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14. ABSTRACT The present report provides a summary of first year activities for the three-year project. Key accomplishments include Institutional Review Board (and MRMC Oversight approval) for the focus group and individual interview studies, approval of the 3rd Infantry Division for the studies in all 3 years of the grant, completion of focus group data collection, and over 50% of the interviews conducted for the individual interview study. The data for the two Year 1 qualitative studies are currently being processed, and coordination for the Year 2 longitudinal study has begun. In addition, a chapter supported by the contract has been accepted for publication, and an additional review article supported by the contract is being written. Key activities in the first quarter of the second year of the project will be completing processing of the focus groups and interviews, presentation of the results to the 3rd Infantry division, and preparation for presentation of the findings at academic and military conferences.					
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INTRODUCTION

The studies being supported under the grant titled “Facilitating Soldier Receipt of Mental Health Treatment” are all designed to provide a better understanding of those factors that facilitate and hinder Soldiers from getting treatment for mental health problems caused by exposure to traumatic events during combat. Two qualitative studies were proposed for Year 1 of the grant. The first qualitative study involved focus groups with Soldiers of different ranks to get the Soldier’s perspective on those factors that determined whether fellow Soldiers would get treatment for a mental health problem. The focus group study was designed to include Soldiers who may or may not have actually sought treatment, and therefore would provide a representative assessment of how Soldiers in general view the facilitators and impediments toward treatment seeking. The second qualitative study involved Soldiers who have sought treatment for a mental health problem while on active duty. The primary goal of this study was to provide insight into what causes Soldiers to overcome the barriers to treatment seeking that may exist and actually get treatment. The results of these two qualitative studies will be written up for presentation and publication, and will also provide information for the studies being proposed in Year 2 and Year 3 of the grant. In Year 2 a longitudinal study will be conducted with a Brigade Combat Team (BCT) from the 3rd Infantry Division. This study will include the most comprehensive assessment of facilitators and inhibitors of treatment seeking of any study conducted on treatment seeking in the military, and will also include a detailed assessment of actual treatment seeking (e.g. the type of treatment received, number of sessions attended). The results from the Year 2 study, along with the two qualitative Year 1 studies, will be used to design an intervention in Year 3 that will be geared towards changing the attitudes of Soldiers towards seeking needed mental health treatment. This intervention will be pilot-tested in Year 3, which will involve an examination of whether Soldiers who receive the intervention report more positive attitudes toward seeking needed mental health treatment than Soldiers who receive a control intervention of stress management training.

BODY

In this section of the report the major tasks from the approved Statement of Work (SOW) are presented, followed by an assessment of whether the task was accomplished, and a summary (where applicable) of data/results relevant to the task. If a given task has not been completed, a plan is offered for addressing any objectives not achieved.

Statement of Work Objectives for Year 1

1. Brief military leaders on overall research project, including the importance of the research and the methodology involved in the three studies. Emphasis will be placed on the research allowing us to better understand how to get soldiers to receive needed mental health treatment.

The investigators made multiple trips to Fort Stewart, Georgia, in order to secure the support of the 3rd Infantry Division for the studies in the 3-year grant. The first visit was made by the principal investigator (Thomas Britt) and members of the Department of Military Psychiatry at the Walter Reed Army Institute of Research (MAJ Thomas and LTC Whelan). This team briefed the command surgeon of the 3rd ID (LTC Malish), as well as the division psychiatrist (MAJ Czech). The approval of the studies for the 3-year grant was obtained 06 JUN 11. This approval came a bit later than desired, putting a delay of approximately two months in the achievement of the Year 1 objectives. A PowerPoint slide summarizing the entire 3-year effort that was used in obtaining approval for the studies is provided in Figure 1. After the initial briefing involving the consultants from the WRAIR, all future briefings were conducted solely by the Clemson University investigators on the grant.

2. Finalize individual interview schedule to be used for interviewing soldiers who have recently sought mental health treatment.

The final individual interview schedule was completed and is included in Appendix A. This interview schedule provided a comprehensive assessment of the Soldier's perceptions of his or her symptoms, how the Soldier decided he or she needed treatment, what factors served as facilitators and inhibitors of treatment seeking, and recommendations the Soldier had for increasing the likelihood that fellow Soldiers would seek needed mental health treatment. A written demographic and symptom questionnaire was also created (see Appendix B), and included an assessment of age, gender, race, level of civilian education, grade/rank, years in military, current military attachment (brigade, battalion, company/battery), deployment history to Iraq or Afghanistan, PTSD symptoms, depression symptoms, and alcohol use. This measure was completed at the end of the interview.

3. Submit expedited research protocol to Clemson University Institutional Review Board for the individual interview study. Upon approval, submit to the Office of Research Protection at Ft. Detrick for approval.

The expedited protocol for the Individual Interview study was submitted and approved by the Clemson University Institutional Review Board, and was also approved by the Office of Research Protection at the US Army Medical Research and Material Command.

4. *Coordinate with mental health professionals to identify soldiers interested in discussing why they sought treatment. The current planned cite for the research in Year 1 is Fort Stewart, Georgia.*

The Clemson investigators made multiple trips to the Behavioral Health Clinic at Fort Stewart, GA., in order to identify the optimal way of recruiting Soldiers for the individual interview study. Ultimately the Clemson investigators and mental health professionals at the Behavioral Health clinic determined the best recruiting strategy would be to have the mental health professionals alert Soldiers attending treatment to the study, and if the Soldier was interested in participating, he or she would contact the principal investigator of the study, Dr. Cynthia Pury. Then interviews would be scheduled with interested Soldiers at a future date. The Clemson investigators also coordinated with personnel from the Behavioral Health Clinic to identify a private room for conducting the interviews. A room was identified at the Traumatic Brain Injury Clinic in a separate building, and the interviews occurred at that location. In addition, an ombudsman who received CITI training and specific training on the project was available when Soldiers consented to participate in the interview.

5. *Conduct 40-50 interviews of soldiers who have sought treatment for psychological problems.*

As of 28 October 2011, 25 Soldiers who had sought behavioral health treatment had been interviewed. All of these Soldiers consented to have the interview recorded. An additional 4 Soldiers have been scheduled for the coming weeks, including the first officer recruited for this study. We are trying to recruit more officers. The complete rank breakdown for the total sample-to-date of 28 is as follows:

Rank	Count
PFC	4
SPC	11
SGT	9
SSG	1
1SG	2
CSM	1
Officers	1

For the total sample-to-date of 29, 3 are female and 26 are male.

Other demographic data are only available for the 26 Soldiers who have already been interviewed. Mean age is 29.0 ($sd = 7.0$). Mean years in the military is 8.1 ($sd = 6.0$). Nearly all of the Soldiers interviewed had deployed for combat: 16 have deployed for combat 2 or more times, 7 have deployed for combat once, and 2 have not deployed for combat. Of those who had deployed to combat, total mean deployment time was 19.4 months ($sd = 8.0$).

It is worth pointing out that data collection for the individual interview study has occurred slower than expected. Collectively the Clemson investigators have made 11 trip to Fort Stewart to

interview Soldiers, many times interviewing one or two participants per trip. Dr Pury provided the Behavioral Health Clinic staff an interim summary on 25 OCT 11, and the head of the clinic encouraged the providers to present the opportunity for participation to their Soldiers who had sought treatment. We are committed to making as many data collection trips as necessary to obtain the minimum number of 40 interviews.

6. Content analyze interviews to identify facilitators of treatment seeking; use this information when conducting focus group interviews and designing the survey for the longitudinal study.

Given that the desired number of participants has not been collected, a formal content analysis of the interviews has not yet been conducted. The Clemson investigators have provided informal summaries of the key issues mentioned in the interviews they have conducted, but the formal analysis of the interview responses will occur during the first quarter of the second year of the project. The Clemson investigators have developed a plan for the transcription of the collected interviews so that an initial content analysis of the responses can be performed. This initial analysis will inform the inclusion of additional questions in the survey being developed for Year 2 of the project. The final content analysis of the interview study will be conducted once 40 interviews have been conducted. As indicated in the Introduction to this report, presentations for military and academic conferences, as well as manuscripts for publication, will be developed based upon the individual interview study during the next year of the grant.

7. Finalize focus group interview schedule and procedure for conducting 12 focus groups, three groups for four different rank categories.

The focus group interview schedule was finalized and is included in Appendix C. This measure includes items that assess Soldier perceptions of what determines whether fellow Soldiers seek mental health treatment, the role of stigma in treatment seeking, perceptions of what occurs during treatment, attitudes toward mental health professionals, and suggestions for making it easier for Soldiers to seek mental health treatment. In addition, a brief set of demographic questions was asked for each focus group member.

