

Early Employer Response to Workplace Injury: What Injured Workers Perceive as Fair and Why These Perceptions Matter

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The authors examined whether early employer response to workplace injury affects injured workers' subsequent attitudes and mental health. At 1 month and 6 months postinjury, telephone surveys were conducted with 344 workers from Ontario, Canada, who had experienced a musculoskeletal lost-time workplace injury. One-month reports of initial supervisor reaction to the injury and the use of workplace-based return-to-work strategies (early contact with worker, ergonomic assessment, presence of designated coordinator, accommodation offer) were hypothesized to predict reports of fairness, affective commitment, and depressive symptoms measured at 6 months postinjury. Structural equation modeling supported a model wherein fairness perceptions fully mediated the relationship between early responses and injured workers' attitudes and mental health. Early contact and supervisor reactions were significant predictors of fairness perceptions. The implications for early employer response are discussed.

Keywords: return to work, organizational justice, depression, affective commitment, workplace injury

An aging workforce and the severe personal and financial costs associated with workplace disability are prompting the study of how workplaces can return injured workers to their workplaces in a safe and timely manner. The quantitative research literature demonstrates that length of work disability can be effectively reduced with the use of several workplace-based return-to-work strategies such as workplace accommodations and the presence of designated return-to-work coordinators (Franche et al., 2005, 2007; Krause, Dasinger, & Neuhauser, 1998). The qualitative research literature emphasizes the

workplace social environment and demonstrates the importance of workplace goodwill for a successful return to work (for a review, see MacEachen, Clarke, Franche, Irvin, & the Workplace-Based Return to Work Literature Review Group, 2006).

In the current longitudinal study, we defined a successful return to work broadly and considered outcomes beyond disability duration and simple return-to-work status. In particular, we focused on workers who had returned to work and examined their commitment to the workplace as well as their mental health. In addition, we proposed that injured workers would use the availability of return-to-work strategies and supervisor goodwill to make judgments regarding the fairness of their return to work and proposed organizational justice as a mediator of these relationships. To the best of our knowledge, this is among the first studies to address organizational justice in the return-to-work context.

Successful Return to Work of Injured Workers

Early efforts to design return-to-work interventions focused on the physical nature of the injury as well as the physical characteristics of the job (for a review, see Krause & Lund, 2004). Emphasis on the

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importance of the role of other parties, such as the employer, in the return-to-work process came later (Franche & Krause, 2002; Frank et al., 1998). Recent systematic reviews (Hlobil et al., 2005; van Oostrom et al., 2009) attest to the success of return-to-work interventions in reducing days on disability and, currently, research evidence suggests that workplace-based strategies are more successful in assisting injured workers' return to work than clinical interventions provided in a clinical context (Loisel, 2005). Workplaces should make early contact with the injured worker, offer work accommodation (e.g., reduced hours of work, lighter duties, flexible schedules), and have contact with the injured worker's health care provider, as well as have designated return-to-work coordinators and workplace-based ergonomic visits (for a review, see Franche et al., 2005). Such workplace-based strategies are critical to reducing work disability duration according to administrative and self-report data (Franche et al., 2007; Hepburn, Franche, & Francis, 2010).

The qualitative literature on return to work has taken a slightly different focus than the quantitative literature. A recent review highlighted this literature's emphasis on the critical nature of goodwill in determining a successful return to work for injured workers (MacEachen et al., 2006). MacEachen et al. (2006) suggested that if workers are respected in their work environment, then a sincere effort may be directed toward return to work by workplace parties. Furthermore, the evidence indicated that goodwill was critical even if effective workplace-based strategies were in place: "whether parties actually collaborate in the return-to-work process is dependent on goodwill . . . even when the procedures met the standards of good practice . . ." (p. 5). In fact, MacEachen et al. suggested that the absence of goodwill may undermine worker recovery by leading to psychological trauma, an outcome not traditionally measured in quantitative studies of return to work. In support of this suggestion, Hepburn et al. (2010) found that poor interpersonal interactions during return to work were associated with the presence of depressive symptoms after accounting for the presence of workplace-based return-to-work strategies. Lippel (2007) suggested that injured workers experience stigmatization because of others' belief in stereotypes that some injured workers are malingerers taking advantage of the system, and Lippel suggested that this stigmatization results in mental health problems.

