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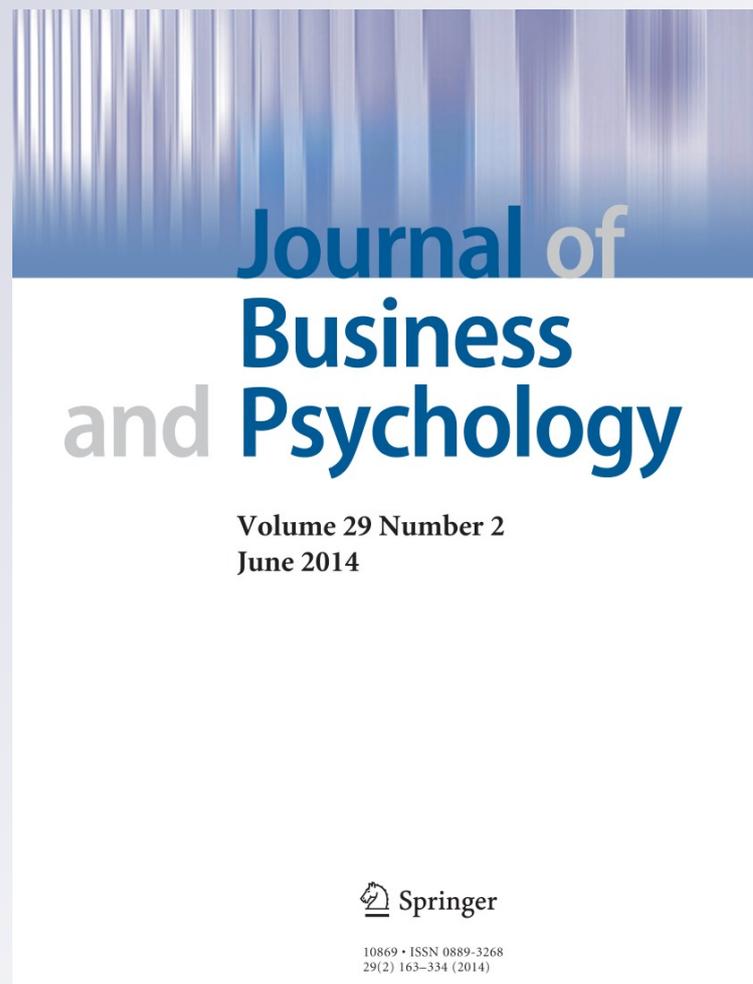
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Employees' Adaptability and Perceptions of Change-Related Uncertainty: Implications for Perceived Organizational Support, Job Satisfaction, and Performance

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Abstract

Purpose The literature on organizational change has increasingly recognized that characteristics of change recipients influence their reactions to workplace change. Yet little is known about the influence of employees' adaptability and change-related uncertainty on their interpretation of organizational actions. We examined these antecedents and the mediating role of perceived organizational support as explanations for employees' job satisfaction and performance.

Design/Methodology/Approach A survey was administered to material handling employees from two organizations. Employees completed measures of individual adaptability, uncertainty experienced regarding changes in the workplace, support received from the organization, and job satisfaction. Performance data were collected from the records of one organization.

Findings Results from both samples support the role of perceived organizational support as a mediator of the relationship between employees' adaptability and perceptions of change-related uncertainty and employees' satisfaction and performance.

Implications Change is a frequent occurrence in today's workplace; thus, improving employee satisfaction and performance requires the consideration of change-related perceptions and individuals' dispositions relevant to change. The present study offers insights regarding how organizations may help improve perceptions of organizational support by reducing perceived uncertainty as well as identifying employees who may need assistance to adapt to workplace changes.

Originality/Value Despite practitioners' expressed interest, there is scant research examining employees' adaptability and change-related uncertainty. We provide the first evidence explaining how and why these variables impact important workplace outcomes and extend existing theory by identifying appraisals of the organization (and not the self) as a mechanism explaining stressor–strain relationships.

Keywords Adaptability · Uncertainty · Perceived organizational support · Organizational change

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Introduction

The workplace today is characterized by the frequent organizational change that accompanies business growth, innovation, globalization, complex regulations, competition, and evolving consumer tastes (Pasmore 2011). The uncertainty associated with change can have deleterious effects on employees' work experience, including their attitudes and performance. Most efforts at managing change have focused

on structural and managerial interventions (e.g., using persuasive messages to influence change beliefs; Armenakis and Harris 2009). Although organizational actions (e.g., change-related communication) influence the success of workplace change, we argue that individuals' perceptions of the work environment and predispositions are critical for understanding how employees perceive organizational actions (e.g., organizational support) that influence their job attitudes and performance. Ultimately, employees are responsible for implementing workplace changes and their perceptions and individual differences are likely to play an important role in this process. Employees' perspectives provide an alternate view to management-focused implementation research and may offer insights for improving implementations and creating positive change experiences for employees.

