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The effect of perceived person-job fit on employee attitudes towards change in trauma centers

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Abstract

Background—Employee attitudes towards change are critical for health care organizations implementing new procedures and practices. When employees are more positive about the change they are likely to behave in ways that support the change, whereas when employees are negative about the change they will resist the changes.

Purpose—This study examines how perceived person-job (demands–abilities) fit influences attitudes towards change following an externally-mandated change. Specifically, we propose that perceived person-job fit moderates the negative relationship between individual job impact and attitudes towards change.

Methodology—We examined this issue in a sample of Level I trauma centers facing a regulatory mandate to develop an alcohol screening and brief intervention (SBI) program. A survey of 200 providers within 20 trauma centers assessed perceived person-job fit, individual job impact, and attitudes towards change approximately one year after the mandate was enacted.

Results—Providers who perceived a better fit between their abilities and the new job demands were more positive about the change. Further, the impact of the alcohol SBI program on attitudes towards change was mitigated by perceived fit, where the relationship between job impact and change attitudes was more negative for providers who perceived a worse fit as compared to those who perceived a better fit.

Practical Implications—Successful implementation of changes to work processes and procedures requires provider support of the change. Management can enhance this support by improving perceived person-job fit through ongoing training sessions that enhance providers' abilities to implement the new procedures.

Keywords

Person-job fit; attitudes toward change; organizational change; trauma centers

The imperative for change dominates the organizational landscape. Nowhere is this more evident than in the U.S. health care sector, where the need for improved efficiency, financial performance, and accountability has forced hospitals to implement various changes (Lee & Alexander, 1999). However, organizational changes such as restructurings, mergers and acquisitions (M&As), and new processes and procedures, often fail to bring about the desired results (Bazzoli, Dynan, Burns, & Yap, 2004). One common explanation for the difficulty implementing change is that employees resist changes to how they do their work

(Abrahamson, 2000; Bhattacharjee & Hikmet, 2007; Stanley, Meyer, & Topolnitsky, 2005). Employee attitudes towards change are considered a critical factor influencing the successful implementation of change (Elias, 2009; Lines, 2005). Hence, further investigation of the factors influencing employee support for change is warranted.

Prior research has identified a number of factors that influence employee attitudes towards change including an individual's cognitive appraisal of the change (Fugate, Kinicki, & Prussia, 2008; Lazarus & Folkman, 1984). Cognitive appraisal refers to the meaning individuals ascribe to a particular change, and has a significant effect on the corresponding support for a change (Scheck & Kinicki, 2002). Researchers often focus on individuals' appraisal of the impact of change on his or her job, where a greater impact results in more stress and lower support for the change (e.g., Fedor, Caldwell, & Herold, 2006; Rafferty & Griffeth, 2006; Wanberg & Banas, 2000). Recently, researchers have also examined how organizational changes influence an important cognitive appraisal - perceptions of fit following a change (Caldwell, Herold, and Fedor, 2004; Niessen, Swarowsky, and Leiz, 2010). For example, Caldwell et al. (2004) found that employee perceptions of fit with respect to job demands (person-job fit) and organizational values (person-organization fit) were affected by the implementation of organizational change. However, little research has examined how changes in perceptions of fit influence attitudes towards change. We investigate the main and joint effects of individual job impact and perceived person-job fit on attitudes towards change.

The focus of this study is the American College of Surgeons Committee on Trauma (ACS/COT) mandate, which requires the implementation of an alcohol screening and brief intervention (SBI) as a requisite for trauma center accreditation. The mandate went into effect in 2007 and the study began in 2008 to examine what extent trauma centers have responded to the mandate, as well as the impact of the change on health care providers. The ACS/COT mandate provides an excellent opportunity to study changes in person-job fit, as the alcohol SBI directly influences the day-to-day work activities of trauma center providers. Importantly, this change cannot succeed without provider willingness to learn and utilize the alcohol SBI. Thus, we examine an important issue for health care organizations in a unique research setting.

Background and Hypotheses

Attitudes towards Organizational Change

Employee attitudes towards change are central to the success of organizational change. Elias (2009) defines attitudes towards change 'as an employee's overall positive or negative evaluative judgment of a change initiative implemented by his or her organization' (p. 39). When employees are more positive about the change they are likely to behave in ways that support the change, whereas when employees are negative about the change they will resist and oppose the changes (Elias, 2009; Lines, 2005). For example, physicians who reported greater levels of resistance to a new health care information technology system also had lower intentions of using the new system (Bhattacharjee & Hikmet, 2007). Thus, we are interested in the attitudes about a specific change and, in particular, whether or not the change is viewed as harmful or positive for the team/unit/organization.

