness, we used the multilevel mixed-effects Poisson regression model for our model testing (Aiken et al., 2015; Atkins et al., 2013). We adopted a stepwise model-building procedure to increase the model complexity from step to step by adding random effect predictors (Aguinis et al., 2013). This procedure allowed the testing of the study hypothesis and the evaluation of multilevel model fit. To contrast the fit of the models, we compared the -2 log-likelihood values in a likelihood-ratio test and the Akaike information criterion (AIC), where smaller values indicated better relative model fits (Singer & Willett, 2003). Following Aguinis et al. (2013), we applied the standard centring procedures for multilevel research. Predictors at the team level (i.e., age-gender faultlines, age diversity, gender diversity, and team size) were grand-mean centred. Hypotheses were tested in Stata 15 SE.

Results

Descriptive statistics

Table 1 presents means, standard deviations, and bivariate correlations for all study variables on the individual level, while Table 2 presents those descriptives on the team level, respectively. The group-level correlations show some moderate to higher intercorrelations, which raises the risk of multicollinearity issues affecting our results. The risk of biased results might be further intensified given our relatively small sample size at the team level (Bergtold et al., 2018). Therefore, we decided to run our main analyses without control variables.²

Level issues and hypothesis testing

Table 3 displays the results of the general linear random effects model tested in a stepwise procedure. Our theoretical framework implied that individual LMX quality significantly varies on the

Table 1. Descriptive statistics of study variables on the individual level.

	mean	SD	1.	3.
1. LMX quality	3.437	1.038	1	
3. Absenteeism	24.305	53.647	-0.243**	1

N = 164 individuals.

* $p < 0.05$, ** $p < 0.01$; *** $p < 0.001$; two-sided.

Table 2. Descriptive statistics of study variables on the team level.

	mean	SD	1.	2.	3.	4.
1. Gender diversity	0.187	0.191	1			
2. Age diversity	10.523	2.043	-0.206**	1		
3. Team size	11.793	5.330	-0.450***	-0.201**	1	
4. Age-gender faultline	0.616	0.103	-0.316***	0.210**	0.410***	1

N = 25 teams.

* $p < 0.05$, ** $p < 0.01$; *** $p < 0.001$; two-sided.

Table 3. Absenteeism as a function of team faultlines and subgroup relative standing.

	Absenteeism:		
	Model 1: Null model	Model 2: Random intercept	Model 3: Cross-level interaction
Level 1			
Constant	0.911*	2.561***	2.006***
LMX quality	-0.389	-0.416	-0.375
		-0.479***	-0.240***
		-0.024	-0.038
Level 2			
Age-gender faultline		1.874	28.333***
		-3.156	-4.044
Cross-level interaction			
Age-gender- faultline * LMX quality			-5.920***
Additional information			
Observations	164	164	164
$-2 * \log$ likelihood	5021.610	4616.053	4518.554
AIC	5027.610	4626.053	4530.554
df	3	5	6

L1 = Level 1 (=individual level) L2 = Level 2(= team level).

L1 N = 164; L2 N = 25.

Standard errors are shown in brackets.

* $p < 0.05$, ** $p < 0.01$; *** $p < 0.001$, two-tailed.

subgroup level. Before conducting the main analyses, we, therefore, tested whether differences across subgroups account for a part of the variability in LMX. The ICC1 (Bliese, 2000) confirmed that this is the case indicating that 43.77% ($p < 0.05$) of the variability in individual LMX originates from the subgroup level. Our hypothesis furthermore implied that significant variance in individual absenteeism could be explained by the subgroup level. Again, the ICC1 confirmed this by indicating that 11.29% ($p < 0.05$) of the variability in absenteeism originates from the subgroup level. This provided us with the confidence that subgroups indeed matter for absenteeism and indicated that it is appropriate to perform a multilevel analysis (Shin et al., 2012).

Therefore, we estimated a *null model* in which individual absenteeism was a linear function of the grand mean of all individuals, the random effect due to individuals, and the random effect due to teams. These results again provided evidence for a nested data structure and supported the benefit of taking a multilevel perspective on team faultline effects. In the *random intercept model*, both explanatory variables (age-gender faultlines and LMX quality) were included. The mean of absenteeism was allowed to vary across teams and subgroups. This model led to a significant improvement of the model fit: The -2 log-likelihood value was significantly smaller than for the null model ($\Delta-2$ log-likelihood = 405.558) based on a Chi-square distribution ($\Delta df = 2; p < .05$). A comparison of AIC values led to the same conclusion ($\Delta AIC = 401.557; \Delta df = 2; p < .05$). This model entailed the coefficient of the direct effects of the age-gender faultline on individual absenteeism. This effect ($\beta = 1.874, p = .553$) was not significant. Thus, in line with our theoretical argumentation, results indicated no support for a significant direct effect of team faultlines on absenteeism. Following Aguinis et al.'s (2013) recommendations, we proceeded with the next step of the analysis, as the existence of a cross-level interaction could not be ruled out yet.