Researchers have begun to consider the psychological predispositions of change recipients (Judge et al. 1999; Saksvik and Hetland 2009), including their adaptability (i.e., propensity to adjust to changing environments; Ployhart and Bliese 2006) and also employees' perceptions of the workplace environment (e.g., change frequency; Bartunek et al. 2006; Rafferty and Griffin 2006). What is central to understanding individuals' reactions to change is that change creates uncertainty (Nelson et al. 1995; Pollard 2001; Rafferty and Griffin 2006; Terry et al. 1996) and we argue that the extent to which employees perceive uncertainty impacts their view of the support their organization provides and ultimately their job satisfaction and performance.

A flexible workforce allows the organization to meet changing performance requirements, adapt, and respond to workplace innovations (Miller 2002). Thus, companies value employees who have the ability to adjust to changing expectations and capitalize on opportunities that enhance their skills (Ngo and Loi 2008; Roehling et al. 2000). Indeed, a survey of human resources professionals indicated that adaptability was rated among the most desired skills for both new and experienced workers (Society for Human Resource Management 2008). Organizations expect employees to maintain positive job attitudes and high levels of performance by learning new skills and procedures. This is particularly true for technology-dependent industries (e.g., logistics, manufacturing) where frequent changes in soft-, hardware, and automation require continuous learning (García-Arca and Prado-Prado 2007).

Both organizational actions and individual differences in employees' dispositions and perceptions influence the success of organizational change. Although, one could argue that there is an objective amount of change in a given organization, the experience of change (e.g., change-related uncertainty) is variable and represents the employees' reality. Thus, even in organizations with comparatively little change, employees who experience or perceive uncertainty

will be as affected, psychologically, as those employees working in companies undergoing comparatively more change. Despite practitioners' interest, there is surprisingly little research examining adaptability and change-related uncertainty and how these variables affect employee attitudes and performance (cf., Balogun and Johnson 2004; Elias 2009; Walker et al. 2007). Our proposed model suggests that employees' dispositional tendencies and appraisals of the work environment influence their assessment of organizational actions, which then determines their job satisfaction and performance. Specifically, we posit that employees' perceptions of uncertainty related to changes in their work environment and their adaptability are two antecedents that explain employee satisfaction and performance because of their influence on perceptions of organizational support. Identifying a linking mechanism through which employees' perceptions of change-related uncertainty and their individual adaptability impact job satisfaction and performance improves our understanding of employees' experience of and responses to their changing work environment. This knowledge advances our theoretical understanding of employees' reactions to workplace change and improves our ability to offer recommendations for practitioners seeking to improve employees' work experience and the implementation of organizational change.

Perceived Organizational Support and Employee Job Satisfaction and Performance

Organizational support theory proposes that employees form global impressions of the extent to which their organization provides adequate resources and values them as individuals, including the likelihood that the organization will reward their performance and help them during difficult times (e.g., during organizational change; Eisenberger et al. 1986; Shore and Shore 1995; Rhoades and Eisenberger 2002). The development of a positive impression regarding the support employees receive from their organization will lead to positive outcomes for both the employees and the organization. When employees perceive strong organizational support, their socio-emotional needs are met and they are likely to report more positive job attitudes, including job satisfaction. Based on the norm of reciprocity (Blau 1964), employees will also attempt to repay their organization for the support they perceive by caring about the organization and performing their jobs well. However, if employees do not feel supported by their organization they may withhold effort (resulting in lower levels of performance) and report more negative job attitudes. The meta-analysis by Rhoades and Eisenberger (2002) revealed a strong positive relationship between perceived organizational support and job satisfaction and positive relationship between perceived

organizational support and job performance. We expect to replicate these findings and propose in our current model that employees' who perceive higher levels of organizational support will also report higher levels of job satisfaction and will demonstrate higher levels of performance. In the following sections we describe the mediating role of perceived organizational support in the relationships between perceived change-related uncertainty and adaptability and these outcomes.

Change-Related Uncertainty and Perceived Organizational Support

The stress created by organizational change is largely due to perceived uncertainty regarding changes in the work environment (Rafferty and Griffin 2006). When dealing with change employees extract cues from the environment to make sense of an event (e.g., the implementation of new technology). Within this context, employees' perceptions and attitudes are determined by their understanding of the changing situation and the impact the changes will have on them (Lau and Woodman 1995). Ambiguity or lack of information leads employees to experience uncertainty, confusion, or doubt regarding what change means for them (DiFonzo and Bordia 1998). Rafferty and Griffin found that frequent and poorly planned changes lead to greater levels of change-related uncertainty. Indeed, uncertainty is a commonly experienced state during organizational change (Bordia et al. 2004a). Empirical evidence indicates that uncertainty is negatively associated with many organizational attitudes including job satisfaction (Nelson et al. 1995; Rafferty and Griffin 2006), commitment (Hui and Lee 2000), and trust in the organization (Schweiger and Denisi 1991), and can also cause negative health effects (Pollard 2001). Further, uncertainty may inhibit employees' ability to effectively perform their job, but this relationship has not been examined empirically.

