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Relationship between Employee Involvement Management Practices and

Burnout among Military Mental Health Providers

A Dissertation

Presented to

the Faculty of the Morgridge College of Education

University of Denver

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Raymond-Steven Almora Fernandez, M.A.

March 2012

Advisor: Patrick Sherry, Ph.D., ABPP

DISCLAIMER

The views expressed in this publication are those of the author and
do not necessarily reflect the views of the United States Navy
or the United States Government

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Title: Relationship between Employee Involvement Management Practices and Burnout among Military Mental Health Providers
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ABSTRACT

This study will investigate the relationship between Employee Involvement Management Practices, Burnout, and work-related consequences of Burnout. The sample for this study was drawn from a population of Military Mental Health Providers in the United States Navy. Based on research information about work stress, direct service work, and the costs of interpersonal work, there is a strong potential for Burnout to occur among individuals working in such a setting.

Burnout has been shown to lead to negative organizational consequences such as increased employee turnover, reduced organizational commitment, reduced job satisfaction, emotional exhaustion, and cynicism, all of which can result in reduced consistency and quality of care for patients. Employee Involvement Management Practices have shown a potential for moderating Burnout related issues such as organizational commitment, job satisfaction, and reduced turnover in other work settings. This study will assess subjects' perception of Employee Involvement Management Practices at their work site, and will assess Burnout, Turnover Intentions, Organizational Commitment, and Job Satisfaction.

The author's hypothesis is that where Employee Involvement Management Practices are perceived, subjects will report lower scores of Burnout, lower Turnover Intentions, higher Organizational Climate, higher Organizational Commitment and higher Job Satisfaction. The **Emotional Exhaustion** section of the **Maslach Burnout Inventory and Interview** was used to assess Burnout. The **Work Environment Scale Clarity and Control scales** assessed attitudes about organizational climate. The **Organizational Commitment Questionnaire** was used to assess organizational commitment. Two questions drawn from the **Organizational Commitment Questionnaire** were used to assess respondents' Turnover Intentions. The **Employee Involvement Practices Scale** was used to assess perceptions of Employee Involvement Management Practices at the respondents' work site. The **Job In General Index** was used to assess respondents' ratings of job satisfaction.

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CHAPTER 1

Introduction

Military Mental Health

Military mental health was born through the need for personnel services during World War One. Psychologists were vital in assisting with screening of recruits, and as the war continued they also served as researchers and uniformed clinicians at United States Army hospitals. Not only was this work seen by Armed Forces policy makers as a success, it also demonstrated a tangible way for the burgeoning mental health profession to provide services on a large scale (Benjamin, DeLeon, Freedheim & Vandebos, 2003). Changing wartime environments during the Vietnam War and the Korean War, and the emergence of combat related trauma and recognition of its impact on service members led to increased focus on coordinated mental health service provision within the military medical system. As of 2005 there were approximately 130 clinical psychologists on active duty in the United States Navy. These clinicians, along with uniformed psychiatrists and uniformed social workers, and along with uniformed mental health providers from the United States Air Force and United States Army, provide mental health services to active duty members and their families across all branches of the military.

More recently, increased media focus on mental health care for veterans and active duty service members has led to increased scrutiny and pressure on military mental health providers. Controversy regarding ethical practices in a wartime environment or in an interrogation setting has increased debate on the role of mental health providers within the military (Benjamin, 2010). Increased diagnosis of Post Traumatic Stress Disorder and increasing recognition of traumatic brain injury and deployment related mental health issues has also created an increased demand on uniformed psychologists. Placement of military psychologists in less traditional roles, such as in the deployed environment, directly embedded with United States Marine Corps units, in operational roles with special forces groups, and on aircraft carriers, has led to complex roles for military mental health providers. This has led to a push to improve the retention of and increase the overall numbers of military mental health providers. This push to improve retention and increase numbers is not only based on a changing military environment. A 2007 report from the American Psychological Association on the status of the military mental health system specifically recommended a focus on retention of experienced and trained personnel. This report also urged a focus on increasing the existing numbers of military mental health providers, to meet the ever growing demand from service members and their families (APA, 2007). This was echoed by Admiral Mike Mullen, chairman of the United States Military Joint Chief of Staff, when he cited a need

to redouble efforts to deal effectively with combat stress and of the risk of multiple deployments of soldiers (Morgan, Cocks, & Dunham, 2009).

Burnout

The concept of burnout in the work environment emerged in the 1970s and has since been defined as a specific type of job stress unique to the human service sector, related to the interpersonal work involved in counseling, caretaking, and therapy (Schaufeli & Enzmann, 1998; Sherry, 1981). Human service workers experience this stress after the extended interpersonal contact inherent to this work. This job stress leads to three consequences that impact the work environment, impact the individual, and impact the patients being treated. The first consequence is a state of emotional and physical exhaustion. The second consequence is when providers start to view their patients impersonally, as a number or a time slot, and have difficulty developing empathy and creating rapport and trust. The third consequence is that providers start to view their own performance negatively, and start to feel diminishing returns on the interpersonal investment they make at work.

Maslach & Jackson (1981) developed the three factor structure of burnout which was used in the Maslach Burnout Inventory (MBI). The MBI has become a widely accepted and tested measure of burnout in current research. The three factors that are assessed by the instrument are; Depersonalization, Emotional Exhaustion, and Personal Accomplishment. Depersonalization refers to the

counselor increasingly viewing their client as a dehumanized object, or as a disorder, or with a negative label rather than as a person. Emotional exhaustion refers to an increasing sense of apathy, and inability to feel empathic and caring toward one's clients. Personal accomplishment is inversely related to the first two factors, in that a burned out individual's sense of personal accomplishment and pride in their work is lowered, instead feeling frustrated and incompetent.

Consequences of Burnout

Burnout has been suggested to be a key factor in the high rates of employee turnover and low job morale in staff members working in childcare settings (Pines & Aronson, 1988). Cynicism and low morale, which can negatively impact how direct care workers provide care, are also attributed to burnout (Pines, Aronson & Kafry, 1981). Decreased organizational commitment, job performance, contextual performance, and increased turnover intentions have also been suggested as negative consequences of burnout (Jawahar, Stone, & Kisamore, 2007). Given these negative consequences for both the individual and the organization, the pursuit of research that can reduce the negative effects of burnout is vital.

Direction of Burnout Research

A pro-active focus on the assessment of leading indicators of mental health in the workplace is important, as much research into work and stress has

been focused on lagging indicators like outcomes of individual and organizational well-being (Kelloway & Day, 2005). With a focus on predictors of mental and physical health in the workplace, with management style as a correlate of burnout, a more pro-active approach toward managing burnout can be achieved. Focusing solely on treatment, after burnout has already been detected, limits the field to healing the wounded. Instead by initiating a focus on primary intervention, on management of employees and the workplace, organizations can reduce the likelihood that job stress will lead to burnout.

Employee Involvement Management Practices

Employee involvement management practices have shown promise in human service settings for reducing job related consequences of burnout such as reduced organizational commitment, increased job turnover, and poor morale and cynicism (Green, 1991). More needs to be known about how employee involvement management practices are related to burnout, and how they can be implemented in different clinical settings. Until then knowledge about the effectiveness of such management practices will be limited, and the current rates of burnout could continue, negatively impacting the consistency and quality of patient care.

Purposes of the Research

This study will investigate the relationship between employee involvement management practices, burnout, turnover, organizational climate, organizational commitment and job satisfaction. This research will contribute to existing literature and knowledge about the military mental health work environment and its demands on its providers, and provide an argument for the inclusion and increase of employee involvement management practices into the current state of military mental health. The care of active duty service members, their families, and of veterans also stands to benefit from this research, since clinical care may be affected by this research.

Research Objectives and Hypotheses

The objective of this study will be to assess the extent to which military mental health providers' perceptions of employee involvement management practices correlate with their level of burnout, organizational commitment, job satisfaction, intention to leave their job, and their rating of their organizational climate. Burnout will be assessed by the emotional exhaustion dimension of the MBI. Obtaining their scores on the Employee Involvement Practices Scale (EIPS) will measure perceptions of employee involvement at their facility. Use of the Organizational Commitment Questionnaire (OCQ), the Jobs in General Index (JIG), and the Work Environment Scale (WES) will measure levels of

organizational commitment and intention to quit, job satisfaction, and perception of their organizational climate, respectively.

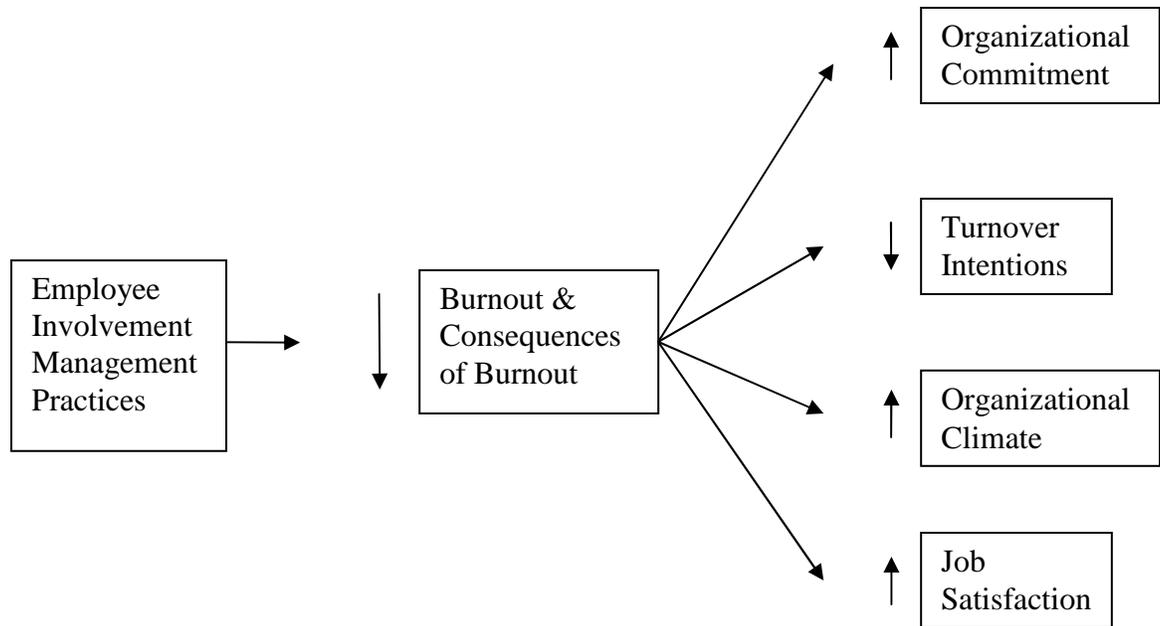
Hypothesis 1: Ratings of Employee Involvement Management Practices will be significantly negatively correlated to self-reported levels of Emotional Exhaustion as measured by the MBI.