8. Submit exempt research protocol to Clemson University Institutional Review Board for focus group study. Upon approval, submit to the Office of Research Protection at Ft. Dietrick for approval. Note the submission of the expedited protocol for the interview study and the exempt protocol for the focus group study will occur at parallel points in time.

The exempt protocol for the Focus Group Study was submitted and approved by the Clemson University Institutional Review Board, and was also approved by the Office of Research Protection at the US Army Medical Research and Material Command.

9. Coordinate with military leaders to identify soldiers to participate in 12 focus groups regarding why soldiers do and do not receive treatment for psychological problems.

Clemson investigators coordinated with personnel from the Command Surgeon's office of the 3rd ID to develop a FRAGO for the focus group study. Different units were tasked with providing Soldiers of different ranks (see below) to participate in the focus groups across a four day period.

All four Clemson investigators, and three graduate students, participated in the focus groups over the day period.

10. Conduct 12 focus groups, 3 each of soldiers in the following rank categories: E1-E4, E5-7, O1-O3, O4-O5, on issues involved in seeking treatment for psychological problems and perceptions of mental health treatment. In addition, interview four soldiers in each of the following rank categories: E8-E9, O6-O7.

Focus groups (k=12) were conducted over four days (06SEPT2011-09SEPT2011). Participant's consent was first obtained through the use of an information letter describing the purpose of the focus group. An ombudsman was present at the beginning of each session in order to ensure there was no coercion during the consenting process and to have questions about participation answered before indicating if the Soldier's responses could be used for research purposes. While the ombudsman was still present, the moderator (one of the four Clemson investigators) obtained consent from the group to have their responses recorded on tape. All focus groups consented to having the group recorded. Additionally, two graduate students were present during each focus group to take notes. The ombudsman left the room before the session began. As the two graduate students were taking notes on the comments that were made, they identified which particular focus group member made which particular comment by assigning numbers to the focus group members. This procedure was performed in the event a focus group member did not consent to his or her data being used for research purposes. Fortunately, all participants agreed for their responses to be used for research purposes.

Three focus groups were conducted each day at 0900, 1100, and 1400. On days 1-3, junior enlisted Soldiers participated at 0900, NCO's participated at 1100, and company grade officers participated at 1400. On the fourth (and last) day, three groups of field grade officers participated. The number of participants in each session ranged from three to eight, but on average, each session had seven participants. The length of each session ranged from 55 minutes to 1 hour and 26 minutes.

Participants consisted of 78 Soldiers, including junior enlisted (E2-E4), NCO's (E5-E7), company grade officers (O1-O3 and CW2), and field grade officers (O4-O5 and CW3). On average, participants were 31.10 years old, had been in the Army for 9.28 years, had been on 1.82 combat deployments, and were 80% male. A summary of demographics by rank is presented in the Table below.

Summary of Demographic Characteristics by Rank

	Junior Enlisted	NCO	Company Grade Officers	Field Grade Officers
<i>n</i>	19	19	21	19
Gender	78.9% male	89.5% male	66.7% male	84.2% male
Age (mean)	24.95	30.84	30.24	38.47
Years of service (mean)	3.35	9.58	8.33	15.95
Ethnicity	63.2% white	57.9% white	61.9% white	73.7% white
# of deployments	21.1% = none 63.2% = 1 5.3% = 2 10.5% = 4	10.5% = none 42.1% = 1 10.5% = 2 26.3% = 3 10.5% = 4	4.8% = none 52.4% = 1 23.8% = 2 19% = 3	10.5% = 1 36.8% = 2 26.3% = 3 21.1% = 4 5.3% = 5

Note: Demographic information for senior enlisted and senior field grade officers is not represented due to the small number that have participated.

In addition to conducted the focus groups, the study required interviews with high ranking Officers (O6-O7) and Non-Commissioned Officers (E8-E9). Identifying senior Officers and NCOs within line units to participate in the interviews has been difficult, but the task will be accomplished. As of the current date, two senior NCOs and two senior Officers have been interviewed using the same questions asked in the focus group schedule. As of the writing of this report, the remaining two senior NCOs have been identified to be interviewed. The completion of the remaining interviews should occur within the next month.

11. *Content analyze focus group interviews to identify perceived barriers and catalysts to treatment seeking, and perceptions of how mental health treatment occurs; use this information when designing the survey for the longitudinal study.*

The 12 focus groups have been transcribed and the Clemson investigators and graduate students are in the initial phase of content analyzing the responses. The transcribed document for each focus group ranged from 14 to 29 pages (Mean = 21.58), for a total of 259 pages of responses. The four investigators on the project are currently reading through all of the responses and developing a preliminary coding system based on the responses. The investigators will decide on an initial coding system in the next week. The three graduate students working on the project will then each sort each response of the focus group into one of designated categories. This will allow for the calculating of inter-rater agreement in sorting the responses into categories. The content analysis of the focus group responses should be completed by the end of next month. The results from the focus groups and interviews will be developed into presentations and manuscripts to be submitted for publication.

KEY RESEARCH ACCOMPLISHMENTS AND REPORTABLE OUTCOMES

- Completed focus group data collection and transcription. Conducted three focus groups for each of four different rank categories addressing the barriers and facilitators of Soldiers getting needed mental health treatment, and transcribed 259 pages documenting the responses of the groups. An analysis of these focus groups will result in a better understanding of why Soldiers do versus do not get needed mental health treatment.
- Completed 50% of the interviews with senior NCOs and Officers regarding their perceptions of the barriers and facilitators of Soldiers getting needed mental health treatment.
- Completed 25 of the 40 interviews with Soldiers who have sought mental health treatment for mental health problems.
- A book chapter was written addressing the factors that determine whether employees in high stress occupations seek needed mental health treatment. The chapter is attached at the end of this report. The reference for the chapter is:

Britt, T.W., & McFadden, A.C. (in press). Understanding mental health treatment seeking in high stress occupations. In J. Houdmont, S. Leka, & R. Sinclair (Eds.), *Contemporary occupational health psychology: Global perspectives on research and practice*, Hoboken, NJ: Wiley-Blackwell Publishers.

CONCLUSION

The present report documents the progress made on the Year 1 objectives of the grant, including the two qualitative studies that were to be completed in the first Year. Although data collection from the two studies is not complete, we anticipate data collection being completed in the next two months (by the end of the year). As mentioned earlier, there was a delay in being granted approval to conduct the studies with the 3rd ID at Fort Stewart, which delayed the start of data collection for the two studies. However, even though there was a delay in the approval of the studies, the entire 3-year project was approved, therefore minimizing delays that would have resulted in having to identify an additional unit for Year 2 and 3 of the grant.

In the next two months we anticipate completing data processing of the two qualitative studies, and developing coding systems for the focus group study and the individual interview study. Presentations and manuscripts will be developed based on the results of the studies, and the results will be used to finalize the survey instrument being used in Year 2 of the grant. Therefore, although this annual report does not include presentations or publications based upon the data that were collected in Year 1, we anticipate being able to include presentations and publications by the due date of the next annual report.

APPENDIX A

Individual Interview Schedule

Thank you for taking the time to talk to me today about your decision to seek mental health treatment. I'm going to ask you about your experiences in seeking treatment, both things that helped and the things that got in the way. To make sure that I don't forget anything, I will be working from a list of questions I have with me. It would be helpful if I could make an audio recording of our interview, so that we can go back later to make sure I got down exactly what you said. After we have a record of your exact words, we will destroy the recording, and no one outside of our research team at Clemson University will hear the recording. Is it OK if I turn on the recorder?

(if yes, turn on the recorder)

(if no, "That's OK. I will leave it off and take notes instead.")

Major Questions

Please describe how you came to be in mental health treatment. (follow-up questions, if unclear: What led to your decision to seek treatment? How did you come to believe that you should get treatment?)

What type of mental health treatment did you receive? (e.g., psychotherapy, pharmacotherapy, chaplain, peer support groups, treatment by doctor/psychiatrist/psychologist, etc.) (follow-up questions: how long were you in treatment? How many sessions did you attend? Do you know what your diagnosis was?)

Before this, had you ever been in treatment before for any other problem? (follow-up with how many times, how long ago, how long in treatment, was it successful?)

How long was it between when you first thought you might need to get treatment and when you actually got treatment? What happened in the meantime?

How long were you experiencing problems or symptoms before you decided to get treatment?

Why did you decide to get treatment?

What benefits did you see to getting treatment?

Did you have support from others in seeking treatment? (if yes, What was your relationship to them? How did they offer support?)

What did you think treatment would be like? How has it been / was it different?

