BRIEF REPORT

An Examination of Successful Soldier Postdeployment Transition From Combat to Garrison Life

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Previous studies have shown that combat exposures and deployment-related stressors have negative implications on soldiers' postdeployment health and well-being. The current study aimed to examine the individual and combined effects of organizational and social support on the success of soldiers' postdeployment reintegration. In this study, 2,922 U.S. soldiers were surveyed from a brigade combat team at 90–120 days postdeployment, measuring soldiers' perceptions of postdeployment transition home, occupational and social support, stigma and barriers associated with accessing behavioral health care, and previous behavioral health care. Logistic regression analysis indicated that soldiers reporting a positive postdeployment transition home \( (n = 1,776; 61\%) \) was significantly associated with leadership perceptions, adjusted odds ratio (AOR) \( = 1.19, 95\% \) confidence interval (CI) \([1.02, 1.39]\), unit cohesion, AOR \( = 1.29, 95\% \) CI \([1.09, 1.53]\), personal support, AOR \( = 1.37, 95\% \) CI \([1.23, 1.52]\), perceived levels of stigma, AOR \( = 0.73, 95\% \) CI \([0.65, 0.82]\) barriers to accessing care, AOR \( = 0.86, 95\% \) CI \([0.76, 0.97]\), and previously accessing behavioral health care, AOR \( = 0.34, 95\% \) CI \([0.28, 0.43]\). These findings suggest redeploying soldiers may benefit from programs aimed at improving self-efficacy and coping through fostering occupational and social support, with special concern taken to reduce stigma and barriers to care across the Army.

Since 2001, several studies have examined predictors of negative postdeployment behavioral health outcomes, yet additional research is needed to discern factors that may improve positive postdeployment experiences. In recent years, the U.S. Department of Defense and U.S. Army have taken extensive efforts to identify symptoms of physical or emotional distress through population medical screeners. Recently, these efforts have been augmented with proactive programs geared towards development of psychological resilience to traumatic events (Casey, 2011). The current study aimed to explore factors associated with soldiers experiencing positive postdeployment transitions to garrison.

Robust literature exists demonstrating social and occupational support, including unit cohesion and leadership, can reduce individual risk for negative behavioral health outcomes through increasing psychosocial development and moderating the effects of combat-related stress (Bliese, 2006; Pietrzak, Johnson, Goldstein, Malley, & Southwick, 2009). Social (friends and family) and occupational (unit cohesion and leadership) support will be evaluated individually and collectively to assess their influence on soldier postdeployment transition.

Large-scale studies among military personnel have found personal, peer, and career stigma contribute to barriers associated with soldiers seeking behavioral health help (Britt et al., 2008; Millikan et al., 2012). Soldiers are sometimes unwilling to report behavioral health issues and/or access care due to vertical stigma, arising from leadership, and horizontal stigma, from peers (Warner et al., 2011). Additionally, self-stigma, internalized stigma among individuals about behavioral health, can lead to low self-esteem, isolation, unwillingness to seek treatment, and negative prognoses (Watson, Corrigan, Larson, & Sells, 2007). The influence of stigma and barriers on the success of soldier postdeployment transition will be evaluated.

This study expands existing postdeployment literature by exploring how soldier postdeployment reintegration is influenced...
by social support, occupational support, stigma and barriers, and aims to expand providers’ and policy makers’ understanding of risk and protective factors associated with perceptions of well-being following traumatic events.

Method
Participants and Procedures
This study was part of a large cross-sectional field investigation by the U.S. Army Institute of Public Health (AIPH) Behavioral and Social Health Outcomes Program assessing current climate and challenges facing redeploying soldiers of a single brigade combat team (Gallaway, Lagana-Riordan, & Millikan, & the Behavioral and Social Health Outcomes Program 2011). Overall, 3,670 soldiers (97% response rate) completed a confidential survey, 90–120 days postdeployment. Descriptive statistics are presented in Table 1. This study was reviewed by the AIPH Review Board. Participation was voluntary.

Measures
Soldiers were asked to self-report demographic (e.g., age, gender) and military characteristics (e.g., rank, deployments), combat exposures, and behavioral health diagnoses and symptoms. Soldiers not deploying with the unit (e.g., rear detachment) or joining after the unit returned from deployment, were removed from analyses ($n = 924$, 35%).

The outcome, postdeployment transition home, was assessed through a 5-point Likert scale item, “My transition from combat to home has gone well,” with responses ranging from $1 = \text{Strongly Agree}$ to $5 = \text{Strongly Disagree}$. The variable was dichotomized; $\text{Strongly Agree/Agree}$ considered a positive transition and $\text{Strongly Disagree/Disagree/Neither Agree or Disagree}$ a neutral/negative transition.

Perceptions of occupational support were assessed through six 5-point Likert scale items ranging from $\text{Strongly Disagree}$ to $\text{Strongly Agree}$ (Office of the Surgeon General, 2007). In the current study, internal consistency of the items was good ($\alpha = .90$). The three questions related to leadership were averaged as were the three related to cohesion. Personal support from friends and family was measured through a single question: “I receive personal support from family and/or friends.” Additionally, soldiers completed an 8-item scale, shown to be reliable in military studies, to assess perceptions of stigma and barriers associated with accessing behavioral health services (Britt et al., 2008; Hoge et al., 2004). In this sample $\alpha = .91$.