Drawing on the cognitive-phenomenological model of stress and coping (Lazarus & Folkman, 1984), we focus on individuals' appraisal of change to understand attitudes towards change (Jimmieson, Terry, & Callan, 2004; Scheck & Kinicki, 2002). For instance, a major change like an M&A could be appraised as "irrelevant" for those employees whose jobs and departments are unchanged, whereas a smaller, more proximal change such as a new process could pose a significant "threat" for those directly affected by it (Lazarus &

Folkman, 1984). That is, in order to understand how employees respond to a change it is critical to understand their perceptions of how the change will impact their work. Researchers have focused on 'individual job impact' or 'personal impact' as an important cognitive appraisal of the change (Fedor, Caldwell, & Herold, 2006; Wanberg & Banas, 2000), whereby individuals appraise the extent to which their work has changed in terms of both the nature and responsibilities of the work, as well as the amount of demands and pressure associated with the change.

Researchers argue that organizational changes are disruptive for employees, even if a change will ultimately be positive (cf., Fedor et al., 2006). Organizational changes impose new demands on individuals and reduce their sense of control over their job. Even if a change has the potential to be positive, the initial implementation creates uncertainty and an adjustment period that is disturbing for employees (Oreg, 2003). And as the level of disruption increases, an employee's attitudes towards the change will be more negative, even if the long-term value of the change is potentially positive. The earlier example of physicians' resistance to new technologies illustrates how the level of disruption influences attitudes towards change, even if the change (new technology) is perceived to be useful (Bhattacharjee, & Hikmet, 2007). Several studies have linked the level of impact appraised by an individual to various change attitudes, including lower commitment to change (Fedor et al., 2006), decreased job satisfaction after the change (Caldwell & Liu, 2010), and higher levels of work irritation (Wanberg & Banas, 2000). Hence, we predict that:

Hypothesis 1: Individual job impact is negatively related to attitudes towards change.

Person-job Fit and Attitudes towards Change

Person-environment (P-E) fit in the organization literature is described primarily as the congruence between some aspect of the individual and the corresponding aspect of the organization (Edwards, 2008). Although P-E fit can occur in multiple forms, researchers have focused on two primary types of fit: organizational values (person-organization fit) and job demands (person-job fit) (Kristof-Brown, 2000). The former focuses on the match or alignment between an individual's values and those espoused by the organization and other employees, while the latter focuses on the fit between the demands of a job and the skills and abilities needed to fulfill those demands. In the current study, we focus on person-job (P-J) fit because the alcohol SBI protocol affects the job demands placed on providers, but is unrelated to the values of a hospital or trauma center. Another important distinction in the fit literature is between objective or actual fit and subjective or perceived fit (Kristof-Brown, Zimmerman, & Johnson, 2005). We focus on perceived fit rather than objective fit in that employee attitudes are based on their perceptions rather than some external criteria (Kristof-Brown, 2000). Individuals' perception of P-J fit is related to key attitudes including job satisfaction and commitment (Edwards, 2008; Kristof-Brown et al., 2005; Resick, Baltes, & Shantz, 2007; Schneider, 1987).

Within the context of organizational change, researchers have focused on how the implementation of change affects P-J fit. Caldwell et al. (2004), in a study of 34 different organizational work units, found that perceptions of person-job fit were influenced by the implementation of an organizational change. Similarly, Niessen et al. (2010), in a study of three multinational organizations, examined the impact of change on demand-abilities (P-J) fit. In both studies, the cognitive appraisal of fit was affected by individual differences (i.e., mastery orientation and adaptive self-efficacy), whereby fit was better when individual possessed more coping resources. These findings are consistent with Lazarus and Folkman's (1984) stress and coping framework where individuals' coping resources (e.g., self-esteem) influence the appraisal of change.

Building on the findings that organizational change is related to changes in perceptions of P-J fit, we are interested in how the revised perceptions of P-J fit influence attitudes towards change. Researchers find that a lack of perceived P-J fit is stressful for individuals (Yang, Che, & Spector, 2008), and that a greater amount of stress results in more negative attitudes towards change (Vakola & Nikolaou, 2005). In contrast, individuals who perceive a better fit between their abilities and the demands of their job are more satisfied and committed to the organization (Resick et al., 2007). Hence, we expect that the better the perceived P-J fit, the more positive view of the changes they will hold. In formal terms, we predict:

Hypothesis 2: Perceived change in person-job fit is positively related to attitudes towards change.