Hypothesis 2: Ratings of Employee Involvement Management Practices will be significantly positively correlated with ratings of Organizational Commitment as measured by the OCQ.

Hypothesis 3: Ratings of Employee Involvement Management will be significantly positively correlated with reported ratings of Job Satisfaction as measured by the JIG.

Hypothesis 4: Ratings of Employee Involvement Management Practices will be significantly positively correlated with overall Organizational Climate as measured by the Involvement, Clarity, and Control subscales of the WES.

Hypothesis 5: Ratings of Employee Involvement Management Practices will be significantly negatively correlated to reported Turnover Intentions as measured by the OCQ.



Limitations of the Research

One limitation of this research is that employee involvement is a relatively new phenomenon, and as such a tool to measure its presence or employee's experience of it has not yet been fully developed and tested for full validity and reliability. For this study, the EIPS, developed by Mackie, Holahan, and Gottlieb (2001) will be used to measure respondents' perceptions of EI practices. This researcher's review of the literature has found this to be the first clear operationalization of employees' perceptions of EI practices. The EIPS assesses employees' perception of four subscales, or four components, of employee involvement management practices. Related instruments do exist, such as the Moos Work Environment Scale (1981), however the EIPS was the first tool to focus solely on employee perception of EI practices. Kahnweiler & Thompson (2000) created a survey to measure employees' desired, actual, and

perceived control over decision making, however participation in decision making is only one component of employee involvement management practices. Another limitation of the research is the limited number of military mental health providers available for research purposes in contrast with the general population of mental health providers in all settings globally.

Conclusion

Chapter I of this study introduced research on military mental health, burnout, and employee involvement. Hypotheses regarding employee involvement and its effect on burnout and consequences of burnout were presented. Limitations of the study were presented. Chapter II will review literature on military mental health, military mental health providers, and burnout. Chapter II will also review the literature on employee involvement and its relationship to work related issues.

CHAPTER II

Review of the Literature

Military Mental Health: History and Definitions

Learning how to predict and understand human behavior has been intertwined with military efforts for as long as people have been at war. Combat tactics, from Sun Tzu's Art of War to contemporary psychological operations in current conflicts, have long relied on an understanding of human nature and thinking. In American history the development of a national army and navy in the 1800s created a need for aptitude and intelligence tests to help guide selection for military service and operational specialties. Since the American Civil War, the understanding of mental disorders and the relationship between combat, trauma, and mental health has been increasing (Kennedy & McNeil, 2006). The trauma of a nationally divisive war such as the American Civil War led to unprecedented mental health problems following the end of conflicts, when service members struggled to reckon the cognitive dissonance of fighting with those who had been their neighbors and fellow countrymen. Difficulties in treating these military wounded led to the US Congress founding the United States Government Hospital for the Insane in 1852 to provide care for military patients. Once established this hospital spearheaded treatment for the American

Civil War's psychologically and physically wounded, and in the early 1900s developed the first military psychiatric internship training site.

World War I marked the official birth of military mental health, when in 1917 then-head of the American Psychological Association Robert Yerkes convened a group of leading psychologists of the time to determine how psychology could help the war effort. This committee concluded that "psychologists volunteer for and be assigned to the work in which their service will be of the greatest use to the nation, and as Yerkes wrote:

The Council of the American Psychological Association is convinced that in the present emergency American psychology can substantially serve the government, under the medical corps of the Army and Navy, by examining recruits with respect to intellectual deficiency, psychopathic tendencies, nervous instability, and inadequate self-control. (1917).

Committees were soon developed ranging from the Committee on the Selection of Men for Tasks Requiring Special Skills to the Committee on Problems of Motivation in Connection with Military Service. On August 17, 1917, Yerkes was commissioned as a Major in the US Army, and by January 1918, 132 officers were commissioned for work in the Division of Psychology, Office of the Surgeon General (Zeidner & Drucker, 1988). Advancements in intelligence testing and personality assessment soon followed. Lewis M. Terman, a professor at Stanford University at this time, revised the Binet - Simon scale in 1916, renaming it the Stanford-Binet Revision. This test was eventually administered to over 2,000 soldiers in the United States Army during WWI.

Yerkes published the results of these tests in 1921 in a document that would become known as the Army Report. This testing eventually developed into the Weschler-Bellevue Scale, a precursor to the Weschler Adult Intelligence Scale, one of the most frequently used intelligence tests today (Boake, 2002).

During this time, several firsts for military psychology were made. Shell shock as a mental health phenomenon and as a "war neurosis" was identified (Young, 1999). The first intervention for combat stress was recognized, and the earliest cognitive restructuring techniques were documented. This progression from mental health providers conducting assessment only, to providing intervention and aiding in the return of a service member to combat, signified a paradigm shift in the field of military psychology. This practice of combat stress intervention continues on today in a variety of settings in all the branches of the military (Campise, Geller, & Campise, 2006).

World War II ushered in an era of substantial growth for the psychological field in four major areas: individual ability testing, applied social psychology, instruction and training, and clinical psychology (Xiao, 2007). The US Army had no unified program military psychologists until 1944, towards the end of WWII. Prior to this time, no clinical psychologists were serving in Army hospitals. This had to do with the limited role that the Army assigned to mental health. At this time, the only psychiatric interview that was being processed on the ever-increasing numbers of military recruits lasted only three minutes and only was able to identify the most severely disturbed or mentally ill recruits.

Under these conditions, it was impossible to determine which recruits would likely have mental health issues under the strain of military combat. The need for uniformed Army psychologists was identified and by 1945 there were over 450 clinical psychologists serving in the Army (Michels, 2004). However the focus was still on selection and assessment. In 1945, Boring published one of the first comprehensive manuals on the application of psychology to the military, noting such topics as adjustment to the combat environment, personnel selection, morale, sexuality, and psychological warfare.

However, while there was a renewed focus on assessment and pre-screening in order to avoid recruiting individuals pre-disposed to combat stress, there was not as much focus on treatment or intervention of combat stress symptoms as they developed in recruitment. In World War II, the top five mental health diagnostic categories among service members were neurosis, personality disorder, alcoholism, epilepsy, and insanity (Stearns & Schwab, 1943). During this time nearly 40% of all early discharges were attributed to combat fatigue (Neill, 1993). This high number of mental health related discharges led to the recognition of the need for better preparation and better interventions for the psychological effects of combat (US Department of the Army, 1948). In 1946, the American Psychological Association's Division 19, the Division of Military Psychology, was founded to foster and promote mental health work among military members by military members.

During World War II the first military psychologists began to be assigned to hospitals, heralding military clinical psychology. Although these psychologists were de-mobilized following the conclusion of World War II, in 1947 these uniformed psychologists were able to obtain permanent active-duty status. They continued to practice, meeting the mental health needs of veterans in Veteran's Administration (VA) facilities. Eventually in 1946 the first psychology internship programs were established, with 200 psychology interns enrolled within the VA system (Cranston, 1986). In 1949, the first military clinical psychology internship programs to work with active duty service members were established in the US Army.

During the Korean War psychologists began to be used outside of the traditional hospital settings. They were implemented in service overseas, in combat zones, and on hospital ships. Psychological intervention in the combat environment was still in its beginning stages during this time. As a result mental health issues in the combat theater were still poorly understood, and at one time during the Korean conflict nearly 250 per 1000 troops were declared psychological casualties and were returned to stateside. As the war progressed however, previous combat stress interventions from World War I and II were used to establish new combat stress principles, and by the end of the conflict 80 to 90% of most combat stress cases were returned to duty (Jones, 1995).

Prisoner of war experiences led the military to consider development of survival schools. These school eventually turned into the Survive, Evade,

Resist, Escape (SERE) programs of today, where psychologists play a vital role in developing realistic training to mimic prisoner of war experiences and act as safety advisors to address potential stress injuries from such rigorous training (McGuire, 1990; Ursano & Rundell, 1995). In time the US Army and US Air Force published a technical manual outlining the roles of the military psychologist and proper interpretation of psychological tests (U.S. Departments of the Army and the Air Force, 1951). The first Bronze Star for an operational psychologist was given during the Korean War as well, to Richard H. Blum, of the US Army's 212th Psychiatric Battalion, for his role in the development of combat stress procedures (Stambor, 2005).

Following the Korean War the US Army began devoting resources to the study of motivation, leadership, morale, and psychological warfare (Uhlener, 1967) and the concept of human systems related to military functioning (Zeidner & Drucker, 1988). The Vietnam War was a complex war where forces were caught in a conflict between their field training and the realities of jungle warfare. Unit cohesion was impaired when instead of units deploying as a whole, service members were deployed on an individual basis, resulting in poor group cohesion due to the constant arrival and departure of personnel. Support for the war was also unpredictable, and returning service members were as likely to receive criticism for their service as praise. These factors, among others, have been hypothesized as contributing to high rates of Post Traumatic Stress Disorder among surviving veterans of this conflict (Zeidner & Drucker, 1988).

Following Vietnam, in 1978 the psychiatry department at Portsmouth Naval Hospital organized the first Special Psychiatric Rapid Response Team (SPRINT) consisting of psychiatrists, psychologists, chaplains, nurses, and medical technicians (McCaughey, 1987). This multi-disciplinary response team was developed to provide thorough management of crises, and have continued to be developed at other military hospitals, standing by to respond to emergencies nation-wide.

Operations Desert Shield and Desert Storm saw further changes in the role of the military psychologist, with the first psychologist stationed aboard the aircraft carrier USS John F. Kennedy. The year before the U.S. Navy assigned a psychologist to the carrier, the USS Kennedy had had 26 crew members leave the ship for medical or psychological difficulties while at sea. After the "ship's psychologist" joined the carrier's medical team, medical evacuations due to mental health reasons dropped to zero on the next 6 month deployment to the Persian Gulf (Wood, Koffman, & Arita, 2003). This success led to every aircraft carrier in the US Navy having a psychologist as part of their ship's company and as a member of their medical department.

In 1989 the Department of Defense established a pilot project to train psychologists to prescribe medications. Over the following decade 10 psychologists have thus far completed this training. In 2005 the psychopharmacology fellowship was established at the Tripler Army medical Center in Hawaii to provide required training for military psychologists to

receive prescribing privileges. Completion of this fellowship allows licensed military psychologists prescriptive privileges, privileges currently allowed for civilian psychologists only in Alabama and New Mexico (Murray, 2003).

