

Bringing the Troops Back Home: Modeling the Postdeployment Reintegration Experience

Shannon L. Currie
Dalhousie University

Arla Day and E. Kevin Kelloway
Saint Mary's University

Using a sample of Canadian Forces personnel ($N = 490$) returning from deployment in Afghanistan, we tested a model of reintegration experiences, with a focus on affective organizational commitment, support factors, posttraumatic stress symptoms, changes in alcohol use, and turnover intentions. The model provided an excellent fit to the data, although homecoming experiences were not associated with commitment as predicted. No differences emerged between novice (single tour) and experienced (multiple tours) personnel, although the number of tours was associated with increased affective commitment as expected.

Keywords: military, reintegration, posttraumatic stress, affective commitment, turnover

Military personnel deployed to active combat regions are exposed to unfamiliar and stressful experiences, and there is much evidence to suggest that the experience of deployment can have a significant negative impact on physical and mental health outcomes (Adler, Vaitkus, & Martin, 1996; Day & Livingstone, 2001; Hoge et al., 2004; Hourani, Williams, & Kress, 2006; Wain, Bradley, Nam, Waldrep, & Cozza, 2005). Indeed, personnel exposed to combat and deployment stressors are at increased risk for suffering physical injuries or conditions and experiencing psychological difficulties, such as depression, substance abuse, and posttraumatic stress (Adler et al., 1996; Doyle & Peterson, 2005; Hoge et al., 2004; Resnik & Allen, 2007; Wain et al., 2005). Such difficulties present challenges for personnel to reintegrate into personal and professional roles (Basham, 2008), and they may have implications for organizational retention. Despite these

personal and organizational costs, there is little published research on reintegration experiences (Blais, Thompson, & McCreary, 2009). Therefore, in the present study, we sought to examine the reintegration process with a focus on affective commitment and support.

Reintegration

Reintegration is the process of personnel transitioning back into personal and organizational roles and society after having been deployed. Despite the growing recognition of the importance of the reintegration experience of personnel on both individual health and organizational outcomes (Basham, 2008; Blais, Sullivan-Kwantes, & McCreary, 2006; Doyle & Peterson, 2005), our understanding of reintegration is limited to clinical knowledge and exploratory research (e.g., Basham, 2008; Blais et al., 2006; Resnik & Allen, 2007).

Recent work by Blais et al. (2009) examined the “reintegration attitudes” of military personnel returning from deployment. They found that negative attitudes toward work were associated with increased strain and turnover intentions and decreased affective commitment. To expand the focus from attitudes during reintegration, we must move toward an understanding of the reintegration process, using solid theoretical conceptualizations to guide our insight into the multifaceted factors of the reintegration process. Therefore, we focus on affective commitment and support to address personnel health and turnover outcomes during reintegration.

Shannon L. Currie, Department of Psychology, Dalhousie University; and Arla Day and E. Kevin Kelloway, Department of Psychology, Saint Mary's University.

Preparation of this article was supported by funding from the Social Sciences and Humanities Research Council of Canada. We thank Sébastien Blanc for his work and comments on an earlier version of this article and the Canadian Department of National Defence for their assistance with this article. The views stated in this article do not necessarily reflect the views of the Department of National Defence.

Correspondence concerning this article should be addressed to Arla Day, Department of Psychology, Saint Mary's University, Halifax, Nova Scotia, B3H 3C3 Canada. E-mail: arla.day@smu.ca

Military Personnel Health and Turnover Intentions

There is large body of literature demonstrating that the stress of deployment places personnel at increased risk for negative health behaviors, such as alcohol consumption and drug use (Bray, Fairbank, & Marsden, 1999; Tucker, Sinclair, & Thomas, 2005), psychological strain (e.g., Hoge et al., 2004; Sharkansky et al., 2000; Wain et al., 2005), posttraumatic stress disorder, depression, anxiety, and adjustment disorders (Basham, 2008; Bray et al., 1999; Ford et al., 2001; Hoge et al., 2004; Wain et al., 2005). There also is growing recognition that these psychological difficulties need not be at clinical levels to have a significant negative impact on personal and professional functioning (e.g., Ford et al., 2001). Indeed, there has been a shift in clinical awareness so that some level of postdeployment psychological distress is to be expected rather than medicalized (Doyle & Peterson, 2005). That is, some degree of distress is common and, although not at diagnostic levels, can still significantly affect individual well-being.

Such negative outcomes can further affect military organizations, resulting in productivity loss and job burnout (Harrington, Bean, Pintello, & Mathews, 2001; Hourani et al., 2006; Tucker et al., 2005). For example, high strain has been shown to be associated with increased turnover intentions (Elangovan, 2001). The question remains, however, as to what factors may influence this process to promote more positive reintegration experiences.

Affective Commitment

Organizational commitment has important implications for many organizations, including the military (Thomas, Bliese, & Jex, 2005), and it may be a key mechanism in the reintegration process. Commitment can be conceptualized as one's attachment to an organization in terms of an emotional attachment to the organization (i.e., affective commitment), the perceived costs of leaving the organization (i.e., continuance commitment), or a perceived obligation to remain with the organization (i.e., normative commitment; Allen & Meyer, 1990).