Did you put a name or diagnosis with the problems you were having before you went in for treatment, or did you just know something wasn't right? (if yes, Was your diagnosis the same one that the treatment provider thought you have/had?)

Did you encounter any problems from the Army when trying to get treatment? (if yes, Please describe them. How did you overcome problems?)

Did you encounter any problems with family members or friends when trying to get treatment (if yes, Please describe them. How did you overcome those problems?)

Did you encounter any problems or concerns with the healthcare system when seeking treatment? (e.g., difficulty making appointments, difficulty finding needed services, perceived lack of eligibility, expense)

Did you have any other difficulties accessing the treatment you needed? (e.g., scheduling conflicts, time constraints, transportation)

Did you experience any doubts of your own about seeking treatment? (if yes, Please describe them. How did you overcome those doubts?)

Follow-up: What about any beliefs that prevented you from seeking treatment sooner or might have initially hindered seeking treatment? (e.g., pride in self-reliance, focus on job and family functioning, providers won't understand/believe, treatment not helpful, treatment is for the weak/crazy, treatment is only for extreme problems)

Did you encounter any other obstacles in seeking treatment? ((if yes, Please describe them. How did you overcome those obstacles?)

Before you decided to get treatment, did you know anyone else who had similar problems? (if yes, were they in the Army/military? What was your relationship to him/her/them? How did their symptoms affect them? How did you see your symptoms compared to theirs- better, worse, or the same? Did they get treatment? How did you see treatment affecting him/her/them?)

Before you decided to get treatment, did you know anyone (else) in the Army who sought treatment? (if yes, What was your relationship to him/her/them? How did you see treatment affecting them, either on or off duty?)

Before you decided to get treatment, did you know anyone outside of the Army who sought treatment? (if yes, What was your relationship to him/her/them? How did you see treatment affecting them? Were they in the military at the time?)

Is there anything in particular that you told yourself or that led you to get treatment?

Is there anything in particular that others did that led you to get treatment?

Is there anything in particular that the Army did that led you to get treatment?

What do you think was the single most helpful thing in getting you in to treatment?

What do you think was the biggest barrier you faced in getting into treatment?

If there was one thing that you could tell someone who needs treatment but isn't getting it, what would it be?

APPENDIX B

Participant Code: _____

Demographic Questionnaire

1. Age: _____
2. Gender:
 - a. Male
 - b. Female
3. Race/Ethnicity:
 - a. Caucasian/White
 - b. African American
 - c. Hispanic
 - d. Asian/ Pacific Islander
 - e. Other (please specify) _____
5. Grade/Rank: _____
6. How many years have you been in the military? _____
7. Have you deployed in support of the combat operations in Iraq or Afghanistan? _____ If yes, how many times were you deployed, and what was the length of each deployment?
8. Please describe any other deployments you have been on: _____
9. Please indicate your primary diagnosis: _____
10. Please indicate if you are on any psychotropic medication, and if so, which you are taking:

Mental Health Symptoms

I. PTSD Symptomology

Below is a list of reactions that soldiers sometimes experience following deployment or in response to other stressful life experiences. Please mark how much you have been bothered by each problem in the past month.

1= Not at all 2= A little bit 3= Moderately 4= Quite a bit 5= Extremely

1. _____ Repeated, disturbing memories, thoughts, or images of the stressful experience
2. _____ Repeated, disturbing dreams of the stressful experience
3. _____ Suddenly acting or feeling as if the stressful experience were happening again (as if you were re-living it)
4. _____ Feeling very upset when something reminded you of the stressful experience
5. _____ Having physical reactions (like heart pounding, trouble breathing, sweating) when something reminded you of the stressful experience
6. _____ Avoiding thinking about or talking about the stressful experience or avoiding having feelings related to it
7. _____ Avoiding activities or situations because they reminded you of the stressful experience
8. _____ Trouble remembering important parts of the stressful experience
9. _____ Loss of interest in activities that you used to enjoy
10. _____ Feeling distant or cut-off from other people
11. _____ Feeling emotionally numb or being unable to have loving feelings for those close to you
12. _____ Feeling as if your future somehow will be cut short
13. _____ Trouble falling or staying asleep
14. _____ Feeling irritable or having angry outbursts
15. _____ Having difficulty concentrating
16. _____ Being “super alert” or watchful or on-guard
17. _____ Feeling jumpy or easily startled

II. Depression (PHQ)

Over the LAST 2 WEEKS, how often have you been bothered by any of the following problems?

Not At All Several Days More than Half the Days Nearly Every Day

1. Little interest or pleasure in doing things.
2. Feeling down, depressed, or hopeless.
3. Trouble falling or staying asleep, or sleeping too much.
4. Feeling tired or having little energy
5. Poor appetite or overeating.
6. Feeling bad about yourself-or that you are a failure or have let yourself or your family down.

7. Trouble concentrating on things such as reading the newspaper or watching television.
8. Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual.
9. Thought you would be better off dead or of hurting yourself in some way.

III. Alcohol Use

In the past 4 weeks:

- | | No | Yes |
|--|----|-----|
| 1. Have you felt you wanted or needed to cut down on your drinking? | | |
| 2. Have you used alcohol more than you meant to? | | |
| 3. Did you drive after having several drinks? | | |
| 4. Did you ride with a driver who had too much to drink? | | |
| 5. Have you been late or missed work because you were drinking or hung over? | | |

APPENDIX C

Focus Group Moderator's Guide (Major Questions)

Based on responses from the participants as well as information obtained during the interviews, additional questions may be added.

1. We are interested in those factors that determine whether a soldier with a mental health problem will get treatment for that problem. What factors do you feel may influence a soldier to seek treatment? (follow-up questions, if needed may include asking about specific factors such as family, friends, encouragement from leaders, other soldiers, etc.)

2. What makes it easier for soldiers to seek treatment when they need it?

3. Many soldiers who are experiencing psychological problems do not seek treatment for their difficulties. Why do you think this is the case?

(follow up questions may include: how much do attitudes of friends and family members serve as barriers to treatment seeking? What about beliefs regarding who seeks treatment (e.g., only weak/crazy people)? Beliefs about how it will affect job performance? Beliefs about self-reliance? Beliefs about mental health providers (e.g., their ability to understand/treat your problems)? Problems with access? Scheduling? Expense?)

4a. How much of a stigma is there for getting treatment for a psychological problem?

4b. What do you think needs to be done to decrease the stigma of getting treatment for psychological problems?

5. How important is organizational support in the decision to seek treatment?

6. What do you think happens during mental health treatment? How helpful do you think mental health treatment is? Are there other ways that soldiers typically prefer to deal with mental health problems? (e.g., talk to a friend, chaplain, medical doctor)

7. What are your beliefs about the use of medication to treat mental health problems? (Does medication work? Concerns about side effects?)

8. What are your perceptions of mental health professionals in your unit? (Do you see them as part of your "ingroup", or more as an outside asset for consultation)

9. When do you think a soldier should seek mental health treatment? (e.g., how serious does the problem have to be? What types of problems are appropriate for treatment?)

10. What do you think are the best ways to encourage a soldier to get treatment for psychological problems? Have you ever encouraged someone to seek treatment for psychological problem?

11. How can fellow buddies (and leaders) in the unit encourage the acceptance of soldiers getting treatment?

12. What aspects of training do you think best prevent the development of psychological problems following combat?

13. Please describe any other thoughts you have on helping soldiers deal with the psychological effects of combat.

14. Without naming names, do you know anyone in the Army who has gotten treatment for psychological problems? (If yes, what was your relationship to him/her/then? How did you see the treatment affecting them, either on or off duty?)

