The Relationship between Personal Impact of Organizational Change and Employee Commitment: The Mediating Role of Organizational Justice

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Abstract

Organizational change famously fails more often than it succeeds and has an impact on employees' organizational commitment. During times of organizational change, it is important to understand how employee perceptions of the personal impact of change and their assessments of whether the changes are fair will affect their commitment to the organization. The present field study involved a survey of 206 employees from all organizational levels at a division of a Fortune 100 company in the U.S. two and a half years after it underwent restructuring with a significant reduction of force. Results showed that all four dimensions of organizational justice – distributive, procedural, interactional, and informational justice – mediated the influence of personal impact of change (how beneficial or detrimental employees felt the change was for them personally) on affective organizational commitment. In support of fairness heuristic theory, informational justice explained unique variance in affective commitment, above and beyond other justice dimensions. Overall, results showed that management practices perceived as fair will reap the benefits of employee commitment and increase the long-term success of organizational change efforts.

Keywords: abacizational change, personal impact of change, organizational justice, organizational commitment, organizational restructuring, organizational downsizing, layoff survivors, quantitative

Organizations are facing more change, at a more rapid pace than ever. Research has shown that change has a significant impact on an array of important organizational outcomes: organizational commitment, job satisfaction, performance, employee health and well-being (Marks, 2006; Oreg, Vakola & Armenakis, 2011). Yet most change efforts fail to achieve their objectives and long-term success remains elusive (Aiken & Keller, 2009; Beer & Nohria, 2000; Kotter, 1995). Various scholars contend that models of

change are flawed and managers lack the tools and competencies necessary to implement and manage change successfully (Higgs & Rowland, 2005; McBain, 2006; Todnem, 2005). However, most models share psychological underpinnings that elevate the importance of employees' perception and motivation.

The purpose of this cross-sectional field study was to gain new insights into the psychological underpinnings of organizational change in a field setting. The present study investigated employees' perceptions of organizational change and affective organizational commitment (emotional attachment to the organization). A multidimensional model of organizational justice was used as a lens from which to understand organizational change, challenge current approaches, stimulate new strategies, and improve the effectiveness of change initiatives (Bernerth, Armenakis, Field, & Walker, 2007; Greenberg & Wiethoff, 2001). Organizational justice (OJ) refers to employees' perceptions of fairness. Thus, the terms justice and fairness are used interchangeably.

A number of previous studies have shown that perceptions of justice are associated with employee reactions to change (e.g. Armenakis et al., 2007; Berneth, Armenakis, Field, & Walker, 2007; Herold et al., 2007) However, the field of OJ has suffered from ambiguity in regards to the dimensionality of the justice construct (Colquitt & Greenberg, 2003), with various researchers investigating two, three, or four different dimensions of OJ. Further, OJ research has been largely dominated by the dimensions of distributive and procedural justice, while research on interactional and informational justice remains scarce (Colquitt, Wesson, Porter, Conlon, Yee, 2001; Cropanzano & Rupp, 2003; Foster, 2010; Klendauer & Deller, 2009). This study contributes to the advancement of justice theory by integrating the four justice domains, namely distributive-, procedural-, interactional-, and informational justice, in a single field study. Moreover, organizational commitment has been described as one of the most critical success factors of change (Meyer & Herscovitch, 2001), yet the differential effects of the four-factor conceptualization of organization justice on affective commitment in the context of change have yet to be thoroughly investigated in an empirical study in a field setting.

Overall, this study sought to contribute to the further understanding of the long-term effects of large-scale change – in this case, restructuring – on organizational members (Todnem, 2005), and to offer practical insights to managers and practitioners in an important but rarely investigated area.

Literature Review

Organizational Change

The ability to manage organizational change successfully has become a vital competency (Ashkenas, 2013; Longenecker, Neubert & Fink, 2007). Despite the plethora of models and strategies put forth by consultants and used by top management, successful

organizational change has remained elusive, with an estimated failure rate of 70 percent consistent across time (Aiken & Keller, 2009; Beer & Nohria, 2000; Higgs & Rowland, 2005; Kotter, 1995). As organizational change becomes more ubiquitous and occurs at an unprecedented rate, the investigation of organizational change, its nature, and consequences, is of crucial importance to researchers and practitioners.

One of the major keys to successful organizational change might depend on how change leaders approach people in their organizations. The fields of organizational development and industrial/organizational psychology take an approach of building an adaptive capacity via people, processes, systems, and organizational design. The human element is of essence to the successful implementation of organizational change and its sustainability in the long run (Ashkenas, 2013; Kotter, 1995). A key part of the organization's sustainability is its capacity to retain key employees, increasing the importance of understanding the factors that influence organizational commitment, especially during times of organizational change.