We suggest that these findings may be considered within a general work stress framework consisting of stressors, the objective and verifiable event; stress, a

worker's interpretation of this event; and strain, the outcome of the stress experienced (Pratt & Barling, 1988). Absence from work and mental health are commonly studied strain responses, and the absence of workplace-based strategies and goodwill may easily be considered as indicators of poor interpersonal relations at work, a well-established workplace stressor (Sauter, Murphy, & Hurrell, 1990). In addition, the absence of some strategies (e.g., offer of accommodation) may contribute to perceptions of job demands.

Our first set of hypotheses expanded on previous research by considering the impact of strategies on mental health as well as by adding the critical factor of goodwill from the qualitative literature (see Figure 1). We focused on injured workers' perceptions of the response that their supervisors had to their injury. Specifically, we measured negative reactions related to stigmatization (e.g., your supervisor doubted you were injured; seemed angry with you).

Hypothesis 1a: The presence of workplace-based return-to-work strategies reported 1 month postinjury will reduce the likelihood of adverse mental health effects at 6 months postinjury.

Hypothesis 1b: Negative supervisory reactions at 1 month postinjury will increase the likelihood of adverse mental health effects at 6 months postinjury.

We also believed that workplace commitment would be an indicator of successful return to work and suggested that early employer response, in the form of workplace-based return-to-work strategies and negative supervisory reactions, would be related to injured workers' commitment to their workplace. Work stress researchers consider commitment to be an important individual-level strain indicator (Jex & Crossley, 2005), and empirical evidence supports this link (for a review, see Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Furthermore, specific human resource management practices, such as promoting training and development for workers and policies that provide job security, are considered to be "high-commitment" practices. Such practices likely encourage employee commitment by signaling an employer's long-term dedication to employees (Collins & Smith, 2006). Return-to-work strategies could easily be considered among these high-commitment practices. Although Hepburn et al. (2010) did not find support for a link between return-to-work strategies and affective commitment, it would be premature to

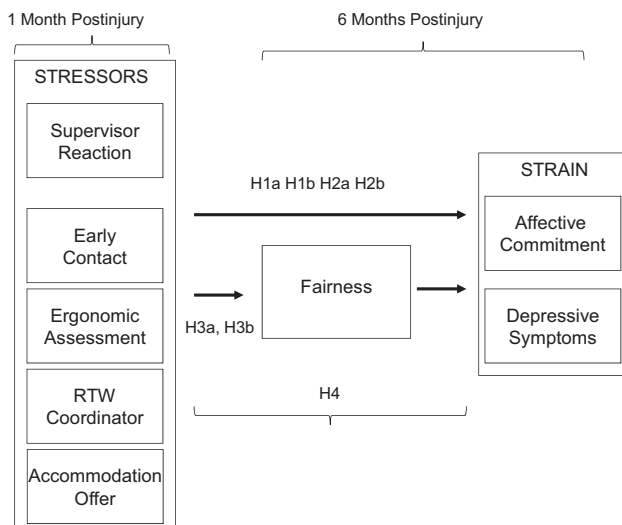


Figure 1. Conceptual model. RTW = return-to-work.

dismiss the idea because this previous study was cross-sectional and did not include all possible employer-based strategies. The current study was longitudinal and contained the strategy of workplace ergonomic assessments, one not addressed in the Hepburn et al. study but one deemed important in the Franche et al. (2005) review of the literature. Thus, our second set of hypotheses added commitment as an indicator of successful return to work (see Figure 1).

Hypothesis 2a: The presence of workplace-based return-to-work strategies at 1 month postinjury will be associated with greater organizational commitment at 6 months postinjury.

Hypothesis 2b: Negative supervisory reactions at 1 month postinjury will be associated with poorer organizational commitment at 6 months postinjury.

Fairness Perceptions of Injured Workers

Injured workers will be attentive to fairness information. Workers attend to fairness when they are faced with negative outcomes and in situations that involve power differentials (Greenberg, 2001). A workplace injury is a negative outcome, and power imbalances have been reported by injured workers (Lippel, 2007). Furthermore, according to van den Bos and Lind's (2002) uncertainty management

model, workers attend to fairness during times of uncertainty at work in order to manage their uncertainty. We believe uncertainty may be inherent for injured workers. Fear that their injury will not be perceived as legitimate and concerns about being labeled as a malingerer or a criminal defrauding the system are commonly expressed by injured workers (e.g., Beardwood, Kirsh, & Clark, 2005). We believe that early employer response in the form of workplace-based return-to-work strategies and negative supervisory reactions will be instrumental for the fairness perceptions of injured workers.

