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Fighting Conflict: Violent Splits or Healthy Divides?

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Abstract

In this study, we develop a theory to understand how groups with strong divisions may, paradoxically, help members to cope with conflict and injustice. We test our theoretical predictions using a survey methodology and the data from 72 work groups across different industries. Consistent with our hypotheses, we found that group faultlines weakened the positive relationships between injustice and psychological health.

Keywords: Faultlines, Injustice, Psychological Health

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Employee psychological health is increasingly seen as a critical correlate of productivity, absenteeism and turnover. It has also become clear that mental health problems in the form of anxiety and depression present a significant business cost. Recent estimates by the National Mental Health Association (2005) put the cost of anxiety, depression and other mental health related issues at $44 billion for U.S. organizations. This is noteworthy since many organizations adopt cost-cutting HRM strategies geared toward downsizing, salary reduction, and other work restructuring practices (Aycan & Kabasakal, 2006). These practices play a critical role in developing insecurities about keeping one's job, salary, and benefits – the major sources of stress, conflict, and anxiety in the workplace (e.g., Aycan & Kabasakal, 2006; Greenberg, 2006). In this connection, justice perceptions have been shown to have important implications for psychological well-being (Tepper, 2001). Greenberg (2004) noted the accumulating scientific evidence that employees who believe they have been treated unfairly experience significant psychological distress.

In this study, we focus on employee perceptions of *distributive injustice* (beliefs about how much they have been rewarded in proportion to their contributions, Greenberg, 2006) and *interactional injustice* (people's beliefs about the way they are treated by their direct supervisor, (Cohen-Charash & Spector, 2001)). These are primary "stressors" and threats to affective well-being and psychological health (e.g., Aycan & Kabasakal, 2006; Jones-Johnson & Johnson, 1992) that often create conflict in the workplace (Reb, Goldman, Kray, & Cropanzano, 2006). Unlike procedural injustice (the perceived fairness of decision making processes, Tepper, Duffy, Henle, & Lambert, 2006), these two forms of injustice have received less attention in the

psychological health literature until recently. Distributive injustice conveys information about the extent to which events have implications for employee well-being and are seen as self-threatening (e.g., Haslam & Reicher, 2006; Tepper, 2001). Similarly, interactional injustice diminishes feelings of confidence in favorable job conditions and may cause deterioration in psychological health (Jones-Johnson & Johnson, 1992; Papper, 1983). For all these reasons, we believe that these two forms of injustice are relevant for employee psychological health.

While health consequences of organizational injustice have already attracted attention (e.g., Tepper, 2001), less is known about how group composition may operate as a potential coping mechanism. Yet, social connections and group-level constructs have long been thought to be one of the most important boundary conditions for psychological and physical well-being (e.g., Heaphy, 2007; Levine & Moreland, 1992; Rogers, 1995). As Levine and Moreland (1992, p.150) state "any serious effort to understand mental health must consider the psychological benefits and risks associated with group membership." Given the prior evidence, it is surprising, however, that there has been no research on how injustice and group membership may work together to affect employee psychological health. Because of the global trend toward an increasing amount of stress placed on employees (Ellis, 2006), there is a need for a more comprehensive analysis of moderator variables that may influence well-being in the workplace. Thus, our purpose is to better understand the relationship of work group composition, organizational injustice, and mental health.

Group membership has been often studied in terms of demographic composition of a group and a determinant of various process and performance outcomes (c.f., Williams & O'Reilly, 1998). Although this research has led to many important insights, cumulative findings have been inconsistent. Alternative research has recently emerged to understand how group

composition may function as a moderator in shaping the attitudes and behaviors in diverse groups (e.g., Cummings, 2004; Joshi, Liao, & Jackson, 2006). Joshi and colleagues (2006) examined whether work group composition plays a role in shaping perceived pay inequalities. We further this line of research and extend theory on group composition by turning our attention to group faultlines. Group faultlines form when group members' multiple characteristics (e.g., age, gender, tenure) come into alignment and create so called "rifts" in diverse groups. These divisions provide the impetus for members of diverse groups to differentiate themselves across a divide and fracture into subgroups (Lau & Murnighan, 1998).

Prior research has largely focused on group-level processes to demonstrate how faultlines can create an environment of distrust, conflict, and problems (e.g., Li & Hambrick, 2005; Polzer et al., 2006). We extend this research beyond group-level influence and theorize about cross-level effects to understand how faultlines may explain employee anxiety and depression as individuals' reactions to injustice in diverse organizational groups. For instance, would coping with a lack of justice be easier if there was another middle-age female psychologist on a research team with all others being young male management scientists? Does having someone who may have similar experiences influence how employees respond to a perceived lack of justice? While recent introduction of the faultline concept in diversity research has generated a lot of attention, only a few recent studies have examined the cross-level effects of faultlines (e.g., Sawyer, Houlette, & Yealey, 2006; Lau & Murnighan 2005) and no one to our knowledge has studied how group divisions may influence employee health and well-being. We thus develop a new approach that integrates concepts and theories from multiple disciplines and considers data at multiple levels to address the complexity of health related issues in which group faultlines may play a significant role.