Organizational Commitment

Most scholars define organizational commitment (OC) in terms of the strength of identification or attachment that bond an individual to a particular organization (Meyer & Herscovitch, 2001). Organizational commitment has been found to be an important determinant of employee acceptance of organizational change (Iverson, 1996; Oreg, Vakola & Armenakis, 2011). Highly committed individuals have been found to be less likely to leave the organization because of change (Cunningham, 2006). Furthermore, OC has been found to buffer change related stress, alleviating the negative effects of outcomes such as job dissatisfaction, intent to quit, and work-related irritation (Begley & Czajka, 1993). The details and context of a change initiative, how it is managed, and its consequences can alter an individual's relationship with the organization. Therefore, it is important for managers to understand how to design, implement, and navigate organizational change in a way that will strengthen an individual's commitment to the organization (Fedor, Caldwell, & Herold, 2006).

Meyer and Allen (Allen & Meyer, 1990; Meyer & Allen, 1984, 1991) developed a three-component model of OC as a psychological state, predicting the likelihood that an employee will maintain membership in an organization, characterized by the following dimensions: (a) affective commitment—emotional attachment to the organization, desire to remain; (b) normative commitment—perceived obligation to remain; and (c) continuance commitment—perceived cost of leaving. Based on Meyer and Allen's (1991) conceptualization of commitment, affective commitment (AC) is characterized mainly by a mind-set of emotional attachment related to identification and belief in organizational goals and values, leading an individual to want to pursue a course of action or involvement due to shared values and identification. Organizational members who are affectively committed to the organization are more likely to pursue organizational goals and engage in citizenship behaviors (Moorman & Byrne, 2005).

Affective commitment seems to be a crucial component to the achievement of new work goals, methods, and structures caused by change and have been found to be associated with acceptance of change, achievement, and innovation (Iverson & Buttigieg, 1999; Parish, Cadwallader, and Busch 2008; Swailes, 2004). Parish et al. (2008) found that different components of commitment are affected by various antecedents. In their study, affective commitment to change (ACC, which is the emotional attachment to a change initiative) was the only commitment type to significantly improve performance and implementation success. Herscovitch and Meyer (2002) found ACC to be associated with higher levels of change related cooperation (exerting effort to support the change) and championing (enthusiasm, going above and beyond to ensure change success). Comparing the three types of commitment, AC is considered to be the most robust predictor of employee behaviors (Lavelle, Rupp, & Brockner, 2007). Organizational AC was selected for the purposes of the present study as it is arguably the most important and desirable type of commitment in relation to long-term organizational success after an organizational change has taken place.

Personal Impact of Change

When employees hear about an organizational change that has occurred or is about to occur, it is natural for them to assess the change initiative in terms of personal impact. Personal impact of change refers to the extent to which employees believe that the organizational change will be personally beneficial or detrimental (Caldwell, Herold, & Fedor, 2004; Holt, Armenakis, Field, & Harris, 2007). Based on expectancy theory (Vroom, 1964), the valence or value of the anticipated rewards represent one of three components that drive employee motivation to act in pursuit of specific goals. Hence, to the extent that employees believe that the change will bring personal rewards, they will be more supportive of the change initiative as well as the organization itself.

A number of studies have used measures of expected personal impact of change (e.g., Armenakis, Bernerth, Pitts & Walker, 2007; Ning & Jing, 2009). Other studies have looked at the impact of change on organizational processes and the employees' work (e.g., Straatman, Kohnke & Mueller, 2016). However, changes with proximal (i.e., more immediate, personal) impact are theorized to be more salient in shaping attitudes and behaviors than changes affecting distal levels in the organization (Fedor, Caldwell, & Herold, 2006). For example, Fugate, Kinicki and Prussia (2008) found that for employees who were in the midst of a one-year change process, their negative appraisals of future threat and present harm caused by an organizational change strongly influenced their activation of coping behaviors, which influenced their emotions, sick time used, quit intentions and turnover.

The present study measured personal impact of change (PIC) in terms of both present and expected threat or benefit, given that the organizational change in this sample had already taken place, though its ramifications for the future were still salient. PIC was defined as whether the change was personally beneficial or detrimental overall, with

regard to status in and future with the organization, and with regard to personal relationships.

Oreg, Vakola & Armenakis (2011) reviewed 79 quantitative studies of change recipients' reactions to organizational change, and proposed an integrative model of organizational change comprised of three main elements: (a) change antecedents (i.e., change recipient characteristics, internal organizational context, change process, change content and perceived benefit/harm); (b) explicit reactions (i.e., affective, cognitive, and behavioral reactions); and (c) change consequences (i.e., work-related and personal consequences such as employee job satisfaction, performance, and well-being). In light of this model, PIC represents a change antecedent that is expected to have a consequence on employees' organizational commitment.

Hypothesis 1. There will be a positive relationship between personal impact of change and affective commitment, such that the more individuals perceive the change to be personally beneficial the more committed they will be to the organization.

