Organizational justice and mental health: A multi-level test of justice interactions

Ronald Fischer1, Amina Abubakar2,3, and Josephine Nyaboke Arasa4

1Centre for Applied Cross-Cultural Research, Victoria University of Wellington, Wellington, New Zealand
2Department of Cross-Cultural Psychology, Tilburg University, Tilburg, The Netherlands
3Department of Child and Adolescent Studies, Utrecht University, Utrecht, The Netherlands
4Department of Psychology, United States International University (USIU), Nairobi, Kenya

We examine main and interaction effects of organizational justice at the individual and the organizational levels on general health in a Kenyan sample. We theoretically differentiate between two different interaction patterns of justice effects: buffering mechanisms based on trust versus intensifying explanations of justice interactions that involve psychological contract violations. Using a two-level hierarchical linear model with responses from 427 employees in 29 organizations, only interpersonal justice at level 1 demonstrated a significant main effect. Interactions between distributive and interpersonal justice at both the individual and the collective levels were found. The intensifying hypothesis was supported: the relationship between distributive justice and mental health problems was strongest when interpersonal justice was high. This contrasts with buffering patterns described in Western samples. We argue that justice interaction patterns shift depending on the economic conditions and sociocultural characteristics of employees studied.

Keywords: Organizational justice; Mental health; Buffering hypothesis; Intensifying hypothesis; Justice climate; Africa.

Employee mental health is of great importance for employees, the organization and larger society as failure to ensure good health and well-being is expensive for both individuals and society. It is important to identify variables that influence mental health and can be controlled by organizational decision makers. Organizations that use fair procedures, treat employees with respect and dignity and use fair compensation have healthier staff (e.g., Elovainio, Kivimäki, & Vahtera, 2002; Spell & Arnold, 2007). To date, much research has focused on the main effects of justice on health. We focus on the interaction between justice dimensions on health and theoretically differentiate between two different interaction patterns associated with buffering versus intensifying mechanisms. These patterns have often been confused in the literature and we provide an explicit theoretical differentiation.

Furthermore, scholars have focused primarily on individual perceptions while paying less attention to the social context (Marklund, Bolin, & von Essen, 2008; Restubog, Scott, & Zagenczyk, 2011). This theoretical and methodological individualism in psychological research has been challenged by recent research demonstrating that collective perceptions or justice climate are important for understanding justice effects more holistically (Colquitt, Noe, & Jackson, 2002; Liao & Rupp, 2005; Spell & Arnold, 2007). Justice perceptions are shared with others and individuals are likely to calibrate their justice experiences through social comparisons. Therefore, we examine both individual and collective perceptions of justice on mental health and provide the first test of the relative importance of interactions at individual and organizational levels on overall general health.

Finally, the majority of published research has focused on Western organizations, with a few published studies being conducted in Asian contexts (e.g., Tam & Mong, 2005) and no study conducted in any African setting (for reviews, see Fischer, 2013; Fischer & Smith, 2003). African societies are characterized by strong collectivistic and traditional cultural beliefs and a more adverse economic climate, which contrasts with the more secular
and individualistic beliefs in economically advanced Western societies (Hofstede, 2001). Fischer (2013) demonstrated that general justice effects are affected by both collectivistic values and economic inequality. Therefore, this study examining Kenyan employees as an example of a highly collectivistic, low income and unequal context fills an important gap in the literature on justice and mental health. We argue that the context is likely to change the interaction patterns between the justice variables described above.

Organizational justice

The three major types of justice are distributive (outcome fairness), procedural (perceptions of process leading to decisions) and interpersonal justice (how decisions are enacted) (see Colquitt, Conlon, Wesson, Porter, & Ng, 2001). People are concerned about justice as it provides important information about security and belonging (Fischer, 2013). If perceptions of distributive, procedural or interpersonal justice are violated, people feel insecure about material and non-material resources as well as lack of inclusion in trusted group membership (Colquitt et al., 2002; Tyler & Lind, 1992). Insecurity about rewards and exclusion from social relationships are potent stressors that lead to increased stress and burnout (Maslach, Schaufeli, & Leiter, 2001). Not surprisingly, all three justice variables show significant negative correlations with various mental health variables (e.g., Ellovainio, Kivimäki, Steen, & Vahtera, 2004; Spell & Arnold, 2007), with all three dimensions showing similar correlations with overall well-being (Ferreira, Assmar, & Fischer, 2007). Therefore, we predict that higher perceptions of justice are associated with less mental health problems (Hypothesis 1). This hypothesis is a replication of past research in a novel context.