In their injustice–stress theory, Vermunt and Steensma (2001, 2005) asserted that potential stressors in the workplace may be evaluated as allocations of material (e.g., work demands are due to allocations of task and time) or immaterial resources (e.g., the absence of participation in decision making as lack of status or regard) on the part of authorities in the workplace. Workers compare what they receive to what they think they deserve. If what they receive is less than what they believe they deserve, the potential stressor will be viewed as unfair. With respect to injured workers, a negative reaction on the part of a supervisor may be considered as an allocation of an immaterial resource (lack of regard or acceptance), as may the strategy of early contact. Furthermore, some return-to-work strategies may be considered as allocations of material resources (e.g., ergonomic assessment) on the part of

authority figures in the workplace. If injured workers perceive these allocations to be less than they deserve, they will perceive unfairness.

In the current study, we measured injured workers' perceptions of both distributive justice and procedural justice. Distributive justice is related to the perceived fairness of the distribution of outcomes (Adams, 1965). In the return-to-work context, the outcome of interest would be the employer's proposed plan for the injured workers' return to work. For example, one plan may be a return to modified or reduced duties; another plan may prescribe a return directly to a preinjury job with no modifications. Although outcome fairness may be evaluated on the basis of equity, equality, and need (Deutsch, 1975), measures typically focus on equity (e.g., Colquitt, 2001). We addressed fairness with respect to equity, injured workers' perceptions of their plan's fairness considering their level of experience and workplace contributions. However, we also addressed need, asking whether their plan was fair given their current level of ability.

Injured workers' return-to-work plans should come as a result of a decision-making process; therefore, we also measured procedural justice or injured workers' perceptions of the fairness of this process. Process fairness relates to process issues such as having voice or an opportunity to express oneself and appeal decisions, as well as the accuracy and ethicality of a process (Leventhal, 1980).

Vermunt and Steensma (2005) acknowledged that potential stressors may be considered as allocations relating to both procedures and outcomes. For example, some injured workers may consider an offer of work accommodation an outcome, whereas others may view it as part of the return-to-work decision-making process. Therefore, we believed both forms of justice may be affected by negative supervisory reactions and return-to-work strategies (see Figure 1).

Hypothesis 3a: The presence of workplace-based return-to-work strategies at 1 month postinjury will increase injured workers' perceptions of distributive and procedural justice at 6 months postinjury.

Hypothesis 3b: Negative supervisory reactions at 1 month postinjury will lessen injured workers' perceptions of distributive and procedural justice at 6 months postinjury.

Fairness as a Mediator

Empirical work suggests a link between fairness perceptions and our outcomes of interest. Perceptions of fairness have been linked to organizational commitment (for reviews, see Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Conlon, Meyer, & Nowakowski, 2005) and more recently to mental health outcomes (e.g., Elovainio, Kivimäki, & Helkama, 2001; Francis & Barling, 2005; Tepper, 2001). These links can be explained within a work stress framework using ideas central to the relational explanation for why justice is important.

The relational explanation (Cropanzano & Greenberg, 1997) asserts that fair dealings provide workers with evidence that they are valued by their group. Tyler and Blader (2003) suggested that group members who are respected within their group develop greater identification with that group and will choose to cooperate—they adopt positive attitudes toward the group and work on its behalf. However, individuals who perceive that they are being treated in an unfair manner may believe that they do not have the respect of their group. Without the respect of their group, individuals may doubt their ability to cope with future difficulties. Therefore, injured workers who are treated unfairly may feel that they are not valued by their workplace and feel threatened. Certainly, this logic is in keeping with the idea of stigmatization.

Furthermore, as indicated earlier, we suspected that uncertainty is inherent for injured workers and makes them attend to fairness. The uncertainty management model (van den Bos & Lind, 2002) also suggests that fairness may have a greater impact on outcomes during times of uncertainty. Field studies have demonstrated that compared with workers reporting low levels of uncertainty, workers with high levels of uncertainty report a stronger relationship between fairness perceptions and health outcomes (e.g., Elovainio et al., 2005). Specifically, Kausto, Elo, Lippinen, and Elovainio (2005) found that for employees with high job insecurity (i.e., those experiencing uncertainty), the negative relationship between process fairness and emotional exhaustion was stronger than for those with low job insecurity.