Perceptions of Organizational Justice during Times of Organizational Change

In the present study, the organizational change examined included an organizational restructure and a reduction in force. Due to the sensitive nature of the change, there was little forewarning to employees prior to its implementation. In a situation characterized by ambiguity and uncertainty, employees naturally engage in a process of sensemaking to interpret their environment. Sensemaking is triggered when individuals encounter a novel, unexpected, confusing, or ambiguous event that is of significance to them (Maitlis & Christianson, 2014; Weick, 1995). Organizational change, such as restructures, spurs sensemaking and reevaluation particularly with regard to OJ norms and perceptions (Luscher & Lewis, 2008; Monin, Noorderhaven, Vaara & Kroon, 2013).

Indeed, justice evaluations play an essential role in the process of sustaining commitment. For example, Brockner, Tyler, and Cooper-Schneider (1992) found that the most negative reactions to unfair treatment were exhibited by individuals who reported high levels of prior OC. As yet, few studies have investigated, in a single investigation, employees' reactions associated with the change, the buffering effects of fairness judgments, as well as an assessment of organizational commitment (Fedor, Caldwell & Herold, 2006; Herscovitch & Meyer, 2002; Klendauer & Deller, 2009).

Organizational justice (OJ) theory can provide a framework for understanding how recipients of change assess personal impact and influence the success and sustainability of the change effort (Novelli, Kirkman, & Shapiro, 1995; Wanberg & Banas, 2000) as well as their post-change commitment to the organization (Klendauer & Deller, 2009). An investigation of change from a psychological perspective of fairness

might serve as a valuable mechanism to provide a great deal of insight for both researchers and practitioners (Bernerth, et al., 2007; Lind & Van den Bos, 2002).

The conceptualization of the OJ construct used herein involves individual subjective judgments of perceived fairness (Byrne & Cropanzano, 2001; Van den Bos & Lind, 2002). The four-factor conceptualization of OJ is comprised of the following dimensions: (a) distributive justice—the fairness of decision outcomes and their implementation, (b) procedural justice—the fairness of procedures used for making such decisions, (c) interactional justice—the fairness of how people are treated interpersonally, and   (d) informational justice—the fairness of both the quantity and quality of information that is made available to people (Colquitt, 2001).

Organizations have limited resources and tend to be stretched thin during times of change. Therefore, the predictive power of each justice dimension could be critical for management practices and implementation strategies. Distributive justice is associated with equality and equity and can be of concern during organizational change as resources, roles, and responsibilities are often redistributed. Procedural justice refers to the appraisal of fairness about decision-making procedures. Interactional justice is associated with leaders treating employees with dignity and respect; it is highly relevant in the context of change because employees depend on authority figures and managers for information, communication, and other resources. Informational justice refers to timeliness, completeness, and truthfulness of information provided by those authority figures. During change initiatives managers typically personify the organization and convey initial communications about the change that is taking place.

Empirical evidence based on fairness heuristic theory (FHT) and uncertainty management theory (UMT) has demonstrated that fairness effects are strengthened in the presence of uncertainty and diminished in the presence of certainty (Lind & Van den Bos, 2002). Change initiatives arouse ambiguity and uncertainty, especially when the implementation involves layoffs and information about the change effort is not available (Brockner, Wiesenfeld, Reed, Grover, & Martin, 1993). In the face of uncertainty, employees are likely to seek fairness-relevant information – used as heuristics – to guide decisions and behavior (Colquitt & Greenberg, 2003; Colquitt, Greenberg & Zapata-Phelan, 2005; Lind, 2001; Van den Bos & Lind, 2002). Accordingly, when information is missing or people feel uncertain, they rely on fairness heuristics in the process of determining how to react (Lind & Van den Bos, 2002; Van den Bos & Lind, 2002; Van den Bos, Lind & Wilke, 2001).

Uncertainty management theory (UMT) can be used to explain how those fairness heuristics operate. UMT draws on two main principles, the primacy effect and the substitutability principle (Van den Bos & Lind, 2002). The primacy effect occurs when initial events elicit fairness judgements in event recipients, and those initial perceptions guide the interpretation and evaluation of subsequent events. The substitutability principle

suggests that in the absence of information about one phenomenon, people substitute the information that they have about a related phenomenon.

Primacy effects play a role in perceptions of OJ, but research findings are mixed. Van den Bos, Vermunt, and Wilke (1997) found that early justice information exerts a stronger influence on fairness judgments than information received later (Van den Bos & Lind, 2002). Similarly, Klendauer and Deller (2009) examined organizational change in the form of mergers and found that interactional justice (which included informational justice in their measure) influenced organizational commitment more than distributive and procedural justice did. They proposed that employees experience interpersonal treatment around organizational change efforts before they experience change procedures and change outcomes, and this creates a primacy effect that gives interactional justice an outsized influence. However, Kernan and Hanges (2002) found that in comparison to interactional and informational justice, procedural justice was the strongest predictor of several employee attitudes.