All three of these components of commitment are similar in that they are associated with a reduced likelihood to leave the organization; however, the rationale for remaining is quite different for each. Affective commitment describes the extent to which an individual is emotionally attached to an organization, identifies with it, and is involved with it (Allen

& Meyer, 1990; Meyer & Allen, 1997). Employees with affective commitment stay because they "want to" stay; Conversely, employees with continuance commitment stay because they "have to" stay (they have no alternatives), and employees with normative commitment stay because they feel they "ought to" stay (Allen & Meyer, 1990; Meyer & Allen, 1997). Because our focus is on commitment in terms of positive attitudes after deployment, and because most organizations (including the military) are interested in increasing the "want to" aspect of commitment, our focus is on affective commitment.

Previous research with military personnel has suggested that commitment is associated with decreased psychological strain (e.g., posttraumatic stress disorder; Blais et al., 2009; Sutker, Davis, Uddo, & Ditta, 1995) and psychosomatic symptoms (Nystedt, Sjöberg, & Hägglund, 1999). In their meta-analysis of the antecedents and outcomes of organizational commitment across various occupations, Meyer, Stanley, Herscovitch, and Topolnysky (2002) found that affective commitment was negatively related to stress ($\rho = -.21$).

There also are consistent findings demonstrating the relationship of commitment with less turnover (Rhoades, Eisenberger, & Armeli, 2001) and lower intentions to turnover (e.g., Ferres, Connell, & Trava-glione, 2004; Porter, Steers, Mowday, & Boulian, 1974). In Meyer et al.'s (2002) meta-analysis, affective commitment was associated both with actual turnover ($\rho = -.17$) and turnover intentions ($\rho = -.56$). In fact, it has been argued that, of all three components of commitment, affective commitment appears to be the most consistent predictor of turnover and turnover intentions (Somers, 1995).

Feelings of commitment may promote a sense of purpose that facilitates interpreting events in a way that provides meaning, thus decreasing the perception of stress and resultant strain (Kobasa, Maddi, & Kahn, 1982). If affective commitment to the organization can be seen as a form of context-specific mental health (Warr, 1987), resources provided by the organization should have their primary impact on such context-specific indices, which then spillover to more context-free measures of well-being (e.g., Kelloway & Barling, 1991, 1994). Therefore, bolstering affective commitment may have important individual and organizational implications.

Organizational and Social Support

Support may be one of the key factors in bolstering affective commitment, and we may foster commit-

ment in two ways: First, formal support tactics in the military context could serve to foster commitment by debriefing and transitioning personnel in a way that reinforces the importance of their contributions and increases morale and commitment. Second, although informal support may not promote organizational values in the same manner, such supports likely fulfill individual support needs and validate one's deployment term, thus influencing commitment attitudes.

In their meta-analysis of the antecedents and outcomes of organizational commitment, Meyer et al. (2002) found that organizational support was positively related to affective commitment ($\rho = .63$). Similarly, in a series of studies, Rhoades et al. (2001) found that organizational support was associated with changes in commitment over two- and three-year periods, providing evidence that support predicts commitment. In studies of military personnel, both supervisor support (Thomas et al., 2005) and co-worker support (Nystedt et al., 1999) have been found to be related to commitment.

From an organizational perspective, it is important to distinguish between formal and informal support. Formally, the challenges of reintegration are widely recognized and have led to the development of military support services to aid in this transition. Reintegration supports often take the form of debriefing or more structured group debriefing programs (Ritchie, 2007; Rossignol, 2007), which provide a structured opportunity for personnel to "reflect upon the breadth of their deployment experiences and accomplishments" and "implications of the deployment . . . [and] postdeployment consequences" (Blais et al., 2006, p. 15). Indeed, the U.S. Army considers reintegration support programs to be an essential training component and offers programs to support reintegration back to garrison environment and family life (Doyle & Peterson, 2005).

Formal supports can take the form of homecoming events (e.g., parades and welcome-home parties) that publicly acknowledge the efforts of personnel during deployment. More positive homecoming receptions from family and community are associated with better adaptation in personnel returning from tour (Bolton, Litz, Glenn, Orsillo, & Roemer, 2002; Fontana & Rosenheck, 1994). Conversely, negative homecoming receptions are associated with greater psychological strain (Fontana & Rosenheck, 1994; Johnson et al., 1997). Reintegration support programs during deployment and postdeployment homecoming events (Pincus, House, Christenson, & Adler, 2001) are important aspects of the entire deployment process, and they can function as a resource by for-

mally acknowledging the contributions of personnel, thereby increasing their sense of accomplishment and purpose, which in turn bolsters commitment and reduces strain (Fontana & Rosenheck, 1994).