Among the many factors suggested to influence employees' perceptions of support are behaviors by the organization that indicate the organization has provided appropriate aide to address unfavorable workplace experiences (Eisenberger et al. 1997). For example, Rhoades and Eisenberger (2002) proposed that employees perceive many stressors to be within the control of the organization (e.g., work overload, role ambiguity, role conflict). Thus, the existence of these stressors may serve as indicators that the organization is failing to attend to the needs of the employees. Change is stressful for many employees (Herscovitch and Meyer 2002). Employees attempt to make sense of their changing environment and determine how the changes will affect their daily life and their livelihood (Fisher and Howell 2004; Bartunek et al. 2006).

Organizational representatives provide information to guide employees through workplace change. Employees interpret the information available to them when forming attitudes, including their general impression of the support provided by their organization. If employees are unable to make sense of their environment (i.e., perceive higher levels of uncertainty) they are likely to hold the organization responsible and interpret change-related uncertainty as a signal of inadequate organizational support. As previously stated, employees' perceptions of organizational support are positively associated with job satisfaction and performance. Thus, we propose that perceived organizational support will explain the relationship between change-related uncertainty and satisfaction and performance because perceived organizational support reflects an appraisal that change-related uncertainty can be addressed by the entity that is responsible for the stress (the organization). Based on the above rationale, we hypothesized:

Hypothesis 1a Perceived organizational support mediates the negative relationship between change-related uncertainty and job satisfaction.

Hypothesis 1b Perceived organizational support mediates the negative relationship between change-related uncertainty and job performance.

Employee Adaptability and Perceived Organizational Support

Empirical research on adaptability lags behind its appreciation by organizational practitioners. In response to this critical gap in the literature, Ployhart and Bliese (2006) proposed a theory of individual differences in adaptability (I-ADAPT) and called for future research. I-ADAPT theory defines adaptability as "an individual's ability, skill, disposition, willingness, and/or motivation, to change or fit different task, social, and environmental features" (2006, p. 13). They also differentiated it from related constructs (e.g., coping, adaptive performance). For instance, researchers have studied adaptability as participants' performance under changing task conditions (e.g., laboratory studies varying task rules; transfer of training studies). In contrast to this adaptive performance approach (e.g., Pulakos et al. 2000), I-ADAPT theory describes individual adaptability as a distal predictor construct related to performance via the mediating process of situation perception and appraisal. We tested I-ADAPT theory by proposing perceived organizational support as an important appraisal that explains the link between individual adaptability and performance.

Previous research suggests that dispositional variables affect how individuals interpret characteristics of their environment (Lau and Woodman 1995). For example,

Judge et al. (1999) found that employees' positive self-concept and tolerance for ambiguity were associated with more positive perceptions regarding the usefulness of change for their company as well as confidence regarding their ability to lead the change effort. Based on their meta-analytic findings, Rhoades and Eisenberger (2002) concluded that studies of the antecedents of perceived organizational support have focused almost exclusively on the actions of the organization (e.g., fairness of organizational procedures). However, they note that a few studies suggest that employee characteristics also influence perceptions of organizational support through employees' behavior, which determines (to some extent) the actual supportive treatment they receive from the organization, and by altering how employees interpret organizational actions.

We argue that individual differences in adaptability predict the extent to which employees perceive organizational support for at least two reasons. First, adaptable employees are proactive in their approach toward environmental challenges (Ployhart and Bliese 2006). Adaptable individuals take responsibility for adjusting to the situation. In the case of using new technology, this would include learning the skills necessary to operate the equipment efficiently. The proactive, resourceful, and resilient nature of adaptable employees allows them to acquire these skills on their own and to also seek out and use support from their organization. The initiative taken by adaptable employees will increase the likelihood that they will receive help when they need it. Further, organizational representatives (e.g., supervisors) will appreciate their resourcefulness and thus, encourage and praise their efforts.

Second, Ployhart and Bliese (2006) proposed that individual adaptability is a relatively stable individual difference that influences how employees interpret and respond to a situation. The interpretation of organizational actions is central to the formation of perceived organizational support. Adaptable individuals are more likely to perceive situations in a positive light (e.g., as challenging rather than stressful) and are more sensitive to environmental cues, which increases their ability to notice and appreciate even small supportive actions by their organization. Thus, the predisposition of adaptable employees leads to positive interpretations of organizational actions, including the level of support they receive from the organization.

Two recent studies provide further support for our proposal that individual differences in adaptability influence individuals' appraisals of situations. Wessel et al. (2008) found that although adaptable employees were no more likely to fit (objectively) with their college major; adaptable employees perceived higher levels of fit with their major than less adaptable students. Further, Wang et al. (2011) demonstrated that employees' assessment of their compatibility with their organization (i.e., perceived

person–organization fit) mediated the relationship between individual adaptability and workplace outcomes during newcomer socialization. In sum, adaptable employees will seek out and take advantage of opportunities provided by the organization (e.g., training) and interpret assistance provided by the organization in a positive way. Adaptability should be positively related to perceived organizational support such that employees high in adaptability will form more favorable perceptions of organizational support than employees who are low in adaptability; and the resulting perceptions of support will positively influence levels of job satisfaction and performance. Based on the above rationale, we hypothesized:

Hypothesis 2a Perceived organizational support mediates the positive relationship between individual adaptability and job satisfaction.