Substitutability might also play a role in perceptions of OJ, but here, too, the research findings are mixed. One of the most common uncertainty reduction strategies is to engage in information seeking behaviors (Berger & Calabrese, 1975; Beugré, 2002; Kramer, 1999). According to the substitutability principle, when all fairness information is not available, people rely on information that is available as a heuristic to make general justice judgments. Hence, impressions of one type of fairness serve as a heuristic for overall judgments of justice. According to UMT, any of the justice dimensions alone can generate a global sense of fairness, which in turn can be used as a heuristic to manage uncertainty (Lind & Van den Bos, 2002). The research findings on this are mixed. The fairness substitutability effect has been found to take place across different types of fairness judgments (Lind, 2001; Van den Bos & Lind, 2002). Van den Bos (1999) found that in the absence of procedural fairness information, people used the fairness of their outcome to assess how to respond to the procedure, resulting in strong fair outcome effects. Similarly, Van den Bos (2001) found stronger effects of perceived fairness under uncertainty-salient conditions. Diekmann, Barsness, and Sondak (2004) found an interaction effect between OJ and uncertainty as well as related yet differential effects of various types of justice. However, a study by Bernerth et al. (2007) produced contradicting results—although both distributive and procedural justice were significant predictors of affective change commitment, high levels of one form of justice did not compensate for low levels of another form of justice. These mixed findings might illustrate that the context of change has a significant influence on justice perceptions and their consequential effect on attitudes and behaviors.

Uncertainty is one of the most central contributors to the importance of fairness to people (Van den Bos, 2001; Van den Bos & Miedema, 2000). Therefore, examining OJ during times of organizational change can provide important practical insights and advance theoretical findings. The mixed findings in the OJ and commitment literature demonstrate the need for further research to investigate the substitutability quality and

primacy effects of fairness perceptions in the context of change in a field setting. Currently, very few studies have examined organizational justice founded on the four-factor justice typology (Colquitt, 2001; Roch & Shanock, 2006). Folger and Skarlicki (1999) theorized that organizational fairness is a psychological mechanism that can mediate negative effects of change. Accordingly, it is proposed in this study that justice judgments operate as a mechanism through which change impacts outcome variables. In alignment with the substitutability principle, all justice dimensions are expected to fully mediate the relationship between PIC and AC.

Each of the four justice dimensions offers a unique perspective on employees' interpretation of the impact of change. In light of mixed results from previous studies, the present study examined the four OJ dimensions separately as mediators between employee perceptions related to the personal impact of change and their affective organizational commitment.

Hypothesis 2. Distributive justice (DJ) will mediate the relationship between personal impact of change and affective commitment.

Hypothesis 3. Procedural justice (PJ) will mediate the relationship between personal impact of change and affective commitment.

Hypothesis 4. Interactional justice (ITJ) will mediate the relationship between personal impact of change and affective commitment.

Hypothesis 5. Informational justice (IFJ) will mediate the relationship between personal impact of change and affective commitment.

Methodology

Research Design

This cross-sectional study was conducted in a field setting. Participants completed a survey that assessed the key constructs discussed above.

Participants

The organization selected for this study operates in a dynamic, competitive, rapidly evolving, and complex industry (Daft, 2004). In response to environmental pressures and part of an organization-wide large-scale change, the division participating in this study underwent an extensive restructuring, including a 20% reduction of the workforce at all hierarchical levels, which was executed in a single day two and a half years prior to the administration of the survey. The internal environment was characterized by increased workload, change, ambiguity, and uncertainty. The change intervention was characterized by top-down decision making and information being closely guarded by executives until the day the restructuring took place.

The sample consisted of 206 participants out of nearly 500 employees from all departments and positions. Participants were required to accept the conditions of the informed consent form via an electronic signature to ensure that participants met the criteria and voluntarily agreed to participate in the study.

Procedure

Participants were recruited on a voluntary basis through email messages sent from the Human Resources Department to all employees. The invitation included a brief description of the purpose of the study, estimated time for completing the survey, a confidentiality statement with consent form, and a link to the online survey.

Instrumentation

The survey used in this study included measures with multiple Likert-type items, anchored by a five-point scale. The items were derived from established scales. Some scales were slightly modified for the purposes of this study. The following demographic variables were included to control for systematic biases associated with participants' characteristics: (1) age, (2) gender, (3) level of education completed, (4) hierarchical position, and (5) tenure.

Personal impact of change (PIC) consisted of four items ($\alpha = .67$) adapted from Holt et al. (2007) and Caldwell, Herold, and Fedor (2004). Sample items included "My future in this job has been limited because of the change" (with an EFA factor loading of .93) and "In the long run, I think the change will be worthwhile for me" (with an EFA factor loading of .51.) After adjusting for reversed scored items, higher personal impact of change scores signified changes being more personally positive and less detrimental so that positive correlations with affective commitment would be easier for readers to interpret. An exploratory factor analysis found that PIC was distinguished from other dimensions of change outcomes.