Demographics of Each Group Member:

Gender: Male Female

Age: _____

Marital Status: Married Single Divorced Widowed

Number of children: _____

Rank: _____

Number of years in the service: _____

Ethnicity (circle more than one if appropriate):

Caucasian/White

African American

Hispanic

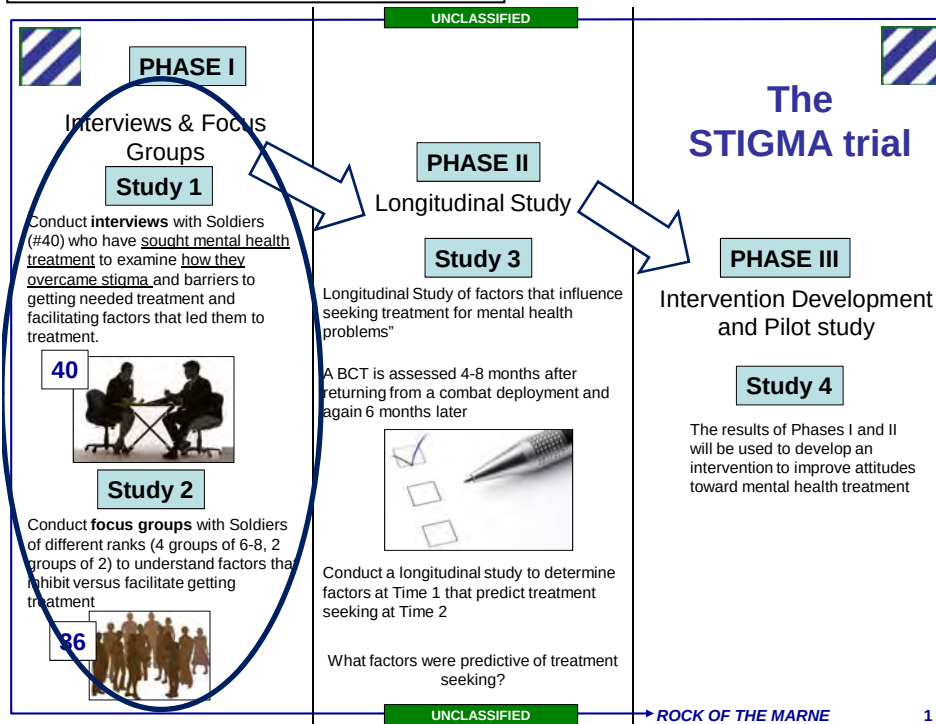
Asian/Pacific Islander

Other _____

Have you been on a combat operation in the last 10 years? YES NO

If YES, how many combat deployments? _____

Figure 1



(In Press). In J. Houdmont, S. Leka, & R. Sinclair (Eds.), *Contemporary occupational health psychology: Global perspectives on research and practice*, Hoboken, NJ: Wiley-Blackwell Publishers.

Understanding Mental Health Treatment Seeking in High Stress Occupations

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Employees in many organizations are faced with high levels of stress that have the potential to create mental health problems. Prototypical examples of high stress occupations include military personnel deployed in support of combat operations, intelligence analysts engaged in deep undercover operations, first responders following different types of emergencies, and firefighters and police officers. In addition, employees in many additional occupations are exposed to chronic organizational stressors that have been repeatedly linked to psychological and physical symptoms (Barling, Kelloway, & Frone, 2005; Cooper, Dewe, & O'Driscoll, 2001).

Although it is well-recognized that adverse work conditions have the potential to create mental health problems, surprisingly little research has investigated the determinants of whether employees seek mental health treatment for these problems. Literature on employee assistance programs (EAPs) describes the availability of mental health services for employees, but a gap exists in understanding the factors involved in whether employees use these resources (see Cooper, Dewe, & O'Driscoll, 2001). Furthermore, an underlying assumption of EAPs is that it is the employee's responsibility to take advantage of the different programs, and the use of these programs reflects a tertiary level of prevention that affects the relatively few employees who fail to cope with occupational demands.

In the present chapter we review research on mental health problems in high stress occupations, whether employees seek treatment for these problems, and the factors associated with the decision to seek treatment. Our interest in this chapter is on what determines whether employees seek mental health treatment for problems caused by highly stressful work, rather than treatment for problems not work-related or present prior to employment. We discuss both the individual determinants of treatment seeking, as well as those aspects of organizational culture,

leadership, and unit climate that are likely to influence an employee's decision to seek mental health treatment. After presenting the available research, we make the argument that the expeditious receipt of mental health treatment by employees in high stress occupations is the responsibility of the organization and leaders within the organization. We conclude the chapter with a discussion of the need to normalize the receipt of mental health treatment in high stress occupations, emphasize the receipt of mental health treatment as an effective mechanism to prevent more severe problems from occurring, and repackage mental health treatment so it is more sensitive to the organizational culture of high stress occupations.

Mental Health Problems in High Stress Occupations

One high stress occupation where the documentation of mental health problems has become a priority is in the U.S. military. Given the prevalence of different mental health problems following Operation Desert Storm, the U.S. military began a comprehensive screening program following operational deployments to assess the mental health impact of military operations. Given the traumatic stressors encountered during combat, it is not surprising that up to 30% of military personnel returning from combat in Afghanistan and Iraq report suffering from psychiatric problems (Hoge, Auchterline, & Milliken, 2006; Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004). Numerous sources also report an increase in suicide rates. Senior defense officials told the Associated Press (P. Jelinek, January 30, 2009) that soldier suicide was at the highest rate in three decades. Officials reported that at least 128 soldiers had taken their own lives in 2008, an increase from the 115 suicides in 2007 and 102 suicides in 2006.

Furthermore, research has identified objective features of combat operations that are predictive of the incidence of mental health problems. Military personnel are more likely to develop mental health problems if they are exposed to higher levels of combat (Hoge, et al. 2004), deploy for longer periods of time (Adler, Huffman, Bliese, & Castro, 2005), or participate in multiple deployments (Castro & Adler, 2011). Castro and Adler (2011) reported that the incidence of some form of mental health problem (i.e. PTSD, depression, alcohol abuse) was 40% for those military personnel who spent more than 40 hours per week outside their base camp. These individuals are the most likely to experience high levels of combat exposure, and this finding further links the incidence of mental health problems to the experience of severe occupational hazards.

In addition to the military, employees in other high stress occupations also experience mental health problems as a result of exposure to stressors. Employees involved in responding to emergencies (e.g., paramedics,

firefighters) frequently encounter highly stressful demands at work, with over 80% reporting a critical incident involving natural or man-made disasters (Beaton & Murphy, 1995). Exposure to these stressful events often results in mental health problems (Phelps, Lloyd, Creamer, & Forbes, 2009). In a UK sample of emergency ambulance workers (paramedics and EMTs), 22% reported symptoms consistent with a diagnosis of PTSD (Bennett, Williams, Page, Hood & Woollard, 2004). Del Ben, Scotti, Chen, and Fortson (2006) reported a PTSD rate of 8% among firefighters, and identified a number of predictors of PTSD symptoms in this high stress occupation. McFarlane (1998) also found that 15% of firefighters in Australia who experienced the critical incident of a deadly bushfire showed symptoms of PTSD.

Rothberg and Wright (1999) also detailed the significant stressors facing police officers (e.g., exposure to violence, injury, and death), and noted how exposure to these stressors can create mental health problems. A study of US suburban police officers revealed that 13% met diagnostic criteria for PTSD (Robinson, Sigman, & Wilson, 1997). As another example, researchers found that first responders reported mental health problems related to burnout and “compassion fatigue” when assisting victims of the 2001 terrorist attacks in New York City (Alexander & Atcheson, 1998; Boscarino, Figley, & Adams, 2004). Interestingly, those in the media who report on potentially traumatic episodes also report symptoms of mental health problems. Among war correspondents, Feinstein, Owen, and Blair (2002) found a lifetime prevalence rate of 28.6% for PTSD, 21.4% for depression, and 14.3% for substance abuse. These rates were considerably higher than a comparison group of journalists who had not reported on wartime events.

This brief review reveals that employees may experience different mental health problems (e.g., PTSD, depression, alcohol problems, burnout) from stressors encountered on the job, and that the magnitude of stressors encountered in a given occupation is predictive of mental health problems experienced by employees. Given the latter association, we argue that highly stressful events at work should be considered occupational hazards that place employees at risk for the development of mental health problems, just as environmental hazards (e.g., loud noise, toxic fumes) place employees at risk for physical problems. In most cases employees will readily get medical treatment for physical injuries, but the decision to seek treatment for mental health problems is more uncertain.

Do Employees Seek Treatment for Mental Health Problems?

In addressing whether employees seek treatment for mental health problems, it is first important to emphasize that the early receipt of mental health treatment is seen as an effective way of preventing more severe

problems in the future (Bacharach & Bamberger, 2007; Bryant, Moulds, & Nixon, 2003; Ehlers & Clark, 2003). Therefore, it is important to gather information regarding not only whether employees seek mental health treatment, but also how much time expires before employees seek treatment upon recognition of a problem. Unfortunately, in most occupations statistics regarding the percentage of employees who seek mental health treatment are not available, nor is information available regarding the amount of time that elapses before care is sought (Bamberger, 2009).

Some research has been conducted on the percentage of employees who utilize EAPs. For example, French, Dunlap, Roman, and Steele (1997) found that 11% of their sample utilized the EAP at their workplace. However, one difficulty with this type of research is that it is unclear what percentage of employees within a given organization have a mental health problem, and therefore to estimate the percentage of those with a problem who do or do not get treatment. For example, physical injuries at work are substantially under-reported (Probst, Brubaker, & Barsotti, 2008).