Informal, unstructured support from social networks also can be important for facilitating reintegration. Personnel returning from tour face a potential multitude of challenges in adjusting to life back home (Blais et al., 2006). Personnel have experienced new environments, heightened world awareness, and developed new strengths and skills (Basham, 2008), while their family and friends at home have experienced their own changes. Thus, reintegration involves adjusting to changes in one's self, as well as in personal and family relationships and in household roles and expectations (Basham, 2008; Blais et al., 2006; Doyle & Peterson, 2005). This adjustment process is facilitated by supportive interpersonal interactions (Bolton et al., 2002). Coworkers play an important role in providing informal support: They offer the advantage of shared military work experiences and stressors, which facilitates a unique understanding and provision of support (Cohen & McKay, 1984), and they may be friends outside of the work context, thus providing informal support across a variety of settings.

Taken together, both formal and informal supports appear to be an important part of the reintegration of personnel returning from tour and are important antecedents to affective commitment, which in turn are associated with organizational outcomes (e.g., turnover intentions), strain, and ultimately, health behaviors (e.g., changes in alcohol use).

Tenure and Experience

In any occupation, job tenure can influence the relationships among organizational and individual factors. This situation is even more apparent in the military, especially when tenure is considered in terms of deployment experience. That is, experience in deployment may influence the effectiveness of both formal and informal supports, as well as the relationships among commitment, stress, changes in alcohol use, and turnover intentions.

There is a small body of research on the impact of deployment experiences on well-being, with the literature suggesting two differing effects of experience (see Adler, Huffman, Bliese, & Castro, 2005). On one hand, new experiences may be viewed as more stressful than familiar situations (e.g., Lazarus & Folkman, 1984), especially when the situation is potentially dangerous. Similarly, individuals who have

been exposed to stressful events after learning coping skills may have greater resilience (see, e.g., Meichenbaum's [1985] stress inoculation theory). Therefore, we expect members who have not previously been deployed to experience greater strain. In support of this perspective, soldiers who previously had been deployed in peacekeeping missions reported fewer incidents of posttraumatic stress disorder (PTSD), depression, and alcohol problems (Martinez et al., 2000). Similarly, Adler et al. (2005) found that military personnel who were on their first deployment reported higher psychological distress scores.

Conversely, already having experienced acute stressors may exacerbate one's reaction to future stressors. For example, people report greater stress after a traumatic incident if they have previously experienced a traumatic event (McFarlane, 2000). Therefore, according to this perspective, personnel who have experienced several deployments may report higher strain. Some research supports this view: U.S. military personnel who were in combat in the Gulf War and who had previous combat experience were more likely to be diagnosed with PTSD (McCarroll et al., 1997; Wolfe et al., 1999).

Despite this research on experience and strain, we do not know in what ways the differences between experienced and novice personnel may occur across all aspects of support, commitment, psychological health, turnover intentions, and alcohol consumption.

Summary and Hypotheses

We propose a model of reintegration with a focus on affective commitment and support, providing us with a framework to examine how both formal (e.g., formal reintegration support programs and homecoming events) and informal (e.g., coworker) support are associated with affective commitment, which in turn is associated with strain, alcohol consumption, and turnover intentions. Because of research showing differences in strain based on experience (Adler et al., 2005; Wolfe et al., 1999), and because experience in deployment may influence the effectiveness of formal and informal supports, as well as the relationships among commitment, stress, changes in alcohol use, and turnover intentions, we tested the following hypotheses using data from a sample of deployed military personnel divided into two subgroups based on experience: (1) experienced personnel who have completed other deployments and (2) novices who are returning from their first deployment. Moreover, we specifically hypothesized that:

Hypothesis 1: There are significant differences in the model for novice and experienced personnel.

Because past research has shown that both coworker support and organizational support are related to commitment (e.g., Meyer et al., 2002; Nystedt et al., 1999), we predicted the following.

Hypothesis 2: Coworker support (Hypothesis 2a), formal homecoming events (Hypothesis 2b), and formal reintegration program effectiveness (Hypothesis 2c) are associated with increased affective organizational commitment.

Furthermore, although we expect the formal channels of support to influence other variables solely through affective commitment, we expect that coworker support will be related to strain beyond its impact on work attitudes. Therefore, we predicted the following.

Hypothesis 3: Coworker support is associated with lower posttraumatic stress symptoms.

On the basis of past research on the outcomes of affective commitment (e.g., Meyer et al., 2002), and because affective commitment has been shown to mediate the relationship between support and voluntary turnover (Rhoades et al., 2001), we also predicted the following.

Hypothesis 4: Affective organizational commitment is associated with decreased posttraumatic stress symptoms (Hypothesis 4a) and turnover intentions (Hypothesis 4b).

On the basis of the research indicating that strain is associated with intentions to leave the organization (Elangovan, 2001) and alcohol use (Tucker et al., 2005), we predicted the following.

Hypothesis 5: Psychological strain (e.g., posttraumatic stress symptoms) is associated with increases in alcohol consumption (Hypothesis 5a) and increased turnover intentions (Hypothesis 5b).