The dimensions of OJ were measured based on the work of Colquitt (2001). To capture change-specific justice, four items were added from Caldwell, Herold, and Fedor (1994), one item for procedural justice (PJ), and three items for informational justice (IFJ). Reliability was very good, with Cronbach's alpha scores of $\alpha = .91$ for distributive justice, $\alpha = .89$ for informational justice, $\alpha = .97$ for interactional justice, and $\alpha = .86$ for procedural justice.

Individual levels of affective commitment were assessed via Meyer and Allen's (1997) revised measure of organizational commitment (OC), with six items and $\alpha = .82$. A sample item is "This organization has a great deal of personal meaning for me."

Results

The following sections present the characteristics of the sample, descriptive statistics, evidence of construct validity, and simple correlations for the variables from the hypotheses, and results from hypothesis testing through correlational and multiple regression analyses.

Characteristics of the Sample

The sample for this study consisted of 206 respondents from a total population of nearly 500. Due to missing data, the final sample size for testing the hypotheses ranged from 144 to 161 depending on the variable and for demographics the sample size ranged from 195 to 206. Respondents described the organizational changes as: significant (53.1%), considerable (53.5%), and major (51.4%).

In addition, there was an equal distribution of female (48.6%) and male (49.5%) respondents. Of this sample, the age range of 36 through 45 had the greatest number of respondents (39.3%), followed by the age ranges of 26 through 35 (27.7%) and 46 through 55 (23.8%). Most respondents had completed a bachelor's (45.7%) or master's (32.4%) degree. Respondents included individual contributors (39.4%), managers (25.3%), and executives (35.4%), reflecting a fairly accurate representation of the hierarchical dispersion in the organizational population. Length of employment with the organization ranged from under a year to 29 years, with a mean of 7.4 years ($SD = 6.54$). Overall, participants represent a highly educated and professional workforce, with a long-standing relationship with the organization.

Construct Validity

Prior to performing the analyses, select items were reverse scored. Separate principal axis factor analyses were conducted to assess the psychometric properties of organizational justice and change impact. Those analyses will be elaborated in a future article. For organizational justice, the four-factor structure was confirmed. The four distinct dimensions that emerged from the analyses and represent the underlying construct of organizational justice include: (1) informational, (2) procedural, (3) distributive, and (4) interactional justice. For change impact, personal impact of change (PIC) came out as a separate factor.

Intercorrelations between Study Variables

In Table 1, the means, standard deviations and simple correlations between study variables are presented. All correlations were in the expected direction and ranged from small to moderate.

Table 1

Intercorrelations between Study Variables

Variable	Mean	SD	PIC	PJ	DJ	ITJ	IFJ
PIC. Personal impact of change	2.37	.69					
PJ. Procedural justice	2.77	.64	.25**				
DJ. Distributive justice	3.46	.88	.37**	.48**			
ITJ. Interactional justice	3.78	.85	.41**	.48**	.48**		
IFJ. Informational justice	3.47	.68	.33**	.49**	.44**	.67**	
AC. Affective commitment	3.64	.69	.17*	.35**	.32**	.30**	.41**

Note. N ranges from 144 to 161.

* p < .05. ** p < .01.

**Hypothesis Testing**

Hypothesis 1.

Simple correlation analysis confirmed that there was a small, positive relationship between personal impact of change and affective commitment, such that the more individuals perceive the change to be personally beneficial the more committed they will be to the organization ($r = .17$, $n = 144$, $p < .05$).

Hypotheses 2 – 5.

For the remaining hypotheses, mediation analysis (Baron & Kenney, 1986) was used. The four steps required to establish mediation are: (1) The independent variable has a significant effect on the criterion variable (i.e., Path *c*); (2) The independent variable has a significant effect on the presumed mediator (i.e., Path *a*); (3) The mediator has a significant effect on the dependent variable (i.e., Path *b*); (4) When Paths *a* and *b* are controlled, the mediator has a significant effect on the criterion while the effect of the independent variable is reduced or no longer significant (i.e., Path *c'*). When path *c'* is no longer statistically significant, the finding is for full mediation. Refer to Figure 1 for an illustration.