Theory and Hypotheses

Faultlines are defined as hypothetical dividing lines that split a group into relatively homogeneous subgroups based on the group members' demographic alignment along multiple attributes (Lau & Murnighan 1998). As strong faultline subgroups develop across a divide, they create a separate independent source of influence, different from a larger group. For instance, differences across faultline subgroups may trigger behavioral disintegration (Li & Hambrick, 2005), whereas similarities across members within faultline subgroups may reinforce social support (Phillips, 2003). This dual influence (group and subgroup) may find its manifestation in how we think about faultlines; while groups with faultlines may suffer from divisive processes (Lau & Murnighan, 1998; Li & Hambrick, 2005), members of faultline subgroups may personally benefit from a supportive subgroup environment (Nishii & Goncalo, 2008). We thus extend prior research on faultlines by theorizing about how subgroup dynamics (often thought as detrimental for a group, Lau & Murnighan, 1998) can benefit individual members. We next integrate group faultline theory and psychological health literature with justice theory to propose our theoretical model.

Early justice research noted the potentially unhealthy outcomes that would likely be associated with inequity (Adams, 1963). That is, outcomes that resulted in inequitable distributions would likely cause feelings of dissonance and conflict within the individuals involved in the exchange. This conflict would likely create feelings of stress and discomfort (Judge & Colquitt, 2004), and ultimately cause anxiety and depression (Davidson & Friedman, 1998; Tepper, 2001). We focus on these variables due to their common representation as measures of employee psychological health (Elovainio, Kivimaki, & Vahtera, 2002; Tepper, 2001). Anxiety is defined as employee feelings of nervousness and fear (Tepper, 2001) that are

accompanied by anxiousness, worry, and/or tension, with an inability to relax and feel comfortable. Depression is defined as employee feelings of dread, sadness, and despair (Tepper, 2001). Depression is indicated through such feelings as gloom and despair, and a general lack of enthusiasm and optimism.

In our conceptual model, we argue that people may feel less anxious and depressed as they respond to distributive unfairness in groups with strong faultlines. Research suggests that aversive stimuli are less stressful when individuals have greater control and certainty or a belief that they can escape from, avoid, or mitigate the impact of the stimuli – whether or not they actually have an opportunity to do so (Tepper, 2001). Because cooperative processes are likely to emerge within faultline subgroups (Hart & Van Vugt, 2006; Sawyer et al., 2006), crucial knowledge and competences will be shared within subgroups of like-minded people. These subgroups may operate as networks in providing self-help, reducing interpersonal biases, stereotyping and discrimination, and facilitating communication (Lau & Murnighan, 2005). For instance, members within respective faultline subgroups may collectively evaluate, codify, and interpret implications of distributive injustice at work in a more rational and constructive way. This shared information within a faultline subgroup can be viewed as an extended situational resource that may further increase confidence and one's self-efficacy (Gibson & Vermeulen, 2003). Self-efficacy is an individual's belief in his or her capability to organize and execute the course of action required to produce given attainments (Bandura, 1997: 3). When employees in groups with faultlines have strong self-efficacy beliefs, they feel good about themselves, are more motivated and are not afraid of threatening work conditions. Self-efficacy beliefs are typically associated with feelings of self-worth, self-respect, and self-acceptance – all help to

buffer stress and are positively associated with psychological well-being (Matt, Bellardita, Fischer, & Silverman, 2006).

Hypothesis 1: Faultlines will moderate the relationship between distributive injustice and psychological health outcomes; this relationship will be weaker when faultlines are stronger.

Eisenberger and colleagues (1986, 1990) has found that employees tend to personify their organization and presumably an employees' direct supervisor would typically represent a primary "face" of their organization. Part of this personification includes an attitude about the extent to which their organization, and by extension their supervisor, cares about their well-being. While it may be difficult to distinguish between perceived support directly from supervisors and the organization in all cases, it seems likely that employees perceiving their supervisor as unsupportive would experience more psychological strain related to their job. For example, they would be more anxious about getting things done on time, being unfairly disciplined, getting time off when needed, and so forth if they feel their supervisor does not support and "look out" for their needs. Likewise, employees would be more likely to express attitudes of hopelessness and despair in relation to their work if they think they have a supervisor who, for instance would not "go to bat for them" if they were behind schedule or having a problem with a co-worker. When that happens, group members often turn to their workgroups for support and develop relationships and perceptions regarding the supporting nature of their workgroup against their supervisor (Self, Holt, & Schaninger, 2005).