Method

Participants

Data for this study were taken from a larger sample of 867 Canadian military personnel, who were responding to a postdeployment survey on their return

from a particular rotation in Afghanistan.¹ Personnel selection officers coordinated the survey so that returning personnel were asked to complete either an electronic or hard copy of the survey within approximately 6 months of returning home (with the majority completing it within 3 months, which is in line with suggested timing of assessments; see, e.g., Bliese, Wright, Adler, Thomas, & Hoge, 2007). Personnel completed the survey either individually or in a group setting and either electronically or through a hard copy. Participation was voluntary, and all responses were anonymous.

For the purpose of this study, we focused on junior noncommissioned members from the Army ($N = 490$).² There were 231 novice personnel ($n = 30$ women, 201 men) and 259 experienced personnel ($n = 21$ women, 238 men). In terms of primary work location, 58% of personnel were deployed outside the wire (i.e., worked outside a protective base of any kind), 35% worked inside the wire (i.e., worked within a protective base), and 7% worked both inside and outside the wire.³ Twenty-five percent of personnel had completed 5 years or less of service, 29% completed 6–10 years, 14% completed 11–15 years, 17% completed 16–20 years, and 13% completed 21 years or more.

Measures

The questionnaire included demographic information (i.e., gender, tenure, and work location) and the following measures.⁴

Number of completed tours. Respondents indicated the number of tours they had experienced (including the tour from which they had just returned). Personnel were classified as “novice” personnel if the current tour was their first tour; they were classified as “experienced” personnel if they had been on previous tours (i.e., two or more tours).

Homecoming events. Homecoming events were measured by two items developed by the Directorate of Research and Development Canada (DRDC). Using a dichotomous scale (0 = *no*; 1 = *yes*), respondents indicated the whether they participated in a parade in their hometown and/or in a parade at their base. A composite of these two items was calculated.

Coworker support. A 4-item measure of homecoming support developed by the DRDC was used to assess the perceived supportiveness of respondents’ coworkers since one’s return from deployment. Using a 7-point Likert-type scale ranging from 1 (*extremely unsupportive*) to 7 (*extremely supportive*),

respondents indicated the extent to which they perceived their coworkers to be supportive. Internal reliability of this scale was high ($\alpha = 0.83$), with item-total correlations ranging from $r = .56$ to $r = .71$.

Effectiveness of formal reintegration support program. On completing their rotation, all personnel were required to attend a 5-day debriefing session (i.e., a “Third Location Decompression”; TLD) in another country to aid in the transition from their tour to their return home to Canada. Respondents who participated were asked to consider its influence on their reintegration back to Canada and rate the perceived effectiveness of the sessions (9 items; e.g., “The TLD has helped me put the events of the tour behind me.”) using a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The internal reliability of this scale was high ($\alpha = 0.96$), with item-total correlations ranging from $r = .68$ to $r = .88$.

Posttraumatic stress symptoms. The PTSD Checklist—Civilian Version (PCL–C; Weathers, Litz, Herman, Juska, & Keane, 1993) is a brief, 17-item inventory of PTSD-like symptoms with validated psychometric properties (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996). The inventory is designed to assess responses to traumatic experiences encountered in the course of civilian living. Respondents indicated the degree to which they were bothered by symptoms (e.g., “Feeling emotionally numb or being unable to have loving feelings for those close to you”) in the previous month using a 5-point Likert-type scale ranging from 1 (*not at all*) to 5 (*extremely*). The result is a continuous score based on number and severity of symptoms that captures gradations in posttraumatic stress symptomatology and indicates symptom burden. The internal reliability of this scale was high ($\alpha = 0.95$), and the item-total correlations ranged from $r = .61$ to $r = .78$. The average sum score of the PCL–C in the present sample was 28.22 ($SD = 12.98$), and 91.3%

¹ There were 2,615 members deployed during this rotation, for a response rate of 33%.

² The focus was on noncommissioned members because there were insufficient numbers of members in other groups to allow for credible analyses.

³ Personnel working outside the wire did not necessarily face more combat. However, these individuals would potentially be exposed to more danger and thus may have a greater potential incidence of violence and injury.

⁴ Data from other measures were collected but not used in this study.

of the sample were below the clinically elevated cutoff of 50 as reported by Hoge et al. (2004).

Affective organizational commitment. A 4-item version of the Affective Commitment subscale of Allen and Meyer's (1990) Organizational Commitment scale was modified for use in the military. Personnel indicated the degree to which they agree with statements related to their commitment (e.g., "The Army has a great deal of personal meaning to me") on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to (*strongly agree*). To avoid a spurious correlation with the turnover intention item, we did not use the item "I would be very happy to spend the rest of my career with this organization." Cronbach's alpha for this scale was 0.92, with the item-total correlations ranging from $r = .77$ to $r = .89$.

Alcohol use. Using a one-item scale, personnel described any change in their alcohol consumption since they had returned home compared with their predeployment alcohol consumption levels (1 = *substantially lower*; 3 = *about the same*; 5 = *substantially higher*).

Turnover intentions. Personnel responded to a single item that asked the likelihood of their leaving the military within the next year. Responses were on a 6-point Likert-type scale ranging from 1 (*highly unlikely*) to 6 (*highly likely*).