Given the recent combat operations in Iraq and Afghanistan, the military has not only tracked the incidence of mental health problems in the months personnel return from deployment, but also whether they seek treatment for a mental health problem when referred. Hoge, et al. (2004) found that among active duty military personnel, between 23 and 40% reported seeking treatment for a mental health problem. Milliken, Auchterlonie, and Hoge (2007) conducted a longitudinal assessment of mental health treatment seeking among military personnel where treatment seeking was assessed through medical records indicating the service member had visited a military treatment facility for a particular diagnosis. They found that among those referred for a mental health problem, 42% were seen within 90 days following the initial mental health screening, and 61% were seen within 90 days following a screening 3 to 6 months following deployment. However, the percentage of treatment seeking was lower for those referred for alcohol problems, with only 21% getting treatment.

Unfortunately, treatment seeking by National Guard soldiers could not be examined in the Milliken, et al. study given the lack of a standardized database for the storage of medical record information. However, a recent study by Kehle, et al. (2010) found that over 50% of National Guard Iraq veterans who screened positive for a mental health problem did not report seeking treatment for their difficulty. Kim, Thomas, Wilk, Castro, and Hoge (2010) found that the percentages of National Guard soldiers who reported seeking treatment were between 13 and 27%.

This brief review indicates that although estimates vary, in general a majority of service members who are identified as having a mental health problem do not seek treatment for their difficulty. In addition, it appears that employees in other high stress occupations frequently do not get treatment for mental health problems, or delay treatment seeking until initial symptoms become severe enough to create additional problems (Bamberger, 2009). In the next section we discuss research examining those factors that distinguish employees who seek mental health treatment from those who do not.

Determinants of the Decision to Seek Treatment

Researchers have begun to investigate the determinants of whether employees seek needed mental health treatment. Much of this research has been done in the military setting, but research has also been conducted on treatment seeking among first responders such as firefighters and paramedics. We review this work, as well as research on the predictors of employee use of EAPs. One caveat we offer regarding this latter area of research is that the use of EAPs may have more to do with reactions to non-work stressors than with the occupational hazards of severe stress at work.

In reviewing research on the decision to seek mental health treatment, we divide our summary into individual versus unit/organizational determinants of treatment seeking. In Figure 1 we present the overall model guiding our review of the research. This model is similar to that of Bamberger (2009), with an emphasis on the individual and organizational factors that are likely to determine treatment seeking in high stress occupations. In addition, our model emphasizes changes to the packaging of mental health treatment in high stress occupations.

Individual Determinants of Treatment Seeking

Employees involved in high stress occupations such the military, firefighting, police work, and emergency response place an emphasis on being resilient and handling problems themselves (Bamberger, 2009; Castro & Adler, 2011). Therefore, admitting one has a mental health problem resulting from exposure to work demands is difficult for these personnel, and seeking treatment for these problems may be even more difficult. Within the military, researchers have emphasized the stigma associated with admitting a mental health problem as a determining factor in the decision to seek treatment (Britt, 2000; Hoge, et al. 2004; Kim, et al. 2010; Pietrzak, Johnson, Goldstein, Malley, & Southwick, 2009).

Britt (2000) examined the stigma associated with mental health problems and treatment among military personnel returning from a peacekeeping mission to Bosnia. All personnel underwent a mental and physical

screening to ensure any emergent problems could be treated upon return from the deployment. The mental health screening involved service members completing measures of PTSD, depression, and alcohol abuse, and talking with a mental health professional if they scored above a cutoff criterion for having a problem. A parallel procedure occurred for physical problems. Participants completed a survey after the screening containing questions about the stigma of admitting a problem in the military, as well as their comfort in talking about psychological versus physical problems (if they scored above the cutoff criteria for these problems), and their likelihood of following through with their mental or physical health referrals.

Service members perceived more stigma when admitting a psychological than a physical problem in the military, with the majority agreeing with the statement that admitting a psychological problem would cause harm to their career and their commander to treat them differently. Furthermore, personnel experienced more discomfort when discussing psychological problems than physical problems with a professional, especially when they were returning home with their unit (versus when they were returning alone). Finally, personnel indicated a lesser likelihood of following through with a referral for a psychological problem than a medical problem.

Hoge, et al. (2004) also found that military personnel returning from combat operations in Iraq and Afghanistan endorsed stigma as a concern with seeking treatment, and that concerns about stigma were twice as high in veterans screening positive for a mental health problem. These findings suggested that concerns related to stigma were highest among the service members most in need of getting mental health treatment. Many symptoms of mental health problems such as depression and PTSD include social withdrawal, which likely serve as additional obstacle to treatment seeking. Other studies replicated the finding that reports of stigma were greater among individuals reporting greater mental health symptoms or screening positive for a mental health problem (Britt, et al. 2008). Greene-Shortridge, Britt, and Castro (2007) proposed that concerns about the stigma associated with mental health treatment are most relevant to individuals who have higher levels of symptoms, and that employees without symptoms may not think about what it would be like to seek treatment, and therefore may fail to consider the actual consequences that would result from seeking treatment.

Although multiple studies have shown that service members endorse stigma as a factor associated with the decision to seek mental health treatment, less research has examined stigma as a predictor of actually seeking treatment. Britt, Greene, Castro, and Hoge (2006) found that among soldiers who admitted having a mental health problem, those who also indicated seeking treatment for that problem reported less stigma associated with seeking

treatment. However, this study was cross-sectional, and therefore could not rule out the possibility that those soldiers who sought treatment came to perceive less of a stigma associated with seeking treatment. More recent research has not shown stigma to differentiate service members who seek treatment from those who do not (Britt, et al. 2011; Kim, Britt, Klocko, Riviere, & Adler, 2011). As we discuss later, stigma is likely to contribute to negative attitudes toward treatment, which should be a more proximal antecedent to seeking treatment.

The stigma-related concern about confidentiality of having sought mental health treatment has been examined more generally as a predictor of using EAPs. French, et al. (1997) examined predictors of which employees used EAPs, and found that perception of confidentiality was a significant predictor of usage. Employees were less likely to use the program if they believed others could find out about it. These results reflect concerns about the potentially stigmatizing effects of using EAPs.

In addition to the stigma associated with mental health treatment, employees in occupations with a high operational tempo may not have believe they have the time to attend lengthy treatment sessions or to investigate the various options for seeking mental health treatment. Hoge, et al. (2004) found that military personnel endorsed operational barriers to mental health treatment such as difficulty getting time off for treatment and scheduling an appointment, and that reports of these barriers were again higher among those personnel screening positive for a mental health problem. Britt, et al. (2008) showed that stigma and operational barriers to care were empirically distinct, and that barriers to care were especially related to reported depression among military personnel when work overload was rated as high. In addition, emergency personnel or employees involved in shift-work often work long and continuous hours that may complicate receiving needed mental health treatment (Smith, Folkard, Tucker, & Evans, 2011). Later in the chapter we discuss the implications of the fast-paced nature of highly involving jobs for the packaging of mental health treatment to employees.

Although stigma and operational barriers to care are two important factors that may influence an employee's decision to seek mental health treatment, researchers have recently turned their attention to additional determinants of treatment seeking. In a review of prior research on factors that inhibit seeking treatment in the general population, Vogel, Wester, and Larson (2007) identified four primary impediments: social stigma, treatment fears, a concern of showing emotion, and concerns about self-disclosing. Two additional deterrents were also identified that had not received as much research attention: social norms (support of others for getting treatment) and self-esteem (feeling worse about oneself for seeking treatment). All of these factors collectively assess

perceived risks associated with getting counseling and will likely be part of an individual's risk-benefit analysis when making a decision to seek treatment (Vogel, Wester, Larson, & Wade, 2006).

Treatment fears refer to concerns an individual has about what will happen during treatment, including what the therapist will think, how the individual will be treated, and whether the individual will be forced to address certain issues (Amato & Bradshaw, 1985; Kushner & Sher, 1989). A concern over showing emotion is a specific fear associated with the therapy process (Vogel & Wester, 2003). Research has shown that those individuals who do not like to show their emotions exhibit more reluctance to seek treatment (Komiya, Good, & Sherrod, 2000). Considering self-disclosure, individuals differ in their willingness to disclose personal information, emotional or not (Jourard, 1964). Not surprisingly, individuals who prefer not to disclose personal information tend to have more negative attitudes toward seeking mental health treatment (Vogel & Wester, 2003; Vogel, Wester, Wei, & Boysen, 2005).