We further argue that the relationship between interactional injustice and psychological anxiety and depression will be weaker for members in groups with strong faultlines. A non-supportive supervisor who, for example, withholds information about the job, work procedures,

or other aspects of the organization would be more likely to be a source of anxiety to group members. Yet, if there are faultlines, then group members may be less likely to look to the supervisor for support since they can obtain it from their fellow subgroup members. While it is possible that group members may look to peers in other groups, higher level supervisors, or elsewhere, it seems likely that the first place they might look for support would be their own group members. It has been often assumed that naturally occurring demographic categories that align within a group create common subgroup identities (Brewer, 2000). This identity is a critical determinant of the dynamics of social support; it helps to buffer groups from adverse organizational exigencies and serves as a basis for the receipt of effective support from ingroup members (Haslam & Reicher, 2006). Social support is information that leads a person to believe that she is cared for, esteemed and valued and belongs to a network of communication and mutual obligation (Cobb, 1976). As one way to cope with a perceived lack of interactional justice, members of groups with faultlines can always retreat back to their faultline subgroup to assure their actions are backed up or at least protect their ego (Earley & Mosakowski, 2000). Such support has further been shown to have a positive impact on individuals' health and well-being (Haslam, O'Brien, Jetten, Vormedal, & Penna, 2005).

Hypothesis 2: Faultlines will moderate the relationship between interactional injustice and psychological health outcomes; this relationship will be weaker when faultlines are stronger.

Method

Sample

We used a sampling procedure similar to the data collection of Liao (2007) and Tepper (1995). Eighty one students enrolled in two night human resources management classes in a large northeastern university collected the data as part of the course requirement. The students

received training on survey administration and were given a self-addressed, postpaid envelope with each questionnaire. They distributed questionnaires to each employee within their work group at their place of employment and instructed participants that each respondent was to return the questionnaires individually in their sealed envelope via mail. Students were told to consider a "work group" as a collection of employees, including themselves, who are interdependent in their tasks, who share responsibility for work outcomes, and who are seen by themselves and others as a social entity. Students who could not fulfill this requirement (i.e., were not employed, or were not part of a work group) were given alternative options for earning the extra credit points. The night student classes, however, tend to have many students working full time, so this did not prove to be problematic, as 72 of 81 students participated in the project. Altogether, the students distributed 720 questionnaires and collected 677 completed surveys; hence the response rate was 94 percent.

The questionnaire asked about respondents' assessment of fair distribution of rewards, their direct supervisor, demographic and mental health information. The average group size was nine members and less than ten percent of all groups had fewer than seven members. For the sample, 57.5 percent of the respondents were female. High school was the highest education level attained for 30.9 percent of respondents, with 29.4 percent having two years of college and 26.6 having a four-year degree. Respondents had been employed in their jobs an average of 4.8 years. All the major industrial groups were represented in the sample, with 21 percent of the work groups working in the retail or wholesale trade industry. Seven percent were in manufacturing, with the rest being hospitals, real estate, insurance, and transportation.

Measures

Faultlines. We adopted the faultline algorithm developed by Thatcher et al (2003) and used in faultline research by others (e.g., Lau & Murnighan, 2005) to measure faultlines in this study. The development of this algorithm was motivated by Lau and Murnighan's (1998) original faultline theory suggesting that the alignment of multiple demographic attributes can potentially subdivide a group. This faultline measure takes into account cumulative proportions of variance across demographic variables; this makes it different from a simple aggregate measure in that it estimates how well the variability within the group can be explained by the presence of different clusters within the group (for more details see Thatcher at al., 2003). We measured the *strength* of faultline splits using a multivariate measure of group similarities over several variables taken from the statistical cluster analysis literature (Jobson 1992, p.549). This statistic measures the degree of alignment or correlation of attributes within the resulting subgroups. More technically, this is accomplished by calculating the ratio of the between group sum of squares to the total sum of squares.

Calculating *Fau* can be viewed as a two-step process. The first step is to calculate:

$$Fau_g = \left(\frac{\sum_{j=1}^{p} \sum_{k=1}^{2} n_k^g \left(\bar{x}_{\bullet jk} - \bar{x}_{\bullet j\bullet} \right)^2}{\sum_{j=1}^{p} \sum_{k=1}^{2} \sum_{i=1}^{n_k^g} \left(x_{ijk} - \bar{x}_{\bullet j\bullet} \right)^2} \right) \qquad g = 1, 2, \ldots S,$$

where x_{ijk} is the value of the j^{th} characteristic of the i^{th} member of subgroup *k*, $\bar{x}_{\bullet j\bullet}$, is the overall group mean of characteristic *j*, $\bar{x}_{\bullet jk}$ is the mean of characteristic *j* in subgroup *k*, and n_k^g is the number of members of the k^{th} subgroup (*k*=1,2) under split *g*. The second step is to calculate the maximum value of Fau_g over all possible splits *g*=1,2,…S (or, to avoid splits involving a subgroups consisting of a single member, we can maximize over all splits where

each subgroup contains at least two members). We measured group faultlines along four characteristics (level of education, gender, tenure with the company, and age). These demographic variables were chosen based on previous research on group diversity (Tsui, Egan, & O'Reilly, 1992). Faultline strength can take on values between 0 and 1 with larger values indicating greater strength. Possible values of faultline strength ranged from .36 (weak faultlines) to .99 (very strong faultlines) in our dataset (see Table 1 for examples of groups with strong and weak faultlines).