Results

As an initial test of our first hypothesis, we conducted a test of the equivalence of covariance matrices

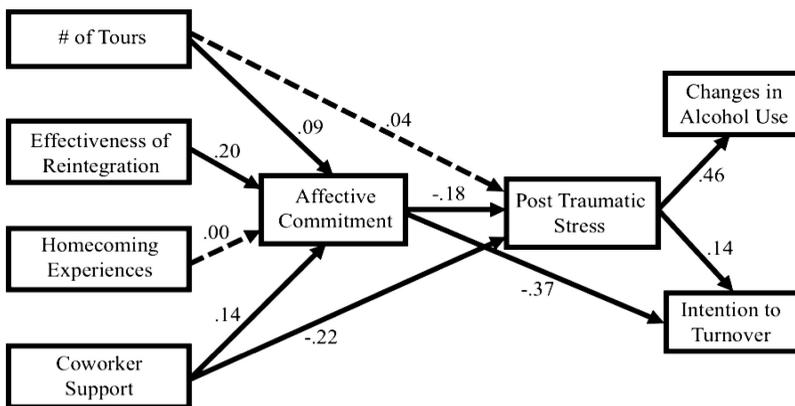
across the two samples. The test indicated no difference between these two groups, $\chi^2(28, N = 490) = 28.55, ns$. Accordingly, we combined the samples and used the number of completed tours as a predictor of both affective commitment and posttraumatic stress symptoms in our model. Descriptive statistics and intercorrelations among study variables for the combined sample are presented in Table 1. All subsequent analyses were based on the covariance matrix and utilized maximum likelihood estimation as implemented in LISREL VIII (Joreskog & Sorbom, 1993).

The proposed model provided an excellent fit to the data, $\chi^2(13, N = 486) = 9.29, ns$; root mean square error of approximation = 0.00, *ns*; normed fit index = 0.97; comparative fit index = 1.00. Standardized parameter estimates for the model are presented in Figure 1. The number of completed tours was associated with affective commitment ($\beta = 0.09, p < .01$) but not with posttraumatic stress symptoms ($\beta = 0.04, ns$). The perceived effectiveness of reintegration was associated with affective commitment ($\beta = 0.20, p < .01$), and coworker support was associated both with enhanced affective commitment ($\beta = 0.14, p < .01$) and with fewer posttraumatic symptoms ($\beta = -0.22, p < .01$). Homecoming activities were not associated with affective commitment ($\beta = 0.00, ns$). Affective commitment was associated with posttraumatic stress symptoms ($\beta = -0.18, p < .01$) and with turnover intentions ($\beta = -0.37, p < .01$). Posttraumatic symptoms were associated with

Table 1
Descriptive Statistics and Intercorrelations for All Study Variables: Novice and Experienced Personnel

Variable	Scale	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Alcohol use	1-5	1.78	0.65	—									
2. Posttraumatic stress	1-5	1.69	0.79	.46**	—								
3. Affective commitment	1-5	3.41	0.96	-.15**	-.22**	—							
4. Turnover intentions	1-6	2.05	1.52	.15**	.22**	-.40**	—						
5. Coworker support	1-7	5.51	1.22	-.15**	-.25**	.17**	-.13**	—					
6. Homecoming events	0-3	1.44	0.65	-.02	.02	.03	.05	.03	—				
7. Reintegration effectiveness	1-4	2.51	0.75	-.06	-.07	.22**	-.08	.15**	.10*	—			
8. No. of completed tours		1.97	1.16	-.03	.02	.09	-.07	.01	-.04	-.02	—		
9. Gender	1-2			-.09	.10*	.01	-.06	-.03	-.02	.02	-.10	—	
10. Years of service		2.07	1.13	-.00	.06	.12*	-.10*	-.01	-.08	.03	.61**	.03	—
11. Deployment	1-2	1.72	0.45	.00	.03	-.05	.09	-.05	.07	-.05	.05	-.25**	-.15

Note. Gender is coded as 1 = men and 2 = women. Deployment is coded as 1 = inside the wire and 2 = outside the wire.
* $p < .05$. ** $p < .01$.



Notes: $p < .01$ for values $> .08$

Figure 1. Standardized parameter estimates for the model.

increased alcohol use ($\beta = 0.46$, $p < .01$) and turnover intentions ($\beta = 0.14$, $p < .01$).

Discussion

The primary goal of the present study was to examine the reintegration experience for military personnel returning from deployment. To do so, we tested a model in which we examined the extent to which formal and informal supports were associated with decreased levels of affective commitment and posttraumatic stress symptoms, and ultimately, increased alcohol use and turnover intentions.

Although we had hypothesized differences between novice and experienced military personnel, the data indicated that there were no differences between these samples, thus failing to support Hypothesis 1. Accordingly, we combined the samples for further analysis. Substantively, this finding suggests that experiential factors do not modify the associations outlined in our model. Number of tours was associated with affective commitment, such that individuals who had completed more tours also reported higher levels of affective commitment to the organization. However, the number of tours was not associated with strain. These results do support those of Ritzer, Campbell, and Valentine (1999), who found that the number of deployments was not associated with psychological health.