The norms for strength and not showing emotion in many high stress occupations will likely result in these factors playing an even greater role in an employee's decision to seek mental health treatment. In addition, the concept of treatment fears may relate to employees not knowing what happens in mental health treatment, or having inaccurate perceptions of what occurs. Some intervention research with EAPs has focused on increasing employee knowledge relative to the details regarding the policies governing the company EAP and information about substance and drug abuse. Bennett and Lehman (2001) found that employees who had been part of an intervention involving informational training about the EAP showed significant increases in EAP knowledge on pre-post measures compared to a control group. Additionally, those employees in the informational intervention also reported being more likely to recommend the EAP to others and less likely to ignore coworker problems or stigmatize individuals with a substance abuse problem. In addition, Sinclair, Leo, and Wright (2005) found that employee knowledge of the benefits available to them was predicted by their ratings of benefit communication quality, and that knowledge was related to affective commitment toward the organization. This research suggests that educating employees about what happens in mental health treatment may result in more favorable attitudes toward treatment, and a greater likelihood that employees will support others who seek treatment.

Vogel, et al. (2007) identified social norms as an under-investigated predictor of treatment seeking. Social norms represent the beliefs of those close to the individual regarding whether people should get treatment when they are having psychological problems. Social norms are similar to subjective norms within the Theory of Planned

Behavior (Ajzen, 1985), which proposes that individuals will be more likely to form an intention to engage in a behavior when those close to the individual support the individual engaging in the behavior, and the individual believes it is important to comply with the wishes of these individuals. Within the context of seeking mental health treatment, individuals will be more likely to seek such treatment when important others support the individual getting treatment, or perhaps even recommend they get treatment.

Considering employees in organizational settings, subjective norms are likely to play an important role in the decision to seek treatment. As discussed in more detail in the section on unit determinants of treatment seeking, employees in high stress occupations are typically heavily influenced by their immediate unit climate, and therefore a primary determinant of seeking treatment may be the perception that the decision is supported by close unit members. Milne, Blum, and Roman (1994) found that employee perceptions of their top management and direct supervisor support of the EAP predicted employee confidence in the EAP, which in turn significantly predicted propensity to use the EAP.

In contrast to research on the deterrents of seeking needed mental health treatment, much less research has been conducted on those factors that facilitate treatment seeking. Vogel and Wester (2003) argued that the perceived benefits and risks of getting treatment would influence one's attitude toward mental health treatment and ultimately the receipt of such treatment. They assessed the perceived utility of mental health treatment with a four item scale consisting of questions such as "How helpful would it be to self-disclose a personal problem to a counselor" and "How likely would you get a useful response if you disclosed an emotional problem you were struggling with to a counselor" (p. 354). Individuals responding to these types of questions presumably consider such factors as the reduction in personal distress that would result from receiving treatment, and perhaps the ability to function better in personal and occupational settings. More research is clearly needed on positive beliefs individuals have about the benefits of therapy, as well as ways to get individuals to recognize the benefits of treatment when determining whether they will ultimately seek mental health care.

Research in military settings has examined some of these additional individual determinants of treatment seeking. Kim, et al. (2011) investigated beliefs about treatment and mental health professionals as a predictor of reported receipt of treatment, in addition to stigma and operational barriers to care, among active duty personnel who had participated in combat operations in Iraq and Afghanistan. They found that beliefs about problems and treatment (e.g., "I don't trust mental health professionals" and "Psychological problems tend to work themselves out

without help”; see Mackenzie, Knox, Gekoski, & Macaulay, 2004) was the only variable that distinguished soldiers with a mental health problem who sought treatment for that problem from those who did not.

Britt, et al. (2011) examined treatment seeking among a Reserve Component sample of veterans, and also found that a measure assessing beliefs about psychological problems and treatment distinguished those veterans with a problem who reported seeking treatment from those who did not. They also found that the veteran’s overall attitude toward seeking mental health treatment was predictive of a higher likelihood of seeking treatment. Kehle, et al. (2010) also recently found that positive attitudes were associated with receiving treatment among National Guard veterans of the Iraq war. Finally, research on the use of EAPs has emphasized the importance of employee’s trusting the program in their propensity to use it if needed (Milne, et al. 1994).

In Figure 1, we illustrate how the individual factors discussed above are hypothesized to relate to an employee’s decision to seek mental health treatment. These individual factors fall broadly within the Theory of Planned Behavior (Ajzen, 1985; see Britt, et al. 2011). According to the TPB, the intention to engage in a behavior (i.e., treatment seeking) is influenced by three different factors: the overall attitude toward the behavior, perceived social norms for engaging in the behavior (referred to as subjective norms), and perceived control over the behavior. Determinants of the overall attitude toward the behavior include the number of positive versus negative beliefs about the behavior (i.e., costs and benefits of treatment, concerns about treatment, stigma), determinants of subjective norms include beliefs about what others important to the individual think about the behavior (including co-workers and unit leaders), and determinants of perceived behavioral control include beliefs about how much control the individual has over the behavior (which can be indexed by operational barriers to care).

The intention to seek treatment for a mental health problem should be stronger when the attitude toward seeking treatment is positive, when important others support seeking treatment, and when the employee believes he or she has control over having the time and resources to get treatment. The intention to seek treatment should then be predictive of actually getting treatment, although research on the TPB has recently documented variables that intercede between the forming of an intention and engaging in a particular behavior. For example, Armitage (2006) described the role of implementation intentions in the intention-behavior link, where the individual forms an intention to perform the given behavior at a given time in a given location.

Importantly, Figure 1 presents two final individual determinants of an employee’s decision to seek mental health treatment that do not fall neatly into the TPB. These factors are addressed in Andersen’s (1995) behavioral

model of health care utilization, and include the severity of the employee's symptoms and the magnitude of work demands facing the employee. Not surprisingly, employees who are exposed to greater trauma and who therefore experience more severe mental health symptoms are typically more likely to seek mental health treatment (Fikretoglu, Brunet, Guay, & Pedlar, 2007; Kehle, et al. 2010; Milliken, et al. 2007). Studies linking the magnitude of operational stressors to treatment seeking emphasize the importance of occupational hazards in the development of mental health problems.

Organizational Determinants of the Decision to Seek Treatment

Whereas some research has been conducted on individual determinants of treatment seeking in high stress occupations, much less research has been conducted on organizational determinants. According to Figure 1, the unit and organizational climate related to the support for getting treatment should be associated with the employee's overall attitude toward treatment seeking as well as the subjective norms the employee perceives for getting treatment. Below we discuss the specific unit and organizational factors that should ultimately be related to seeking needed mental health treatment. Given the lack of research examining these factors, we pay particular attention to how they should be assessed in future studies.

Bamberger (2009) addressed when employees will seek help for mental health problems, and highlighted the importance of unit-level factors in the decision to seek treatment. He argued that unit-level norms should influence the expectations employees feel about seeking help. For example, norms associated with the belief that employees should cope with problems themselves would result in negative expectancies associated with help seeking, whereas unit norms associated with privacy, support, and encouragement to seek help would result in more positive expectancies about seeking help, thereby making help seeking more likely. However, to our knowledge no research has been conducted addressing those unit factors most directly linked to employees seeking treatment for mental health problems.

We propose theory and research on safety climate can be used to better understand the organizational, unit, and leadership influences on the decision to seek mental health treatment. The unit climate for treatment seeking may operate similarly to the unit climate for safety behavior. In extending the safety climate literature to the decision to seek treatment in high stress occupations, a number of parallels emerge. First, the decision to engage in safety behavior often involves a tradeoff between maximizing performance and maximizing a safe work environment. When workload is high, performance of safety behaviors can suffer (Zohar, 2010). Similarly, when

employees in high stress occupations begin to develop mental health problems, the importance of a given mission and the sheer workload may result in employees putting off getting treatment, and instead focusing on performance. Sonnentag and Frese (2003) noted that employees will often attempt to sustain effective performance even as their well-being suffers. Under these conditions, the climate in a given organization and unit should have an influence on the employee's decision to get necessary mental health treatment even if such treatment risks a temporary reduction in performance.

In addition to the unit and organizational climate for treatment seeking, research on the role of leadership in safety behavior also has relevance to an employee's decision to seek mental health treatment. Zohar (2010) argued that leadership is an antecedent of climate, where interaction with the leader and social learning inform employees about the relative importance of safety-related behavior. A parallel can be seen with treatment seeking in that supervisor attitudes toward treatment seeking can inform an employee's decision to get needed treatment. If a supervisor places little importance on employee psychological well being, as perceived through exchanges with the leader and implementation of policy, it is unlikely that employees will perceive a strong climate and their resulting motivation to seek treatment may be diminished. Just as management support for safety is a primary component in safety performance (Zohar, 1980), "higher up's" support for treatment seeking may be a primary component in the decision to seek treatment within complex hierarchical organizations, such as the military.