Military Mental Health Today: Increasing Demands and Decreasing Numbers

Currently military psychologists continue to push the envelope of provider duties and expectations. Psychologists continue to be deployed to both the combat theater as well as to detainee operations roles in Guantanamo. They find themselves in operational positions working aboard aircraft carriers and as mental health advisors to US Marine Corps leadership, and working in special warfare and special training schools. Psychologists provide support in repatriation operations, humanitarian missions, selection and evaluation for special operations forces, and with special survival training. They act as advisors for military leaders on safety, morale, fitness for duty, and deployability. They have been permanent ship's company on aircraft carriers since 1998, the success of which has led to psychologists being considered for stationing aboard smaller ships. Military mental health providers provide an invaluable role to the modern military, and have been in more demand as time goes on.

Military mental health providers find themselves needed more than ever before. With the current operational tempo, the impact of service members' families, the impact of Posttraumatic Stress Disorder and Traumatic Brain Injury on service members and their families, the demands placed upon mental health

providers in the military settings have only increased in recent years. The recent report of APA Presidential Task Force on Military Deployment Services for Youth, Families, and Service Members (APA, 2007) indicated that military psychologists are increasingly stressed by frequent and unpredictable deployment to combat environments, extended absences from family, exposure to trauma...and reduced morale resulting from poor retention of uniformed psychologists. The same report recommended an:

...all out effort should be made by the military to retain well-trained and experienced psychologists. Retention of seasoned experts is crucial to the provision of high quality psychological services to military members and their families (p. 17).

The 2007 report from the APA also cited several barriers to the provision of quality mental health care in the military: a shortage of uniformed behavioral health professionals. In 2007 approximately 40% of the active duty licensed clinical psychologist billets in the US Army and US navy are unfilled. A 2005 US Army study identified significant indications of professional burnout and compassion fatigue among behavior health care personnel in deployed settings, with 33% of respondents in that study reporting high burnout, 27% reporting low work motivation, and 22% reporting low morale. High levels of work-related stress and burnout contribute to difficulties retaining well trained mental health providers, which is destined to create a chronic shortage of providers, adding to the work strain of the already limited numbers of providers who choose to stay on.

Military psychologists must be generalists; able to work in diverse and ever-changing environments, prepared to perform any clinical duty, in any location, with any potential patient. They are tasked to perform this challenging work all the while still expected to be mindful of ethical issues, legal issues, issues related to the uniform code of military justice, fitness and suitability for duty, deployable status, and expectations placed on officers of the United States military (Budd & Kennedy, 2006).

As of 2007 there were approximately 412 active duty psychologists serving in the Army, Air Force, and Navy (which provides medical support for the Marine Corps). The percentage of uniformed psychologists across services currently involved in overseas assignments (including deployments to Iraq and Afghanistan and shipboard duty) is estimated to be 25 to 35% (Kennedy, Arita & Jones, 2007). Each uniformed psychologist is also a commissioned military officer who along with clinical duties must also perform in a capacity expected of any other military officer, i.e. maintaining a specified level of physical fitness, performing collateral duties on top of clinical duties to learn leadership skills, placement in positions of responsibility and command, pursuit of extracurricular activities to bolster chances for potential rank advancement, and presenting a suitable example of maturity and poise under fire for more junior officers and for enlisted staff.

The clinical practice that a uniformed psychologist performs is unique to the military setting. Compared to a civilian setting; when a patient presents to a

military psychologist with an Axis I or II diagnosis fitness for duty, suitability for continued service, and ability to deploy must be evaluated. Clinical judgment is made within the context of the specific military rate (or job) that the service member holds, as well as on the potential impact of this service member's diagnosis on the rest of their unit. This can sometimes run counter to patient goals. If a patient's goal is continued employment this may not be an option depending on the severity of their disorder, on their prognosis, or on their pre-existing history. The military psychologist's decision has an impact on their patients' career, financial stability, marital stability, ability to support their family, and access to continued medical treatment.

In the case of major Axis I disorders such as depression or anxiety the service member may be detached, or separated, from their military command. This is a decision that the uniformed psychologist must make depending on the severity of the presenting problem. This separation has a major impact on the service member's future, as they may have up to 18 months to pursue treatment in the hope that their symptoms will resolve to the point that they can be placed back on full duty status.

Otherwise the service member will be placed on a physical examination board that will determine their medical retirement and they will ultimately be medically discharged from the military. Thus any visit with a uniformed mental health provider has the potential for career-affecting implications for any service member. This has led uniformed psychologists to having the nickname

"Wizard," since personnel sent to mental health sometimes do not return to their command, and instead effectively disappear (Sammons 2005).

Management, Stress, and Mental Health Providers

Research suggests that the following topics are common stressful issues for individuals working in mental health treatment: (1) the need for in-depth training or education, (2) the development of more refined techniques for working with severely emotionally disturbed and psychiatrically compromised individuals, (3) feelings of disenfranchisement from program and treatment plan development, (4) interpersonal difficulties with co-workers and supervisors, (5) career development, and (6) issues surrounding burnout or compassion fatigue (Pazaratz, 2000). It is the third topic regarding the individual's relationship with program development that is the focus of this study. Also of note is the sixth topic, which again suggests that burnout is a valid topic of study among mental health providers.

As early as 1969 individuals working in mental health have been citing open communication from administration downward as a potential booster to morale. A 1969 survey conducted by the American Psychiatric Association collected 385 responses from a representative range of occupations; 70% psychiatrists, 82% psychologists, 70% social workers, 60% nurses, 47% aides, 70% activities therapists, and 74% rehabilitation personnel from 8 mental health centers in metropolitan cities across the United States. Of this sample, in

response to the question, “Can you think of something specific that would probably raise morale in this community mental health center?” 36% responded that morale would be improved by more open and better communications, in most cases from administration downward.

Some of the specific responses indicated that communication blocks occur due to lack of time to communicate adequately, the fear among staff of retaliation for disagreeing with authority figures, and a fear of communicating ideas that might suggest any questioning of the adequacy of the professional staff. On the topic of communication, the authors of the 1969 APA study cited that the need for effective communication was important to staff working in community mental health centers. They cited staff responses that expressed a need to be given explicit information about the nature of interrelationships among staff members in different program components. Staff responses also described a need for the opportunity to have a forum or format for working out misunderstandings, misconceptions, and bad feelings as they arose between program elements. The recommendations from this study to facilitate communication were to include open and direct written communications from administration to staff at appropriate intervals, including precisely formulated statements of mission and goal; weekly team and service meetings conducted in an open manner, and staff interaction from team to team and service to service.

One of the recommendations from the literature for reducing stress describes an organizational culture of involving people in decisions, and keeping

them informed about what is happening in the organization (Michie, 2002). The ability to participate in problem-solving and decision making leads to employees reporting feeling better able to cope with stress, and better team work functioning and organizational climate.

Burnout: History and its definitions

In human services work the therapeutic relationship is the vehicle for change and therefore the main source of accomplishment and personal success for their clients (O'Hara & Weber, 2006). However this relationship is demanding and patients may not always respond positively or quickly, which makes the delivery of this care challenging. Burnout often results from these interpersonal processes as well as from the interplay of individual and organizational factors (Schaufeli, Maslach, & Marek, 1993). Maslach (1978) asserted that individuals engaged in professions that require continuous contact with people are prone to burnout.

Freudenberger (1974) was the first to use the term *burnout* to denote a state of physical and emotional depletion that results from work conditions. Freudenberger identified a liability inherent among young idealistic students who want to do something for the world by becoming doctors, nurses, lawyers, social workers, teachers, and counselors. Whitebook, Howes, Darrah, & Friedman (1981) suggested that it is the nature of interpersonal work itself that produces

burnout: the necessarily intensive interaction becomes more draining and less gratifying over time. Edlewich (1980) defined burnout as:

A progressive loss of idealism, energy, and purpose by people in the helping professions as a result of the conditions of their world. Those conditions range from insufficient training to client overload, from too many hours to too little pay, from inadequate funding to ungrateful clients, from bureaucratic or political constraints to the inherent gap between aspiration and accomplishment. (p.14).

Burnout is often described as a pervasive sense of emotional and physical fatigue. This fatigue is accompanied by feelings of hopelessness and helplessness that are associated with beliefs that one's efforts will never be good enough to bring about desired changes for the children and adolescents that one is working with. Manlove (1993) suggested burnout should be a serious concern for employers whether it results in job turnover or not. Negative results can come from both the loss of an employee as well as from continued work from an employee who is disillusioned with the purpose of their work but stays on for monetary reasons.

Pines & Maslach (1978) referred to burnout as a condition:

...of physical and emotional exhaustion, involving the development of negative self-concept, negative job attitudes, and loss of concern and feeling for clients. (p.234).

Pines and Aronson (1988) described burnout as physical, emotional, and mental exhaustion brought on by involvement over prolonged periods with emotionally demanding situations. Emotional exhaustion involves feelings of helplessness, hopelessness, and entrapment. Mental exhaustion refers to negative attitudes toward self, work, and one's environment.

In 1981 Maslach & Jackson indicated that persons in occupations that involve providing services to others are especially susceptible to burnout, and counseling has been identified as one of those person-oriented occupations (Farber, 1983). Maslach & Jackson (1981) called burnout a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment. Maslach developed the Maslach Burnout Inventory (MBI), to assess this three factor structure of burnout. It has become a widely accepted and preferred measure of burnout in current research, reflected by its use in nearly all of the burnout studies found in this literature review. Factor analyses have confirmed Maslach and Jackson's three factor structure for human service workers, with the depersonalization component being shown to be specific to service work (Leiter, 1991).

Schaufeli & Lieter (1993) suggest that burnout may be especially severe in human service organizations serving individuals with severe and persistent mental illnesses. The traditional view has been that the emotionally demanding nature of the care giving relationship leads to burnout. With this model one would expect that burnout would be a particular problem in the care of individuals who are seriously mentally ill or exhibit aggressive behavior since rewards such as patient progress or patient's expressions of gratitude may be limited.