Overall, our proposed model provided an excellent fit to the data. Coworker support was significantly

related to affective commitment, providing support for Hypothesis 2a. The extent to which respondents participated in a homecoming event parade (i.e., formal postdeployment support) had very little impact on their attitudes (i.e., affective commitment) toward the military, thus failing to support Hypothesis 2b. It may be possible that a lack of variance in formal support restricted the range of correlation. It is also possible that the nature of the support provided may be misaligned with the needs of personnel. That is, the stressor-support specificity model suggests that the nature of support offered must match with the perceived need of the person experiencing stress (Cohen & McKay, 1984). Although providing a formal acknowledgment of the work of personnel is a nice gesture, such events may not significantly alter one's psychological well-being. In keeping with the view that reintegration is a process involving the reestablishment of multiple relationships and roles, this process is perhaps better facilitated by ongoing personal social support rather than a single large-scale event. This suggestion is consistent with previous research that has found that people who are experiencing the same or similar stress are optimally able to provide social support that matches a perceived need, because such shared experience fosters genuine understanding of the need (Cohen & McKay, 1984).

In contrast to these findings, the degree to which personnel found the formal reintegration support program to be beneficial was positively related to their

emotional attachment to the military, supporting Hypothesis 2c. These results extend past research indicating a link between perceived organizational support and commitment. However, these results should be interpreted within the limitations of the cross-sectional design, because other factors (e.g., positive affectivity) may explain the relationship between perceived debriefing benefit and commitment. In addition to its relationship with posttraumatic stress symptoms through commitment, coworker support also had a direct relationship with these symptoms, thus supporting Hypothesis 3. These results support past research showing that perceived social support is an important resource to reduce the long-term adverse effects of combat trauma (e.g., by facilitating coping; Basham, 2008).

As expected, higher affective commitment was related to lower posttraumatic stress symptoms, providing support for Hypothesis 4a. These results support past research suggesting that commitment may promote a sense of purpose and provide meaning, thus resulting in lower stress and strain (Kobasa et al., 1982). Affective commitment also was related to lower turnover intentions, thus supporting Hypothesis 4b, and supporting previous research with other populations showing that stronger emotional attachment to an organization is associated with lower intentions to leave (Porter et al., 1974). Finally, a higher reported number of posttraumatic stress symptoms was strongly associated with self-reported increased alcohol consumption after returning from deployment and more thoughts of leaving the military (Hypotheses 5a & 5b). These results extend previous research showing that perceived stress is related to substance use in the military (Bray et al., 1999).

Limitations and Future Research

In presenting and testing this unique model of reintegration, there were some limitations of this study. Respondents completed all of the measures in the survey at the same time after they had returned from deployment. Therefore, we should be cautious in making statements about causality using this cross-sectional data. Although structural equation modeling helps us to understand potential relationships between variables, future research should examine these issues with a longitudinal design before, during, and after deployment for a more extensive view of the stress and reintegration process and to help rule out alternative models. The study focused on junior noncommissioned members; therefore, the sample

was limited to more junior members of the military with less overall tenure in the organization. Extending the proposed model to more senior ranks, and to the ranks of commissioned officers, would provide some insight into the effectiveness of these resources at all levels and also may provide some insight into the impact of tenure on the study variables.

In a similar manner, we focused solely on coworker and institutional support. Considering a more extensive list of specific sources of support (e.g., supervisors, unit commanders, family members) would provide a broader perspective so that one could test the relative effects of these supports on both individual and organizational outcomes. Similarly, incorporating the perceived organizational support model (e.g., Rhoades & Eisenberger, 2002) into our model to identify the specific factors that are important to the reintegration process (e.g., supportive environments, member self-esteem; Semmer et al., 2008) would be informative.

There are some limitations of our measures: We used a one-item measure of change in alcohol use, which may not have captured the entire domain of alcohol use and abuse. Although the item taps into the basic changes in one's own alcohol usage, future research should include a multiple-item, validated measure. Furthermore, we assessed the perceived effectiveness of a reintegration program and not the existence of the program alone. Therefore, the validity of results lies in the extent to which the program met participants' needs, perhaps in terms of feeling recognized, respected, and supported. Future research should compare outcomes for individuals who participated in a reintegration program and those who did not participate.

Many researchers have called for more intervention research. We reiterate their suggestions by emphasizing the importance of examining the efficacy of programs aimed at improving the physical and psychosocial health of military personnel. By way of implications for the formal reintegration support program, greater emphasis on education and resource support for posttraumatic stress symptoms may be important, both at the time of debriefing and after members have been home for a few months to facilitate coordination between individual needs and resources. Building in additional follow-up supportive programs on returning home (e.g., buddy support system with a previously deployed member) may also help to foster ongoing personal social support with persons who have shared experiences. From a research perspective, assessing perceived benefit of programming, as well as additional measures of psy-

chological functioning (e.g., posttraumatic stress symptoms) over time, will be important in evaluating the efficacy of such interventions.