Therefore, we proposed that justice may, in fact, mediate the relationship between strategies and supervisor reactions and both commitment and mental health (see Figure 1). Researchers have proposed justice as a mediator of the relationship between stressors and strains (Cropanzano, Goldman, & Benson, 2005), and Elovainio et al. (2001) provided empirical evidence demonstrating that perceptions of

fairness mediated the relationship between worker control and psychological strain.

Hypothesis 4: Injured workers' perceptions of the justice or fairness of their return to work will mediate the relationship of early employer response, namely workplace-based return-to-work strategies and supervisor negative reactions, with mental health and affective commitment.

Method

Participants

Telephone surveys were conducted with 344 workers in the province of Ontario, Canada, working for organizations eligible for workers' compensation coverage. Surveys were conducted as part of a larger study. Eligibility for the larger study required that participants had filed a lost-time claim for work-related musculoskeletal disorders of the back, upper limbs, or neck. As well, participants were required to self-report being absent from work for at least 5 of the first 14 days following their injury.

Forty-eight percent of respondents were women, and 72% indicated that they were married or living with a partner. Participants had an average age of 44 years, ranging in age from 16 to 68 years. Fourteen percent had completed some high school, with 27% indicating that they had completed high school. The remaining participants had some postsecondary education. Participants indicated that they had been with their employers for an average of 10.37 years ($SD = 8.79$).

Procedure

Participants completed two questionnaires over the telephone, the first within approximately 1 month of the date of their injury and the second at 6 months postinjury. To determine participant eligibility, meet ethical requirements, and respect injured workers' privacy, the research team recruited participants in a three-stage process. In the first stage, injured workers' files in Ontario's Workplace Safety & Insurance Board's (WSIB) database were reviewed to identify those meeting eligibility requirements. Next, those individuals were contacted by a WSIB staff member to determine their interest in participating in the study and to verify their eligibility. In the third stage, members of the research team attempted to contact and recruit those persons who had indicated that they were interested in participating in the study.

The WSIB contacted 2,173 eligible workers, 1,870 of whom agreed to be contacted by the research team. The research team could not contact 585 of these workers, and 247 were deemed ineligible by virtue of not meeting eligibility requirements. Of the remaining 1,038 workers, 357 refused to participate, 32 consented but the research team was unable to recontact for an interview, and 17 workers provided incomplete interviews. Ultimately, 632 participants completed the baseline interview, a participation rate of 61% (632 of 1,038 workers contacted). Of these individuals, 446 completed the 6-month interview, a retention rate of 71%. Given our focus on workplace commitment, we targeted only those 344 injured workers who had maintained an employment relationship with the workplace where their injury occurred (i.e., they had not quit, been fired, or laid off). At 6 months postinjury, fully 96% had made a return-to-work attempt, with 86% of these individuals back at work at the time of the survey.

Measures

Covariates. Several variables were used as covariates in our analyses. At 1 month postinjury, respondents reported their gender and age. Respondents were also asked to rate the physical demands of the job they would be returning to on a 5-point scale (1 = *not at all demanding*, 5 = *extremely demanding*; Kerr, 1998). In addition, participants were asked to rate their current level of pain (1 = *no pain*, 10 = *pain as bad as could be*; Von Korff, Jensen, & Karoly, 2000).

Workplace-based return-to-work strategies. Participants' experience with four workplace-based return-to-work strategies found to be important elements of return-to-work interventions (Franche et al., 2005, 2007) was measured at 1 month postinjury. We selected only those strategies that were at the discretion of the workplace: early contact with injured workers by their workplace, offers of work accommodation, ergonomic assessments, and the presence of a designated return-to-work coordinator. Four dichotomous variables were created; participants received a score of 1 if they reported having been a recipient and a score of 0 if they reported that they were not a recipient of the strategy.

Supervisor negative reaction. Supervisor negative response to injury was measured at 1 month postinjury. Three items were selected from a negative employer response scale created by Pransky et al. (2000) that was reported as having a Cronbach's alpha exceeding .77. Selected items included "Your

supervisor blamed you for your injury,” “. . . doubted that you were really hurt or injured,” and “. . . seemed angry with you for being off work.” One additional item was created for the study: “Your supervisor made you feel the need to justify the time that you have taken off work.” Participants were asked to indicate their level of agreement on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). Scores were calculated by taking the average of the four items. High scores indicate a greater negative reaction on the part of the supervisor.