However, while much research has been done to identify burnout and develop tools for assessment of burnout, less attention has been paid to the

effects of burnout in specific settings (Ross, Altmaier & Russell, 1989). Maslach (1978) suggested that investigations of burnout should be shifted from identifying burned-out people in human service occupations toward uncovering characteristics of negative situations. According to Lieter and Maslach (1988) the majority of the research evidence suggests that environmental factors, such as the characteristics of a work setting, are more strongly related to burnout than personal factors such as demographic or personality variables. Maslach, Schaufeli, & Leiter also stated that research in the area of organizational characteristics related to burnout is still new, and that the relationship where employees are having to give inordinate time, effort, skills, and flexibility for less than satisfactory career opportunities, lifetime employment, and job security needs more attention (2001).

Jayarathne and Chess (1984) found similar levels of job satisfaction, burnout, and turnover intentions across a range of settings including child welfare, community mental health, and family service workers, suggesting that interventions must be setting specific and attend to the unique characteristics of each group.

As Edelwich and Brodsky (1980) state,

If burnout only affected individuals in isolation, it would be far less important and far less devastating in its impact than it is. Burnout in human service agencies is like an infection in hospitals: it gets around. It spreads from clients to staff, from one staff member to another, and from staff back to clients. (p.25).

However, to simply study burnout on a setting by setting basis has the potential to gloss over the characteristics that make each setting unique. Consideration of the complex interrelationship of organizational, work environment, staff, and client variables in relation to burnout should be studied for each site. This would give a more complete picture of each site, and each site's characteristics, paying respect to the role each variable plays in the development of burnout. To conceptualize burnout as not an individual outcome but, more holistically, an organizational outcome is more accurate as neither of the aforementioned variables exists in a vacuum. Burnout as organizational outcome, with a focus on organizational effectiveness, will be the focus of this study. This system focus, viewing organizational outcomes of burnout and staff morale, is important if one is to show how an organization as a whole can change, adapt, and survive.

Consequences of Burnout

The stress and depression related to burnout have shown a significant relationship with impaired work performance, increased absenteeism, poor physical health, and negative perceptions about the abilities of supervisory staff. Staff members who do not terminate their position despite being burned out may provide less than satisfactory care for the residents in residential treatment facilities (Pflanz, 2006). Burnout, in combination with job satisfaction (another

factor negatively correlated with burnout), has been shown to predict individuals' intentions to leave their jobs (Irvine & Evans, 1995).

Burnout has been linked to a variety of physical and mental health issues: headaches, stomach problems, job dissatisfaction, anxiety, depression, fatigue and exhaustion, sleep difficulties, and somatic problems like headaches and gastro-intestinal pains (Gill, Flaschner, & Shachar, 2006). One study found that 67% of a sample of human service providers working with children thought that their physical health was adversely affected by their work. This same study provided a meta-analytic review of burnout research, finding that depression, guilt, and anxiety are significantly correlated with burnout (Kahill, 1988). Physically, an individual who is burned out has little energy and enthusiasm, feels fatigued, and has a higher susceptibility to colds and viral infections (Freudenberger, 1974). These issues have a negative impact on employee commitment and performance and result in poor performance.

Burnout has been found to have negative effects on job satisfaction and performance (Rigger, Godley, & Hafer, 1984). Research has also found a link between higher rates of turnover among childcare staff and burnout (Manlove & Guzell, 1997). The emotional exhaustion that is a characteristic of burnout has also been found to be predictive of job turnover, job exit, and low job satisfaction (Harrington, Bean, Pintello, & Mathews, 2001). McKee, Markham, & Scott also found burnout to be positively correlated with employees' intentions to leave their job as well as absenteeism (1992). Burned-out counselors have reported

more negative feelings about themselves, their clients, and their jobs (Van Aiken, 1979). In addition, employees who are burned out often report decreased effectiveness and work performance (Maslach, Shaufeli, & Leiter, 2001).

Other burnout related behaviors that have negative impacts on work performance are significant loss of motivation and energy, insulation from feelings, irritability, isolation from social relationships, clock-watching, excessive complaining, somatic complaints, cynicism, increasing use and abuse of drugs and alcohol, decrease in work efficiency accompanied by depression, and depersonalization (Suran & Sheridan, 1985). Leiter and Maslach (1988) posit that organizational commitment, turnover, and burnout are inherently linked. Organizational commitment refers to employee identification with their work organization, e.g. higher organizational commitment is related to lower levels of turnover. It seems reasonable to postulate that the experience of burnout would lead employees to be less committed to their work organization, and thusly be more likely to quit their job.

Maslach (1982) posits that while it is difficult to find a causal relationship between work satisfaction and burnout, they are in a reciprocal relationship where individuals who are more dissatisfied with their work situation will become more burned out, but also staff who are burned out for other reasons will be more dissatisfied with their work situations. Maslach also goes on to suggest that staff burnout leads to a deterioration of the quality of care, and has been found to result in an attitude of detached concern for clients and deterioration of

client services. Table A (in appendix) shows a sample of the range of work related behaviors that have demonstrated negative correlational relationships with burnout, reinforcing the theory that the development of burnout amongst employees has a destructive impact for an organization.

Burnout and Management Practices

The relationship between organizational factors and burnout is supported by the literature. Leiter (1991) posits that in terms of organizational stressors, the principal stressors that contribute to burnout are work overload and conflict with people in the work setting. Leiter and Maslach also found a relationship between emotional exhaustion and a negative work environment characterized by high role conflict and high unpleasant interactions with supervisors (1988). One study from 2007 found that employees who perceive higher organizational support report less emotional exhaustion and depersonalization and that it moderated the relationship between role conflict and emotional exhaustion (Jawahar, Stone, & Kisamore).

Leiter and Maslach (1988) found burnout to be associated with low organizational commitment, and is manifested through negative organizational outcomes such as absenteeism, turnover, job dissatisfaction, and a decrease in the quality of job performance. Research shows that turnover, withdrawal intentions, and absenteeism are reduced with increasing organizational

commitment (Schmidt, 2007). Of note is the relationship between burnout and one's relationship to the larger job organization.

Manlove (1993) suggested that childcare workers who quit their jobs are more dissatisfied with their supervisors' technical competence and support of career development than those who remain at their jobs. Furthermore child care workers who report better supervisor and co-worker relations as well as more autonomy at work report significantly lower levels of depersonalization. Other research also suggests that an individual's level of trust in management can serve as a buffer of work overload and job strain, in that employees expressing higher trust in management tended to report lower signs of burnout and felt less that work interfered with family life (Harvey & Kelloway, 2003).

This relationship between employee burnout, job related variables, consequences of burnout, and management has important implications for this study's research among military mental health providers and the setting that they work in. While these providers may conduct clinical therapy on an individual basis, they are still a part of a larger chain of command that manages the environment that the provider operates in.

Research suggests that certain perceived job conditions such as poor cooperation or poor support from a superior have predicted burnout 10 years later, and numerous studies have shown a positive association between job demands such as work overload and time pressures and high emotional exhaustion. Studies suggest that a lack of job resources such as job satisfaction,

supervisor satisfaction, job control, and good workplace climate are related to increased reports of depersonalization and cynicism and reduced personal accomplishment (Hatinen, Kinnunen, Pekkonen, & Kalimo, 2007).

Organizational factors that can contribute to burnout include increased regulation, role conflict, downsizing, and role ambiguity (Lewandowski, 2003). Role conflict and ambiguity refer to a lack of clarity about what is expected, appropriate, or effective behavior, and may be brought about by a lack of communication regarding job expectations and roles, conflict with co-workers, or conflict with supervisors. It may also be brought about by differences between organizational policy and expectations.

These factors are inherent to the way an organization is run, and can be moderated by the inclusion of employees into the decision making process. Research shows that when an employee feels supported by the organization that they work for, they feel less emotional exhaustion and depersonalization and that such support can moderate the relationship between role conflict and emotional exhaustion (Jawahar et. al., 2007).

Employee involvement: history and its definitions

Lawler (1996) defines employee involvement with four key principles: increasing skills and knowledge, sharing information, redistributing power, and rewarding performance. For employees to participate effectively and successfully within an organization, they must have information regarding its

business strategy, processes, client feedback, and results. They must have the skills and knowledge to interpret and act on that information to the extent of their expertise, and the ability to take actions and make decisions within the scope of their duties. Lastly they must be rewarded based on results, individual growth, capability and contribution.

Lawler (1992) cited that the inherent principle of employee involvement is the sharing of information about the business with employees. He added that without such information individuals have difficulty making meaningful contributions to the business. Employees cannot make good suggestions about how products and services can be improved, and about how work processes in their areas can be carried out more effectively without this information. Instead employees are limited to simply repetitively performing their job tasks in an automatic way. Of note is that in the literature Lawler uses the terms “involvement” and “participation” interchangeably, referring to both as having the four elements of power, information, knowledge, and rewards (1991, 1996). As a result literature on both employee involvement and employee participation was included in compiling the literature review on employee involvement management practices.

Employee involvement includes teamwork and is associated with complex service organizations where individuals with differing responsibilities, duties, and qualifications are working together toward a common goal. This complexity requires the sharing of job roles and responsibilities through

teamwork, with supervisors having less control in directing the activities of the teams and taking on a more supportive role. Lawler (1991) stresses the role of work teams, in that they can be the basic building blocks upon which high-involvement organizations can be constructed, and moreover management must be committed to creating an organizational framework where teamwork can effectively be used to achieve job involvement and high involvement. This alleviates interference from individual deficits in training or experience, since in a team environment individual deficits can be moderated by corresponding strengths in other team members and each individual's strengths add to the overall strength of the team.

Lawler (1991) refers to high involvement with this quote about the assumption that employees:

...can be trusted to make important decisions about work activities, can develop the knowledge to make important decisions about the management of their work activities...[and]...when people make decisions about the management of their work, the result is greater organizational effectiveness (p. 42).

Lawler (1992) proposed that employee involvement can be characterized by a work environment where all employees recognize that they have the power to make decisions (participative decision making), information is shared throughout the organization (information sharing), employees are provided with the necessary training to do the work (training), and they will be rewarded for using their participation in decision making, information sharing, and training to

positively influence organizational outcomes (performance based rewards). As Lawler (1986) explains:

Power without knowledge, information, and rewards is likely to lead to poor decisions. Information and knowledge without power leads to frustration because people cannot use their expertise. Rewards for organizational performance without power, knowledge, and information can lead to frustration and lack of motivation because people cannot influence their rewards. Information, knowledge, and power without rewards for organizational performance are dangerous because nothing will ensure that people will exercise their power in ways that will contribute to organizational effectiveness. (p. 32).

The most commonly used employee involvement methods include quality circles, task forces, quality improvement teams, and suggestion programs (Lawler & Mohrman, 1992). Employees are provided training in participative decision making, problem solving team skills, and quality control. Key to this type of training is that trainees will take this training and generalize its use past employee involvement training to their standard work duties.