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***Depression and anxiety*.** We measured depression and anxiety using the scale from Axtell et al. (2002). This is a shortened version of Warr's (1990) anxiety-contentment and depression-enthusiasm scales. The scales were developed to assess anxiety as low pleasure and high mental arousal, whereas depression can be thought of as exhibiting low levels of pleasure and arousal (Warr, 1996). Previous research has illustrated the distinction between anxiety and depression through demonstrating differential relationships with other study variables that reflect the expected arousal and pleasure dimensions (Warr, 1990). Respondents were presented with 12 adjectives (six each for depression and anxiety) and were asked: "Thinking of the past few weeks, how much of the time has your own job made you feel each of the following?" Sample items (for anxiety-contentment) were relaxed (reverse coded) and tense. Sample items for depression-enthusiasm were gloomy and enthusiastic (reverse coded). Responses were captured on a 5-point scale ranging from 'never' to 'all the time.' For each scale, three of the items were reverse coded so that a higher number indicated increased depression or anxiety. The depression scale had a reliability estimate (Cronbach's alpha) of .84, and the anxiety scale had a reliability estimate of .83.

Distributive Justice. Similar to Reb, Goldman, Kray, & Cropanzano (2006), we reverse coded the justice scores for purposes of our analysis so that a high score on any of the scales indicates high injustice. In our operationalization of injustice, we focused on distributive injustice as being a primary "stressor" and more fundamental to employee needs (Tepper, 2000, 2001). While various justice dimensions (e.g., procedural) have been discussed in the literature, perceptions of distributive injustice related to inequitable pay raises or unfair distributions of workload has been shown to be most predictive of employee psychological health outcomes (Tepper, 2000, 2001). Distributive injustice conveys information about the extent to which events have implications for employees' well-being and influences personally relevant outcomes (Paterson & Cary, 2002; Tepper, 2001). Distributive injustice was measured using four items adapted from Colquitt (2001) (Cronbach's alpha = .94). Sample items were: "Does your compensation reflect the effort you have put into your work?" "Does your compensation reflect what you have contributed to the organization?" Responses ranged from a 1 indicating a low level of injustice to 7 indicating a high level of felt injustice.

Interactional injustice. Interactional injustice can be connected to the level of respect employees feel from their supervisor and the extent they feel they are kept informed. For example, employees may experience anxiety or depression stemming from a feeling of being poorly informed about their job security or being unfairly treated. Interactional justice has been conceptualized as comprising two dimensions, interpersonal and informational (Colquitt, 2001). We used the interpersonal dimension in this study expecting that it would be most closely related to the dependent variables. Stecher and Rosse (2005) found that interpersonal treatment was significantly related to emotional reactions and more specifically, to negative emotional arousal. In our operationalization of interpersonal injustice, we adopted Colquitt's (2001) four-item scale

(Cronbach's alpha = .94). A sample item included: “Has (he/she) treated you with respect?” Responses ranged from a 1 indicating a low level of injustice to 7 indicating a high level of felt injustice.

Controls. Since job control defined as the extent of authority to make decisions concerning the job (Karasek,1979), has been found to be associated with mood and physical health (Bosma, Marmot, Hemingway, Micholson, Brunner, & Stansfeld, 1997; Teuchmann, Totterdell, & Parker, 1999), we controlled for individual job control. We also controlled for group size as it has been shown to be of great importance for group processes and outcomes (Goodman, Ravlin, & Argote, 1986). To control for diversity effects, we used Blau’s (1977) heterogeneity index to measure group heterogeneity for gender, calculated as $H = - \Sigma P_i^2$, where P represents the fractional share of team members assigned to a particular grouping within a given characteristic and i is the number of different categories represented on a team. We used the coefficient of variation to measure group diversity for continuous variables (e.g., age) (Allison 1978). These demographic characteristics were chosen based on previous diversity research (Williams & O’Reilly 1998) and their respective match with our faultline variable. Following the procedure suggested by Jehn and colleagues (1999) and widely used in recent diversity research (e.g., Polzer, Milton, & Swann 2002), we averaged our heterogeneity variables to arrive at our overall group heterogeneity control variable.