Figure 1

Mediation paths for Hypotheses 2-5 (following Baron & Kenny, 1986)
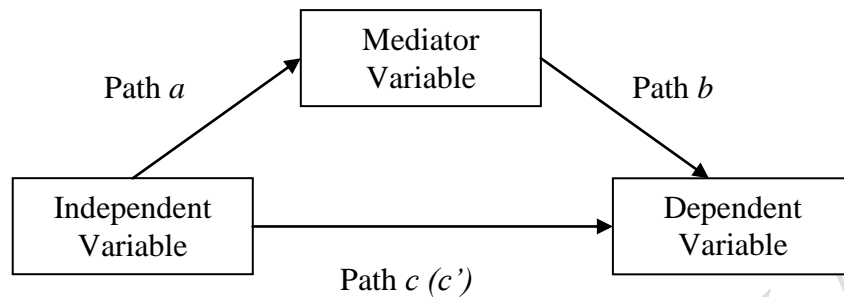
As shown in Table 2, Hypotheses 2, 3, 4, and 5 were all supported. Justice variables acted as full mediators for the influence of personal impact of change on organizational commitment for employees who had been through the organizational change.

Table 2

Results of Mediation Analyses

Hypothesis	Mediator Variable	Path a	Path b	Path c	Path c'	Finding
2	Distributive Justice	.37***	.32***	.17*	.06	Full mediation
3	Procedural Justice	.25**	.35***	.17*	.05	Full mediation
4	Interactional Justice	.42***	. 30***	.17*	.05	Full mediation
5	Informational Justice	.33***	.41***	.17*	.04	Full mediation

Note: N=143

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

To further explore possible fairness heuristic effects, an exploratory regression analysis was performed to see whether one or two justice dimensions accounted for most of the variance in AC. A multiple regression analysis was conducted, simultaneously entering the various justice dimensions of distributive, procedural, informational, and interactional justice as predictors of AC. The four justice dimensions accounted for 21.1% of the variance in AC (see Table 3). Examining the standardized regression coefficients for each of the variables revealed that holding the other justice dimensions constant, only

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informational justice contributed significantly to the prediction of AC (t(139) = 2.80, b = .308, SE = .11, β =.305, $p < .05$). Thus, informational justice explained unique variance in affective commitment above and beyond all other justice dimensions.

Table 3

Multiple Regression Results for Justice Dimensions on Affective Commitment

Variable	df	F	R²	Adj. R²	B	β	t	Sig.
Complete model	4	9.28	.21	.19				
Distributive (DJ)					.104	.133	1.45	.15
Procedural (PJ)					.171	.158	1.70	.09
Interactional (ITJ)					-.037	-.045	-.41	.68
Informational (IFJ)					.308	.305	2.80	.01

Note. N = 143.

Discussion

The purpose of this field study was to investigate the relationship between personal impact of change (PIC) and affective organizational commitment (AC), and the mediating roles of the four organizational justice (OJ) dimensions. The results of this study provided support for the positive relationship between PIC and AC, and demonstrated that distributive, procedural, interactional, and informational justice each fully mediated this relationship.

The small positive relationship between PIC and AC indicates that when employees perceive organizational change to be personally beneficial, they are more likely to be emotionally attached or bonded to their organizations. Consistent with other findings in the literature, this study found AC to be an important variable in the context of change, especially when individuals judge whether the overall change was beneficial or detrimental to them personally. Prior research has shown that employees who are affectively committed to the organization are more likely to exhibit positive behaviors, including supporting and championing the change as well as exhibiting higher performance, achievements, and innovation (Herscovitch and Meyer, 2002; Iverson & Buttigieg, 1999; Parish, Cadwallader, and Busch, 2008; Swailes, 2004). Furthermore, this finding is consistent with previous studies that have shown that the anticipation of positive outcomes by change recipients is associated with positive reactions to the change, while the anticipation of negative outcomes is associated with negative reactions

(Oreg et al., 2011). Positive reactions to change in relation to perceived benefit have included organizational commitment (e.g., Fedor et al. 2006; Oreg, 2006), morale (Paterson & Cary, 2002), job satisfaction (e.g. Amiot, Terry, Jimieson, & Callan, 2006), turnover or intent to leave the organization (e.g., Gardner, Dunham, Cummings, & Pierce, 1987) and organizational citizenship behavior (Shapiro & Kirkman, 1999). Negative reactions in relation to perceived threat or harm include: stress and psychological withdrawal (e.g., Axtell, Wall, Stride, Pepper, Clegg, Gardner, & Bolden, 2002), reduced openness to accept change (Cunningham, Woodward, Shannon, MacIntosh, Lendrum, Rosenbloom, & Brown, 2002), lower job satisfaction and involvement (Hall, Goodale, Rabinowitz & Morgan, 1978), and lower perceptions of job-person fit (Caldwell et al., 2004).

This significant link between PIC and AC underscores how critical it is for managers to pay attention to employees' attitudes, reactions, and interpretations related to organizational change. Frequently, managers focus on the content, scope, and execution of the change at the organizational level and lose track of the impact of the change on individuals. Indeed, there is growing consensus among researchers that change recipients have a critical role in influencing the success of change (Bartunek, Rousseau, Rudolph & DePalma, 2006). Researchers have started to focus on individual attitudes and reactions to change as an important and distinct line of research. This is a departure from the majority of change research that has focused on the organizational level (Judge, Thoresen, Pucik & Welbourne, 1999). At the heart of the change recipients' reactions is their assessment of PIC, which significantly influences whether or not they will support the organization and the change endeavors. Consequently, the practical implication is that it is critical that managers and change agents strategize and implement thoughtful communication about the change, both in terms of how the change supports the organization's vision, strategy, and goals as well as how the change will affect the individual employees.