Mental health. Mental health was measured with depressive symptoms at the 6-month interview. We used the well-validated self-report scale from the Center for Epidemiological Studies (Radloff, 1977). On a 4-point scale, participants were asked to indicate how often in the past week they had experienced each of 20 different symptoms (0 = *less than 1 day*, 3 = *most or all of the time*). An example of an item from this scale is “You felt that everything you did was an effort.” High scores indicate greater depressive symptoms.

Organizational commitment. At the 6-month interview, we measured affective commitment, employees’ emotional attachment to and identification with their organization. Two items were adapted from Meyer, Allen, and Smith (1993): “You would be very happy to spend the rest of your work life in this workplace” and “This workplace has a great deal of personal meaning to you.” Participants indicated their level of agreement with each item on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). A scale score was created by taking the average of the two items. High scores indicate greater levels of commitment. Original versions of the affective commitment scale have been demonstrated to have strong internal consistency (median $\alpha = .85$) and construct validity (Meyer & Allen, 1997).

Fairness perceptions. Fairness was measured at the 6-month interview. Distributive justice was measured with four items (e.g., “Your return-to-work plan has been appropriate given your experience”). We assessed the procedural justice of the decision-making process to determine the injured workers’ return-to-work plan with six items (e.g., “You were able to express your views and feelings during this process”). We adapted these items from items created by Colquitt (2001) and Moorman (1991). The original Colquitt scales have been found to have very good psychometric properties, with alphas typically exceeding .80 (for a review, see Colquitt & Shaw, 2005). They were adapted for the return-to-work context and to ensure understanding by individuals

who do not have a high school education. Participants indicated their level of agreement with each item on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). Scale scores were created by taking the average of the items. High scores indicate greater levels of each type of fairness.

Results

Table 1 contains the descriptive statistics and intercorrelations for all study variables. Table 2 contains the regression analyses testing Hypotheses 1–3 with depressive symptoms, commitment, distributive justice, and procedural justice as the outcome variables. Step 1 contained the four covariates. Step 2 contained the four workplace-based return-to-work strategies and supervisor negative reactions. For each outcome variable, the step containing the covariates accounted for a significant proportion of the variance explained.

Hypotheses 1a and 1b were not supported. Step 2 did not account for a significant proportion of the variance explained in depressive symptoms (2%). However, an examination of the beta coefficients indicated that early contact approached significance ($p < .10$) as an independent predictor of depressive symptoms. Fewer depressive symptoms were associated with an early contact.

Hypotheses 2a and 2b were supported. Step 2 accounted for a significant proportion of the variance explained in commitment (14%). An examination of the beta coefficients revealed supervisor reaction and receiving an ergonomic assessment to be significant and independent predictors of affective commitment. An ergonomic assessment enhanced commitment and a negative supervisor reaction decreased commitment.

Hypotheses 3a and 3b also received support. Step 2 accounted for a significant proportion of the variance explained in both distributive (10%) and procedural (20%) justice. An examination of the beta coefficients indicated that supervisor reactions and early contact emerged as significant and independent predictors of both forms of justice. Early contact enhanced perceptions of justice and supervisor negative reactions reduced perceptions of justice.

To more fully examine these relationships, we estimated a series of structural equation models using the Amos 7 software package (Arbuckle, 2006). Perceptions of justice were hypothesized to mediate the relationships between early employer response as the predictors and both affective commitment and depressive symptoms as the outcome. To account for the substantial correlations between the measures of