Results

Since we have identified the factor structure of our variables from previous research, to test the underlying structure of our proposed model we used confirmatory factor analysis (Fabrigar, Wegener, MacCallum, & Strahan, 1999). We ran confirmatory factor analysis for each set of focal constructs reported by employees (i.e., job control, two injustice variables, anxiety

and depression). To assess the convergent and discriminant validity of the focal constructs, we estimated a five-factor confirmatory measurement model. All five constructs were latent variables. Each questionnaire item loaded only on its latent construct (or first order factor). The overall model provides a satisfactory fit to the data (*Chi-Square* = 877.21, $p < 0.001$, *d.f.* = 289; adjusted goodness-of-fit index = 0.98; confirmatory fit index = 0.98; incremental fit index = 0.96; and root mean square error of approximation = 0.05), indicating the unidimensionality of the measures (Anderson & Gerbing, 1988). Additionally, all factor loadings were highly significant ($p < 0.001$), and the composite reliabilities of all constructs exceeded the usual benchmark of 0.60 (Bagozzi & Yi, 1988). Thus, the measures demonstrate adequate convergent validity and reliability**.**

Table 1 displays means, standard deviations, and correlations among all variables. Distributive and interactional injustice measures were significantly and negatively related to depression and anxiety at both levels, individual and group. We examined the relationships between injustice, faultlines, and mental health outcomes further using hierarchical linear modeling (HLM)[1]. Each HLM analysis was conducted in a hierarchical fashion that included four steps (Bryk & Raudenbush, 1992; Hofmann, Griffin, & Gavin, 2000). In the first step, we estimated the null or baseline model and found significant level 2 variance ($p < .001$) in our dependent variables confirming the appropriateness of testing the cross-level relationships. We then added our control variables (job control, group size, and heterogeneity variable) in step 2 and distributive injustice (or interactional) and faultline main effects in step 3. Finally, we performed a series of slopes-as-outcome regression models to test for significance of cross-level interaction models. Mean-centering of the interaction terms was done as recommended by Aiken and West (1991) to address multi-collinearity.

[1] All variables are grand mean centered.

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Table 3 presents the HLM analyses testing the moderated effects of faultlines on the injustice – psychological health link. Hypothesis 1, predicting that faultlines will moderate the relationship between distributive injustice and health outcomes, was fully supported. Faultlines moderated the effects of distributive injustice on both anxiety and depression ($\hat{y}$ = -1.61, $p < .05$ and $\hat{y}$ = -.92, $p < .05$, respectively). We also calculated the pseudo-R^2 for the level 2 slope as outcome model that reflects what percentage of slope variance is explained by the cross-level interaction term. Comparing the residual variance of the current model with a model that did not contain the cross-level interaction term, we found that faultlines explained 8.2% of the variance in anxiety and 8.3% of the variance in depression above and beyond control variables and main effects.

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Hypothesis 2 predicted that faultlines will moderate the relationship between interactional injustice and psychological health outcomes. In full support of H2, faultlines moderated the effects of interactional injustice on both anxiety ($\hat{y}$ = -2.06, $p < .01$) and depression ($\hat{y}$ = -1.90, $p < .01$) with the effect sizes of 5.3% and 8.6% respectively. Graphing the relationship reflected that the link between interactional injustice and psychological health outcomes became weaker when faultlines were stronger (see Figure 1).

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Discussion

Up until now justice researchers have primarily focused on work performance, organization citizenship behavior, withdrawal behavior, and attitudinal reactions to justice (for review see Cohen-Charash & Spector, 2001). Less understood, however, is how employee

psychological health is influenced by perceptions of injustice. Our results support the notion that both distributive and interactional injustice may be thought as threatening stimuli and primary stressors that trigger stress reactions such as anxiety and depression (Greenberg, 2006; Jones-Johnson & Johnson, 1992).

In this study, we further advance our knowledge of these processes by demonstrating empirically that these responses can be attenuated dramatically among members of groups with faultlines. Our findings indicate that the relationship between *distributive injustice* and psychological health outcomes was weaker in groups with strong faultlines than in those without such divisions. One can envision that faultlines in groups with a high sense of distributive injustice may lead to the increase of mutual helping behaviors and less conflict within a faultline subgroup. For instance, fellow subgroup members may "lend an ear" to expressions of concern, boost confidence, and help make an employee feel better about the feelings of distributive injustice that he/she suffers (e.g., Colquitt & Greenberg, 2003; Greenberg, 2006). In addition, they can also add to an individual's feelings of self-efficacy and beliefs that he/she can successfully reduce or entirely avoid threatening stimuli. Thus, faultlines may function as a boundary condition of employee health-related reactions to organizational distribution of resources. We, therefore, extend the diversity and psychological health literature by showing how group faultlines operate as reactive mechanisms that ameliorate the negative effects of distributive injustice in diverse organizational groups. However, future research should consider process variables (e.g., subgroup help, role conflict, self-efficacy, etc.) that might be responsible for the positive effects of faultlines.