The results of this study align with previous research that has demonstrated that managers and other change agents do not necessarily dedicate enough thought and attention to change recipients' perspectives and reactions when planning and implementing change efforts (Oreg et al., 2011). The organizational change management literature is rich with models and philosophies related to planned approaches to change. Some of the well-known change management models include Kotter's eight-step process for leading change (Kotter, 1995), Lewin's three-step approach to planned change (Lewin, 1947), and ADKAR's model for change (Hiett, 1999). Others, like William Bridges (1991), emphasize the psychological process people go through to adapt to change. The practical implications of this study reinforce the importance of the psychological underpinnings related to the human side of change. To enable successful organizational change, a large focus needs to be placed on the managerial capacity and soft skills of those who design and implement organizational change efforts (Ashkenas, 2013; De Smet, Lavoie, & Hioe, 2012). Given that employees will be concerned about the personal impact of the change on them, it is critical that change communication includes information about how the change effort will benefit the individuals within the

organization as well as the organization. Organizational change that is perceived by employees as unfair or costly in terms of personal impact is likely to result in apprehension or negative reactions. Furthermore, it is important to leverage insights from organizational justice theory to design and implement a holistically fair change effort.

The results of this study also demonstrated that distributive, procedural, interactional, and informational justice perceptions play an important role in linking PIC to affective organizational commitment. According to uncertainty management theory, the ambiguity and uncertainty of organizational change triggers fairness judgments as employees attempt to make sense of their experience (Lind & Van den Bos, 2002). The present study showed that employee perceptions of the personal benefit or harm of the change were accompanied by evaluations about the fairness of the change outcomes, change-related processes and procedures, interpersonal treatment, and the quality and quantity of change-related information. The findings imply that each type of judgment plays a unique and important role in employees' reactions to and interpretation of the change, and thus should be considered carefully by managers as they design, communicate, and implement organizational change processes.

The mediation results might also suggest the existence of substitutability effects per uncertainty reduction theory. Based on the substitutability principle, it is plausible that impressions of one type of fairness could serve as a heuristic for overall judgments of justice, consequently leading to similar mediation results for the other justice dimensions. In examining the correlation table, it was noted that while PIC was significantly correlated with all four justice dimensions, the highest correlation was between PIC and interactional justice ($r = .41$, $p< .01$). Moreover, according to fairness heuristic theory, particularly the primacy effect, the justice-relevant information that is received first will have the greatest impact on fairness judgments (Lind, 2001). Perhaps in the current study, interactional justice was experienced first because the restructuring and downsizing activities were executed within a single day. As such, the change was carried out primarily by managers and other authority figures who interacted directly with their employees as the first point of contact to deliver the key change-related messages. This could explain why higher PIC levels were linked with higher perceptions of interactional justice. In contrast, Kernan & Hanges (2002) found that procedural justice was experienced first; however, in their study employees received communication about the organizational change several months before implementation. These findings might demonstrate the importance of the change context to the organizational outcomes.

Another noteworthy finding was the result of the exploratory regression of the four justice domains on AC. This analysis found that the four justice dimensions accounted for more than one-fifth (21%) of the total variance in AC, further attesting to the importance of OJ perceptions in predicting employee commitment. Moreover, in the presence of other justice dimensions, only informational justice contributed significantly to the prediction of AC ($\beta=.305$, $p<.01$). It is possible that in this particular change context where there was practically no advance notice made about the restructuring,

informational justice was most salient to individuals. The higher the quantity and quality of change-related information, the greater employees' AC to the organization post-change. Interestingly, interactional justice did not emerge as a unique predictor of AC as informational justice did. A possible explanation is that interactional justice exerted a primacy effect while the change was being communicated, but employees' longer-term commitment might be driven more by informational justice. The central role of informational justice during organizational change and has been demonstrated in previous studies, where communication determined how effectively employees were able to reduce change-associated uncertainties (Allen, Jimmieson, Bordia, & Irmer, 2007; Bordia, Hobman, Jones, Gallois, & Callan, 2004). The saliency of the informational justice dimension might be heightened during change that includes restructuring and downsizing, given that typically little information is provided until the moment of execution.