Hypothesis 2b Perceived organizational support mediates the positive relationship between individual adaptability and job performance.

Method

Context of the Study

We examined two samples of material handling employees who were responsible for the movement, protection, and storage of products after manufacturing and until arrival at retail stores. Before surveying participants, we conducted interviews with managers at each company. The interviews revealed that new technology adoption is a common occurrence and that various change initiatives (e.g., the introduction of wrist scanners) had taken place and were occurring in the distribution centers where participants worked. We also conducted focus groups with employees in the second sample, which further confirmed that change was occurring in their work environment. Several focus group participants commented, "Nothing ever stays the same at this company." When referring to the skills and procedures the organization expected them to know, employees stated, "The company is always expecting more," and "It gets more complicated." Some employees reported feeling anxious and uncertain about the changes occurring in their workplace and discussed ways their organization helped or failed to help them cope with workplace change. Finally, managers expressed concern that the skills of the workforce were not keeping pace with the progression of automation and technology. Similar to other researchers (e.g., Judge et al. 1999; Rafferty and Griffin 2006) we were not interested in reactions to a specific organizational intervention, but instead we were interested in employees' appraisals of uncertainty created by all of the changes in the workplace.

Participants and Procedure

Employees in Sample 1 were recruited from three distribution centers of a pharmaceutical company. Ten percent of the respondents received a \$25 reward for completing a paper-and-pencil survey. The response rate was 68 % ($N = 147$). Five participants did not complete all of the survey items and 49 could not be matched to their performance data. Therefore, all analyses are based on the smaller sample for which we have complete data ($N = 93$). The sample was mostly female (58 %), Caucasian (86.9 %) and the average age was 43.4 (standard deviation, $SD = 13.7$) years. We compared the sample of participants included in the study ($N = 93$) to the sample of participants excluded because of missing performance data ($N = 49$). Independent samples t tests indicated that there were no statistically significant differences for tenure or age and χ^2 analyses indicated no statistically significant differences for race, sex, or education level. Thus, we were convinced that the samples of participants with complete data were not markedly different from those that were excluded.

Employees in Sample 2 were recruited from two distribution centers of an international hair salon corporation using the same incentive method. The response rate was 78 % ($N = 389$). All analyses are based on the smaller sample for which we have complete data ($N = 379$). The majority of our sample consisted of women (64 %) and the average age of employees was 39.5 ($SD = 11.2$) years. The sample was racial/ethnically diverse (i.e., 35.8 % Caucasian, 42.7 % African American, and 17.6 % Hispanic).

Measures

Unless otherwise noted, all responses were made on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree). Internal consistency estimates are provided in Table 1.

Change-Related Uncertainty

We measured the extent to which employees are unsure or uncertain regarding how the changes occurring in their workplace will affect their job using a 4-item scale developed by Rafferty and Griffin (2006). The instructions asked participants to respond to each item concerning the changes that occur in their work environment. Example items are “My work environment is changing in an unpredictable manner” and “I am often uncertain about the effect of change on my work unit.”

Individual Adaptability

Employees in the present study had experienced prolonged changes in policies, procedures, and technology implementations; thus, we used the two most relevant dimensions of the I-ADAPT scale (Ployhart and Bliese 2006): *uncertainty-* and *learning adaptability*. Uncertainty adaptability (5 items) refers to employees' ability and willingness to deal with uncertain and unpredictable situations. Learning adaptability (7 items) measures employees' behavioral tendency to actively learn unfamiliar work tasks, technologies, and procedures (Ployhart and Bliese 2006). Example items are “I become frustrated when things are unpredictable” (uncertainty adaptability) and “I take action to improve work performance deficiencies” (learning adaptability).

Perceived Organizational Support

We defined perceived organizational support as the extent to which employees felt supported by their organization's management, including their direct supervisor and measured this construct using 7 items from Eisenberger et al. (1986). An example item is “Management really cares about my well-being.”

Job Satisfaction

We measured employees' general job satisfaction using 5 items adopted from Spector (1985). Example items were “My job is enjoyable” and “I am satisfied with my job.”

Performance

After the completion of the surveys by participants in (only) Sample 1 we obtained supervisor ratings of performance from organizational records. Supervisors rated employees once each year and we obtained the most recent ratings available. The supervisor rating consisted of 5 items measuring initiation, communication, cooperation, quality of performance, and quantity of performance. Supervisors provided ratings using a 4-point Likert-type scale (1 = needs improvement, 2 = meets expectations, 3 = exceeds expectations, and 4 = outstanding).