Finally, the *cross-level interaction model* included both explanatory variables as well as the cross-level interaction term. Hypothesis 1 stated that LMX quality moderates the relationship between the age-gender faultline and individual absenteeism. The interaction term between LMX quality and age-gender faultlines was significant ($\beta = -0.926, p < .001$). Based on a Chi-square distribution, this final model fitted the data significantly better than the previous model without interaction term, as shown by comparing -2 log-likelihood values ($\Delta-2$ log-likelihood = 97.499; $\Delta df = 1; p < .05$). The significantly smaller AIC based on a Chi-square distribution ($\Delta AIC = 95.499; \Delta df = 1; p < .05$) confirmed this better relative model fit.

To facilitate the interpretation of the significant cross-level interaction, we followed the guidelines offered by Gardner et al. (2017) and calculated the Johnson and Neyman (1936) interval at a 90% significance level. In line with current research (e.g., D'Innocenzo et al., 2016; Reinwald et al., 2019), we relied on this method to report the direction and significance of the interaction because, contrary to the simple-slopes approach, it has the advantage of not depending on arbitrary conditional values (Preacher et al., 2006). Instead, it yields a holistic overview of all possible conditional values. For our case, the Johnson and Neyman (1936) interval provided the region of the LMX quality moderator variable, within which the age-gender faultline had

a significant impact on individual absenteeism based on the fixed portion of the Model 3 in Table 3.

Our analysis reveals that the effect of faultlines on absenteeism is significantly positive for individuals with an LMX quality score between 1.2 and 2.7 ($p < 0.1$) and turns non-significant for LMX scores of 2.7 and above. In our sample of 164 respondents, 17.07% had an LMX quality score within this range and thus displayed a significantly positive conditional relationship between team faultlines and individual absenteeism. This finding supports Hypothesis 1 – the idea that the positive faultline effect on absenteeism increases as LMX quality decreases. The pattern of results remained the same in a cross-level interaction model with control variables.

Robustness checks

In addition to the analyses above, we tested if our multilevel model provides insights into the faultline-absenteeism relationship, which would have gone unnoticed in a single-level team model, as it has been the norm in prior faultline studies. In doing so, we estimated a single-level OLS regression model containing the interaction effect of faultlines and LMX differentiation on team-level absenteeism to check if the interaction is not meaningful when the individual and subgroup level is ignored. For this purpose, we aggregated the absenteeism variable to the team level and relied on the within-team variance of individual LMX quality scores as an established team-level LMX differentiation measure (Li & Liao, 2014; Liden et al., 2006). The single-level interaction effect was not significant ($\beta = 1.01, p > 0.05$), and direct faultline and LMX differentiation effects could not be found either. This indicates that our integrative multilevel approach spanning the team, subgroup, and individual levels provides more fine-grained insights that would have gone unnoticed in a traditional team-level model.

Furthermore, to verify the robustness of our results, we conducted several robustness checks. Firstly, we again performed all steps of analysis with faultlines values calculated based on Bezrukova et al.'s (2009) faultline algorithm that limits the number of possible subgroups within a team to two. The pattern and significance of the results remained the same (interaction: $\beta = -1.368, p < 0.001$) which provides us with the confidence that our results do not depend on measurement choices. Secondly, to ensure that the results are not exclusively driven by extreme values, we excluded extreme outliers in the dependent variable. On a 10% significance level, results were robust to excluding the six individuals whose absenteeism deviated more than two standard deviations from the mean absenteeism ($\beta = -1.347, p = 0.091$). Lastly, we performed several models with the inclusion of different combinations of control variables (i.e., team size, gender diversity, age diversity).³ All analyses supported our initial results.

Discussion

This paper analyses the impact of age-gender faultlines in work teams on individual absenteeism by considering LMX quality. We argued that team faultlines affect team members differently by applying a multilevel perspective. Drawing from social comparison theory (Festinger, 1954), we theorized that subgroup

members receiving less favourable LMX treatment were expected to more strongly increase their absenteeism due to faultline-induced social categorization. We found support for our theoretical model as faultlines had no main effect on overall team absenteeism but influenced individual absenteeism differently depending on LMX quality.

Theoretical implications

Our theoretical model and empirical results contribute to research in at least four ways. First and foremost, our results emphasize the advantage of multilevel approaches considering micro-reactions to team faultlines below the team level. Recent faultline and diversity research has called for more multilevel conceptualizations of diversity and faultline effects (Joshi & Neely, 2018; Tasheva & Hillman, 2019; van Dijk et al., 2017). Yet, only a few empirical faultline studies are truly multilevel (for exceptions, see, Meyer et al., 2015, 2016; Shemla et al., 2016). We followed calls for more multilevel work in this domain and demonstrated that team faultlines have an idiosyncratic impact on team members' health-related work behaviour. Thereby, our work demonstrates what numerous researchers have speculated about: faultlines can trigger different reactions within a team, which may be masked if aggregated to the team level (Joshi & Roh, 2009; Kozlowski, 2012; Reagans et al., 2004). This became particularly evident from the fact that in our sample, we did not find any significant direct effect of team faultlines that applied equally to all individuals in the team. The actual processes triggered by the faultline was only uncovered once we took subgroup membership and LMX into account.