Table 1
Means, Standard Deviations, and Intercorrelations of All Study Variables (N = 344)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	44.06	10.29	—												
2. Gender ^a	1.52	0.50	.08	—											
3. Physical demands	3.77	1.14	.03	-.12*	—										
4. Pain	4.72	2.59	.00	-.21***	.14**	—									
5. RTW ^b coordinator ^c	0.79	0.41	.07	-.03	.05	-.04	—								
6. Early contact ^c	0.66	0.47	.09 [†]	-.06	-.02	-.07	.07	—							
7. Accommodation offer ^c	0.62	0.49	-.09	-.06	-.08	-.02	.17**	.05	—						
8. Ergonomic assessment ^c	0.09	0.29	-.01	-.04	.06	-.09	.06	.14**	.06	—					
9. Supervisor reaction	2.08	0.85	-.01	-.04	.14*	.17**	.04	-.10 [†]	.06	-.06	—				
10. Depressive symptoms	10.46	12.12	-.01	-.10 [†]	.14*	.30***	.04	-.11*	-.03	-.09	.13*	—			
11. Commitment	3.42	1.10	.23***	.01	-.03	-.08	.00	.14**	-.03	.12*	-.36***	-.24***	—		
12. Distributive justice	3.75	0.81	.08	-.03	-.13*	-.19***	.01	.17**	-.02	.09 [†]	-.33***	-.32***	.44***	—	
13. Procedural justice	3.61	0.77	.06	.00	-.09	-.17**	.00	.17**	-.04	.07	-.46***	-.29***	.50***	.75***	—

Note. When appropriate, Cronbach's alphas appear within parentheses on the diagonal. ^aFemale = 1, male = 2. ^bRTW = return-to-work. ^c1 = strategy reported, 0 = strategy not reported. [†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

justice ($r = .75$), we represented this construct as a single latent variable—fairness. All other model variables were treated as observed variables and the models were estimated using maximum likelihood estimation.

We began by estimating a fully mediated model as shown in Figure 2. As noted elsewhere (Kelloway, 1998), reasonable alternatives to a mediated model are the partially mediated model (adding paths from all predictors directly to the outcome variables) and a nonmediated model (deleting the paths from justice to affective commitment and depressive symptoms). Both the fully and nonmediated models were nested within the partially mediated model, allowing for comparisons using the chi-square difference test.

Although the nonmediated model provided a poor fit to the data ($\chi^2(9) = 96.63, p < .01$; goodness-of-fit index [GFI] = .94; normed fit index [NFI] = .83; comparative fit index [CFI] = .83; root mean square error of approximation [RMSEA] = .17, $p < .01$), both the fully mediated ($\chi^2(17) = 25.92, ns$; GFI = .98; NFI = .95; CFI = .98; RMSEA = .04, ns) and the partially mediated ($\chi^2(7) = 12.17, ns$; GFI = .99; NFI = .98; CFI = .99; RMSEA = .05, ns) models provided a good fit to the data. However, the partially mediated model did not provide a significantly better fit than did the fully mediated model ($\chi^2_{\text{difference}}(10) = 13.75, ns$). Therefore, the more parsimonious fully mediated model was retained for further analysis.

As shown in Figure 2, fairness was significantly predicted by supervisor negative reaction ($\beta = -.47, p < .01$) and early contact ($\beta = .15, p < .01$), but not by receiving an ergonomic assessment ($\beta = .07, ns$), the presence of a return-to-work coordinator ($\beta = .01, ns$), nor by receiving an offer of workplace accommodation ($\beta = -.02, ns$). In turn, fairness predicted both affective commitment ($\beta = .56, p < .01$) and depressive symptoms ($\beta = -.34, p < .01$). Greater fairness was associated with greater commitment and fewer depressive symptoms.

Discussion

Previous quantitative research on return to work primarily has focused on establishing the intervention strategies best able to reduce disability duration among injured workers. The current longitudinal study contributes to this quantitative literature in several ways. First, we included constructs related to successful return to work from both the quantitative literature, namely effective workplace-based return-to-work strategies, and the qualitative literature,

Table 2
Regression Analyses for Hypotheses 1–3 (N = 344)

1 Month postinjury	6 Months postinjury							
	Depressive symptoms		Commitment		Distributive justice		Procedural justice	
	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.10***		.06***		.06***		.04*	
Age		.00		.22***		.07		.04
Gender ^a		-.04		-.01		-.08		-.03
Physical demands		.09		.01		-.09 [†]		-.02
Pain		.26***		-.01		-.13*		-.09 [†]
Step 2	.02		.14***		.10***		.20***	
RTW ^b coordinator ^c		.06		-.02		.01		.01
Early contact ^c		-.09 [†]		.08		.12*		.11*
Accommodation offer ^c		-.02		.00		-.02		-.03
Ergonomic assessment ^c		-.06		.10*		.07		.04
Supervisor reaction		.06		-.35***		-.28***		-.43***