Results

We present the means, SDs, and correlations for both samples in Table 1. In Sample 1, we collected both job satisfaction and performance; thus, we tested all of our hypotheses. Current approaches to mediation suggest that researchers should focus on directly testing the indirect

Table 1 Means, standard deviations, and correlations

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5
Sample 1 (<i>N</i> = 93)							
(1) Change-related uncertainty	2.35	0.93	0.93				
(2) Individual adaptability	4.05	0.49	−0.25*	0.91			
(3) Perceived organizational support	3.51	0.82	−0.30*	0.42*	0.92		
(4) Satisfaction	3.90	0.72	−0.21*	0.35*	0.44*	0.94	
(5) Performance	2.08	0.52	−0.25*	0.25*	0.39*	0.16	0.87
Sample 2 (<i>N</i> = 379)							
(1) Change-related uncertainty	2.75	0.91	0.85				
(2) Individual adaptability	3.85	0.51	−0.21*	0.86			
(3) Perceived organizational support	3.33	0.84	−0.33*	0.24*	0.89		
(4) Satisfaction	3.52	0.87	−0.24*	0.23*	0.59*	0.93	–

Internal consistency estimates (α) are provided in the diagonal

* $p < 0.05$

effect and the model pathways that are involved in transmitting that effect (Hayes 2009; MacKinnon et al. 2000; Shrout and Bolger 2002). Thus, we examined the statistical significance of the paths from adaptability and perceived uncertainty to perceived organizational support and the paths from perceived organizational support to job satisfaction and performance.

To first assess the fit of the measurement model, we used items as manifest indicators for the change-related uncertainty, perceived organizational support, job satisfaction, and performance latent variables. To improve our item-to-indicator ratio we created 3-item parcels from 12 adaptability items and used these parcels as the manifest indicators of the latent adaptability variable. We used the mean of the 5 adaptability uncertainty items as 1 parcel and split the 7 items for learning adaptability into 2 parcels: the first 3 items and the last 4 items. To scale the latent variables we arbitrarily fixed one of the factor loadings for each latent variable to 1.0. We freely estimated all other factor loadings and error variances of the indicators and the covariances among the latent variables. Overall fit of the measurement model was very good, $\chi^2(242) = 364.07$, $p < 0.001$, RMSEA = 0.07 (90 % confidence interval [CI] = 0.06–0.09), CFI = 0.93, TLI = 0.92. Further, all factor loadings were significant and the average standardized loading was $M = 0.81$ ($SD = 0.07$).

We predicted that perceived organizational support would mediate the relationships between perceived uncertainty and job satisfaction (Hypothesis 1a), perceived uncertainty and job performance (Hypothesis 1b), individual adaptability and job satisfaction (Hypothesis 2a), and individual adaptability and job performance (Hypothesis 2b). We tested the mediation hypotheses by obtaining point estimates of the indirect effects and the bias corrected and accelerated 90 % CIs around the effects using a

bootstrapping method (cf. Preacher and Hayes 2004; MacKinnon et al. 2004; Shrout and Bolger 2002). We estimated the full structural equation model as indicated in Fig. 1 and estimated 3,000 bootstrap samples to construct the CIs. It is again important to note that the data were obtained from three different branch locations; thus, we included a dummy-coded variable for branch location as a covariate in a separate set of analyses to determine if nesting in the data associated with branch location may have altered the results. However, the covariate did not alter the effect sizes and led to a poor-fitting model because the covariate was not related to the dependent variables. Therefore, we present the results from the more parsimonious model.

Statistical significance was determined using the unstandardized effects; however, we presented the standardized effects in Fig. 1 for ease of interpretation. The model provided a good fit to the data, $\chi^2(242) = 364.07$, $p < 0.05$, RMSEA = 0.07 (90 % CI = 0.06–0.09), CFI = 0.93, TLI = 0.92. The model accounted for 27 % of the variance in perceived organizational support, 25 % of the variance in job satisfaction, and 20 % of the variance in performance. Examinations of the model pathways involved in the indirect effect were all statistically significant. As tests of Hypotheses 1a, 1b, 2a, and 2b, the specific indirect effects are presented in Table 2. The bootstrapped CIs for all of the specific indirect effects did not contain zero; thus, our hypotheses were fully supported.

We could not collect performance data in Sample 2. Therefore, we sought to replicate our results for the hypotheses regarding job satisfaction (Hypotheses 1a and 2a). We assessed the fit of the measurement model using the same indicators for our latent variables as in Sample 1. Overall fit of the measurement model was good, $\chi^2(146) = 443.44$, $p < 0.05$, RMSEA = 0.07 (90 % CI = 0.06–0.08),

Fig. 1 The coefficients presented in *bold* are statistically significant at $p < 0.05$. These values are the standardized structural coefficients for the hypothesized mediation model for Sample 1