We also found that faultlines moderated the relationship between *interactional injustice* (e.g., supervisors were unsupportive) and psychological health; this relationship became weaker

when faultlines were stronger. Based on these findings, we can speculate that these effects are likely to happen in the presence of social support (e.g., Shaw, Fields, Thacker, & Fisher, 1993). For instance, in the absence of strong supervisor support, subgroups that are predictable from demographic categories may provide emotional and instrumental resources to their members. Consistent with Lazarus' (1999) cognitive appraisal theory of stress, fellow members of a faultline subgroup may offer information that may be helpful in assessing the magnitude of harmful stimuli. One example of such instrumental support is that they can explain to their fellow subgroup member that others were treated in similar fashion. In interdependent groups and even more within a faultline subgroup, it is reasonable to expect that fellow subgroup members have considerable influence and are well suited to attenuate stress. One can envision that informational and emotional support that members of groups with faultlines receive from their fellow subgroup members will be well attended and may help them to effectively cope with conflict and stress. For instance, this effect may be similar to that documented in counseling and therapeutic practice (Brownlie, 2004). A major aspect of a counselor's work is talking with clients and responding to their descriptions of their troubles in an effort to improve mental health. Miller and Silver (1995) called this process troubles talk which may as well likely to happen within faultline subgroups.

The most important implication of this research is that group composition matters in determining employees' reactions to injustice. Our findings suggest that beyond individual injustice perceptions, the employees' context in the form of co-worker characteristics and group level structure is important in influencing psychological health at work. In this manner, these findings contribute to bridging the literatures on organizational justice, group faultlines, and psychological health and better understanding of potentially available coping mechanisms in the

workplace. We focused on group faultlines which are traditionally thought to be destructive for a group and its members, yet as we show, can also be highly useful in coping with workplace conflict and stressful job conditions. Our study demonstrates that the examination of faultlines, as a potentially important social factor influencing intra-group dynamics, may add to our understanding of some boundary conditions of employee psychological well being. In showing how faultlines can have positive effects, at least with respect to individual psychological well-being, we begin to answer why there have been conflicting results in the past research ascribing positive and negative effects for faultlines.

Study Limitations and Future Directions

Like most survey based studies, our study has some method based limitations. One potential concern is that our results could be confounded due to common method variance. Following Price, Harrison and Gavin (2006), this was unlikely to be the case in the present study given the different variable constructions. For instance, our faultlines measure constructed from demographics based on clustering analysis decreases our dependency on single-respondent impressions (for a similar discussion see Ambrose & Schminke, 2003). The dependent variables also included internal phenomena that are assumed to arise within the mind, hence self-reports maybe the only way to measure such constructs (Self et al., 2005; Rothbard, Phillips, & Dumas, 2005). For instance, reports of subjective states cannot be wrong because individuals are, by definition, the only judges of what constitutes mental health for themselves (Angel & Gronfein, 1988). Moreover, common method variance tends to reduce the likelihood of detecting interaction effects (cf. Wall, Jackson, Mullarkey, & Parker, 1996), so that the observed significant interactions can be considered as meaningful support for our model. Furthermore, while our interaction terms accounted for a small percentage of the variance in both anxiety and

depression, they were higher than those in a similar research in the justice domain (Tepper, Duffy, Henle, & Lambert, 2006; Tepper & Taylor, 2003). This problem is not uncommon in field research; in fact Evans (1985) argued that interactions explaining as little as 1 percent of the variance should be considered important.

Although the results should move forward the study of employee psychological health, it is also apparent that there is still much to learn. Diversity research has largely focused on the performance aspect of workgroups, while psychological health outcomes have been largely underemphasized. While the theory of faultlines has been gaining popularity in diversity literature, not much empirical research has been done within the psychological health framework. As organizations strive to utilize the potential of diverse groups, create a healthy work environment and manage employee distress in a most optimal way, more research on psychological health in diverse groups is needed. For instance, one research possibility is to extend the study of faultlines to understand how faultlines may trigger anxiety and depression in organizational groups to explain the loss of productivity, increased absenteeism and turnover due to mental illness. Another avenue of research is to look at other health-related outcomes such as alcohol and drug abuse and examine how demographic alignments in a group affect minority-majority relationships, what processes (e.g., stigma, prejudice) arise from faultlines and how these processes may influence alcohol and drug abuse.

Managerial Implications

Our findings demonstrate the implications of group composition in management action for employee perceptions of organizational injustice. It is apparent that demographic characteristics of a work group can ameliorate the negative effects of perceived injustice on employee psychological health. Managers, as they develop stress management training

programs, may focus on faultlines as one of the coping resources. The evidence suggesting that faultlines have compensatory effects suggests that even among those who receive unfavorable outcomes, group alignments give employees resources they need to cope effectively. These findings also have implications for organizational interventions like groups for women managers, clubs and associations for minority professionals and similar affinity groups. In fact, much of the rationale for such groups is it gives members the opportunity to interact with others with common backgrounds and interests. From a more general perspective, as organizations restructure work they should recognize the value of groups with faultlines. This may help them apply HRM-related practices involving downsizing and layoffs but without many disturbing effects on employee psychological well-being.