The Interactive Effects of Individual Job Impact and P-J Fit

Thus far, we have argued that when employees perceive change programs as having a significant impact on their job, they will have more negative attitudes towards the change. We also expect that the extent to which employees perceive a better fit between their abilities and the revised job demands (P-J fit), they will have more positive attitudes about the change. Taking these arguments together, we propose that the relationship between individual job impact and attitudes towards change is moderated by P-J fit. While perceptions of job impact and fit are related, they are conceptually distinct in that changes may or may not be a good fit with an individual's existing skill set. A major change will be perceived more negatively to the extent that individuals view themselves as incapable of meeting the demands – that is, perceive a worse fit. And to the extent that individuals are asked to incorporate changes to their job – changes that do not fit with their skills and abilities – the level of stress and uncertainty would increase. However, when P-J fit is appraised as better, we expect individuals will experience a greater sense of control over the change, which reduces the stress and uncertainty associated with the changes (Brockner et al., 2004). These benefits can mitigate the negative effects of individual job impact on attitudes towards change.

Hypothesis 3: The negative relationship between individual job impact and attitudes towards change is moderated by person-job fit such that the relationship is weaker for employees who perceive a better person-job fit.

Methodology

Context of the Study

The 2007 ACS/COT alcohol SBI mandate derives from a body of randomized clinical trials that demonstrate reduced alcohol consumption and injury recidivism among patients receiving SBI compared to patients in control conditions (Gentilello et al., 1999; Zatzick et al 2004). The alcohol SBI protocol is conducted in three phases. First, injured admitted trauma patients are screened for alcohol intoxication either through laboratory testing or a self-report questionnaire. Next, for those patients who screen positive and deemed to be at a “hazardous or at-risk level,” trauma center providers (employees) are required to conduct a brief non-confrontational intervention that aids the patient in weighing the pros and cons of alcohol abuse in the context of their traumatic injury. To successfully complete phase two, providers need to be tactful and sensitive, but also forthright and direct with patients. Finally, providers are required to conduct follow-up such as telephone contact, referrals to specialists, and alcohol treatment programs. Estimates suggest the SBI protocol requires between 0.25 and 1.0 full-time equivalents (1.0=full-time job) of a trauma center social worker, nursing or mental health professional. While some trauma centers hand off to one person all alcohol screening and intervention activities, other trauma centers disperse the

activities between anywhere from 2–10 providers. A description of the alcohol SBI protocol is provided in a guide developed by the ACS/COT (American College of Surgeons, 2010).

The data used in this study is taken from an ongoing research study of Level I trauma centers in the United States. Level I trauma centers care for the most severely injured patients and are mandated by the ACS to uphold the highest standards of trauma center care. After obtaining institutional review board approval, a baseline survey was sent to the entire population of Level I trauma centers in the U.S. ($n=210$), with the primary respondent being a hospital employee with extensive knowledge of the trauma center operations (Terrell et al., 2008). From the initial survey, the researchers split the sample (excluding pediatric trauma centers) into three groups (i.e., innovators, middle majority, and laggards) based on the extent to which the trauma center had taken steps towards meeting the ACS/COT mandate. Innovator sites ($n=23$) were highly motivated centers that had developed alcohol SBI programs, even prior to the ACS/COT regulatory requirement. Laggard sites ($n=37$) had taken little or no interest in alcohol SBI pre- or post- mandate. Middle majority sites ($n=128$) were interested in implementing alcohol SBI programs, but slow to do so.

The current study focused on 20 trauma centers randomly chosen from the middle majority group. The middle majority trauma centers were considered most likely to benefit from being part of an SBI protocol study, whereas the laggards were very unlikely to implement the protocol and the innovators already had the protocol in place. A random sample of 20 centers was chosen due to the costs associated with conducting the study. Using information derived from American Hospital Directory listings and through review of individual hospital web pages, the sample of 20 trauma centers did not differ from overall population of trauma centers in terms of revenues ($t=.5602$, $p>.10$), beds ($t=.5391$, $p>.10$), or affiliation with a university ($t=1.0213$, $p>.10$). The researchers asked the primary contact at the trauma center to identify the ten providers who would be most impacted by the changes required in the implementation of the alcohol SBI program. These individuals were sent online surveys and were paid \$35 for completing the survey. The final sample of providers was 200 with a 100% response rate. The surveys were anonymous and responses could be accessed only by the researchers. No information was available to any other members of the trauma center staff. Informed consent was obtained from each participant before survey completion.