Additionally, we integrate the faultline literature with the LMX differentiation literature (Buengeler et al., 2021). So far, the effects of LMX differentiation have been contested: On the one hand, LMX differentiation has been found to be an efficient tool to optimally distribute tasks and responsibilities within a team (Stogdill, 1959). On the other hand, evidence suggested that team members can react negatively to LMX differentiation because they perceive the different levels of support as unfair or unjustified (Liden et al., 2006). By merging the LMX differentiation with the faultline field, this study is, to the best of our knowledge, the first that offers an integrative theoretical model that harmonizes the opposing impacts that have been found for both faultlines and LMX differentiation (e.g., Georgakakis et al., 2017). Our results revealed that these opposing findings are not paradoxical: Faultlines and LMX differentiation remain double-edged swords, but their implications complement each other rather than contradict each other. As our results revealed, both constructs do not impair or improve team outcomes per se but rather lead to different outcomes for different team members. Thereby, we also respond to Nishii and Mayer (2009) who have called for research studying not only the degree of LMX dispersion in a team but the LMX differentiation pattern in diverse teams along demographic divides. Future research may extend our work further by looking more specifically at why leaders differentiate between different demographic subgroups and how such differentiation can be reduced through targeted interventions.

Third, by including absenteeism as a so far underexplored outcome variable, we extend the criterion space of faultline research traditionally restricted to effectiveness outcomes. Our results imply that destructive team processes might not only have a performance impact but might also be detrimental to the health of individuals. Several researchers have emphasized the importance of considering a broader range of outcome measures in faultline research that goes beyond classic effectiveness indicators (e.g., Meyer, 2017), with limited resonance in empirical faultline research so far. In doing so, we also add empirical evidence to a stream in social identity research describing social relations and identity dynamics as an important predictor of individual health and well-being and social support ties as a potential "social cure" (S. A. Haslam et al., 2018, C. Haslam et al., 2018). At the same time, our work extends individual-level focused absenteeism research. By looking at team-level predictors of individual absenteeism we go beyond traditional individual-centric explanations for absence (Miraglia & Johns, 2021) and add team faultlines as an important collective-level predictor of absenteeism.

Practical implications

For moral and economic reasons, it should be in the best interest of managers to prevent high absenteeism, and our findings lend essential insights on how to reduce absenteeism rates. From a moral perspective, companies should avoid health-related absence as the underlying health issues can significantly lower the quality of life of the employee (Sawatzky et al., 2010). But also economically, high employee absenteeism is an undesirable state and comes with enormous direct and indirect financial costs (Hausknecht et al., 2008; Mason & Griffin, 2003) as it delays work processes, requires the temporal replacement of absent employees, and might lower the morale of co-workers who need to step in (Hausknecht et al., 2008; Mason & Griffin, 2003).

Our results revealed that the probability of being absent is highest for employees who are part of a team with a strong age-gender faultline and receive unfavourable LMX treatment. This result should not encourage executives to create homogenous work teams, as this would significantly reduce the already limited number of qualified candidates in many industries and, additionally, implicate losing the benefits associated with a diverse set of team members (Schölmerich et al., 2016).

The superior method for practitioners is to manage faultlines rather than prevent them (van Knippenberg et al., 2011). This study's most important managerial implication is about a team leader's ideal nature of LMX differentiation within faultline teams. Following our findings, team leaders should avoid engaging in LMX differentiation concurrent with demographic differences because it leads to destructive consequences for the unfavourably treated team members. Team leaders must be aware that through LMX differentiation, they assign a social status to each team member. Therefore, they must reflect on whether the basis of this status assignment is justifiable. While this does not apply to overly broad demographic attributes like age and gender, which are often strongly linked to stereotypes, it might apply to work-related differences such as performance within a team (Sias & Jablin, 1995). Consequently, we

emphasize the need that diversity training for team leaders should support them to critically reflect on their basis of LMX differentiation: Is the induced status hierarchy within the team justified, or does it systematically disadvantage certain demographic groups?

Limitations and future research directions

Besides several strengths, this study also suffers from some limitations. First, respondents participated voluntarily and were not randomly assigned to the study conditions. This makes it difficult to draw strong causal conclusions (Shadish et al., 2002). Yet, our design included a time lag between our predictors and the absenteeism measure providing us with some confidence that our causal inference is sensible.

Second, the study is limited by the nature of its small sample: It consisted of 164 individuals that together only composed 25 teams and 63 subgroups. However, it is important to emphasize that there is consensus in multilevel research that the sample size at the lowest level (in our case the individual level) is most crucial for statistical power (Aguinis et al., 2013). This is particularly applicable to the cross-level interaction test (Mathieu et al., 2012) as applied in our study.

Third, the sample originated from one company within the German cultural context which weakens the study's generalizability. Previous research has shown that culture has a significant impact on employee behaviour (Earley, 1994). Nevertheless, the samples' weaknesses can be subtended by a decisive strength: the criticism frequently voiced in diversity research that mainly teams working on creative tasks are analysed (Fritzsche et al., 2017) does not apply to our study. Teams varied in functions and tasks thereby strengthening the study's generalizability. Maintaining this strength and curing the mentioned sample weaknesses, we encourage future research to replicate our findings via a longitudinal quasi-experimental design and include a larger number of diverse task teams from different industries and countries.

Last, while the usage of objective absenteeism data ruled out any self-reporting bias and allowed us to vastly reduce common source bias (Podsakoff et al., 2003), our objective measurement strategy did not test the underlying theoretical mechanism for our effects. Therefore, future research should extend our research by introducing and testing potential mediating factors, such as social categorization and status dynamics between subgroups.