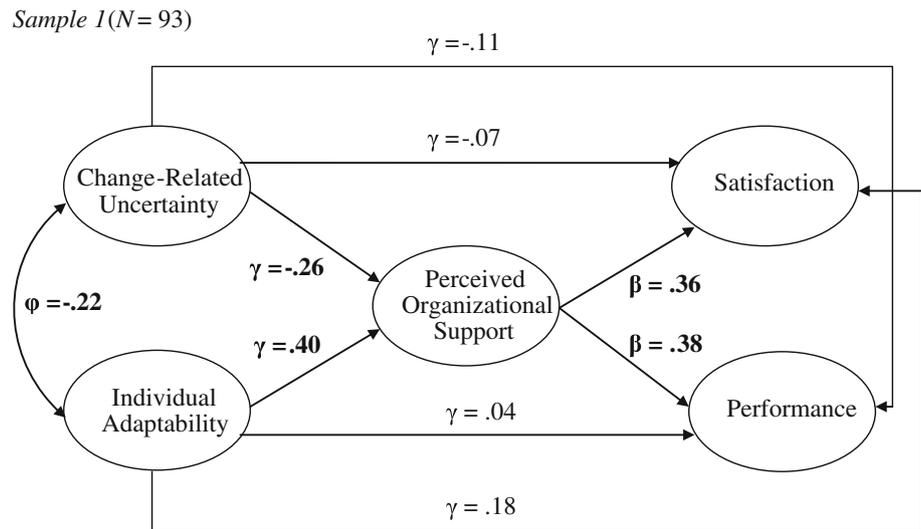


Table 2 Direct and indirect effects of perceived uncertainty and employee adaptability on job satisfaction and performance through perceived organizational support

Mediation models	Indirect effect point estimate	BCa 90 % CI	
		Lower	Upper
Sample 1 ($N = 93$)			
Change-related uncertainty → perceived organizational support → satisfaction	−0.08	−0.23	−0.01
Change-related uncertainty → perceived organizational support → performance	−0.08	−0.22	−0.01
Individual adaptability → perceived organizational support → satisfaction	0.23	0.08	0.55
Individual adaptability → perceived organizational support → performance	0.23	0.07	0.51
Sample 2 ($N = 379$)			
Change-related uncertainty → perceived organizational support → satisfaction	−0.24	−0.33	−0.15
Individual adaptability → perceived organizational support → satisfaction	0.42	0.17	0.84

BCa 90 % CI, bias corrected and accelerated 90 % bootstrapping confidence intervals that include correction for median bias and skew. Bootstrapping results were based on 3,000 bootstrapped samples

CFI = 0.93, TLI = 0.92. All factor loadings were significant and the average standardized loading was $M = 0.76$ ($SD = 0.12$).

After establishing the fit of the measurement model, we conducted a simultaneous test of the proposed relationships depicted in Fig. 2 using structural equation modeling. We again tested the magnitude of the indirect effects using bias corrected and accelerated 90 % bootstrapped CIs. It is important to note that the data were obtained from two different branch locations; thus, to account for the potential effects of nesting within the data, we again included a dummy-coded variable for branch location as a covariate in a separate set of analyses. The covariate did not alter the effect sizes and led to a poor-fitting model. Therefore, we present the results from the more parsimonious model without the covariate.

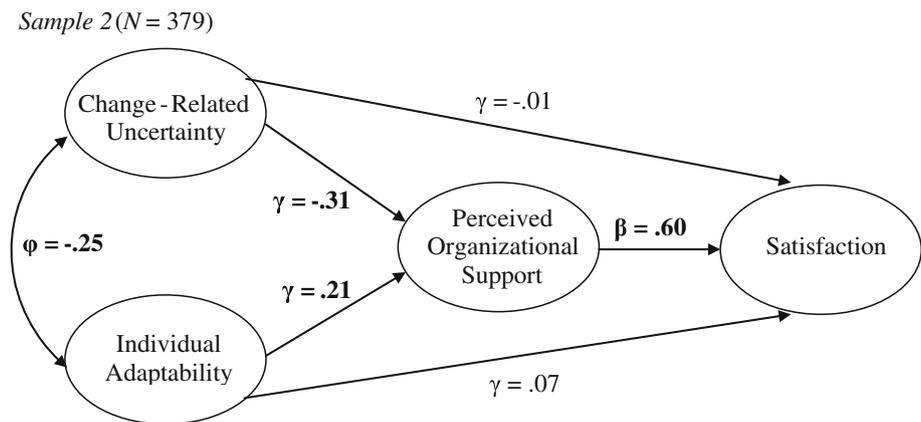
The model provided a good fit to the data, $\chi^2(146) = 443.44$, $p < 0.001$, $RMSEA = 0.07$ (90 % CI = 0.07–0.08), CFI = 0.93, TLI = 0.92. The model accounted for

17 % of the variance in perceived organizational support and 40 % of the variance in job satisfaction. All of the pathways in our hypothesized model were statistically significant. The standardized effects are presented in Fig. 2. As tests of Hypotheses 1a and 2a, the specific indirect effects are presented in Table 2. The 90 % bootstrapped CIs did not contain zero, providing additional support for our hypotheses.

For each sample we tested several alternative models, including adaptability and uncertainty acting as mediators of relationships between perceived organizational support and the outcomes of satisfaction and performance; and also a model in which the effect of the interaction between uncertainty and adaptability on performance was mediated by perceived organizational support. Each model demonstrated suboptimal fit in comparison to the hypothesized model.¹

¹ Results for the full set of alternative models are available upon request from the first author.

Fig. 2 The coefficients presented in *bold* are statistically significant at $p < 0.05$. These values are the standardized structural coefficients for the hypothesized mediation model for Sample 2



Discussion

Based on the evidence in the current study, perceived organizational support explains the effects of perceived change-related uncertainty and individual differences in adaptability on workplace outcomes (satisfaction and performance). We were encouraged by the overall pattern of results, which provided strong support for our theory regarding the importance of change-relevant antecedents in understanding job performance and satisfaction. Replication of our results across two companies/samples speaks to the generalizability of our findings and the robustness of our theoretical framework. Further, employees in many industries and jobs experience organizational change (Fisher and Howell 2004; Martins 2010). Thus, we expect our theoretical framework to generalize beyond the present samples.