Implications and Conclusion

The differences in the impact of supports on commitment (and ultimately, on individual and organizational outcomes) suggest the need to encourage different types of supports to meet the needs of all military personnel. The reintegration support program was associated with increased commitment when it was perceived as being effective: Therefore, this initiative may warrant further study. The nature of employment of deployed personnel is inherently stressful and subject to increased exposure to danger and violence. Therefore, it is important to better understand factors that promote the reintegration of military personnel returning from tour. Continued research, not only into the psychosocial experiences of personnel returning from tour, but also into the factors that may improve reintegration outcomes, will enhance our understanding of optimal organizational supports to foster the well-being of personnel.

References

- Adler, A., Huffman, A., Bliese, P., & Castro, C. (2005). The impact of deployment length and experience on the well-being of male and female soldiers. *Journal of Organizational Health Psychology, 10*, 121–137.
- Adler, A. B., Vaitkus, M. A., & Martin, J. A. (1996). Combat exposure and post-traumatic stress symptomatology among U.S. soldiers deployed to the Gulf War. *Military Psychology, 28*, 1–14.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology, 63*, 1–18.
- Basham, K. (2008). Homecoming as safe haven or the new front: Attachment and detachment in military couples. *Clinical Social Work Journal, 36*, 83–96.
- Blais, A., Sullivan-Kwantes, W., & McCreary, D. R. (2006). *Post-deployment reintegration experiences of AF personnel: Implications for scale development* (DRDC Toronto TR 2006–304). Toronto, Ontario, Canada: Defence R&D Canada.
- Blais, A., Thompson, M. M., & McCreary, D. R. (2009). The development and validation of the army post-deployment reintegration scale. *Military Psychology, 21*, 365–386.
- Blanchard, E. B., Jones-Alexander, J., Buckley, T. C., & Forneris, C. A. (1996). Psychometric properties of the PTSD Checklist. *Behavior Research and Therapy, 34*, 669–673.
- Bliese, P., Wright, K., Adler, A., Thomas, J., & Hoge, C. (2007). Timing of postcombat mental health assessments. *Psychological Services, 4*, 141–148.
- Bolton, E. E., Litz, B. T., Glenn, D. M., Orsillo, S., & Roemer, L. (2002). The impact of homecoming reception on the adaptation of peacekeepers following deployment. *Military Psychology, 14*, 241–251.
- Bray, R. M., Fairbank, J. A., & Marsden, M. E. (1999). Stress and substance use among military women and men. *American Journal of Alcohol and Drug Abuse, 25*, 239–256.
- Cohen, S., & McKay, G. (1984). Social support, stress and the buffering hypothesis. In S. E. Taylor & J. E. Singer (Eds.), *Handbook of psychology and health* (pp. 253–267). Hillsdale, NJ: Erlbaum.
- Day, A. L., & Livingstone, H. A. (2001). Chronic and acute stressors among military personnel: Do coping styles buffer their negative impact on health? *Journal of Occupational Health Psychology, 6*, 348–360.
- Doyle, M. E., & Peterson, K. A. (2005). Re-entry and reintegration: Returning home after combat. *Psychiatric Quarterly, 76*, 316–370.
- Elangovan, A. R. (2001). Causal ordering of stress, satisfaction and commitment, and intention to quit: A structural equations analysis. *Leadership & Organization Development Journal, 22*, 159–165.
- Ferres, N., Connell, J., & Travaglione, A. (2004). Co-worker trust as a social catalyst for constructive employee attitudes. *Journal of Managerial Psychology, 19*, 608–622.
- Fontana, A., & Rosenheck, R. (1994). Posttraumatic stress disorder among Vietnam theater veteran: A causal model of etiology in a community sample. *Journal of Nervous and Mental Disease, 182*, 677–684.
- Ford, J. D., Campbell, K. A., Storzbach, D., Binder, L. M., Anger, W. K., & Rohlman, D. S. (2001). Posttraumatic stress symptomatology is associated with unexplained illness attributed to Persian Gulf War military service. *Psychosomatic Medicine, 63*, 842–849.
- Harrington, D., Bean, N., Pintello, D., & Mathews, D. (2001). Job satisfaction and burnout: Predictors of intentions to leave a job in a military setting. *Administration in Social Work, 25*, 1–16.
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *The New England Journal of Medicine, 351*, 13–22.
- Hourani, L. L., Williams, T. V., & Kress, A. M. (2006). Stress, mental health, and job performance among active duty military personnel: Findings from the 2002 Department of Defense health-related behaviors survey. *Military Medicine, 171*, 849–856.
- Johnson, D. R., Lubin, H., Rosenheck, R., Fontana, A., Southwick, S., & Charney, D. (1997). The impact of the homecoming reception on the development of posttraumatic stress disorder: The West Haven Homecoming Stress Scale (WHHSS). *Journal of Traumatic Stress, 10*, 259–277.
- Joreskog, K., & Sorbom, D. (1993). *Lisrel 8: Structural equation modeling with the SIMPLIS command language*. Lincoln, IL: Scientific Software International.
- Kelloway, E. K., & Barling, J. (1991). Job characteristics, role stress and mental health. *Journal of Occupational Psychology, 64*, 291–304.
- Kelloway, E. K., & Barling, J. (1994). Stress, control, well-being, and marital satisfaction: A causal correla-