However, while management practices are known, in this review of the literature it was noted that assessment tools to measure employee involvement are few. Many studies tended to rely on management reporting what specific employee involvement practices they instituted, however few tools exist that researchers can use to assess employee's perceptions of employee involvement. This focus on "bottom up" versus "top down" perceptions of employee involvement gives researchers the opportunity to assess the very individuals directly affected by employee involvement practices.

In 2001 Mackie, Holahan, and Gottlieb created the Employee Involvement Practices Scale (EIPS) to measure employees' perception of employee involvement practices in use at their facility. There are similar instruments that exist focusing on the work environment, such as the Work Environment Scale (Moos, 1981), the EIPS focuses solely on employees' perspectives in regard to management practices. Kahnweiler & Thompson created a survey to measure the levels of employee's desired, actual, and perceived control over decision making (2000). However, while employee involvement in decision making is one important component of employee involvement management practices, the EIPS does a better and broader job of addressing employee involvement. The EIPS was adapted from a scale developed in 1992 by Lawler to assess implementation of employee involvement management practices in Fortune 1000 companies. While Lawler's scale was developed for use with senior executives to provide a manager's point of view of employee involvement, Mackie, Holahan, and Gottlieb adapted it for use with human service agencies, to reflect employee perceptions rather than managers' perceptions.

A pilot test was conducted with a random sample of 67 individuals working in health care. It yielded acceptable reliability estimates for each of the four subscales that it measures; Increasing Skills and Knowledge ($\alpha = .91$), Sharing Information ($\alpha = .88$), Redistributing Power ($\alpha = .88$), and Rewarding Performance ($\alpha = .80$). The 2001 study yielded reliability estimates of .89, .91,

.91, and .80 respectively. After the review of the literature, the EIPS is the most comprehensive assessment tool available to assess employee perception of employee involvement management practices.

Employee involvement management practices have shown a number of positive relationships with work issues, including improved productivity and organizational effectiveness, job satisfaction, morale, motivation, and health and safety (Mackie et al, 2004). Employees perceiving a climate that encourages employee involvement are more likely to feel that they can and do control their own work activities. Employees who perceive a climate of employee involvement suggests that they perceive that their knowledge, creativity, and perspective are brought to directly bear on work-related issues. Employees who perceive such a climate of employee involvement would be assumed to engage in the knowledgeable and informed application of creativity and relevant perspectives in their daily work activities. They would have a vested interest in improving their work environment, and organizational performance would also improve (Riordan, Vandenberg, & Richardson, 2005).

In terms of employee involvement management practices and stress, practices such increasing the sharing of information, increasing skills and knowledge, and redistributing power should reduce work stress through providing a greater ability to utilize skills, increased personal control, less role ambiguity, and increased participation in decision making. This is supported by Karasek and Theorell (1990) who found that increased skill development is

associated with reduced psychological strain. This has implications for research on stress and burnout.

Grawitch, Trares, and Kohler (2007) specify employee involvement as one of a set of healthy workplace practices, defining it as policies that involve employees in decision making, focusing on aspects such as job autonomy, self-managed work teams, and empowerment. The development and cultivation of employees involved with employee involvement management practices reflects the argument that if organizations take care of the people they employ, then the employees will take care of the organization, revealing an important relationship between the health and well-being of employees and the success of the organization. This underscores the need to involve employees in various aspects of the organization, such as the development and implementation of new programs, and the evaluation and refinement of existing programs. Enlisting such active participation fosters a sense of membership, belonging, identity, and role within the organization. Indeed this reciprocal relationship between employees and the organization is reflected repeatedly in the literature (Barter, 2003; Ford & Honnor, 2000; Ludwig & Geller, 2000; Vassie & Lucas, 2001). Barter went so far as to suggest that an administration that is unresponsive to the needs of its staff can create an atmosphere where staff are unresponsive to the needs of its patients (2003).

Grawitch et. al. (2007) suggests that programs with higher levels of involvement lead to greater direct benefits for employees and organizations.

Guthrie (2001) cited that high-involvement work practices enhance employee retention and suggested that they lead to a workforce that is self-programming and self-managing. This is counter to a more control oriented approach where management tends to emphasize narrow job roles, little training and lower skills demands, with the resultant effect of regarding employees as more like commodities and more replaceable.

In a study of paper mill workers, Ichniowski (1992) found that profitability increased after the implementation of a system of employee involvement management practices. This was attributed to the fact that workers began offering suggestions for improving operations, which they had never done before. Likewise, a study in the apparel industry found that allowing workers to self-regulate resulted in cost savings and reductions in turnaround times (Berg, Applebaum, Bailey, and Kalleburg, 1996).

A study by Riordan, Vandenberg, and Richardson (2005) found that a climate of employee involvement within an organization is positively related to higher levels of organizational effectiveness. Specifically, this study indicated that a perceived climate of employee involvement is related to increased financial performance, reduced turnover, increased employee loyalty and organizational commitment. These findings were echoed in a 2006 study where employee involvement was shown to have a positive relationship with job satisfaction, organizational commitment, employee morale, and productivity and

a negative relationship with turnover and absenteeism (Grawitch, Gottschalk, & Munz).

Furthermore Grawitch (2007) suggested that employee involvement programs yield a 2% to 5% increase in productivity. In research with participants in an employee involvement program, participants reported higher levels of loyalty and commitment to their organization, increased job satisfaction, and a more positive view of management and labor relations than did nonparticipants. This supports that notion that employee involvement programs, if initiated effectively, can produce positive consequences for both employee well-being and organizational effectiveness.

Employee Involvement Practices and Consequences of Burnout

Management related conditions of work that have been linked to negative mental health include a lack of control, autonomy, influence, participation or decision latitude, and a lack of supervisor support (Mackie, Holahan, & Gottlieb, 2004). In contrast, participative work environments have been associated with positive mental health. Participative environments involve employee involvement management practices such as encouraging the development of problem solving skills, providing staff with opportunities to exercise those skills, fostering personal and co-worker beliefs in competence, and encouraging staff participation in decision making. This is reinforced by research from Whitebook et. al. (1981) who recommended that increased staff involvement in decision

making could reduce burnout among mental health staff. Whitebook cited that staff with more input and involvement in decision making appear to be more satisfied with their jobs, and recommended that methods be developed to involve staff members in policy making. Whitebook recommended an ongoing evaluation process to inform the administration of the implications of their decisions.

Jackson's (1983) study with nursing and clerical employees in an outpatient hospital setting used a model investigating employee participation in decision making as a moderator for job-related strain along with a number of correlates. This study also used two posttests (n=95 at 3 month follow up, n=70 at 6 months). After 6 months participation in decision making was shown to have a significant negative effect on role conflict and role ambiguity, both of which are negatively correlated with psychological and physical well-being and are indicative of emotional exhaustion (Lieter and Maslach, 1988).

Participation showed a positive effect on perceived influence. Role conflict and role ambiguity were positively related to emotional strain and negatively related to job satisfaction. Emotional strain was positively related to absenteeism and turnover intentions; lastly perceived influence was positively related to job satisfaction. With these results it seems that participation, a component of employee involvement management practices, can be an important causal determinant of role difficulties, which are in turn important indicators of both individual and organizational outcomes. Following the chain of influence

among the correlates it cannot be ruled out that participation in decision making, one component of EI management practices, has a definite impact on an employee's job satisfaction and on the likelihood that that employee will leave their job.

Employee involvement management practices emphasize employee participation in problem solving and decision making and have shown substantial effects for differentiating between high burnout and low burnout groups of employees (Mackie et al, 2004; Seltzer & Numerof, 1988). The involvement approach is such that organizations should be designed to move power downwards. The potential for employee involvement management practices in the residential treatment setting is great in terms of addressing the job stress that research shows is likely to occur.

Conclusion

In this study military mental health care and the changing role of military psychologists are presented. The need for active duty military members, veterans, and their families to be treated by providers who are able to perform their demanding work consistently and effectively was illustrated. The reliance on military mental health providers for effective care and for effective provision of treatment is the reason that it is important to study issues related to burnout in the military mental health environment. Mental health work is stressful, and may lead to burnout, which has serious consequences. Turnover, job dissatisfaction,

and withdrawal are just some of the negative workplace behaviors that are associated with burnout. Such negative consequences drive the need to study burnout reduction, as well as organizational factors that can moderate the impact of burnout in the military mental health provider population.

Employee involvement has shown promise in reducing negative work variables similar to those related to burnout, and it is important to investigate employee involvement as a potential moderator of burnout for military mental health providers. Burnout research has advocated a focus on environmental and organizational variables, and employee involvement may prove to be an important organizational variable. However, the research to date has not examined the inclusion of both employee involvement and burnout on turnover intentions. This study will investigate relationship between organizational commitment, job satisfaction, ratings of the work environment, employee involvement, emotional exhaustion, and employee turnover among a sample of military mental health providers in the United States Navy.

CHAPTER III

Methods

Location

The study was conducted via web-based survey, administered via email throughout the Navy Medicine network. Navy Medicine is a world-wide entity under the auspices of the United States Navy which is a branch of the military under the Department of Defense. Navy Medicine and the Medical Treatment Facilities (MTF) that operate within it are staffed by a full range of providers and employees. An MTF is similar in structure to a civilian hospital. MTFs are accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Other settings that were captured by this study were outpatient clinics, operational roles working embedded within military units, and the deployed environment.

Participants

The participants in this study were military mental health providers working for the U.S. Navy, providing mental health treatment to active duty service members, to retired military members, and their families. At the time of this writing the population of military mental health providers in the US Navy

was approximately 177 psychologists, and approximately 90 active duty military psychiatrists. These individuals' responses on scales measuring burnout, perception of employee involvement practices, organizational commitment, job satisfaction, organization climate, and turnover intentions were collected via internet survey. For the purposes of this study, military mental health providers were defined as staff members who provide direct face to face mental health treatment. These definitions excluded administrative staff, supervisory staff, clerical staff, and staff members who provided auxiliary duties such as cooking or maintenance.