Beyond these limitations, this study provides avenues for future research. We would like to emphasize two possible streams: One stream could further extend the multilevel view on faultlines. Further factors that vary within teams (e.g., individual personality traits) may also impact reactions to faultlines. Additionally, in analogy to general diversity research (Joshi & Roh, 2009), integrating levels above the team level might contribute to a more realistic and insightful understanding of faultlines and their impact. The recent observations of Guillaume et al. (2014) that team level diversity's effects depend on up to four levels – the individual level, the team level, the organizational level, and the industry level – could be transferred to faultline research.

Conclusion

Increasing demographic diversity in the workforce steadily increases the likelihood of demographic subgrouping in work teams. Based on this trend, our study analysed the role of leadership in diverse teams by investigating the interacting effect of age-gender faultlines and LMX quality on absenteeism. Results revealed that individuals within a faultline team react differently to differential leadership treatment. Precisely, members of subgroups that receive less favourable LMX treatment than their outgroup are particularly likely to increase their absenteeism behaviour. This result offers direct practical implications. It suggests that team leaders should avoid LMX differentiation based on demographic attributes. Furthermore, with our research, we contribute to diversity research that has been characterized by mixed evidence, and faultlines have been advocated as an important milestone to dissolve some of the inconsistencies. Thinking the story forward, we argue that the multilevel view on faultline effects could evolve into the next important milestone in diversity research that provides insights above and beyond those of single-level models.

Notes

1. Ethical approval was not provided for this study on human participants because for field survey studies the researchers' university does not require an ethical approval. The participants provided their written informed consent to participate in this study.
2. Including multiple combination of the control variables did not change the pattern of results (see Robustness Check Section).
3. Note that when we included all three control variables simultaneously, the model did not converge (for a extensive discussion of convergence problems in Poisson models see, Silva & Tenreiro, 2011). To circumvent convergence problems, we estimated a series of models where we entered each of the controls individually. In addition we entered pairs of the three control variables.

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ORCID

Sophie Moser  <http://orcid.org/0000-0001-5593-3092>
 Max Reinwald  <http://orcid.org/0000-0002-7410-3163>
 Florian Kunze  <http://orcid.org/0000-0002-2583-6221>

References

- Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management*, 39(6), 1490–1528. <https://doi.org/10.1177/0149206313478188>
- Aiken, L. S., Mistler, S. A., Coxe, S., & West, S. G. (2015). Analyzing count variables in individuals and groups: Single level and multilevel models. *Group Processes & Intergroup Relations*, 18(3), 290–314. <https://doi.org/10.1177/1368430214556702>