- tional analysis. In G. P. Keita & J. J. Hurrell (Eds.), *Job stress in a changing workforce: Investigating gender, diversity, and family issues* (pp. 241–252). Washington DC: American Psychological Association.
- Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of Personality and Social Psychology, 42*, 168–172.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Martinez, J., Huffman, A. H., & Castro, C. A. (2000). Assessing psychological readiness in U.S. soldiers following NATO operations. *International Review of the Armed Forces Medical Services, 73*, 139–142.
- McCarroll, J. E., Fagan, J. G., Hermsen, J. M., & Ursano, R. J. (1997). Post traumatic stress disorder in U.S. Army Vietnam Veterans who serves in the Persian Gulf War. *The Journal of Nervous and Mental Disease, 185*, 682–685.
- McFarlane, A. C. (2000). Posttraumatic stress disorder: A model of the longitudinal course and the role of risk factors. *The Journal of Clinical Psychiatry (Suppl.), 61*(5), 15–23.
- Meichenbaum, D. (1985). *Stress inoculation training*. New York: Pergamon Press.
- Meyer, J., Stanley, D., Herscovitch, L., & Topolnysky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behaviour, 61*, 20–52.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage.
- Nystedt, L., Sjöberg, A., & Hägglund, G. (1999). Discriminant validation of measures of organizational commitment, job involvement, and job satisfaction among Swedish army officers. *Scandinavian Journal of Psychology, 40*, 49–55.
- Pincus, S. H., House, R., Christenson, J., & Adler, L. E. (2001). The emotional cycle of deployment: A military family perspective. Retrieved from <http://mo4h.missouri.edu/programs/military/resources/manual/Deployment-Cycles.pdf>
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology, 59*, 603–609.
- Resnik, L. J., & Allen, S. M. (2007). Using International Classification of Functioning, Disability and Health to understand challenges in community reintegration of injured veterans. *Journal of Rehabilitation Research & Development, 44*, 991–1006.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*, 698–714.
- Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived organizational support. *Journal of Applied Psychology, 86*, 825–836.
- Ritchie, E. C. (2007). Update on combat psychiatry: From the battle front to the home front and back again. *Military Medicine, 172*, 11–14.
- Ritzer, D. R., Campbell, S. J., & Valentine, J. N. (1999). Human dimensions research during operation “Joint Guard.” Bosnia. *U.S. Medical Department Journal, 1–3*, 5–16.
- Rossignol, M. (2007, November). *Afghanistan: Military personnel and operational stress injuries* (Parliamentary Information and Research Services Publication 2007: 20E). Ottawa, Ontario, Canada: Library of Parliament.
- Semmer, N. K., Elfering, A., Jacobshagen, N., Perrot, T., Beehr, T. A., & Boos, N. (2008). The emotional meaning of instrumental social support. *International Journal of Stress Management, 15*, 235–251.
- Sharkansky, E. J., King, D. W., King, L. A., Wolfe, J., Erickson, D. J., & Stokes, L. R. (2000). Coping with Gulf War combat stress: Mediating and moderating effects. *Journal of Abnormal Psychology, 109*, 188–197.
- Somers, M. (1995). Organizational commitment, turnover and absenteeism: An examination of direct interaction effects. *Journal of Organizational Behaviour, 16*, 49–58.
- Sutker, P. B., Davis, J. M., Uddo, M., & Ditta, S. R. (1995). War zone stress, personal resources, and PTSD in Persian Gulf War returnees. *Journal of Abnormal Psychology, 104*, 444–452.
- Thomas, J., Bliese, P., & Jex, S. (2005). Interpersonal conflict and organizational commitment: Examining two levels of supervisory support as multilevel moderators. *Journal of Applied Social Psychology, 35*, 2375–2398.
- Tucker, J. S., Sinclair, R. R., & Thomas, J. L. (2005). The multilevel effects of occupational stressors on soldiers’ well-being, organizational attachment, and readiness. *Journal of Occupational Health Psychology, 10*, 276–299.
- Weathers, F. W., Litz, B., Herman, D., Juska, J., & Keane, T. (1993). *The PTSD Checklist (PCL): Reliability, validity, and diagnostic utility*. Poster session presented at the annual meeting of the International Society of Traumatic Stress Studies, October 1993 San Antonio, TX.
- Wain, H., Bradley, J., Nam, T., Waldrep, D., & Cozza, S. (2005). Psychiatric interventions with returning soldiers at Walter Reed. *Psychiatric Quarterly, 76*, 315–360.
- Warr, P. B. (1987). *Work, unemployment and mental health*. Oxford, United Kingdom: Oxford University Press.
- Wolfe, J., Erickson, D. J., Sharkansky, E. J., King, D. W., & King, L. A. (1999). Course and predictors of post-traumatic stress disorder among Gulf War veterans: A prospective analysis. *Journal of Consulting and Clinical Psychology, 67*, 520–528.

Received August 20, 2009

Revision received August 26, 2010

Accepted September 6, 2010 ■