Administration

An email containing the consent form (Appendix B) was drafted, containing a link to the web-based survey. Both Navy Psychology and Navy Psychiatry have a senior officer that operates as a specialty leader, effectively serving as the top professional in their respective fields. These individuals were sent an email from the author of this study explaining the purposes of the study, and requesting permission to forward the informed consent email and survey link on to their respective list serves. Upon approval the specialty leaders forwarded the email to their respective list serves. Approximately 2 weeks after the initial email, a second email was sent, along with an appeal to participate, along with the original informed consent and survey link in effort to collect maximum responses. Special care was taken in the crafting of the informed consent email

to specify that the study was being conducted as a doctoral dissertation study, that participation was voluntary, and that request for participation was not a formal order issued by the specialty leaders to their respective populations. The email was sent out globally, versus sending it to the providers of one specific hospital. The reasoning for this is that US Navy providers serve in varied and diverse locations world-wide. At the time of this study, US Navy psychiatrists were practicing in military hospitals, outpatient clinics, working individually as advisors embedded in military units or in training schools, deployed to combat environments, or serving aboard aircraft carriers. By using globally distributed email, this ensured maximum contact and outreach.

Measures

Survey

The web-based survey was constructed using website SurveyMonkey.com. Individuals who chose to participate would click on the link from the informed consent email, which would take them to the electronic survey. The first page of the survey thanked subjects for participating, and subsequent pages followed with the demographic survey, questions from each tool used in the study, and a page that allowed a text box for open-ended responses or comments from participants. A final page thanked participants again for their participation. This Survey Monkey survey is enclosed in appendix C at the end of this study.

Demographical data

A short survey was used to collect demographic data. This instrument, constructed by the author, assessed the respondent's rank, gender, specialty, and clinical setting.

Productivity and Performance data

Two questions were used to assess the respondent's self-perception of their work productivity and their job performance in terms of providing clinical care. The questions used were "I feel that my productivity is the best that it can be" and "I am providing the best patient care possible." The questions were answered by using a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Single item measures were chosen to measure performance and productivity, to shorten the overall length of the survey tool to promote participation (Waltz, Strickland, & Lenz, 1991). Based on a review of the literature single item measures have been used effectively to assess quality of life, job satisfaction, self esteem, and readiness to change (Moss, 2008). Single item scales have been used to represent global constructs, like job satisfaction (Wanous, Reichers, & Hudy, 1997). Single item measures, are also suggested for when a holistic impression is informative (Youngblut & Casper, 1993). In this case, the participants' quick impression of their own performance and productivity was being sought rather than a more exhaustive assessment of the

amount of patients the participants saw, or amount of contact hours were accrued.

Maslach Burnout Inventory

The Maslach Burnout Inventory (MBI) has been the main instrument to measure burnout for the last fifteen years (Schaufeli, Maslach, & Marek, 1993). The MBI uses a three-dimensional definition of burnout, consisting of three scales that measure an individual's score on the three subscales of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment. For this study, the emotional exhaustion subscale questions were used to assess the subjects' level of overall burnout. Of the three scales, emotional exhaustion is generally considered to be the most stable dimension, and is commonly used in research to represent overall burnout.

The MBI has been demonstrated to have satisfactory internal consistency, with Cronbach's values ranging from .71 to .90 in the normative sample that includes over 11,000 subjects (Maslach & Jackson, 1986). Similar α values in samples such as psychologists (Ackerley, Burnell, Holder, & Kurdek, 1988) and human service professionals (Brookings, Bolton, Brown, and McEvoy, 1985). Test-retest reliability coefficients range from .60 to .80 across time periods up to one month (Maslach & Jackson, 1986).

Convergent validity of the MBI has been demonstrated by significant correlations (ranging from .28 to .56) between scores on the MBI and behavioral

ratings made by someone who knew the respondent well (Maslach, Jackson, & Leiter, 1996).

Factorial validity for the MBI was demonstrated in four studies examining the dimensionality through confirmatory factor analysis with LISREL which found the fit of the three-factor model to be superior to other alternative models (Gold, Bachelor, & Michael, 1989; Lee & Ashforth, 1990; Byrne, Schaufeli, & Van Dierendonck, 1992).

Employee Involvement Practices Scale

The Employee Involvement Practices Scale (EIPS) (Mackie, Holahan & Gottlieb, 2001) was developed to measure employee perceptions of employee involvement practices at their facility. The EIPS measures perceptions of the key employee involvement principles conceptualized by Lawler (1996): increasing skills and knowledge, sharing information, redistributing power, and rewarding performance. Based on review of the literature it was one of the first clearly operationalized tools developed to evaluate employee perceptions of Employee Involvement. Although similar instruments exist that measure related practices, such as the Moos Work Environment Scale, the EIPS focuses totally on employees' perceptions of exposure to Employee Involvement practices. It contains specific questions regarding training to increase skills and knowledge, information sharing, redistribution of power, and reward systems. For this study

the EIPS was used to indicate overall level of perceived employee involvement at the participant's job sites.

The EIPS was adapted by Mackie et al. in 2001 from a scale developed by Lawler, Mohrman, and Ledford in 1992 to assess implementation of employee involvement practices in Fortune 1000 companies. The Lawler et al. (1992) scale was constructed for use by human resources managers or senior executives from Fortune 1000 organizations, yielding a managerial point of view of organization practices. Mackie et al. adapted Lawler et al.'s scale for use with human service agencies with the assistance of an expert review panel, revising the questions to reflect individual employee perceptions rather than management perceptions.

On the EIPS employees rate their perceptions of their exposure to practices associated with Employee Involvement on 41 questions, on a five point scale ranging from *Don't Know* (1) to *A Great Deal* (6). Scores are totaled and divided by 41 to yield an average score ranging from 1 to 6, 1 indicating low levels of perceived employee involvement and 6 indicating a high level of employee involvement. This scale was pilot tested with a random sample of 67 subject from a human services facility, where acceptable reliability estimates were found on each of the four subscales of Increasing Skills and Knowledge (alpha = .91). Sharing information (alpha = .88). Redistributing Power) Alpha = .88) and Rewarding Performance (alpha .80). In another study by Mackie et al. in 2001, the reliability estimates were, respectively, .89, .91, .91, and .80.

Organizational Commitment & Turnover

Abrams, Ando, & Hinkle's (1998) Organizational Commitment Questionnaire (OCQ) was used to evaluate employee's organizational commitment and turnover intentions. The OCQ is a 15-item, Likert-type scale, self-report questionnaire that assesses an individual's commitment to their employing organization along three organizational commitment dimensions. The three dimensions measured are: (a) a strong belief in and acceptance of the organization's goals and values, (b) a willingness or motivation to exert considerable effort on behalf of the organization, and (c) a strong desire to maintain membership in the organization.

In Harris & Cameron's (2005) study investigating multiple dimensions of organizational identification and commitment as predictors of turnover intentions and psychological well-being the OCQ's reliability was demonstrated through Cronbach's α as .84.

In this study, turnover and intention to leave are measured by using two items that relate to plans to leave or remain within the organization: "It would take very little change in my present circumstances to cause me to leave this organization"; "There's not too much to be gained by sticking with this organization indefinitely." Questions are answered by using a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Single item measures were chosen to measure turnover and intention to leave, to again shorten the overall length of the survey tool to promote participation (Waltz et

al., 1991). For these items, the participants quick impression of their own attitudes toward their job and desire to leave their job was being sought, and the use to these questions from the OCQ were chosen versus stand alone questions that might have led to self-consciousness of the participant's part, or self-censoring.

Organizational Climate

To assess the subjects' perceptions of their work setting, the Work Environment Scale, Third Edition (WES) by Moos & Lemke (1991) was used. The WES is designed as a norm-referenced forced-choice instrument to be used to describe the social environments of work settings, assess manager and employee perceptions, to compare actual and preferred work environments, and to assess and facilitate change in work settings (Moos, 1994). The WES employs three forms that investigates the subject's perceptions about the current work environment (The Real Form, Form R), conceptions about the ideal work environment (The Ideal Form, Form I), and expectations about the work environment (The Expectations Form, Form E). For this study The Real Form, Form R, will be used to investigate military mental health providers' perceptions about their current work environment. The WES manual specifies the use of The Real Form for use to "evaluate climates in workplaces...", "understand individual's perceptions of their workplace...", and "...understand the impact of the workplace", and "promote improvement" (Moos, 1994).

The WES is a 90-item scale measuring 10 aspects of the work milieu. These aspects are each measured by nine questions: involvement (staff commitment to their job); peer cohesion (staff support of one another); supervisor support (management support of staff); autonomy (staff are encouraged to make their own decisions); task orientation (emphasis on efficiency and getting a job done); work pressure (time urgency dominates the work environment); clarity (staff are clear about what to expect in their job); control (management uses rules to control staff); innovation (emphasis on change and new approaches); and physical comfort (pleasant physical surroundings). For this study 18 true/false items will be drawn to assess clarity and control. The 9 questions about clarity will assess the subject's perceptions of their job and role expectations, and the 9 questions about control will measure the subjects' perceptions of freedom on decision making and level of control over their job duties.

Job Satisfaction

The JIG was developed as an 18-item instrument intended to provide an overall evaluation of how workers feel about their jobs. Initially, responses of 1,149 civil service workers in Florida to 42 items were analyzed using traditional item analysis techniques, factor analysis, and item response theory models. A similar process was followed for other employee samples, including 4,490 employees representing a variety of companies (Ironson, Smith, Brannick,

Gibson, & Paul, 1989). Based on these analyses the pool of items was reduced to 18. The resulting 18 items showed evidence of high reliability via coefficient alpha (.91) and acceptably small standard errors of measurement. Evidence of convergent validity is reported in Ironson et al. (1989), who also reported evidence of the discriminant validity of the JIG. The JIG has been shown to correlate with other job satisfaction scales and various job attitudes and behaviors.

The Jobs In General scale (JIG) was used in this study to provide an overall measure of subjects' job satisfaction. The JIG has been positively reviewed in earlier editions of the Mental Measurements Yearbook (e.g., Crites, 1985; Kerr, 1985; Parsons, 1995; Sundberg, 1995). The JIG uses 18 items to assess overall satisfaction. The items for these scales consist of a list of short phrases and adjectives of five or less words of low reading difficulty (e.g., boring). Respondents mark Y (Yes), N (No), or ? (Cannot Decide) for each item. A Yes or No is scored 3 or 0 depending on the wording of the item, and a Cannot Decide response is scored 1, the rationale being that a 1 is close to an unfavorable response. Each examinee receives a total score that is obtained by summing their point totals on the JIG, and dividing by 18 to obtain their average job satisfaction rating.

Statistical Procedures

Correlations between the variables of employee involvement, burnout, organizational commitment, organizational climate, turnover intentions, productivity and performance, and job satisfaction were assessed for statistical significance. Also assessed was how much of the variance in each of the dependent variables, variables that are linked in the literature to burnout, were attributed to the perceived presence of employee involvement practices. Correlations between the outcome variables were informative in terms of assessing the direction of the relationships between them.