This mandate represents a good test of the impact of changes on individual jobs as the changes place greater demands and pressure on front-line trauma center providers. Providers are not only being asked to learn new skills associated with the alcohol SBI protocol, they also need to work more closely with other providers to ensure that appropriate follow-up is occurring after the patient leaves the hospital. These requirements are being added to the providers' workload without modifying other aspects of their job. As such, the SBI protocol increases the workload and responsibilities of providers. Finally, because there is no additional compensation provided, we expect that individual job impact will be greater in this context.

Measures

Attitudes towards change—Four items taken from Caldwell et al. (2004) were used to assess the dependent variable for this study. The items for the current study were (1=strongly disagree; 5= strongly agree): “The implementation of an alcohol SBI service has...” “...made my trauma center team less effective,” “...created problems for my trauma center team,” “...disrupted the way my trauma center team normally functions,” and “...harmed my trauma center team.” All attitudes were reverse-coded to create a positive measure of attitudes towards change. Coefficient alpha for the measure is .92.

Person-job fit—We used Caldwell et al.'s (2004) measure of P-J fit (1=strongly disagree; 5= strongly agree): “As a result of the implementation of an alcohol SBI service, my abilities and training better ‘fit’ what my job requires” and “As a result of the implementation of an alcohol screening and brief intervention service, I am more qualified to do my job than before.” The coefficient alpha for these two items is .80.

Individual job impact—Six items were taken from Caldwell et al (2004). Again, the stem for each of these items was “As a results of the alcohol SBI...” “I am expected to do more work than I used to,” “The nature of my work has changed,” “My job responsibilities have changed,” “I find greater demands place on me at work,” “I am experiencing more pressure at work,” and “The work processes and procedures I use have changed.” The coefficient alpha for these six items is .93. (1=strongly disagree; 5= strongly agree)

Control variables—Individual-level controls included in the analysis were gender, occupation, tenure, and job satisfaction. There are three main occupations within a trauma center: nurses, doctors, and social workers. While a doctor would be expected to identify potential patients for the brief intervention, the level of impact on his or her job would likely be less than that for social workers and nurses, who are required to conduct the intervention and follow up with patients regarding their alcohol use (Doctor=1; Other=0). Employee tenure is controlled for as it could be related to an employee's willingness to adapt and incorporate new job demands (Niessen et al., 2009). Job satisfaction is an important control as it accounts for individuals' general attitude about their job, apart from the changes that occurred from the mandated SBI requirements. We measure job satisfaction with six items taken from Hackman and Oldham (1980). Example items include (1=not at all; 5=to a very great extent): “How satisfied are you with the chance to do something that makes use of your abilities”, and “How satisfied are you with the chances for advancement.”

We conducted a principal components analysis with varimax rotation for all items in our measures (i.e., attitudes towards change, person-job fit, individual job impact, and job satisfaction). Table 1 shows this analysis. Four factors with eigenvalues greater than 1 explained 72% of the total variance. Factor loadings supported the use of four variables.

Finally, two trauma center control variables were included. We controlled for the number of beds in the hospital which is a common measure of hospital size (Terrell et al., 2008). This was derived from American Hospital Directory listings and through review of individual hospital web pages. The average number of beds was 517 and ranged from 321–833 beds. In addition, we controlled for whether or not the trauma center had received any “specialized training in the delivery of alcohol screening and brief intervention services (e.g., training workshops delivered by an expert consultant)?” (1=yes; 0=no). If training had already been provided, it could influence both the perception of person-job fit and the attitudes towards change. This information was obtained from the baseline survey completed by a hospital employee familiar with trauma center operations. Twelve out of twenty trauma centers reported receiving some specialize training in the delivery of alcohol SBI services, which consisted of a one-day workshop.