Conclusion

The purpose of this study was to advance the group diversity literature by examining the relationship between group faultlines, organizational injustice and employee psychological health. While research on faultlines has contributed to the diversity literature by theorizing about and empirically examining the effects of group faultlines on group processes and performance outcomes (Lau & Murnighan, 2005; Li & Hambrick, 2005), there has been little research done within the context of psychological health. For example, studies have investigated the effects of faultlines on group performance (e.g., Dyke & Starke 1999; Phillips, Mannix, Neale, & Gruenfeld, 2004), conflict (Li & Hambrick, 2005), learning behavior, and satisfaction (Gibson & Vermeulen 2003; Lau & Murnighan, 2005). While faultlines have been often seen as a negative force that splits a group and threatens its entity (e.g., Lau & Murnighan, 1998; Thatcher, Jehn, & Zanutto, 2003), we theorized about and found empirical support for the notion that in some instances, faultlines can be beneficial in creating a supportive environment.

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Table 1

Examples of Groups with Strong and Weak Faultlines

Group #	**Member A**	**Member B**	**Member C**	**Member D**	**L&M classification**	**Fau**
1	College degree Male 25y.o. 2y.tenure	College degree Male 25y.o. 2y.tenure	College degree Male 25y.o. 2y.tenure	College degree Male 25y.o. 2y.tenure	None	0
2	College degree Male 50 12y.tenure	College degree Female 31 2y.tenure	High School Male 55 2y.tenure	High School Female 35 12y.tenure	Medium (2 align, 1 way; 1 align, 2 ways)	0.50
3	Associate degree Male 60 12y.tenure	High School Female 30 2y.tenure	Associate degree Female 58 12y.tenure	College degree Male 35 2y.tenure	Strong (3 align, 1 way; 2 align, 1 way)	0.65
4	College degree Male 50 12y.tenure	College degree Male 55 12y.tenure	High School Female 31 2y.tenure	High School Female 35 2y.tenure	Very Strong (4 align, 1 way)	1.0

Table 2.

Means, Standard Deviations, and Zero-Order Correlations Among Variables.

Correlations	*Mean (N = 677)*	*S.D. (N = 677)*	*Mean (N = 72)*	*S.D (N = 72)*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1. Group Size	10.180	1.934	9.724	2.134		.012	.029	-.202	-.046	.323*	-.079	-.254
2. Heterogeneity	.539	.105	.539	.109	-.001		-.115	-.332*	.034	-.255	.077	-.115
3. Job Control	20.733	4.333	20.722	1.789	-.007	-.034		-.170	-.478**	.066	-.435**	-.437**
4. Distributive Injustice	3.857	1.680	3.828	.753	-.033	-.122**	-.331**		.513**	.068	.413**	.463**
5. Interactional Injustice	5.041	1.443	5.038	.590	.023	.041	-.397**	.499**		.030	.372**	.527**
6. Faultlines	.799	.168	.788	.179	.282**	-.254**	.028	.041	.007		-.102	-.187
7. Anxiety	15.474	4.720	15.518	2.291	-.028	.040	-.289**	.276**	.353**	-.058		.635**
8. Depression	15.058	3.741	15.146	1.684	-.071	-.037	-.326**	.385**	.415**	-.080	.596**	

Note. Individual level correlations are reported in the lower triangle.
Group level correlations are reported in the upper triangle.
*$p < .05$; ** $p < .01$

Table 3.