Post hoc analyses using multiple regression analysis and hierarchical linear modeling was used to assess for predictive effect for the variables that were collected in this study. To clarify the impact of employee involvement, productivity and performance, burnout, organizational commitment, turnover intentions, job satisfaction, and of perceived organizational climate on burnout, turnover, and productivity, hierarchical regression was used.

CHAPTER IV

Results

This chapter describes the results of the study and includes the following sections: demographics of the sample, considerations in data analysis, correlations between variables, multiple regressions for the proposed hypotheses, and a summary of the results.

Demographics

Approximately 300 military mental health providers with clinical privileges, who perform direct patient care, who are employed by the United States Navy and Department of Defense were invited to participate in the study via electronic mail. This invitation was extended in the electronic email, in US Navy and University of Denver IRB approved email script. This electronic mail was sent out to Navy Psychology and Navy Psychiatry distribution lists. A web based hyperlink to the web based survey was included in the electronic mail. The decision to send the email out globally was supported by the specialty leaders for US Navy Psychology and Psychiatry. Once the study was approved by the Institutional Review Boards from the University of Denver and the Department of the Navy, a letter was sent via electronic mail to the 2 officers

currently serving as specialty leaders, for psychology and psychiatry, requesting permission to forward the consent form and web based link to the list serve for the respective specialties. A brief explanation of the study was included in this initial email. Once permission was granted, the consent email and web based link was sent to the specialty leaders, who then forwarded them on to the list serves for US Navy Psychology and Psychiatry. Approximately two weeks later, another email was sent to the list serves, containing a reminder to participate, along with the consent form and web based link.

Every effort was made to obtain an unbiased sample, with invitations to participate distributed equitably, to all staff currently providing direct mental health treatment.

Of those invited to participate, through electronic mail invitations by list serve, 97 responded to the web based survey, with 77 completing all sections of the survey, yielding a total response rate of 26%.

To determine whether the research sample was representative of the military mental health provider population, several demographic variables were collected. Looking first at rank/title, a cross sample of military officers and civilians were collected. The sample was composed of 1 (1.3%) Lieutenant Junior Grade, 29 (37.7%) Lieutenants, 13 (16.9%) Lieutenant Commanders, 8 (10.4%) Commanders, 5 (6.5%) Captains, 4 (5.2%) Civilian/Retired Military, 4 (5.2%) Civilian/Prior Military, 13 (16.9%) Civilian.

Racial membership was not collected to prevent the possibility of identification of a minority participant, when included with gender or rank or specialty. Age of respondents was not collected for the same reasoning.

In regard to gender, 37 (48.1%) were male, and 40 (51.9%) were female yielding a nearly evenly divided sample by gender.

Occupational specialty was collected as part of demographic data. Of the sample 50 (64.9%) identified as psychologists, 22 (28.6%) identified as psychiatrists, 2 (2.6%) identified as social workers, and 3 (3.9%) identified as other (identified themselves as LMFT, mental health counselor, aerospace medicine, department head, neuropsychologist).

In regard to clinical location, 37 (48.1%) worked in military hospitals, 18 (23.4%) worked in outpatient clinics, 8 (10.4%) worked in operational settings, 5 (6.5%) were deployed, and 9 (11.7%) reported working in other locations. These locations as noted by the respondent were: substance abuse rehabilitation program, program staff, non-profit clinic, overseas, university, administrator at the Bureau of Medicine, recruit training command, overseas, internship, fellowship, other DOD agency, training status, combined hospital and outpatient clinic, training status. These demographic results are demonstrated below in Table 1.

Table 1: Frequency Distribution for Collected Sample Characteristics

	N	%
Rank/Status		
Ensign / 0-1	0	0
Lieutenant Junior Grade / 0-2	1	1.2
Lieutenant / 0-3	29	37.7
Lieutenant Commander / 0-4	13	16.9
Commander / 0-5	8	10.4
Captain / 0-6	5	6.5
Rear Admiral /0-7	0	0
Civilian / Retired Military	4	5.2
Civilian / Prior Military	4	5.2
Civilian	13	16.9
	77	100
Gender		
Male	37	48.1
Female	40	51.9
	77	100.0
Occupational Specialty		
Psychologist	50	64.9
Psychiatrist	22	28.6
Social Worker	2	2.6

	N	%
Other	3	3.9
	77	100.0
Work Site		
Military Treatment Facility/Hospital	37	48.1
Outpatient Clinic	18	23.4
Operational Setting	8	10.4
Deployed	5	6.5
Other	9	11.7
	77	100.0

Characteristics of Non-responders

Although over 300 military mental health providers were contacted via electronic mail to participate in the study, only a total of 97 participated, with only 77 completing all sections of the survey. Some potential obstacles to participating could have been that providers were unable to access their electronic mail during the time of administration due to being in deployed or otherwise austere environments. Also the practical issues of having enough time to complete a 25-30 minute survey could have been an inordinate amount of time away from patient care and clinical work for this population. Another obstacle could have been the limitation of using an online web based survey system.

Participants were not able to start the surveys, leave, and then return at a later date to complete them. In essence, the potential participant needed to complete all surveys in one sitting in order to fully give their responses. No demographic information was available for the total number of provider staff that declined that declined to participate due to the confidentiality of the email distribution list being managed by the specialty leader. Likewise, these distribution lists, and identities of all members were unknown.

The use of electronic mail and electronic survey was used to capture as large a sample as possible. A 2011 study on military mental health providers and burnout used a convenience sample, administering surveys on-site during mandatory staff meetings (Ballenger-Browning, Schmitz, Rothacker, Hammer, Webb-Murphy, and Johnson). Limitations to this approach are that it requires a site with a relatively military mental health provider staff for effective sample size. The demographic make-up for the sample collected in this study was similar to the Ballenger-Browning study, in terms of gender and specialty. This similarity shows evidence that the sample collected in this study is at least similar to the sample collected in the Ballenger-Browning study, and representative of the population of military mental health providers. Of note however, is this study also collected rank and work site, which based on review of literature, had yet not been collected in a study on military mental health providers.

Organizational Commitment

Built into the survey was the 15-item Organizational Commitment Questionnaire. This tool assessed the individual's commitment to their work organization. This is measured through the use of 15 questions using a 7-point Likert scale with the following anchors: strongly disagree, moderately disagree, slightly disagree, neither agree nor disagree, slightly agree, moderately agree, strongly agree. Results are then summed and divided by 15 to arrive at a summary indicator of the individual's organizational commitment. Several items are negatively phrased and re-verse scored in an effort to reduce response bias. When the scale items are scored together, it provides a fairly consistent indicator of employee commitment levels for most working populations. Potential scores range from 0 to 7, indicating the individual's level of organizational commitment. Actual scores for this sample ranged from 3.73 to 6.13, with the average score for this sample being 5.13 ($SD = .49$), indicating above average ratings of organizational commitment. Though these scores were above average according to scoring instructions, when compared to normative data from the OCQ (norm $M = 5.1$), scores for this sample of military mental health providers were comparable to a normative population of hospital employees.

Turnover Intentions

The respondents' job turnover intentions, or intentions to leave their job, were assessed using two questions from the OCQ. Question #9 "It would take

very little change in my present circumstances to cause me to leave this organization" and Question #11 "There's not too much to be gained by sticking with this organization indefinitely."

Like the rest of the items from the OCQ, these items are based on a Leichert scale from 1-7. The responses for Question #9 ranged from Strongly Disagree to Strongly Agree, with the average being 3.38 ($SD = 1.93$). The responses for Question #11 also ranged across the scale from Strongly Disagree to Strongly Agree, with the average being 3.74 ($SD = 2.07$). Based on this sample's responses to both of the job turnover related questions, it can be assumed that on average they do not have above average intentions to leave their job.

For the purposes of this study, the scores for the two Turnover questions were turned into a standardized score using the sample mean and standard deviation. This was coded as Turnover STD for the purposes of statistical purposes.

Productivity and Performance

Two questions were added to the survey to address the individual's self-perception of their job performance. "I feel that my productivity is the best that it can be" which was coded as Prod 1 in statistical analysis and "I am providing the best patient care possible" which was coded as Prod 2. These questions were administered with a 1-7 Likert scale range of answers, similar to the OCQ, ranging from strongly disagree, moderately disagree, slightly disagree, neither

agree nor disagree, slightly agree, moderately agree, strongly agree. The majority of the sample (N=27, 37.1%) indicated that they felt that they slightly agreed that their productivity was the best it could be. The average for the sample was 5.01, ($SD = 1.68$), with a range of scores ranging from 1 to 7. In this sample the majority (N = 33, 39.3%) felt that they slightly agreed that they were providing optimal patient care with an average of 6.16 ($SD = 1.22$) with scores ranging from 1 to 7. In the context of contrasting a respondent's self reported job-related variables (organizational commitment, job turnover, burnout, and employee involvement) this researcher also wanted to assess the respondent's self-perceived job performance.

Maslach Burnout Inventory

The 5 questions from the Emotional Exhaustion section of the Maslach Burnout Inventory were included in the survey to assess respondent's level of burnout. The five questions are arranged in a 7 point Likert scale, from 0 to 6, with answers ranging from: Never, A few times a year, Once a month, A few times a month, Once a week, A few times a week, and Every day. The questions: "I feel emotionally drained from my work", "I feel used up at the end of the workday", "I feel fatigued when I get up in the morning and have to face another day on the job", "I can easily understand how my recipients feel about things", and "Working with people all day is really a strain for me." Respondent's scores are added up to indicate their level of this

particular aspect of burnout. Scores from 0-7 indicate low burnout, 8-15 indicate moderate burnout, and scores 16 or above indicate high burnout. It is important to note here that the sample's mean score for burnout 18.54 ($SD=6.33$), indicating an overall high level of burnout. This is interesting to note, especially in relation to the sample's self-reported scores on productivity and performance. Compared to norms for similar group of social services workers ($M = 21.35$), as reported by Maslach in the instruction manual for the MBI, the average emotional exhaustion score for this sample is within one standard deviation.

Also of interest, was that in regard to individual scores, over half the sample (65%) reported high levels of burnout (16 or over). Also of note is that of the range of sample scores, some respondents report a level of burnout of 30, which is the maximum score for this measure. Furthermore only 2 respondents reported scores that fell into the lowest range of burnout (7, 5), whereas the rest of the sample was either moderately burned out or highly burned out. This is cause for concern for the development of psychological distress in military mental health providers. High burnout scores are posited to be highly indicative of vulnerability for compassion fatigue, as well as reflective of low level depression.