Analysis

Because the data consists of employees nested within trauma centers, we test our hypotheses using hierarchical linear modeling (HLM) (Raudenbush & Byrk 2002). Although HLM is ideal for testing cross-level relationships when a higher level variable (e.g., organization) influences lower level variables (e.g., individual), it is still appropriate because of the nested data in our study. We use grand-mean centering for the individual-level predictors. We also calculate the intraclass correlations (ICC) using the proportion of variance in attitudes

towards change attributed to individuals and trauma centers. This serves as a baseline for determining the amount of variance explained by the predictors. Finally, in additional analysis not included in the paper, we verified that the results presented below are consistent with analysis using ordinary least squares regression and the cluster option to account for trauma center membership. These results are available from the author upon request.

Results

Descriptive statistics are presented in Table 2. The correlations are in the expected direction: individual job impact is negatively related to attitudes towards change ($r = -.51$), while perceived fit is positively related to attitudes towards change ($r = .24$). The initial intercepts-only model showed that the majority of variance in attitudes towards change was at the individual level (95 percent) as compared to the trauma center level (5 percent). The control variables accounted for 4 percent of the individual-level variance and virtually all of the variance associated with the trauma center.

Table 3 presents the regression results testing our hypotheses. In step 1, job satisfaction is positively related to attitude towards change. In step 2, individual job impact ($\beta = -.452, p < .01$) was negatively related to attitudes towards change, while P-J fit ($\beta = .331, p < .01$) was positively related to change attitudes. Job satisfaction was no longer significant once entering the independent variables of individual job impact and P-J fit. These two variables explained approximately 30 percent of the individual variance of attitudes towards change. These results support Hypotheses 1 and 2. When we analyzed the interaction between job impact and perceived P-J fit, the interaction term was significant ($\beta = .128, p < .05$). Figure 1 plots the relationship between job impact and attitude towards change at high and low levels of perceived fit (one standard deviation above and below the mean), as recommend by Cohen, Cohen, Aiken, and West (2003). The graph indicates at high levels of P-J fit the relationship between job impact and attitudes towards change remains negative and marginally significant (simple slope: $\beta = -.143, p < .10$), while at low levels of fit the relationship is negative and significant (simple slope: $\beta = -.515; p < .001$). This finding supports Hypothesis 3 and suggests that perceived P-J fit lessens the negative effect of job impact on employee attitudes towards change. The interaction term explained an additional three percent of individual-level variance in attitudes towards change.

Finally, in exploratory analysis, we examined the possibility of reverse causality by regressing perceptions of person-job fit on the interaction term of job impact and attitude towards change. Additionally, we modeled the interaction term of perceived person-job fit and attitude towards change as a predictor of job impact. In both cases, the interaction terms were nonsignificant.

Discussion and Implications

The current study examined two important antecedents of employee attitudes towards change: individual job impact and person-job fit. We predicted that as the impact of the change on an individual's job increased so would the stress and uncertainty for that individual, resulting in more negative attitudes towards change. Further, we predicted that the extent to which individuals perceived the changes as a better fit with their skills and abilities, they would be more positive about the change. Finally, we posited that a better person-job fit would mitigate the negative effect of individual job impact on attitudes towards change. We test and find support for our hypotheses in a sample of U.S. trauma centers experiencing an external mandate to implement an alcohol SBI protocol.

Theoretically, our findings are consistent with much of the research discussing the importance of perceived fit in a changing work environment. Previous research examining

person-job fit during organizational change found that changes to the organizational environment result in changes to employee perceptions of person-job fit (e.g., Caldwell et al., 2004; Niessen et al., 2007). Our findings extend this work by showing that employee perceptions of person-job fit following the implementation of change influence attitudes towards a specific change. Health care providers who perceived a good fit between the alcohol SBI requirements and their abilities to meet the new demands had more positive attitudes towards the change. Further, perceived fit served to mitigate the job impact on employee attitudes towards change. It is likely that perceived fit indicated that providers have a better sense of what the changes involved and reduced the stress of the new job demands. In turn, it is possible that providers experienced greater control over the change, which is an important factor in reducing employee resistance to change (Brockner et al., 2004). Thus, perceived fit appears to serve as a coping resource in the face of changes to an individual's job. Future change research should focus on the issue of person-job fit in order to understand employee responses to change.

Employee attitudes towards change are important in that they lead to behaviors that facilitate change implementation (Piderit, 2000). A variety of employee behaviors could support the change including lower turnover and absenteeism, willingness to learn the SBI protocol, and more positive interactions with patients. Unfortunately, as this study focused on the baseline attitudes, we do not have any measures of employee behaviors associated with the SBI protocol or patient outcomes. Yet, given the link between attitudes and behavior in prior change research, we expect that employees with more positive attitudes towards the change would be more likely to exhibit constructive behaviors related to the change. Future research is needed to examine the link between person-job fit, change attitudes, and patient outcomes.