- Alderfer, C. P., & Smith, K. K. (1982). Studying intergroup relations embedded in organizations. *Administrative Science Quarterly*, 27(1), 35–65. <https://doi.org/10.2307/2392545>
- Alnuaimi, O. A., Robert, L. P., & Maruping, L. M. (2010). Team size, dispersion, and social loafing in technology-supported teams: A perspective on the theory of moral disengagement. *Journal of Management Information Systems*, 27(1), 203–230. <https://doi.org/10.2753/MIS0742-1222270109>
- Antino, M., Rico, R., & Thatcher, S. M. B. (2019). Structuring reality through the faultlines lens: The effects of structure, fairness, and status conflict on the activated faultlines–performance relationship. *Academy of Management Journal*, 62(5), 1444–1470. <https://doi.org/10.5465/amj.2017.0054>
- Atkins, D. C., Baldwin, S. A., Zheng, C., Gallop, R. J., & Neighbors, C. (2013). A tutorial on count regression and zero-altered count models for longitudinal substance use data. *Psychology of Addictive Behaviors: Journal of the Society of Psychologists in Addictive Behaviors*, 27(1), 166–177. <https://doi.org/10.1037/a0029508>
- Bacharach, S. B., Bamberger, P., & Biron, M. (2010). Alcohol consumption and workplace absenteeism: The moderating effect of social support. *The Journal of Applied Psychology*, 95(2), 334–348. <https://doi.org/10.1037/a0018018>
- Bakker, A. B., Demerouti, E., Boer, E. D., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341–356. [https://doi.org/10.1016/S0001-8791\(02\)00030-1](https://doi.org/10.1016/S0001-8791(02)00030-1)
- Bergtold, J. S., Yeager, E. A., & Featherstone, A. M. (2018). Inferences from logistic regression models in the presence of small samples, rare events, nonlinearity, and multicollinearity with observational data. *Journal of Applied Statistics*, 45(3), 528–546. <https://doi.org/10.1080/02664763.2017.1282441>
- Bezrukova, K., Jehn, K. A., Zanutto, E. L., & Thatcher, S. M. B. (2009). Do workgroup faultlines help or hurt? A moderated model of faultlines, team identification, and group performance. *Organization Science*, 20(1), 35–50. <https://doi.org/10.1287/orsc.1080.0379>
- Blau, P. M. (1977). *Inequality and heterogeneity: A primitive theory of social structure*. Free Press.
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 349–381). Jossey-Bass.
- Buengeler, C., & Hartog, D. N. D. (2015). National diversity and team performance: The moderating role of interactional justice climate. *The International Journal of Human Resource Management*, 26(6), 831–855. <https://doi.org/10.1080/09585192.2014.991345>
- Buengeler, C., Piccolo, R. F., & Locklear, L. R. (2021). Lmx differentiation and group outcomes: A framework and review drawing on group diversity insights. *Journal of Management*, 47(1), 260–287. <https://doi.org/10.1177/0149206320930813>
- Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Processes*, 102(1), 3–21. <https://doi.org/10.1016/j.obhdp.2006.09.007>
- Byrne, D. (1971). *The attraction paradigm*. Academic Press.
- Carton, A. M., & Cummings, J. N. (2012). A theory of subgroups in work teams. *Academy of Management Review*, 37(3), 441–470. <https://doi.org/10.5465/amr.2009.0322>
- Choi, J. N., & Sy, T. (2010). Group-level organizational citizenship behavior: Effects of demographic faultlines and conflict in small work groups. *Journal of Organizational Behavior*, 31(7), 1032–1054.
- Chrobot-Mason, D., Ruderman, M. N., Weber, T. J., & Ernst, C. (2009). The challenge of leading on unstable ground: Triggers that activate social identity faultlines. *Human Relations*, 62(11), 1763–1794. <https://doi.org/10.1177/0018726709346376>
- Dansereau, J. F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Performance*, 13(1), 46–78. [https://doi.org/10.1016/0030-5073\(75\)90005-7](https://doi.org/10.1016/0030-5073(75)90005-7)
- Del Triana, M. C., Gu, P., Chapa, O., Richard, O., & Colella, A. (2021). Sixty years of discrimination and diversity research in human resource management: A review with suggestions for future research directions. *Human Resource Management*, 60(1), 145–204. <https://doi.org/10.1002/hrm.22052>
- D’Innocenzo, L., Luciano, M. M., Mathieu, J. E., Maynard, M. T., & Chen, G. (2016). Empowered to perform: A multilevel investigation of the influence of empowerment on performance in hospital units. *Academy of Management Journal*, 59(4), 1290–1307. <https://doi.org/10.5465/amj.2013.1073>
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573–598. <https://doi.org/10.1037/0033-295X.109.3.573>
- Earley, P. C. (1994). Self or group? Cultural effects of training on self-efficacy and performance. *Administrative Science Quarterly*, 39(1), 89–117. <https://doi.org/10.2307/2393495>
- European Commission. (2020). *The impact of the demographic change in Europe*. https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/impact-demographic-change-europe_en
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. <https://doi.org/10.1177/001872675400700202>
- Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. *The Handbook of Social Psychology*, 2(4), 357–411.
- Fiske, S. T. (2017). Prejudices in cultural contexts: Shared stereotypes (gender, age) versus variable stereotypes (race, ethnicity, religion). *Perspectives on Psychological Science*, 12(5), 791–799. <https://doi.org/10.1177/1745691617708204>
- Fritzsche, L., Wach, D., Jungmann, F., & Wegge, J. (2017). Zur Bedeutung von faultlines als grenzen bei der Teamarbeit. *Gruppe Interaktion Organisation Zeitschrift Für Angewandte Organisationspsychologie (GIO)*, 48(2), 127–135. <https://doi.org/10.1007/s11612-017-0364-8>
- Gardner, R. G., Harris, T. B., Li, N., Kirkman, B. L., & Mathieu, J. E. (2017). Understanding “it depends” in organizational research: A theory-based taxonomy, review, and future research agenda concerning interactive and quadratic relationships. *Organizational Research Methods*, 20(4), 610–638. <https://doi.org/10.1177/1094428117708856>
- Georgakakis, D., Greve, P., & Ruigrok, W. (2017). Top management team faultlines and firm performance: Examining the CEO-TMT interface. *The Leadership Quarterly*, 28(6), 741–758. <https://doi.org/10.1016/j.leaqua.2017.03.004>
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219–247. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)
- Greer, L. L., Homan, A. C., Hoogh, A. H. B. D., & Hartog, D. N. D. (2012). Tainted visions: The effect of visionary leader behaviors and leader categorization tendencies on the financial performance of ethnically diverse teams. *The Journal of Applied Psychology*, 97(1), 203–213. <https://doi.org/10.1037/a0025583>
- Guillaume, Y. R. F., Dawson, J. F., Priola, V., Sacramento, C. A., Woods, S. A., Higson, H. E., Budhwar, P. S., & West, M. A. (2014). Managing diversity in organizations: An integrative model and agenda for future research. *European Journal of Work and Organizational Psychology*, 23(5), 783–802. <https://doi.org/10.1080/1359432X.2013.805485>
- Harrison, D. A., & Klein, K. J. (2007). What’s the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32(4), 1199–1228. <https://doi.org/10.5465/amr.2007.26586096>
- Haslam, C., Jetten, J., Cruwys, T., Dingle, G. A., & Haslam, S. A. (2018). *The new psychology of health: Unlocking the social cure*. Routledge.
- Haslam, S. A., McMahon, C., Cruwys, T., Haslam, C., Jetten, J., & Steffens, N. K. (2018). Social cure, what social cure? The propensity to underestimate the importance of social factors for health. *Social Science & Medicine* (1982), 198, 14–21. <https://doi.org/10.1016/j.socscimed.2017.12.020>
- Hausknecht, J. P., Hiller, N. J., & Vance, R. J. (2008). Work-unit absenteeism: Effects of satisfaction, commitment, labor market conditions, and time. *Academy of Management Journal*, 51(6), 1223–1245. <https://doi.org/10.5465/amj.2008.35733022>
- Henderson, D. J., Liden, R. C., Glibkowski, B. C., & Chaudhry, A. (2009). LMX differentiation: A multilevel review and examination of its antecedents and outcomes. *The Leadership Quarterly*, 20(4), 517–534. <https://doi.org/10.1016/j.leaqua.2009.04.003>