The results of our study have important theoretical and practical implications. From a theoretical perspective, the results confirmed our predictions that appraisals of organizational support play a major explanatory role in how change-related uncertainty and individual adaptability influence employee job satisfaction and performance. Most explanations of stressor–strain relationships have examined appraisals individuals make about themselves, including the extent to which they have personal control in the situation that will allow them to address the stressor (e.g., Bordia et al. 2004b). We identified appraisals of the organization (and not the self) as a mechanism explaining stressor–strain relationships. Specifically drawing on organizational support theory, we found that perceptions of organizational support are derived, at least in part, from the extent to which employees believe the organization has taken actions to provide discretionary aide (Eisenberger et al. 1997), including limiting employees' experience of stress. Thus, the extent of change-related uncertainty employees perceive in the work environment sends a signal to employees regarding whether the organization values and supports them. As such,

perceived organizational support is an appraisal that explains the relationship between stress (change-related uncertainty) and satisfaction and performance.

We further contributed to the job stress literature by examining the implications of change-related uncertainty in the workplace. Frequently, organizations experience resistance to change implementation because employees fear the loss of jobs, resent the de-skilling of their jobs, or experience anxiety about learning to use new technology (Klein and Ralls 1997). These reactions are likely responses to uncertainty regarding how their daily work activities will differ due to organizational change. Therefore, understanding how this change-related uncertainty is related to important outcomes such as satisfaction and performance is a crucial first step in combating resistance and coping with change.

The current study makes several noteworthy contributions to the individual adaptability literature. I-ADAPT theory predicts that individual differences in adaptability are related to performance via the mediating process of situation perception and appraisal, without specifying the nature of such an appraisal. By integrating organizational support theory, we addressed the call of Ployhart and Bliese (2006) to examine mediators of the individual adaptability–performance relationship, and provided evidence for our hypothesis that perceived organizational support is an appraisal that explains the relationship between individual adaptability and performance. We also extended the work of Ployhart and Bliese to explain how adaptability is related to job satisfaction. Our logic may also be applied to other pertinent job attitudes (e.g., commitment, justice, intentions to turnover). Despite the stated importance of adaptability in industry and the popular press, the present study is one of the few to investigate the relationships between adaptability and job satisfaction and performance. Wang et al. (2011) also demonstrated this relationship in the context of newcomer socialization. Thus, our study provides evidence of the generalizability of this relationship to the context of organizational change.

The present study also adds to the organizational change literature by following recommendations of Armenakis and Harris (2009) and focusing on the role of the *change recipient*. Perceived organizational support has been identified as an important determinant of organizational and employee outcomes. A changing work environment is likely a critical time for the development of perceptions of organizational support. However, researchers have not examined employees' appraisals of salient factors of the change situation (i.e., change-related uncertainty) or characteristics of the change recipient (i.e., individual adaptability) that are likely to influence employees' perceptions of organizational support. For example, Rhoades and Eisenberger (2002) concluded that most research has examined fairness and justice perceptions as antecedents of perceived organizational support and only a few studies have looked at person characteristics (e.g., conscientiousness, negative affectivity). More research is needed to understand how employees' perceptions of organizational support are formed as well as the extent to which perceptions of organizational support explain the relationships between employees' individual differences and important outcomes.

Practical Implications

From a practical perspective, we derived the present research questions, in part, to help address the needs of the material handling industry. Discussions with industry leaders consistently reflected concern about how workers respond to frequent large-scale technology implementation and the associated change-related uncertainty on an ongoing basis. Through collaborative discussions with managers and employees working in these changing environments we identified change-related uncertainty and individual adaptability as two likely important antecedents of employees' change-related experience, including their perception of the organization and its actions. During this collaboration, we recognized what Bartunek (2007) contends is commonplace—practitioners often realize the importance of workplace phenomena before academics. Simply put, managers value adaptable employees, but from a scientific perspective, we know little about how adaptability influences satisfaction and performance.

Further, by integrating existing organizational theories we can also provide recommendations to industry leaders regarding the importance of organizational support, especially in changing environments. Organizations can take actions to minimize or alleviate the sense of uncertainty inherent in changing environments in order to improve perceptions of support. Rafferty and Griffin (2006) found that more frequent change was associated with greater uncertainty; thus, organizations should carefully consider the

changes they implement and only implement change with a clear rationale for improvement. Communication of the rationale for change and advance notice of changes may also be important for reducing uncertainty. Rafferty and Griffin demonstrated that management planning related to the change was associated with lower levels of uncertainty. Thus, organizations should take the time to carefully plan changes and communicate their impact and the expectations of employees. García-Arca and Prado-Prado (2007) demonstrated through two case studies the success of using a participatory approach for technology implementation for reducing uncertainty and getting employees to embrace new technology. Adopting high-involvement management practices (e.g., Lawler 1992; Riordan et al. 2005; Vandenberg et al. 1999) would also be beneficial for reducing uncertainty and improving perceptions of organizational support. High-involvement management practices would help remove ambiguity from workplace change by limiting unnecessary changes, allowing employees more access to the change process through clear, transparent communication, and giving employees greater voice. Encouraging employees to provide input will go a long way toward decreasing uncertainty and improving perceptions of organizational support. Organizations can also increase perceptions of organizational support through developmental feedback, job rotation, training, rewards, and other forms of engagement. Perceived organizational support is a general view employees form of their organization that is predictive of important workplace attitudes and behaviors; thus, organizations are wise to take steps to bolster this perception.