These findings have some similarities to the Klendauer & Deller (2009) study, which examined the influence of three types of justice perceptions (distributive, procedural, and interactional) on the affective commitment of managers in corporate mergers. Klendauer & Deller found that only interactive justice (operationalized in terms of the communication process, e.g., the timeliness of information sharing and the honesty, politeness, and respect given to change recipients) had a unique relationship with managers' AC. These researchers also reported that trust mediated the organizational justice perceptions and AC. Klendauer & Deller's conceptualization of interactional justice is parallel to the current study's operationalization of informational and interactional justice. Taken together, the results of both studies underscore the primacy effects of clear, candid, timely, and complete communication and the fair and respectful treatment of employees on their post-change commitment to the organization. These have practical implications for the design, implementation, and sustainment of organizational change, change-related communication, as well as change agent and management coaching and training. This includes the soft skills and interpersonal skills used when interacting with employees and communicating information about the change.

The results of this study illustrate that organizations have much to gain by demonstrating organizational justice during times of change. Human resources and organizational development practices should take into account the impact of organizational change and organizational justice on organizational commitment—especially affective commitment—and in turn employee intentions to quit in the aftermath of the change. Key to these practices is the role of fairness. Positive responses to organizational change are more likely to result when organizational practices are perceived as being fair. It is important to implement and manage the initial phases of the change thoughtfully and fairly. The results of this study suggest the existence of a primacy effect of justice perceptions. An early judgment of fairness might serve as a heuristic for interpreting subsequent events, thereby serving as an anchor that will effect ensuing efforts. Therefore, fair interpersonal treatment (e.g., respectful, empathetic, honest) as well as informative communication (e.g., fast, accurate, meaningful) about the change effort, are likely to create overall fair judgment perceptions and increase

employees' organizational commitment for years to come. This is especially important due to the ubiquitous nature of organizational change today and in light of the fact that organizations are anticipated to continue to experience change at an increasing rate.

Limitations and Areas for Future Research

A significant limitation of this study was the cross-sectional nature of the research, such that PIC, OJ dimensions, and AC were measured at the same time (two and a half years after the organizational change took place). Thus causal inferences about the nature of the interrelationships observed among the variables cannot be made. It is for example, possible that perceptions of fairness preceded employee evaluations of PIC, or that levels of AC influenced both perceptions of fairness and PIC. It is highly recommended that future studies on organizational change employ a longitudinal design, with periodic assessments of organizational change antecedents, change reactions, and change consequences following an integrative model such as that proposed by Oreg et al. (2011). Using a longitudinal design, it will also be possible to tease out the differential effects of the four justice dimensions over the course of the change process as well as demonstrate differential primacy effects. Such findings would greatly advance organizational change and justice theories.

Using a broader and longitudinal model, future research could incorporate other change antecedents aside from PIC, including measures about the specific impact of the change on one's work. Other important antecedents to consider are the type of change (e.g., mergers/acquisitions, downsizing, job redesign, new processes or technology, etc.), the historical context of the organization, its culture and climate, and employee and manager characteristics such as their personality traits and coping styles. In terms of change reactions, future research might pay attention not just to cognitive assessments such as fairness perceptions, but also affective reactions such as fear, anger, stress, and excitement – all of which might color change recipients' interpretations of the change. Future research could also include other change consequences, such as employees' openness to future change and change-oriented organizational citizenship behaviors, as well as objective measures of individual, team, and organizational outcomes such as absenteeism, turnover, productivity, innovation, etc. Such studies would require much larger sample sizes compared to what was obtained in this study, and would likely employ more sophisticated statistical techniques such as structural equation modeling. Future research might also consider combining both qualitative and quantitative measures to broaden as well as deepen our understanding of the change process.

The reliability of the PIC measure (alpha=.67) in this study is of some concern as it was slightly lower than the threshold of .70 recommended by Nunnally (1978). It is recommended that future research continue to develop psychometrically sound assessments of organizational change.

The current study was able to investigate the relationships among PIC, OJ and AC with a sample of individuals who experienced the same type of change. It would also be useful for future studies to select a broader sample of participants from various organizations, industries and cultures to increase the generalizability of the findings.

Conclusion

The results of this study illustrate that organizations have much to gain by demonstrating organizational justice during times of change. In today's competitive environment, managers are faced with the challenge of retaining and engaging top talent, especially during times of change and instability, increasing the importance of building loyalty and affective commitment to the organization. The findings of the current study suggest that management practices perceived as fair will reap the benefits of employee commitment over the long run and therefore increase positive organizational outcomes. Fair treatment forms psychological and emotional ties to the organization, therefore employees who have been treated fairly during times of organizational change are more likely to consider a long-term relationship with the organization. Furthermore, the personal impact of change on organizational affective commitment is likely to be increased by an organization that exhibits fairness during times of change via fair (a) outcomes, (b) processes and procedures, (c) interpersonal treatment, as well as (d) quality, quantity and advance notice of change-related information. Regardless of the change model used to implement organizational change, it is recommended that change leaders use the four-factor organizational justice framework (distributive, procedural, interactional, and informational justice) to increase the long-term success of their change efforts.

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