- Hoppe, A., Fujishiro, K., & Heaney, C. A. (2014). Workplace racial/ethnic similarity, job satisfaction, and lumbar back health among warehouse workers: Asymmetric reactions across racial/ethnic groups. *Journal of Organizational Behavior, 35*(2), 172–193. <https://doi.org/10.1002/job.1860>
- Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass, 2*(1), 204–222. <https://doi.org/10.1111/j.1751-9004.2007.00066.x>
- Jehn, K. A., & Bezrukova, K. (2010). The faultline activation process and the effects of activated faultlines on coalition formation, conflict, and group outcomes. *Organizational Behavior and Human Decision Processes, 112* (1), 24–42. <https://doi.org/10.1016/j.obhdp.2009.11.008>
- Johnson, P. O., & Neyman, J. (1936). Tests of certain linear hypotheses and their application to some educational problems. *Statistical Research Memoirs, 1*, 57–93.
- Joshi, A., & Neely, B. H. (2018). A structural-emergence model of diversity in teams. *Annual Review of Organizational Psychology and Organizational Behavior, 5*(1), 361–385. <https://doi.org/10.1146/annurev-orgpsych-041015-062421>
- Joshi, A., & Roh, H. (2009). The role of context in work team diversity research: A meta-analytic review. *Academy of Management Journal, 52* (3), 599–627. <https://doi.org/10.5465/amj.2009.41331491>
- Kozlowski, S. W. J. (2012). Groups and teams in organizations: Studying the multilevel dynamics of emergence. In A. B. Hollingshead & M. S. Poole (Eds.), *Research methods for studying groups and teams* (pp. 270–293). Routledge.
- Kunze, F., & Bruch, H. (2010). Age-based faultlines and perceived productive energy: The moderation of transformational leadership. *Small Group Research, 41*(5), 593–620. <https://doi.org/10.1177/1046496410366307>
- Lau, D. C., & Murnighan, J. K. (1998). Demographic diversity and faultlines: The compositional dynamics of organizational groups. *Academy of Management Review, 23*(2), 325–340. <https://doi.org/10.2307/259377>
- Lau, D. C., & Murnighan, J. K. (2005). Interactions within groups and subgroups: The effects of demographic faultlines. *Academy of Management Journal, 48*(4), 645–659. <https://doi.org/10.5465/amj.2005.17843943>
- Leicht-Deobald, U., Huettermann, H., Bruch, H., & Lawrence, B. S. (2021). Organizational demographic faultlines: Their impact on collective organizational identification, firm performance, and firm innovation. *Journal of Management Studies, 58*(8), 2240–2274. <https://doi.org/10.1111/joms.12747>
- Liden, R. C., Erdogan, B., Wayne, S. J., & Sparrowe, R. T. (2006). Leader-member exchange, differentiation, and task interdependence: Implications for individual and group performance. *Journal of Organizational Behavior, 27*(6), 723–746. <https://doi.org/10.1002/job.409>
- Li, A. N., & Liao, H. (2014). How do leader-member exchange quality and differentiation affect performance in teams? An integrated multilevel dual process model. *The Journal of Applied Psychology, 99*(5), 847–866. <https://doi.org/10.1037/a0037233>
- Liu, X., Zhang, X. X., & Zhang, X. X. (2021). Faultlines and team creativity: The moderating role of leaders' cognitive reappraisal. *Small Group Research, 52*(4), 481–503. <https://doi.org/10.1177/1046496420978298>
- Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using Stata*. Stata press.
- Markham, S. E., Dansereau, F., & Alutto, J. A. (1982). Group size and absenteeism rates: A longitudinal analysis. *Academy of Management Journal, 25*(4), 921–927.
- Martin, R., Thomas, G., Legood, A., & Dello Russo, S. (2017). Leader-member exchange (LMX) differentiation and work outcomes: Conceptual clarification and critical review. *Journal of Organizational Behavior, 39*(2), 151–168. <https://doi.org/10.1002/job.2202>
- Mason, C. M., & Griffin, M. A. (2003). Group absenteeism and positive affective tone: A longitudinal study. *Journal of Organizational Behavior, 24*(6), 667–687. <https://doi.org/10.1002/job.210>
- Mathieu, J. E., Aguinis, H., Culppepper, S. A., & Chen, G. (2012). Understanding and estimating the power to detect cross-level interaction effects in multilevel modeling. *The Journal of Applied Psychology, 97*(5), 951. <https://doi.org/10.1037/a0028380>