The current study also contributes to the organizational change literature. Recent change research has focused on both increasing and improving communication about the change to employees (i.e., Duck, 1993; Kotter, 2007). Improved communication efforts by management increase employees' involvement in the change, as well as their overall understanding of how the changes impact them. Our findings suggest that effective communications also need to emphasize how the changes fit with employees existing skill sets. And when the change requires new skills, the organization must be willing to provide training to help employees improve their perceptions of person-job fit. The need for increased training also has policy and funding implications, which are discussed below.

Finally, the influence of teams on the ability of health care organizations to successfully implement change is another important issue (e.g., Caldwell et al., 2008; Lemieux-Charles & McGuire, 2006). In trauma centers, providers work in a team environment that is characterized as highly intense with little room for error. As the SBI protocol requires communication and cooperation among team members, their motivation and ability to work together will undoubtedly influence attitudes towards change. Future research is needed to understand the role of teamwork and team norms in the successful implementation of an alcohol SBI.

Strengths and Limitations

The current sample provides a number of advantages. First, it overcomes a limitation of many prior change studies in that the alcohol SBI mandate is consistent across a population of organizations from which our sample is drawn. Thus, we are able to study employee reactions to the same type of change in different organizational settings. Second, we focus on the employees most affected by the organizational change being implemented – trauma center providers. This overcomes a limitation of prior change studies by linking a specific change to the individuals whose work is most affected. Finally, we are studying the implementation of an evidence-based intervention within the context of hospitals. The

success or failure of such change efforts is critical not only to hospitals and providers, but also to the safety of the general public. The current study highlights the importance of person-job fit when introducing such a change, and the link between perceived fit and attitudes towards change.

Of course, there are several important limitations as well. The primary limitation is the use of same source data with a cross-sectional design, which pose a threat to the validity of the results. We believe several factors help mitigate these issues. First, in terms of causality, we are studying a mandated change that came into effect one year prior to data collection. The survey questions included this mandated change as a reference point for the independent and dependent variables. Employees were asked to consider how this change had impacted their current job demands, as well as the benefit of the change for the organization. While our theoretical rationale suggests that perceptions of fit and job impact will influence attitudes towards change, it is possible that attitudes towards change interact with job impact to influence perceptions of P-J fit. To test this possibility and as noted in the results, we regressed perceived P-J fit on the interaction between job impact and attitudes towards change. The interaction was nonsignificant suggesting that our initial model was correctly specified.

In terms of common methods, our focus on an interaction effect makes it less likely for common methods to be driving our results (Siemens, Roth, & Oliveira, 2010). In addition, following Spector's (2006) recommendation, we examined the correlation matrix (Table 1) and found that not all survey items are significantly correlated, suggesting that the survey method was not driving all responses. Individual job impact and person-job fit were correlated at .05 ($p > .10$). Finally, we controlled for job satisfaction which accounts for an individual's general attitude towards his or her job. Because job satisfaction is related to both attitudes towards change and person-job fit, it accounts for a potential mindset of the respondent driving all responses to the survey items. Nevertheless, our results have to be interpreted with some caution and need to be confirmed in studies using multiple sources over time. Finally, our findings may not generalize to trauma centers that have been categorized as laggards or innovators, as there could be other issues influencing employee attitudes towards change.

Recommendations for Practice

In practical terms, we tested our predictions in a sample of U.S. trauma centers experiencing a mandate to implement an alcohol SBI. The success of an external mandate such as this one is dependent, in part, on helping providers feel more able to meet the changing job demands. Although initial trainings have occurred in some trauma centers, provider attitudes towards change still have room for improvement. Given the importance of employee attitudes in determining the success of organizational changes, future mandates need to ensure that sufficient resources are allocated to facilitate the implementation. For example, more comprehensive training can enhance employee perceptions of fit by helping them learn the necessary skills and abilities to meet the changing job demands. Another part of this training may include additional resources for providers, such as a part- or full-time position to specifically facilitate the implementation of mandates such as the alcohol SBI.