Hypothesis 1: Higher levels of distributive, procedural and interpersonal justice are associated with less mental health problems.

Interactions between distributive justice on one hand and both procedural and interpersonal justice on various outcomes have been noted (Brockner & Wiesenfeld, 1996). For performance outcomes, these interactions are often explained in terms of trust (Brockner, Siegel, Daly, Martin, & Tyler, 1997). High procedural justice indicates that individuals can trust the organization, which means that experienced distributive injustice does not reduce performance. Only the combination of low distributive justice and low procedural or interpersonal justice reduce work performance. Explaining the same pattern with health as outcome, Tepper (2001) argued that low distributive justice constitutes a loss that leads to an appraisal of coping resources. High procedural justice indicates that employees have access to coping resources that can mitigate the threat and therefore they do not report negative well-being, whereas low procedural justice does lead to stress and negative well-being due to a lack of coping resources (implicated in the lack of procedural justice). Support for this pattern has been reported in studies of US samples (Greenberg, 2006; Spell & Arnold, 2007; Tepper, 2001). In this line of argument, distributive injustice serves as a stressor and both high interpersonal and high procedural justice act as buffers.

A different pattern can be predicted based on psychological contract theory (Rousseau & Parks, 1992). Individuals are thought to establish implicit social contracts with their employers (Rousseau & Parks, 1992). If organizations honour these psychological contracts, individuals will have high quality social exchange relationships. On the other hand, if the organization is perceived as violating these contracts by behaving in unfair ways, then people will react more negatively. Information on procedural and informational justice is often easier to obtain than information about distributive justice because information on pay and compensations are often not readily available (Lind, Kray, & Thompson, 2001; Lind, 2001). Hence, if people have developed a sense of high procedural and interpersonal fairness and are then later confronted with low distributive justice information, this will lead to a perceived contract breach. On the basis of this intensifying hypothesis (Bal, Ciaburu, & Jansen, 2010), perceived distributive injustice will have more negative effects if either procedural or interpersonal justice are high because it indicates a breach of contract. Applying this logic to mental health, we could argue that when individuals have low levels of interpersonal and procedural justice, they have not established high quality social exchange relationships with their employer and feel generally stressed (due to higher insecurity and lack of belonging). Experiencing an episode of distributive injustice will not strongly influence these individuals over and above the already low levels of mental health. In contrast, individuals with high levels of procedural or interpersonal justice have developed high quality relationships with their employers and therefore have higher levels of mental health (as they are not concerned about exclusion and insecurity). Experiencing unfair outcomes (distributive injustice) signifies a contract breach and will result in more negative reactions because of being a significant and unexpected stressor. Some evidence of these intensifying relationships has been discussed in relation to commitment and work performance (Bal et al., 2010). This study provides the first explicit test of this pattern in relation to justice and mental health. The two contrasting patterns are shown in Figure 1.

The buffer hypothesis seems more commonly supported in Western research. However, in non-Western contexts, employees may form closer emotional and social relationships with their employers. Similarly, there is a high level of poverty and income is important for meeting
day-to-day survival. Kenya is one of the poorest countries in the world with an average per capita income of $780 per year (worldbank.org, last accessed 9/08/2012). Therefore, a contract breach is potentially more stressful in these more collectivistic and resource constrained contexts. We explicitly consider and differentiate both theoretical interaction patterns, but believe that Hypothesis 2b predicting an intensifying pattern is more likely in the current Kenyan sample.

Hypothesis 2a: Procedural and interpersonal justice will moderate the relationship between distributive justice and mental health problems. Effects of distributive justice on mental health problems will be strongest and negative, if procedural and interpersonal justice is low (Buffering Hypothesis).

Hypothesis 2b: Procedural and interpersonal justice will moderate the relationship between distributive justice and mental health problems. Effects of distributive justice on mental health problems will be strongest and negative, if procedural and interpersonal justice is high (Intensifying Hypothesis).