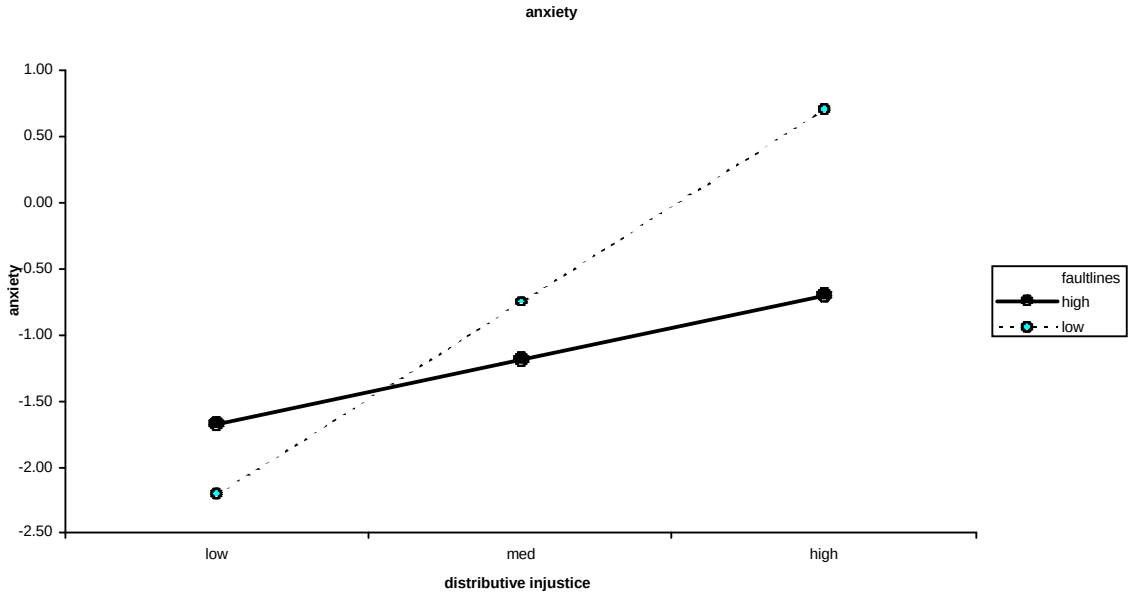
HLM Results

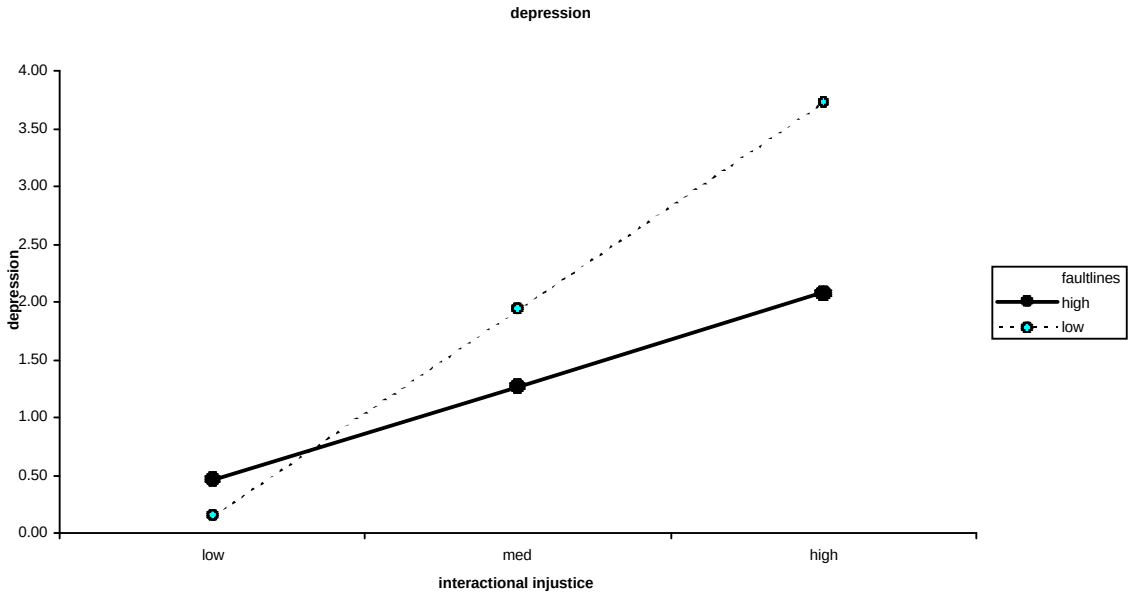
Model & Variable	Anxiety					Depression				
	Model 1 (controls)	Model 2 (m.e.)	Model 2 (m.e.)	Model 3 (H1)	Model 3 (H2)	Model 1 (controls)	Model 2 (m.e.)	Model 2 (m.e.)	Model 3 (H1)	Model 3 (H2)
Intercept	-.640	-.934	-.120	-.967	.026	.910	.593	1.477†	.575	1.610†
Control Variables										
Job Control	-.283***	-.210***	-.168**	-.209***	-.169**	-.270***	-.181***	-.154***	-.181***	-.155***
Group Size	-.085	-.037	-.072	-.022	-.077	-.162†	-.098	-.146†	-.089	-.149†
Heterogeneity	1.237	1.845	.261	1.936	-.004	-1.664	-1.003	-2.667	-.851	-2.905†
Main Effects										
Distributive Injustice (DistINJ)		.543***		.579***			.688***		.708***	
Interactional Injustice (IntINJ)			.923***		.929***			.898***		.901***
Faultlines (Fau)		-1.156	-1.161	-1.225	-1.276		-1.871†	-1.755†	-1.912†	-1.855†
Interactions										
Fau x DistJ				-1.608*					-.915*	
Fau x IntJ					-2.064**					-1.901**
τ_{00} (Group variance)	2.583***	2.147***	2.491***	1.972***	2.358***	.828**	.624**	.581**	.572**	.531***
σ^2 (Residual variance)	18.246	17.810	16.562	17.722	16.391	11.771	10.791	10.496	10.778	10.328
Deviance[a]	3205.936	3166.307	3133.188	3161.252	3125.839	2937.586	2867.628	2851.524	2865.751	2841.616

Note. † $p < .1$; *$p < .05$; **$p < .01$; ***$p < .001$. [a]Deviance is a measure of model fit; the smaller the model deviance, the better the fit. Deviance equals to – 2 x log-likelihood of maximum – likelihood estimate.

Figure 1.

Interactions: The Moderated Effects of Faultlines[2]





[2] Low and high values represent one standard deviation below the mean and one standard deviation above the mean. Analysis is based on centered values (c.f. Aiken & West, 1991). The shape of interaction effects for other significant interactions is similar to the shape of interaction effect presented above.