Implications of Our Model for Organizational Practice

Given that mental health problems have been linked to exposure to highly stressful events at work, we argue it is the organization's responsibility to insure the timely receipt of mental health treatment for employees who develop mental health problems (Castro & Adler, 2011). Importantly, employees in high stress occupations embody the resiliency-based traits of independence and self-reliance that will make it difficult for them to get treatment when needed. Therefore, organizations need to proactively take steps to facilitate employee receipt of needed mental health treatment. In the present section of the chapter we discuss the importance of normalizing the receipt of needed mental health treatment, emphasizing that getting mental health treatment will prevent more severe problems from affecting employee performance, and tailoring mental health treatment to the occupational context of high stress occupations.

Employees may not seek mental health treatment because they believe getting treatment is a sign of personal failure of not being able to handle the problem themselves. However, if employees are made aware of the

mental health consequences of exposure to highly stressful events, they should realize that the development of symptoms is a normal response to severe occupational stressors. If employees know that a sizeable minority may develop symptoms indicative of mental health problems in response to these occupational hazards, the locus of causality for the development of the problem will be identified in the exposure to occupational hazards rather than personal weakness (Bamberger, 2009). Assigning causality for the mental health problem to the occupational setting should facilitate employees getting treatment, and the more employees who get treatment, the greater the normalization of treatment seeking in a given unit or organization.

One potential obstacle to the normalization of mental health treatment is the view that getting mental health treatment represents a failure of primary and secondary prevention. Tripartite models of prevention (Ivancevich, Matteson, Freedman, & Phillips, 1990) view the receipt of mental health treatment as a tertiary level of prevention, and the models implicitly assume that the need for mental health treatment represents failures of initial attempts at prevention to avert the development of a mental health problem. We would argue that the receipt of needed mental health treatment as a result of exposure to occupational hazards can occur in parallel with attempts at primary and secondary prevention. For example, resiliency training for employees in high stress occupations is frequently viewed as a primary prevention directed toward buffering employees from the development of mental health problems. However, in its resiliency training the U.S. Army emphasizes that mental health problems can result from exposure to occupational hazards, and therefore soldiers should seek treatment when necessary so that problems do not become more severe (Adler, et al. 2009). The fact that treatment seeking and resiliency training can co-occur emphasizes that despite attempts to strengthen an employee's ability to cope with severe occupational stressors, mental health problems can result in response to exposure. Employees should view resiliency training and mental health treatment as two different but compatible ways to maintain operational readiness so as to be an effective unit member.

As discussed earlier, one reason mental health treatment is not viewed as a resource for maintaining resiliency is that employees may have negative attitudes and erroneous beliefs regarding what happens in mental health treatment. For example, employees may believe mental health treatment will involve lengthy sessions that continue for a long period of time and that will negatively affect individual and unit performance. They may also believe treatment will leave a "black mark" on their own record, and that these costs outweigh the potential benefits of treatment. Employees may also believe they will be given medication for their problems, the side effects of which may hurt their performance as well as the performance of their unit. In addition to educating employees regarding

evidenced-based treatments that exist to treat mental health problems resulting from exposure to severe occupational hazards (see Karlin, et al. 2010), we would argue it is also necessary to do a better job of tailoring mental health treatments to the organizational culture of high stress occupations. For example, employees in occupations like the military, law enforcement, and firefighting frequently view their work as an important part of their personal identity. If mental health professionals do not recognize the importance of work to the employee, and mental health treatments do not highlight work-related experiences, the employee may be hesitant to seek or remain in treatment.

Recent research has examined the importance of incorporating work-related experiences into treatment for work-related mental health complaints. Blonk, Brenninkmeijer, Lagerveld, and Houtman (2006) were interested in whether employees in who were on leave for mental health problems would return to work faster when work-related experiences were integrated into traditional cognitive behavioral treatment (CBT). Results showed that employees in the work-integrated CBT treatment group returned to work faster than those in traditional CBT and control conditions.

We believe that mental health treatment focused on getting employees back to work would be especially appealing to individuals in high stress occupations who are committed to their jobs. Unfortunately, little research has been conducted on how much of a work focus occurs in traditional mental health treatments for problems created by occupational hazards. The importance of better understanding whether employees will seek needed mental health treatment will hopefully result in more research attention being directed toward whether work-related elements of the organizational culture are incorporated into existing mental health treatments, and how a greater focus on these elements may result in a greater acceptance of mental health treatment among employees in high stress occupations.

In summary, employees in high stress occupations frequently develop mental health problems as a result of exposure to traumatic events that should be viewed as occupational hazards. Ensuring that employees get needed treatment for these problems is an organization and leadership responsibility. In the present chapter we identified a number of individual and unit/organizational determinants of the decision to seek mental health treatment, and have provided suggestions for how to normalize the receipt of mental health treatment and better incorporate the organizational culture of high stress occupations into treatment so that more employees with problems might get help. Future research is needed to better understand the relative importance of different factors in the decision to

seek treatment, and to evaluate how changes to mental health treatment and the dissemination of such treatment influences the percentages of employees getting needed help.

References

- Adler, A.B., Bliese, P.D., McGurk, D., & Hoge, C.W. (2009). Battlemind debriefing and Battlemind training as early interventions with soldiers returning from Iraq: Randomization by platoon. *Journal of Consulting and Clinical Psychology, 77*, 928-940.
- Adler, A. B., Huffman, A. H., Bliese, P. D., & Castro, C. A. (2005). The impact of deployment length and experience on the well-being of male and female soldiers. *Journal of Occupational Health Psychology, 10*(2), 121-137.
- Ajzen, I. (1985). From intentions to action: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action control: From cognition to behavior* (pp. 11-39). Heidelberg: Springer.
- Alexander, D. A. & Atcheson, S. F. (1998). Psychiatric aspects of trauma care: Survey of nurses and doctors. *The Psychiatrist, 22*, 132-136.
- Amato, P.R., & Bradshaw, R. (1985). An exploratory study of peoples' reasons for delaying or avoiding help-seeking. *Australian Psychologist, 20*, 21-31.
- Andersen, R.M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior, 36*, 1-10.
- Armitage, C.J. (2006). Evidence that implementation intentions promote transitions between stages of change. *Journal of Consulting and Clinical Psychology, 74*, 141-151.
- Bacharach, S.B., & Bamberger, P.A. (2007). 9/11 and New Your City firefighters' post hoc unit support and control climates: A context theory of the consequences of involvement in traumatic work-related events. *Academy of Management Journal, 30*, 849-868.
- Bamberger, P. (2009). Employee help-seeking: Antecedents, consequences and new insights for future research. *Personnel and Human Resources Management, 28*, 49-9.
- Barling, J., Kelloway, E. K., & Frone, M. R. (Eds.) (2005). *Handbook of Work Stress*. Thousand Oaks, CA: Sage.
- Beaton, R.D., & Murphy, S.A. (1995). Working with people in crisis: Research implications. In C.R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 51-81). Philadelphia, PA: Brunner/Mazel.
- Bennett, J. B. & Lehman, W. E. (2001). Workplace substance abuse prevention and help-seeking: Comparing team-oriented and informational training. *Journal of Occupational Health Psychology, 6*(3), 243-254.

- Bennett, P., Williams, Y., Page N., Hood, K., & Woollard, M. (2004). Levels of mental health problems among UK emergency ambulance workers. *Emergency Medicine Journal*, 21, 235–236.
- Blonk, R.W.B., Brenninkmeijer, V., Lagerveld, S.E., & Houtman, I.L.D. (2006). Return to work: A comparison of two cognitive behavioural interventions in cases of work-related psychological complaints among the self-employed. *Work & Stress*, 20, 129-144.
- Boscarino, J. A., Figley, C. R., & Adams, R. E. (2004). Compassion fatigue following the September 11 terrorist attacks: A study of secondary trauma among New York City social workers, *International Journal of Emergency Mental Health*, 6(2).
- Britt, T.W. (2000). The stigma of psychological problems in a work environment: Evidence from the screening of service members returning from Bosnia. *Journal of Applied Social Psychology*, 30 (8), 1599-1618.
- Britt, T. W., Bennett, E. A., Crabtree, M., Haugh, C., Oliver, K., McFadden, A., & Pury, C. L. S. (2011). The theory of planned behavior and reserve component veteran treatment seeking. *Military Psychology*, 23(1), 82-96.
- Britt, T.W., Greene, T.M., Castro, C.A., & Hoge, C.W. (2006). The stigma of psychological problems in the military. In D.R. McCreary & M.M. Thompson (Chairs), *Stress and mental health in military personnel: Current issues*. Presented at the American Psychological Association/US National Institute for Occupational Safety and Health Work, Stress, and Health conference, Miami, FL, USA, March 1-4.
- Britt, T.W., Greene-Shortridge, T.M., Brink, S., Nguyen, Q.B., Rath, J. Cox, A.L., Hoge, C.W., & Castro, C.A. (2008). Perceived stigma and barriers to care for psychological treatment: Implications for reactions to stressors in different contexts. *Journal of Social and Clinical Psychology*, 27, 317-335.
- Bryant, R. A., Moulds, M. L., & Nixon, R. V. D. (2003). Cognitive behaviour therapy of acute stress disorder: a four-year follow-up. *Behaviour Research and Therapy*, 41(4), 489-494.
- Castro, C.A., & Adler, A.B. (2011). Reconceptualizing combat-related posttraumatic stress disorder as an occupational hazard. In Adler, A.B., Bliese, P.D., & Castro, C.A. (Eds.), *Deployment psychology: Evidence-based strategies to promote mental health in the military*. (217-242). Washington, DC, US: American Psychological Association.
- Cooper, C.L., Dewe, P.J., & O'Driscoll, M.P. (2001). *Organizational stress: A review and critique of theory, research, and applications*. London, Sage Publications.