Justice climate

Past psychological research has suffered from theoretical and methodological individualism, focusing on the individual as the prime object of study (Hofstede, 2001). The research on justice was no exception. Findings of relatively weak main effects of justice climate beyond main effects of individual level justice dimensions in European and North American samples (Elovainio et al., 2004; Spell & Arnold, 2007) seem to support this focus on the individual and relative neglect of collective phenomena. Yet, when focusing on the majority of the world population living in non-Western societies, the locus of agency is often shifted from the individual to the collective and it becomes imperative to examine justice effects at both the individual and the group level. Context effects are likely to be stronger in non-Western samples because of the greater sensitivity to the social context and group influences in settings characterised by more collectivistic and traditional individual–group relations (Fischer, 2008). Hence, the relative absence of climate effects in previous research in Western settings may have been a result of the specific cultural characteristics of the samples studied.

Furthermore, climate dimensions may also interact. Spell and Arnold (2007) argued that buffering effects operate for justice climate. Higher levels of experienced distributive injustice should lead to greater concerns about available coping resources among employees, sensitizing individuals to available levels of support and coping resources. If levels of procedural and interpersonal justice are simultaneously low, then mental health should be strongly negatively affected. On the other hand, if supervisors provide information and support and organizational procedures are fair, negative effects of low distributive justice can be compensated and there should be weak to no effects on well-being. Hence, a buffering hypothesis may be plausible.

Alternatively, we may also encounter intensifying effects. Procedural and interpersonal justice are often easier to verify and available earlier compared to information about distributions (e.g., Lind et al., 2001). On the basis of these observations, organizations can often readily be characterised to the extent to which supervisors are seen as acting fair and applying formal procedures consistently. Information on distributions on the other hand may often not be available. When information on distributive injustice becomes available, it is likely to spread through social contagion processes (Levy & Nail, 1993) as this provides distinct new information. The availability of negative distributive information becomes a salient threat and constitutes a significant stressor, especially in resource scarce environments. Hence, the combination of high procedural/interpersonal justice climate with low distributive justice climate is likely to be associated with lower mental health.

Hypothesis 3a: Procedural and interpersonal justice climate will moderate the relationship between
distributive justice climate and mental health problems. Effects of distributive justice climate will be strongest and negative, if procedural and interpersonal justice climate is low (Buffering Hypothesis).

Hypothesis 3b: Procedural and interpersonal justice climate will moderate the relationship between distributive justice climate and mental health problems. Effects of distributive justice climate will be strongest and negative, if procedural and interpersonal justice climate is high (Intensifying Hypothesis).

METHOD

Sample

The study was carried out in Kenya, East Africa. Public and private organizations located in the three major cities (Nairobi, Mombasa and Kisumu) were approached through contacts of the researchers using purposive sampling. Within each organization, a cross-section of employees from various levels and departments were sampled; however, individuals with lower educational levels (e.g., unskilled workers, manual labour, shop floor workers) were excluded owing to potential problems in completing this survey. The survey was administered in the official business language (English) and completed outside work hours.

A total of 427 responses were obtained from 29 organizations. The average number of respondents per organization was about 15 (median = 18; ranging from 2 to 24). Fifty-eight percent of the organizations were private sector. Fifty-three percent of those who presented data on gender were male. The mean age of respondents was 34.16 (SD 9.09, minimum 18, maximum 60). Most of those surveyed were largely in the low income brackets; the modal income was US$ 125–375 per month. Of those surveyed, 47.1% had managerial or supervisory roles.

Instruments

Mental health

We used the twelve-item General Health Questionnaire (GHQ-12, Goldberg, 1972) as a uni-dimensional indicator of context-free well-being. We used Likert-type scoring using the sum scores (range between 0 and 36) with higher scores indicating less well-being. The GHQ has been validated in a Kenyan sample (Abubakar & Fischer, 2012). In the current sample, the reliability was .85.

Organizational justice

We used the 20 item organizational justice measure developed by Colquitt (2001). It has been validated in samples from 13 countries across all inhabited continents (Fischer et al., 2011). Answers were recorded on 7-point Likert scales with the labels “(1) Not at all,” “(4) To some extent” and “(7) To a great extent.” A confirmatory factor analysis showed adequate fit of the three factor model: $\chi^2(167) = 771.22, p < .001, CFI = .88, TLI = .87, RMSEA = .09, SRMR = .06$. Cronbach’s alphas were .80, .89 and .92 for procedural, distributive and interpersonal justice, respectively.