A 15-item checklist of combat experiences was examined assessing experiences soldiers may have encountered during their most recent deployment (e.g., “being attacked or ambushed,” “knowing someone seriously injured or killed”; Booth-Kewley,

### Table 1
Demographic and Military Characteristics of 2,922 U.S. Army Soldiers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Positive transition ($n = 1,776$)</th>
<th>Negative/neutral transition ($n = 1,146$)</th>
<th>$\chi^2$(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1,708</td>
<td>1,082</td>
<td>4.98*</td>
</tr>
<tr>
<td>Female</td>
<td>68</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td>51.26***</td>
</tr>
<tr>
<td>Single</td>
<td>664</td>
<td>363</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>978</td>
<td>602</td>
<td></td>
</tr>
<tr>
<td>Separated/divorced/widowed</td>
<td>134</td>
<td>181</td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td></td>
<td></td>
<td>55.67***</td>
</tr>
<tr>
<td>Junior enlisted (E1–E4)</td>
<td>866</td>
<td>611</td>
<td></td>
</tr>
<tr>
<td>NCO (E5–E6)</td>
<td>616</td>
<td>449</td>
<td></td>
</tr>
<tr>
<td>Senior NCO (E7–E9)</td>
<td>101</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Officers (O1–O6)</td>
<td>193</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Previous BH care</td>
<td></td>
<td></td>
<td>205.33***</td>
</tr>
<tr>
<td>Yes</td>
<td>190</td>
<td>367</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1,586</td>
<td>779</td>
<td></td>
</tr>
<tr>
<td>Alcohol misuse</td>
<td></td>
<td></td>
<td>117.14***</td>
</tr>
<tr>
<td>Yes</td>
<td>325</td>
<td>414</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1,451</td>
<td>732</td>
<td></td>
</tr>
</tbody>
</table>

Note. NCO = noncommissioned officers; BH = behavioral health.

*p < .05. ***p < .001.

Table 2

Differences Between Perceptions of Postdeployment Transition on Support, Stigma, Barriers to Behavioral Health Care, and Combat Experiences

<table>
<thead>
<tr>
<th>Variable</th>
<th>Positive transition (n = 1,776)</th>
<th>Negative/neutral transition (n = 1,146)</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Leadership support</td>
<td>3.80</td>
<td>0.84</td>
<td>3.34</td>
</tr>
<tr>
<td>Unit cohesion</td>
<td>3.78</td>
<td>0.80</td>
<td>3.37</td>
</tr>
<tr>
<td>Personal support</td>
<td>4.21</td>
<td>0.78</td>
<td>3.83</td>
</tr>
<tr>
<td>Perceptions of BH stigma</td>
<td>2.67</td>
<td>0.83</td>
<td>2.98</td>
</tr>
<tr>
<td>Perceptions of BH barriers</td>
<td>1.93</td>
<td>0.83</td>
<td>2.26</td>
</tr>
<tr>
<td>Combat experiences</td>
<td>5.00</td>
<td>3.18</td>
<td>5.94</td>
</tr>
</tbody>
</table>

Note. N = 2,922. BH = behavioral health.
*** p < .001

Larson, Highfill McRoy, Garland, & Gaskin, 2010). In this sample α = .82.

Soldiers were determined to have accessed behavioral health care if they reported either seeking help or counseling for a behavioral health problem. Alcohol misuse was determined as one or more affirmative response on the Rapid Alcohol Problems Screen 4 (sensitivity = .86, specificity = .95; Cherpitel, 2002) or reporting a medical professional ever told them they had an alcohol abuse issue (Cherpitel, 2002).

Data Analysis

Frequency distributions were examined for the independent demographic, military, and behavioral health characteristics. Measures of central tendencies, (e.g., mean, standard deviation), were reported for continuous variables. Bivariate analyses (α level ≤ .05) were conducted comparing postdeployment transition home and all relevant variables. χ² tests were performed for binary characteristics, analysis of variance for characteristics with three or more groups, and student t test for continuous variables. Multiple logistic regression modeling was conducted to determine the association between soldier transition home and the aforementioned independent variables of interest. To determine best model fit, change in regression coefficient estimates were examined to assess the addition or removal of characteristics resulting in at least a 10% change. Variables not reaching statistical significance or not in the original hypothesis were dropped from subsequent models. Adjusted odds ratios (AOR) and 95% confidence intervals (CI) were calculated. Data analysis was performed using SAS version 9.2.

Results

Table 2 describes characteristics of soldiers reporting a positive transition home and indicates they were more likely to report increased levels of occupational and personal support, and lower perceptions of stigma and barriers. The mean number of combat experiences among soldiers reporting a positive transition home was significantly lower than soldiers reporting a neutral/negative transition. Soldiers reporting a positive transition home were more likely to screen negative for alcohol misuse and report not previously accessing behavioral health care.