^a Female = 1, male = 2. ^b RTW = return-to-work. ^c 1 = strategy reported, 0 = strategy not reported.
[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

namely workplace goodwill. We targeted goodwill on the part of workers’ supervisors, measuring worker perceptions of their supervisor’s initial reaction to their injury. Second, we conceived of a “successful” return to work broadly and considered outcomes beyond being back at work. Our participants were injured workers, but given that virtually all had returned to work at some point during the study, we focused on their affective commitment to their workplace and their mental health. While mental health seems critical to understand from a recovery stand-

point, and worker commitment likely has implications for workplace reintegration, both will have implications for performance outcomes. Third, we firmly established the importance of studying fairness in the return-to-work context.

Consistent with a work stress framework, we proposed strategies and negative responses at 1 month postinjury as stressors and predicted that they would be related to 6-month reports of commitment and depressive symptoms. We found some support for our hypotheses. Receiving an ergonomic assessment

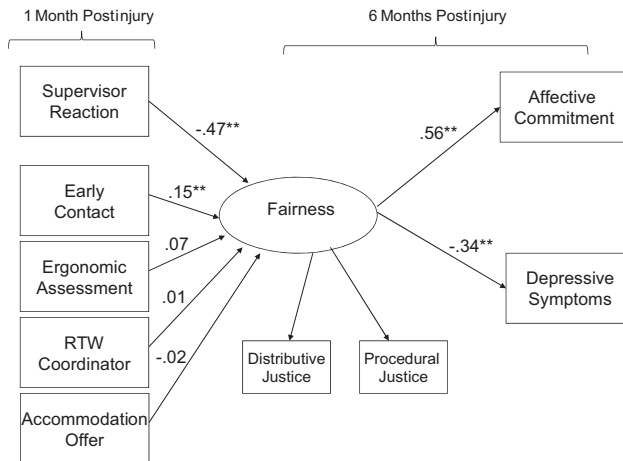


Figure 2. Fully mediated model. RTW = return-to-work. ** $p < .01$.

significantly affected injured workers' reports of affective commitment and, although no strategy emerged as a significant predictor, early workplace contact after injury approached significance as an independent predictor of depressive symptoms. Perhaps strategies that have been deemed important for the traditional return-to-work success indicators, such as disability duration, are not all important influences on other success indicators such as mental health and workplace commitment. Offers of accommodation may get workers back to the workplace in a timely manner, but perhaps it is strategies demonstrating concern about the individual (i.e., early contact) and an earnest effort to prevent future injury (i.e., ergonomic assessment) that engender commitment and encourage mental health.

This theme is underscored by support for our hypothesis that an early negative response from a supervisor will have an impact on affective commitment measured at 6 months postinjury. Although supervisor negative reactions did not affect reports of depressive symptoms, injured workers' perceiving an early negative reaction on the part of their supervisor (i.e., doubting their injury, being angry) displayed less commitment to their organization. These findings demonstrate the critical nature of a supervisor's role in the return-to-work process. Injured workers attend not only to what is done or offered but also to the atmosphere of the workplace. Workplaces would be well advised to consider supervisor response and not simply follow return-to-work practices dictated by policy or procedures. If one also considers that other workers will look to supervisors to model the appropriate reaction to a returning injured worker, the importance of the supervisor response is heightened.

In keeping with both the uncertainty management model (van den Bos & Lind, 2002) and the injustice stress theory (Vermunt & Steensma, 2001, 2005), we argued that given the uncertainty of their situation, injured workers would be attentive to information about fairness and use early negative supervisory reactions and return-to-work strategies to form fairness perceptions. We found some support for these suggestions. Similar to depressive symptoms, early contact emerged as a significant predictor of distributive and procedural justice. Similar to commitment, we found that an early negative supervisor reaction had a highly significant influence on both forms of justice.

To the best of our knowledge, this is one of only a handful of studies that have studied organizational justice in the return-to-work context. As in the broader justice literature, these other studies tended to focus

solely on justice as a predictor of study outcomes. For example, Hepburn et al. (2010) focused only on interactional justice (i.e., being treated with dignity and respect and receiving adequate information) and examined its relationship to disability duration, commitment, and depressive symptoms in a cross-sectional study. They found some evidence that interactional justice was related to self-reported days on disability, depressive symptoms, and affective commitment. Roberts and Markel (2001) measured organizational justice in general, not fairness specific to return-to-work processes or plans. They found evidence indicating that injured workers' general fairness perceptions are linked to claims filing and to their perceptions that their employer was supportive of their disability.