Justice climate

We operationalized climate using standard procedures in climate research (Liao & Rupp, 2005; Spell & Arnold, 2007), following a direct consensus model of climate (Chan, 1998). Individual level items form climate perceptions if there is sufficient agreement ($r_{wg} > .70$; James, Demaree, & Wolf, 1984) and sizable intraclass correlation coefficients (ICC[1] > .05; see Chan, 1998; Fischer, 2009). Agreement among members within organizations was high (.82, .88 and .91 for distributive, procedural and interpersonal justice, respectively) and the intraclass correlation coefficients were substantive (.13, .14 and .23 for distributive, procedural justice and interpersonal justice, respectively). These indicators therefore show strong signs of a direct consensus model (Chan, 1998), justifying aggregation. See Table 1 for means and intercorrelations for all variables.

RESULTS

We used multi-level modelling with HLM6.07 for Windows (Raudenbush & Bryk, 2002). The effective sample size for the multi-level analysis shown in Table 2 was 416 responses from 29 organizations. We entered income and managerial status as control variables (see Model 2). They did not significantly relate to mental health. Next, the individual level main effects (group mean centred) were entered in Model 3. Only interpersonal justice was significantly related to GHQ. Greater interpersonal justice was associated with better mental health, partially confirming hypothesis 1.

Next, we entered the individual level interaction terms (Model 4). The interaction between distributive and interpersonal justice was significant (see Figure 2). The distributive justice slope for high interpersonal justice was significant ($b = -1.14, p < .05$), but not for low interpersonal justice ($b = .11, p > .50$). The pattern is in line with the intensifying hypothesis. The buffer hypothesis was not supported because the effect of distributive justice was not significant for low interpersonal justice.

In Model 5, we entered the main effects of justice climate at level 2. None of the climate perceptions
significant added to the prediction of mental health problems. In the final model, the interaction between distributive and interpersonal justice climate was significant. Similar to Figure 2, a cross-over effect emerged. Examining the single slopes at level 2, distributive justice was a significant predictor of GHQ at high levels of interpersonal justice ($b = -5.1, p = .05$), but not at low levels ($b = 1.98, p = .40$).

To test the stability of results in light of the unequal distribution of respondents, we deleted organizations with less than five respondents and repeated the analyses. The results were virtually unchanged.

**DISCUSSION**

Our results show that interpersonal justice, that is the enactment of organizational procedures by supervisors and managers, had the strongest direct and moderating effects on mental health problems. Our dependent measure captured general psychological health. Although health is undoubtedly influenced by other non-work related variables, the impact of work-related issues on general well-being is salient given that people spend a substantive amount of their day at work (Maslach et al., 2001). Fair treatment by one’s supervisor is strongly associated with employees’ health, even in non-Western settings such as Kenya. Previous research has discussed the role of procedural justice in the interaction with distributive justice (Brockner & Wiesenfeld, 1996). Our findings indicate that the enactment of these organizational procedures by supervisors and managers (interpersonal justice) is more important in shaping employee health. The relative importance of more distal procedural versus more proximal interpersonal justice and their interaction with decision outcomes (distributive justice) needs more attention in future research, both for health and other work outcome variables.

Furthermore, in line with an intensifying interpretation of justice interactions, distributive justice had a significant effect on health when interpersonal justice was high. Previous research in the USA has focused on the buffer...
hypothesis (Tepper, 2001), implying that managers can compensate negative outcomes (low distributive justice) by acting in a procedurally and interpersonally fair manner. In this Kenyan sample, the results suggest that employees formed overall expectations and implicit social contracts with the organization and that violation of either dimension of justice implied a contract breach which was associated with a decrease in mental health, both at the individual and the organizational levels. As we had speculated, in resource scarce settings such as Kenya, violating expectations of employees about financial security or fair treatment of employees by supervisors (which may take paternalistic forms in line with the more collectivistic culture of Kenyan society, Hofstede, 2001) is likely to exacerbate reactions, leading to greater mental health problems. We need to highlight that by using a relatively small sample, we may have underestimated level 2 effects and may have missed out small effects at the organizational level. Future research needs to examine more systematically whether the overall economic and cultural context affects the pattern of the interaction at both the individual and the organizational levels.

It is also important to study the central process variables underlying both the buffering and intensifying hypotheses, namely concerns around trust and psychological contract breach. These theoretical variables of interest may be further qualified by context-specific social or cultural expectations around appropriate supervisory behaviour (e.g., in collectivistic settings) and psychological concerns related to resource scarcity and meeting survival needs (e.g., in low income contexts). Our theoretical clarification and the empirical findings provide intriguing insights that can guide new research.

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