- Meyer, B. (2017). Team Diversity: A review of the literature. In E. Salas, R. Rico, & J. Passmore (Eds.), *The wiley blackwell handbook of the psychology of teamwork and collaborative processes* (pp. 151–175). Wiley-Blackwell.
- Meyer, B., & Glenz, A. (2013). *Calculating diversity faultlines with the asw cluster package in R*
- Meyer, B., & Glenz, A. (2013). Team faultline measures: A computational comparison and a new approach to multiple subgroups. *Organizational Research Methods, 16*(3), 393–424. <https://doi.org/10.1177/1094428113484970>
- Meyer, B., Glenz, A., Antino, M., Rico, R., & González-Romá, V. (2014). Faultlines and subgroups: A meta-review and measurement guide. *Small Group Research, 45*(6), 633–670. <https://doi.org/10.1177/1046496414552195>
- Meyer, B., Schermuly, C. C., & Kauffeld, S. (2016). That's not my place: The interacting effects of faultlines, subgroup size, and social competence on social loafing behaviour in work groups. *European Journal of Work and Organizational Psychology, 25*(1), 31–49. <https://doi.org/10.1080/1359432X.2014.996554>
- Meyer, B., Shemla, M., Li, J., & Wegge, J. (2015). On the same side of the faultline: Inclusion in the leader's subgroup and employee performance. *Journal of Management Studies, 52*(3), 354–380. <https://doi.org/10.1111/joms.12118>
- Miraglia, M., & Johns, G. (2021). The social and relational dynamics of absenteeism from work: A multilevel review and integration. *The Academy of Management Annals, 15*(1), 37–67. <https://doi.org/10.5465/annals.2019.0036>
- Mo, S., Ling, C. -D., & Xie, X. -Y. (2019). The curvilinear relationship between ethical leadership and team creativity: The moderating role of team faultlines. *Journal of Business Ethics, 154*(1), 229–242. <https://doi.org/10.1007/s10551-016-3430-1>
- Molleman, E. (2005). Diversity in demographic characteristics, abilities and personality traits: Do faultlines affect team functioning? *Group Decision and Negotiation, 14*(3), 173–193. <https://doi.org/10.1007/s10726-005-6490-7>
- Nishii, L. H., & Mayer, D. M. (2009). Do inclusive leaders help to reduce turnover in diverse groups? The moderating role of leader-member exchange in the diversity to turnover relationship. *The Journal of Applied Psychology, 94*(6), 1412–1464. <https://doi.org/10.1037/a0017190>
- Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. (1999). Exploring the black box: An analysis of work group diversity, conflict and performance. *Administrative Science Quarterly, 44*(1), 1–28. <https://doi.org/10.2307/2667029>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. -Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology, 88*(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management, 35*(1), 158–188. <https://doi.org/10.1177/0149206308318617>
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*(4), 437–448. <https://doi.org/10.3102/10769986031004437>
- Reagans, R., Zuckerman, E., & McEvily, B. (2004). How to make the team: Social networks vs. demography as criteria for designing effective teams. *Administrative Science Quarterly, 49*(1), 101–133. <https://doi.org/10.2307/4131457>
- Reinwald, M., Huettermann, H., & Bruch, H. (2019). Beyond the mean: Understanding firm-level consequences of variability in diversity climate perceptions. *Journal of Organizational Behavior, 40*(4), 472–491. <https://doi.org/10.1002/job.2344>
- Reinwald, M., & Kunze, F. (2020). Being different, being absent? A dynamic perspective on demographic dissimilarity and absenteeism in blue-collar teams. *Academy of Management Journal, 63*(3), 660–684.
- Richard, O. C., Wu, J., Markoczy, L. A., & Chung, Y. (2019). Top management team demographic-faultline strength and strategic change: What role does environmental dynamism play? *Strategic Management Journal, 40* (6), 987–1009. <https://doi.org/10.1002/smj.3009>
- Richman, L. S., & Leary, M. R. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: A multimotive model. *Psychological Review, 116*(2), 365–383. <https://doi.org/10.1037/a0015250>