Considering that justice perceptions have been linked to strain, we also explored the possibility that fairness mediates the relationships between early employer responses and our return-to-work success indicators. Given the strong correlation between our two justice measures, and the similar regression findings for the two measures, we created a single latent variable of fairness. Our model testing demonstrated that fairness did mediate these relationships. Workplace-based strategies and negative supervisor reactions led to fairness perceptions, which in turn were strongly associated with commitment and depression. In fact, fairness perceptions fully mediated these relationships. Despite finding several significant independent relationships between early employer responses and affective commitment and depressive symptoms, the partially mediated model, one containing direct paths from early employer responses to our success outcomes, was not a significantly better fit to the data than the fully mediated model. Paralleling the individual regression findings for distributive and procedural justice that contained our covariates, only early contact and supervisor reactions were significant predictors of fairness. Therefore, among injured workers, the impact of early strategies and supervisor reactions on depressive symptoms and commitment is likely transmitted via worker perceptions of fairness.

Limitations and Directions for Future Research

Considering justice as a mediator opens a host of future research possibilities. Researchers may be able to conceive of new early return-to-work strategies that could promote fairness perceptions or study the mechanisms by which these strategies promote fairness. For example, research attention could focus on

the comparison standards that injured workers use to make fairness judgments (see Vermunt & Steensma, 2001). Do injured workers determine what they deserve on the basis of an internal standard, one related to their previous experience, or their knowledge of the experience of other injured workers? Future research could also consider including distributive justice judgments related to equality or fairness relative to noninjured coworkers. As we discussed above, the broader justice research literature provides links between fairness and a vast range of productive and counterproductive workplace behaviors, and future research should investigate the impact that injured workers' fairness perceptions have on "presenteeism" (i.e., at work but not working) in addition to more traditional withdrawal variables such as turnover intentions or taking personal days. Furthermore, it would be worthwhile to consider measures of workers' motivation to work and their organizational citizenship behaviors. If fairness perceptions are linked to such variables, then the importance of early supervisor reactions and workplace-based strategies, the events contributing to worker justice perceptions, could not be overemphasized.

Of course, future researchers should attempt to replicate these findings and consider the mediator findings with some caution. A limitation of the current study is that our design was not fully longitudinal. Although our measures of strategies and supervisor negative reactions were measured at 1 month postinjury, our mediator, justice, and our success indicators, depressive symptoms and commitment, were all measured at 6 months postinjury. We suggest that, in the future, justice should be measured at a time point between 1 month and 6 months postinjury. Furthermore, we did not measure commitment and depressive symptoms at 1 month postinjury. It is possible that 1-month levels of commitment and depressive symptoms may affect fairness perceptions at 6 months postinjury. Future research should consider this possibility.

The current study is also limited in that we do not know how our sample compared with the population of workers who were injured and maintained employment relations with the employer where their injury occurred. Furthermore, it relied solely on self-report. Given the vulnerability of injured workers, self-report may be the best way to gain information about this group of workers. Regardless, future research could explore ways to include objective measures of physiological stress reactions or the physical hazards of the participants' jobs. In addition, it may be fruitful for future research to address injured workers'

experience with strategies in greater detail. In the current study, we knew whether a strategy was enacted (e.g., if a worker was contacted early); however, we did not address the quality or tone of that interaction.

Summary

A "successful" return to work should consider variables beyond simple return to the workplace. How workers are treated immediately following a workplace injury has implications not only for return to work per se, as demonstrated in previous research, but also for workers' mental health and their commitment to their workplace. In the current study, we demonstrated that early experiences, especially supervisor reactions, are used by injured workers to make fairness judgments about their return-to-work experience, and that these perceptions will likely affect subsequent reports of depressive symptoms and affective commitment. All of the participants in this study had maintained their employment relationship with the workplace where their injury occurred. In fact, the vast majority were back at work. However, simply being back at work does not ensure commitment or well-being. Future research must continue to study the implications of these early return-to-work experiences. We fully expect that they will extend beyond mental health and commitment and affect many other worker attitudes and behaviors.

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