Regression analyses are presented in Table 3. When examined simultaneously, leadership perceptions, unit cohesion, and personal support were associated with a positive transition, whereas higher perceived levels of behavioral health stigma and barriers were negatively associated with a positive postdeployment transition. The odds of a positive transition were significantly lower among those who were married and separated/divorced/widowed, those previously accessing behavioral health care, those screening positive for alcohol misuse, and those reporting more cumulative combat experiences.

Discussion

This is one of the first studies to examine factors associated with positive postdeployment transitions to garrison. Previous studies of health have primarily concentrated on postdeployment behavioral health outcomes (Booth-Kewley et al., 2010; Hoge et al., 2004), overlooking perceptions of reintegration from combat. This study found 61.8% of soldiers reported a positive transition home, and that unit cohesion, leadership perceptions, and personal support positively influenced postdeployment transitions. Soldiers reporting previous behavioral health care and/or perceived stigma and barriers to seeking care were less likely to report a positive postdeployment transition.

Soldiers perceiving lower levels of stigma and barriers to accessing services may experience a more positive transition because of an increased capacity to receive behavioral health services, if needed. Although the Army has enacted several recent training and educational efforts to assuage stigma, perceptions of negative career implications remain a barrier for many soldiers wishing to seek care (Millikan et al., 2012).
As Army leadership continues to respond through awareness campaigns, policy initiatives, and external partnerships (e.g., Department of the Army, 2009) subsequent evaluations will be necessary to measure the effectiveness of reducing stigma and increasing perceptions of leadership and occupational support.

Two primary theoretical models may help explain the relationship between social support and positive postdeployment transitions (Uchino, 2006). First, social support is postulated to influence health behaviors, including health habits (e.g., smoking) and adherence to medical regimens (e.g., Umberson, 1987). Second, social support affects individual emotions, mood, and locus of control, providing the emotional strength to improve overall well-being (e.g., Cohen & Wills, 1985). These theories are not necessarily independent, but may simultaneously affect multiple facets of perceptions of illness and health. This study’s limited scope of social support as personal support requires further examination to explore how these theories operate in conjunction with behavioral health care in a military population. Further, it is recommended future studies examine the independent and combined effects of social support and stigma on seeking and adherence to behavioral health treatment regimens.

Married, separated, and divorced soldiers were less likely to report a positive postdeployment transition. This finding is in line with previous postdeployment health research that found 77.9% of soldiers with partners reported family readjustment issues including “feeling like a guest” (40.7%), “troubled relationship” (57.8%), and “children not warm or afraid” (25.0%; Sayers, Farrow, Ross, & Oslin, 2009). Furthermore, 53.7% of these service members reported domestic violence (i.e., shouting, pushing, or shoving; Sayers et al., 2009). Additional research is needed to explore the role of, and contributory factors to, successful and failing intimate partner relationships.

Limitations of this study should be noted. The cross-sectional study design limited assessment of the dynamic relationships between time-sensitive variables (i.e., perceptions of postdeployment transition and of organizational/personal support). Additionally because the intent of this study was for surveillance purposes, certain concepts were assessed briefly (i.e., prior behavioral health utilization, social support). Future studies would benefit from utilizing more comprehensive scales to assess behavioral health and social support.

Improving occupational and personal support and reducing barriers to seeking care (including stigma) may improve soldiers’ postdeployment transitions. Increasing leaders’ understanding of behavioral and personal conditions during transition from combat to garrison may enhance unit leadership and cohesion. Postdeployment programs to ease stressors associated with transition (e.g., relationship issues, combat adjustment) should be promoted and recommended to increase utilization.

Table 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>AOR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Single                        | 1.00      | [1.00, 1.00]|*
| Married                       | 0.81*     | [0.67, 0.98]|*
| Separated/divorced/widowed    | 0.41***   | [0.31, 0.55]|***
| Rank                          |           |            |
| Junior enlisted (E1–E4)       | 1.00      | [1.00, 1.00]|*
| NCO (E5–E6)                   | 1.17      | [0.97, 1.41]|*
| Senior NCO (E7–E9)            | 1.49      | [0.98, 2.27]|*
| Officers (O1–O6)              | 2.18***   | [1.51, 3.17]|***
| Previous BH care              |           |            |
| No                            | 1.00      | [1.00, 1.00]|*
| Yes                           | 0.34***   | [0.28, 0.43]|***
| Alcohol misuse                |           |            |
| No                            | 1.00      | [1.00, 1.00]|*
| Yes                           | 0.53***   | [0.44, 0.65]|***
| Leadership support            | 1.19*     | [1.02, 1.39]|*
| Unit cohesion                 | 1.29**    | [1.09, 1.53]|**
| Social support                | 1.37***   | [1.23, 1.52]|***
| Perceptions of BH stigma      | 0.73***   | [0.65, 0.82]|***
| Perceptions of BH barriers    | 0.86*     | [0.76, 0.97]|*
| Combat experiences            | 0.91***   | [0.89, 0.94]|***

Note. N = 2,922. NCO = noncommissioned officers; BH = behavioral health; AOR = adjusted odds ratio; CI = confidence interval.
*p < .05, **p < .01, ***p < .001.

References


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