In terms of policy implications, our findings contribute to the ongoing discussion on the implementation of patient-centered care in trauma centers. Investigators have established an investigative-policy dialogue with the American College of Surgeons' Committee on Trauma whereby innovations in trauma center care described by empiric research can be directly translated into practice changes through college policy guidelines and mandates. For example, research on post-traumatic stress disorder (PTSD) in acute care patients (e.g.,

Zatzick et al., 2004) has guided recent college mandates with respect to guidelines for PTSD screening, intervention, and referral (American College of Surgeons Committee on Trauma, 2006; Terrell et al., 2008). Our study focuses on the importance of person-job fit for trauma center providers and the link to attitudes towards change, both of which potentially influence how and why alcohol SBI protocols succeed or fail in trauma centers.

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Figure 1.
Interactive effects of job impact and person-job fit on attitudes towards change.

Table 1Varimax factor loadings for multi-item variables ($n = 200$)

	1	2	3	4
<i>Attitudes Towards Change</i>				
"The implementation of an alcohol SBI..."				
...has made my trauma center less effective	.18	-.08	.90	-.10
...has created problems for my trauma center team	.25	-.05	.83	-.14
...has disrupted the way my trauma center team normally functions	.31	-.05	.85	-.07
...has harmed my trauma center unit	.26	-.09	.84	-.10
<i>Person-Job</i>				
"As a result of the implementation of an alcohol SBI..."				
...my abilities and training better "fit" what my job requires	.01	.14	-.16	.89
...I am more qualified to do my job than before	.11	.06	-.12	.90
<i>Individual Job Impact</i>				
"As a result of the implementation of an alcohol SBI..."				
...I am expected to do more work than I used to	.77	-.08	.29	.02
...the nature of my work has changed	.79	-.08	.27	.08
...my job responsibilities have changed	.84	-.07	.23	.06
...I find greater demands placed on me at work	.87	-.04	.18	-.02
...I am experiencing more pressure at work	.83	-.12	.17	.02
...the work processes and procedures I use have changed	.81	-.08	.21	.05
<i>Job Satisfaction</i>				
"How satisfied are you with..."				
...the chance to do something that makes use of your abilities?	-.12	.78	-.07	-.03
...the chances for advancement?	-.10	.81	.02	.09
...the freedom to use your own judgment?	-.14	.65	.09	.14
...the feeling of accomplishment you get from your job?	-.07	.78	-.09	.15
...the prestige your job has in the community?	-.01	.79	-.23	.05
...being able to do things the right way?	-.07	.81	-.08	.06

Note. The highest loading of each item is shown in bold.

Table 2Descriptive Statistics and Correlations for Individual-level Variables^a

Variable	Mean	s.d.	1	2	3	4	5	6	7
1. Attitudes towards change	2.80	0.74	.92						
2. Individual job impact	2.48	0.83	-.51	.93					
3. Person-job fit	3.06	0.61	.24	.05	.80				
4. Male	0.29	0.45	.04	-.20	-.08	-			
5. Tenure	9.41	8.33	.04	.08	-.03	-.00	-		
6. Doctor	0.26	0.44	.09	-.19	-.09	.61	-.07	-	
7. Job satisfaction	3.61	0.65	.19	-.22	.16	.08	-.03	.15	.90

Note. n = 200; Correlations .14 or greater are significant at the .05-level of significance.

^aReliabilities are reported on the diagonal for multi-item variables.

Table 3HLM Analysis with Attitudes towards Change as Dependent Variable^{abc}

Level 1	Step 1		Step 2		Step 3	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Male	-.028	.141	-.133	.120	-.148	.119
Tenure	.003	.006	.008	.006	.009	.005
Doctor	.135	.148	.127	.125	.138	.124
Job satisfaction	.143 [*]	.052	.025	.052	.013	.046
Individual job impact	-	-	-.452 ^{**}	.055	-.453 ^{**}	.055
Person-job fit	-	-	.331 ^{**}	.071	.374 ^{**}	.074
Individual job impact * Person-job fit	-	-	-	-	.128 [*]	.050
Level 2						
Number of beds (log)	.000	.000	.000	.000	.000	.000
SBI training	.163	.128	.089	.101	.163	.128
Model deviance	467.77 ^{**}		405.16		402.10	
Change in deviance			62.20 ^{**}		3.06 [*]	

^a n(level 1) = 200, n(level 2) = 20. HLM2 analysis was used.^b Coefficients in table are fixed effects.^c Deviance is a measure of model fit; it equals 2 X the log-likelihood of the maximum likelihood estimate; a smaller deviance indicates a better model fit.^{*} p<.05;^{**} p<.01, two-tailed test.