Likewise, selecting applicants who are high in adaptability could also play a crucial role in affecting perceptions of organizational support. The end goal of course is to keep employees satisfied and productive. Although these objectives may be harder to achieve in a changing environment, organizations may consider selecting employees who have a dispositional tendency to adapt with changing situations. Some initial evidence supports such approaches (e.g., Judge et al. 1999; Nikolaou et al. 2007); however, further research is needed to explore the implications of selecting for adaptability. Alternatively, organizations may consider identifying and then providing extra assistance, training, or support to less adaptable employees.

Limitations and Directions for Future Research

A potential concern may be the use of self-report ratings to measure individual adaptability, perceptions of change-related uncertainty, perceived organizational support, and job satisfaction. Thus, following the recommendations of Conway and Lance (2010) we explain our rationale for using self-report measures. First, several researchers have argued that self-reports are appropriate measures of job

satisfaction and other private events (Conway and Lance 2010; Chan 2009). Second, because our theory focuses explicitly on *perceptions* of change-related uncertainty and organizational support and the *dispositional tendency* of individual adaptability, self-report measures are the more accurate measurement method. We also exercised extreme caution to reduce evaluation apprehension by protecting participants' anonymity, which Conway and Lance identify as a proactive strategy to reduce concerns regarding common method bias.

The cross-sectional nature of the data is a limitation of the current study. Although we collected the survey responses several months before the performance data, these data are correlational so we cannot draw strong causal inferences. We obtained fairly strong results, consistent with our theoretical predictions and replicated the results in two samples to bolster confidence as suggested by Elias (2009). Nevertheless, researchers may obtain stronger conclusions from the results of an experimental or longitudinal study. Researchers have also suggested that social exchange between employees and the organization is an on-going process and cross-sectional studies using moderation or mediation frameworks may be capturing different segments of the on-going exchange (Kiewitz et al. 2009). The use of longitudinal designs examining perceived organizational support as a mediator and a moderator are important because although perceived organizational support theory identifies perceptions of organizational support as a mediator, at least one other theory conceptualizes support as a moderator (cf. job demand–control–support model; Karasek and Theorell 1990). To assess whether perceived organizational support was a moderator in the current samples, we estimated an alternative model. We computed the interactions between uncertainty and perceived organizational support and between adaptability and perceived organizational support and regressed satisfaction (Samples 1 and 2) and performance (Sample 1) onto uncertainty, adaptability, perceived organizational support, and the two interactions. Neither of the interactions were statistically significant predictors of satisfaction or performance so perceived organizational support was not a moderator in the present two samples.² These alternative analyses lend further support to our theoretical framework and hypotheses. However, the use of a longitudinal design may help to integrate the findings of research studies that have examined perceived organizational support as a mediator and a moderator and answer the call by Kiewitz et al. to develop theory that adequately explains the on-going exchange process.

² Results for the models testing whether perceived organizational support was a moderator are available upon request from the first author.

Relatively little is known about how individual adaptability influences workplace outcomes. The current study identified one pathway by which adaptable individuals achieve job satisfaction and performance; however, there may be contingencies on the relationship between individual adaptability and perceived organizational support. If organizations fail to provide support when it is proactively sought by adaptable employees, perceptions of organizational support may suffer. Future research should consider this and other contingencies. Further, I-ADAPT theory proposes four interrelated mediating mechanisms of the relationship between adaptability and performance, only one of which deals with perceived organizational support (i.e., situation perceptions and appraisal). Other situational appraisals (e.g., person–organization fit; Meyer et al. 2010) may be appropriate to consider. Researchers may also examine the other three mediator types proposed in the I-ADAPT model: (a) knowledge acquisition, (b) strategy selection, and (c) self-regulation and coping. Thus, a limitation of our study is the potential omission of mediators that could have biased our indirect effect estimates through perceived organizational support (e.g., Bullock et al. 2010). However, we investigated the role of a mediator directly implicated in theories of stressor–outcome and adaptability–outcome relationships. We also used bootstrapping procedures to obtain more accurate CIs for evaluating mediation. Therefore, extant theory informed the choice of our variable to enhance construct validity and we used an advanced statistical analysis to enhance statistical conclusion validity. As such, we are confident that, although there may be other mediators of our obtained relationships, we have provided compelling evidence that perceived organizational support is important in understanding the uncertainty–outcome and adaptability–outcome relationships.

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