- Cooper, C. L., Dewe, P. J., & O'Driscoll, M. P. (2011). Employee assistance programs: Strengths, challenges, and future roles. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (2nd ed., pp. 337-356). Washington, D.C.
- Del Ben, K. S., Scotti, J. R., Chen, Y., & Fortson, B. L. (2006). Prevalence of posttraumatic stress disorder symptoms in firefighters. *Work & Stress*, 20(1), 37-48.
- Ehlers, A. & Clark, D. (2003). Early psychological interventions for adult survivors of trauma: A review. *Biological Psychiatry*, 53(9), 817-826.
- Feinstein, A., Owen, J., & Blair, N. (2002). A hazardous profession: War, journalists, and psychopathology. *American Journal of Psychiatry*, 159, 1570-1575.
- Fikretoglu, D., Brunet, A., Guay, S., & Pedlar, D. (2007). Mental health treatment seeking by military members with posttraumatic stress disorder: findings are rare, characteristics, and predictors from a nationally representative sample Canadian military sample. *Canadian Journal of Psychiatry*, 52(2), 103-110.
- French, M. T., Dunlap, L. J., Roman, P. M., & Steele, P. D. (1997). Factors that influence the use and perceptions of employee assistance programs at six worksites. *Journal of Occupational Health Psychology*, 2(4), 312-324.
- Greene-Shortridge, T.M., Britt, T.W., & Castro, T.A. (2007). The stigma of psychological problems in the military. *Military Medicine*, 172, 157-161.
- Hoge, C.W., Auchterlonie, J.L., & Milliken, C.S. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Journal of the American Medical Association*, 295, 1023-1032.
- 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. *New England Journal of Medicine*, 351, 13-22.
- Ivancevich, J. M., Matteson, M. T., Freedman, S. M., & Phillips, J. S. (1990). Worksite stress management interventions. *American Psychologist*, 45, 252-261.
- Jourard, S.M. (1964). *The transpersonal self*. New York: Van Nostrand.
- Karlin, B. E., Ruzek, J. I., Chard, K. M., Eftekhar, A., Monson, C. M., Hembree, E. A., & ... Foa, E. B. (2010). Dissemination of evidence-based psychological treatments for posttraumatic stress disorder in the Veterans Health Administration. *Journal of Traumatic Stress*, 23(6), 663-673.

- Kim, P.Y., Britt, T.W., Klocko, R.B., Riviere, L.A., & Adler, A.B. (2011). Negative attitudes about treatment and utilization of mental health care among soldiers. *Military Psychology*, 23, 65-81.
- Kim, P. Y., Thomas, J. L., Wilk, J. E., Castro, C. A., & Hoge, C. W. (2010). Stigma, barriers to care, and use of mental health services among active duty and national guard soldiers after combat. *Psychiatric Services*, 61, 572-588.
- Kehle, S. M., Polusny, M. A., Murdoch, M., Erbes, C. R., Arbisi, P. A., Thuras, P., & Meis, L. A. (2010). Early mental health treatment-seeking among U.S. National Guard soldiers deployed to Iraq. *Journal of Traumatic Stress*, 23(1), 33-40
- Komiya, N., Good, G.E., & Sherrod, N.B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology*, 47, 138-143.
- Kushner, M.G., & Sher, K.J. (1989). Fears of psychological treatment and its relation to mental health service avoidance. *Professional Psychology: Research and Practice*, 20, 251-257.
- Mackenzie, C. S., Knox, V. J., Gekoski, W. L., & Macaulay, H. L. (2004). An adaptation and extension of the attitudes toward seeking professional psychological help scale. *Journal of Applied Social Psychology*, 34, 2410-2435.
- McFarlane, A. C. (1998). Epidemiological evidence about the relationship between PTSD and alcohol abuse: The nature of the association. *Addictive Behaviors*, 23(6), 813-826.
- Milliken, C. S., Auchterlonie, J. L., & Hoge, C.H. (2007). Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *The Journal of the American Medical Association*, 298 (18), 2141-2148.
- Milne, S. H., Blum, T. C., & Roman, P. M. (1994). Factors influencing employees' propensity to use an employee assistance program. *Personnel Psychology*, 47, 123-145.
- Phelps, A., Lloyd, D., Creamer, M., & Forbes, D. (2009). Caring for carers in the aftermath of trauma. *Journal of Aggression, Maltreatment & Trauma*, 18(3), 313-330
- Pietrzak, R. H., Johnson, D. C., Goldstein, M. B., Malley, J. C., & Southwick, S. M. (2009). Perceived stigma and barriers to mental health care utilization among OEF-OIF veterans. *Psychiatric Services*, 60, 1118-1122.
- Retrieved from ps.psychiatryonline.org.

- Probst, T. M. Brubaker, T. L., & Barsotti, A. (2008). Organizational under-reporting of injury rates: An examination of the moderating effect of organizational safety climate. *Journal of Applied Psychology, 93*(5), 1147-1154.
- Robinson, H. M., Sigman, M. R., & Wilson, J. P. (1997). Duty related stressors and PTSD symptoms in suburban police officers. *Psychological Reports, 81*, 835-845.
- Rothberg, J. M. & Wright, K. (1999). Trauma prevention in the line of duty. In J. M. Violanti & D. Paton (Eds.), *Police trauma: Psychological aftermath of civilian combat* (pp. 327). Springfield, IL, US: Charles C. Thomas Publisher
- Seal, K. H., Metzler, T. J., Gima, K. S, Bertenthal, D., Maguen, S., & Marmar, C. R. (2009). Trends and risk factors for mental health diagnoses among Iraq and Afghanistan veterans using Department of Veterans Affairs health care, 2002-2008. *American Journal of Public Health, 99* (9), 1651-1658.
- Sinclair, R. R., Leo, M. C., & Wright, C. (2005). Benefit system effects on employees' benefit knowledge, use, and organizational commitment. *Journal of Business and Psychology, 20*(1), 3-29.
- Smith, C.S., Folkard, S., Tucker, P., & Evans, M.S. (2011). Work schedules, health, and safety. In L.E. Tetrick and J.C. Quick (Eds.), *Handbook of Occupational Health Psychology, Second Edition* (pp. 185-204). Washington, DC: American Psychological Association.
- Sonnentag, S. & Frese, M. (2003). Stress in organizations. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology, vol. 12* (pp. 453-491). Hoboken, NJ, US: John Wiley & Sons Inc.
- Vogel, D.L., & Wester, S.R. (2003). To seek or not seek help: The risks of self-disclosure. *Journal of Counseling Psychology, 50*, 351-361.
- Vogel, D.L., Wester, S.R., & Larson, L.M. (2007). Avoidance of counseling: Psychological factors that inhibit seeking help. *Journal of Counseling & Development, 85*, 410-422.
- Vogel, D. L., Wester, S. R., Larson, L. M., & Wade, N. G. (2006). An information-processing model of the decision to seek professional help. *Professional Psychology: Research and Practice, 37*(4), 398-406.
- Vogel, D.L., Wester, S.R., Wei, M., & Boysen, G.A. (2005). The role of outcome expectations and attitudes on decisions to seek professional help. *Journal of Counseling Psychology, 52*, 459-470.

Zohar, D. (1980). Safety climate in industrial organizations: Theoretical and applied implications. *Journal of Applied Psychology*, 65(1), 96-102.

Zohar, D. (2010). Thirty years of safety climate research: Reflections and future directions. *Accident Analysis and Prevention*, 42, 1517-1522.

Figure 1: Individual and Organizational Determinants of Employee Treatment Seeking