- Ridgeway, C. L. (2002). Gender, status, and leadership. *The Journal of Social Issues, 54*(4), 637–655. <https://doi.org/10.1111/0022-4537.00233>
- Ridgeway, C. L., & Correll, S. J. (2006). Consensus and the creation of status beliefs. *Social Forces, 85*(1), 431–453. <https://doi.org/10.1353/sof.2006.0139>
- Sawatzky, R., Ratner, P. A., Johnson, J. L., Kopec, J. A., & Zumbo, B. D. (2010). Self-reported physical and mental health status and quality of life in adolescents: A latent variable mediation model. *Health and Quality of Life Outcomes, 8*(17), 1–11. <https://doi.org/10.1186/1477-7525-8-17>
- Scandura, T. A., & Graen, G. B. (1984). Moderating effects of initial leader-member exchange status on the effects of a leadership intervention. *The Journal of Applied Psychology, 69*(3), 428–436. <https://doi.org/10.1037/0021-9010.69.3.428>
- Schölmerich, F., Schermuly, C. C., & Deller, J. (2016). How leaders' diversity beliefs alter the impact of faultlines on team functioning. *Small Group Research, 47*(2), 177–206. <https://doi.org/10.1177/1046496416630960>
- Schulte, N., Götz, F. M., Partsch, F., Goldmann, T., Smidt, L., & Meyer, B. (2020). Linking diversity and mental health: Task conflict mediates between perceived subgroups and emotional exhaustion. *Frontiers in Psychology, 11*, 1245. <https://doi.org/10.3389/fpsyg.2020.01245>
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin.
- Shemla, M., Meyer, B., Greer, L., & Jehn, K. A. (2016). A review of perceived diversity in teams: Does how members perceive their team's composition affect team processes and outcomes? *Journal of Organizational Behavior, 37*(1), 89–106. <https://doi.org/10.1002/job.1957>
- Shin, S. J., Kim, T. -Y., Lee, J. -Y., & Bian, L. (2012). Cognitive team diversity and individual team member creativity: A cross-level interaction. *Academy of Management Journal, 55*(1), 197–212. <https://doi.org/10.5465/amj.2010.0270>
- Shin, T., & You, J. (2022). Faults and faultlines: The effects of board faultlines on ceo dismissal. *Journal of Management, 014920632210838*. <https://doi.org/10.1177/01492063221083889>
- Sias, P. M., & Jablin, F. M. (1995). Differential superior-subordinate relations, perceptions of fairness, and coworker communication. *Human Communication Research, 22*(1), 5–38. <https://doi.org/10.1111/j.1468-2958.1995.tb00360.x>
- Sidanius, J., & Pratto, F. (2001). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge University Press.
- Silva, J. M. C. S., & Tenreiro, S. (2011). Poisson: some convergence issues. *The Stata Journal: Promoting Communications on Statistics and Stata, 11*(2), 207–212. <https://doi.org/10.1177/1536867X1101100203>
- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford University Press.
- Stogdill, R. M. (1959). *Individual behavior and group achievement: A theory; the experimental evidence*. Oxford University Press.
- Tajfel, H. (1982). *Social identity and intergroup relations*. Cambridge University Press.
- Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Nelson-Hall Publishers.
- Tasheva, S., & Hillman, A. J. (2019). Integrating diversity at different levels: Multilevel human capital, social capital, and demographic diversity and their implications for team effectiveness. *Academy of Management Review, 44*(4), 746–765. <https://doi.org/10.5465/amr.2015.0396>
- Thatcher, S. M. B., & Patel, P. C. (2012). Group faultlines: A review, integration, and guide to future research. *Journal of Management, 38*(4), 969–1009. <https://doi.org/10.1177/0149206311426187>
- Turner, J. C. (2010). Social categorization and the self-concept: A social cognitive theory of group behavior. In T. E. Postmes & N. R. Branscombe (Eds.), *Rediscovering social identity* (pp. 243–272). Psychology Press.
- United Nations. (2020). *Gender equality and womens' rights in review: Facts and figures*. <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/gender-equality-womens-rights-in-review-key-facts-and-figures-en.pdf?la=en&vs=935>
- Vandebeek, A., Voordeckers, W., Lambrechts, F., & Huybrechts, J. (2016). Board role performance and faultlines in family firms: The moderating role of formal board evaluation. *Journal of Family Business Strategy, 7*(4), 249–259. <https://doi.org/10.1016/j.jfbs.2016.10.002>
- van Dijk, H., Meyer, B., van Engen, M., & Loyd, D. L. (2017). Microdynamics in diverse teams: A review and integration of the diversity and stereotyping literatures. *The Academy of Management Annals, 11*(1), 517–557. <https://doi.org/10.5465/annals.2014.0046>
- van Dijk, H., & van Engen, M. L. (2013). A status perspective on the consequences of work group diversity. *Journal of Occupational and Organizational Psychology, 86*(2), 223–241. <https://doi.org/10.1111/joop.12014>
- van Knippenberg, D., Dawson, J. F., West, M. A., & Homan, A. C. (2011). Diversity faultlines, shared objectives, and top management team performance. *Human Relations, 64*(3), 307–336. <https://doi.org/10.1177/0018726710378384>
- van Knippenberg, D., De Dreu, C. K. W. D., & Homan, A. C. (2004). Work group diversity and group performance: An integrative model and research agenda. *The Journal of Applied Psychology, 89*(6), 1008–1022.
- van Knippenberg, D., & Mell, J. N. (2016). Past, present, and potential future of team diversity research: From compositional diversity to emergent diversity. *Organizational Behavior and Human Decision Processes, 136*, 135–145. <https://doi.org/10.1016/j.obhdp.2016.05.007>
- van Knippenberg, D., & Schippers, M. C. (2007). Work group diversity. *Annual Review of Psychology, 58*(1), 515–541. <https://doi.org/10.1146/annurev.psych.58.110405.085546>
- Wegge, J., & Meyer, B. (2020). Age diversity and age-based faultlines in teams: Understanding a Brezel phenomenon requires a Brezel theory. *Work, Aging and Retirement, 6*(1), 8–14.
- Wegge, J., Roth, C., Neubach, B., Schmidt, K. -, & Kanfer, R. (2008). Age and gender diversity as determinants of performance and health in a public organization: The role of task complexity and group size. *The Journal of Applied Psychology, 93*(6), 1301. <https://doi.org/10.1037/a0012680>
- Xie, X. -Y., Wang, W. -L., & Qi, Z. -J. (2015). The effects of TMT faultline configuration on a firm's short-term performance and innovation activities. *Journal of Management and Organization, 21*(5), 558–572. <https://doi.org/10.1017/jmo.2015.29>
- Zhang, L. L., George, E., & Chattopadhyay, P. (2020). Not in my pay grade: The relational benefit of pay grade dissimilarity. *Academy of Management Journal, 63*(3), 779–801. <https://doi.org/10.5465/amj.2016.1344>