Workplace Environment Scale

Incorporated into the survey were 2 scales of the Workplace Environment Scale (WES) Real (R) version used to measure Organizational Climate. The

WES measures the social environment of all types of work settings. It comprises ten subscales or dimensions, which are divided into three sets: the Relationship Dimensions, the Personal Growth or Goal Orientation Dimensions, and the System Maintenance and System Change Dimensions. The social environment can have a strong influence on people in a work setting. Specifically, it can have an impact on an individual's morale and well-being and job performance. The two scales used were the Clarity and Control scale of the System Maintenance and System Change Dimensions. These two subscales were chosen based on the review of the literature on work-related variables and burnout-related variables, and review of Organizational Climate.

The System Maintenance and System Change Dimension of the WES-R assess the work environment's emphasis on rules and policies and on variety and innovation; and it also addresses the pleasantness of the physical setting. The Clarity scale assesses the extent to which employees know what to expect in their daily routine and how explicitly rules and policies are communicated, for example: how well activities are planned, how clearly the responsibilities of supervisors are defined, and how well the details of assigned jobs are explained to employees. The Control scale assesses the extent to which management uses rules and pressures to keep employees under control, for example: how much following policies and regulations is emphasized, whether people are expected to follow set rules in doing their work, and how closely supervisors watch employees. These scales use a 10 point Likert scale, ranging from 0 - 9. The

responses along this scale range from; Considerably below average, Well below average, Below average, Average, Above average, Well above average, and Considerably above average.

The average Clarity scale score for this sample was 5.06 ($SD = 2.04$) with scores ranging from 1 - 8. This indicated a Below average score in terms of the sample's understanding of their job roles and ability to expect and plan ahead in their daily routine. Compared to normative data for health care workers ($M = 4.89$, $SD = 1.92$) this military mental health provider sample experienced slightly more Clarity in their work environment compared to their norm group. Of note in this scale was the proportion (21 respondents) who indicated a Considerably below average score (0 - 3) for this scale, suggesting that for these individuals their workplace is unpredictable, poorly planned, and poorly defined. Such workplace characteristics have been posited to be related to the development of burnout and low job satisfaction.

The average Control scale score was 5.86 ($SD = 1.89$), indicating this sample experiencing an average amount of control over their work environment. Compared to normative data for health care workers ($M = 5.36$, $SD = 1.82$) this military mental health provider sample experienced slightly more Control in their work environment compared to their norm group. It will be of interest to see how this score correlates with Employee Involvement scores. It will also be of interest to see how this score correlates with rank and position.

The Job in General scale

The Job In General scale (JIG) employs 18 items to evaluate overall job satisfaction. Each item in the JIG consists of five words or less with a “Yes,” “No” and “?” (i.e. uncertain) response format. The positively worded items are scored as 3, while agreement with the negatively worded items are scored 0, and the items with “?” are scored as 1. The “?” response receives 1 point because it has shown to be closer to an unfavorable attitude, which receives 0 points, than to a favorable attitude, which receives 3 points (Balzer et al., 2000). Possible scores for JIG and each of the JDI scales range from 0 - 54 with a high score indicating high satisfaction. According to the JIG manual, an average score of 32 and above indicates being satisfied with one's job and average scores of 22 and below indicate job dissatisfaction.

The average JIG score for this study's sample was 41.38 ($SD = 15.22$), indicating that this sample felt an average amount of satisfaction with their jobs. In comparison with a normative group score for mental health care workers ($M = 39$, $SD = 11.1$), the military mental health providers surveyed for this study felt a comparable level of job satisfaction. Compared with another normative group, that of general health care workers in a hospital setting ($M = 42.9$, $SD = 11.9$), the military mental health providers felt less job satisfaction but were within one standard deviation from that normative group's mean.

Employee Involvement Practices Scale

The Employee Involvement Practices Scale was included to assess military mental health providers' perceptions of employee involvement practices being used in their workplace. On the EIPS participants rated their exposure to practices associated with Employee Involvement on a six point scale ranging from *Don't Know* (1) to *A Great Deal* (6). Their answers are totaled and divided by the number of questions to yield a possible range of scores from 1 to 6. A score of 1 indicates low perceived levels of employee involvement and a score of 6 indicates high levels of perceived employee involvement.

For this sample the average EIPS score was 3.16 ($SD = .86$), with scores ranging from 1.5 - 5. Compared to data found for the EIPS from a 2001 study using the EIPS with a human services residential care facility ($M = 2.54$, $SD = .72$), this sample of military mental health perceived similar levels of employee involvement practices in use in their work.

The range, standard deviation, and mean for all survey tools are presented below in Table 2.

Correlations

The correlation matrix for the 16 variables collected is presented in Table 3 below.

Table 2: Ranges, Means, Standard Deviations for Surveyed Variables

Collected Variables	N	Ranges	M	SD
Organizational Commitment Questionnaire	77	3.73-6.13	5.13	.49
Turnover 1	77	1-7	3.38	1.93
Turnover 2	77	1-7	3.74	2.07
Turnover Standardized	77	-1.33 - 1.92	0	1
Productivity 1	77	1-7	5.01	1.68
Productivity 2	77	1-7	6.16	1.22
MBI Emotional Exhaustion	77	5-30	18.5 4	6.33
WES-R Clarity	77	1-8	5.06	2.04
WES-R Control	77	2-9	5.86	1.89
Job In General Scale	77	6-54	41.3 8	15.22
Employee Involvement Practices Scale	77	1.5-5	3.16	.86

Table 3: Correlations of Demographic Variables and Survey Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1. Rank												
2. Gender		.01										
3. Specialty	.31	.04										
4. Worksite	.04	-.01	.09									
5. OCQ		.21	.11	-.06	.05							
6. Prod	.16	-.03	.02	.08	.51							
7. WESR Cla	.20	-.01	-.07	.28	.15	.24						
8. WESR Con	-.27	.07	-.03	.01	-.11	-.05	-.10					
9. MBI	-.26	.19	-.04	-.26	-.14	-.26	-.51	.10				
10. JIG	.37	.02	-.07	.01	.33	.37	.66	-.18	-.53			
11. EIPS		.24	-.28	-.08	.07	-.01	.24	.40	.01	-.35	.33	
12. Turnover	-.34	.02	.16	-.05	-.06	-.34	-.46	.17	.37	-.56	-.29	

Note: OCQ = Organizational Commitment Questionnaire, Prod 1 = Productivity Question #1, Prod 2 = Productivity Question #2, WESR Cla = WESR Clarity subscale, WESR Con = WESR Control subscale, MBI = Maslach Burnout Inventory, JIG = Job in General, EIPS = Employee Involvement Practices Scale,

Note: Correlations greater than .23 were significant at $p < .05$, and correlations greater than .29 were significant at $p < .01$ and correlations greater than .36 were significant at the $p < .001$ level.

Research Hypotheses

Hypothesis 1: Significant negative correlation between Employee Involvement Management Practices and Emotional Exhaustion, $r(77) = -.35, p < .001$.

-Null hypothesis was rejected.

Hypothesis 2: No significant correlation between Employee Involvement Management Practices and Organizational Commitment, $r(77) = -.01, p = .86$.

-Null hypothesis was not rejected.

Hypothesis 3: Significant positive correlation between Employee Involvement Management Practices and Job Satisfaction, $r(77) = .33, p < .05$.

-Null hypothesis was rejected.

Hypothesis 4: Significant positive correlation between EIPS and WES Clarity, $r(77) = .40, p < .001$.

-No significant correlation between EIPS and WES Control.

Hypothesis 5: Significant negative correlation between Employee Involvement Management Practices and Job Turnover, $r(77) = -.30, p < .05$.

-Null hypothesis was rejected.

Hypothesis 1: Ratings of Employee Involvement Management Practices will be significantly negatively correlated to self-reported levels of Emotional Exhaustion as measured by the MBI.

A Pearson product-moment correlation coefficient was computed to assess the relationship between the respondent's ratings of EIPS and Emotional Exhaustion. This study found that the correlation between the two was statistically significant. The correlation between Employee Involvement Management Practices and Emotional Exhaustion was found to be significant, showing a strong negative correlation $r(72) = -.35, p < .001$. This allowed the null hypothesis to be rejected.

Hypothesis 2: Ratings of Employee Involvement Management Practices will be significantly positively correlated with ratings of Organizational Commitment as measured by the OCQ.

A Pearson product-moment correlation coefficient was computed to assess the relationship between the respondent's ratings on the EIPS and Organizational Commitment. The correlation between Employee Involvement Management Practices and Organizational Commitment was not found to be significant, $r(77) = -0.01, p = .86$. The null hypothesis was not rejected.

Hypothesis 3: Ratings of Employee Involvement Management will be significantly positively correlated with reported ratings of Job Satisfaction as measured by the JIG.

A Pearson product-moment correlation coefficient was computed to assess the relationship between the respondent's ratings on the EIPS and the JIG. The correlation between Employee Involvement Management Practices and Job Satisfaction was found to be significant, showing a strong positive correlation $r(77) = .33, p < .05$ which allowed the null hypothesis to be rejected.

Hypothesis 4: Ratings of Employee Involvement Management Practices will be significantly positively correlated with overall Organizational Climate as measured by the Clarity, and Control subscales of the WES.

A Pearson product-moment correlation coefficient was computed to assess the relationship between the respondent's ratings on the EIPS and their responses to the WES Clarity, and WES Control subscales. This study found that the correlations between EIPS and WES Clarity were statistically significant, while the correlation between EIPS and WES Control was not.

The correlation between EIPS and WES Clarity was found to be significant, showing a positive correlation, $r(77) = .40, p < .001$. The correlation between EIPS and WES Control was not found to be significant, $r(77) = .01, p = .85$. Based on these results it appears that the Clarity aspect of Organizational Climate did have a significant relationship with Employee Involvement Management Practices while the Control aspect of Organizational Climate did not.

Hypothesis 5: Ratings of Employee Involvement Management Practices will be significantly negatively correlated to reported Turnover Intentions as measured by the OCQ.

A Pearson product-moment correlation coefficient was computed to assess the relationship between the respondent's ratings of EIPS and Job Turnover intentions as measured using the standardized Job Turnover STD figure. The correlation between Employee Involvement Management Practices and Job Turnover was found to be significant, showing a strong negative correlation $r(77) = -.30, p < .05$, allowing the null hypothesis to be rejected.

Post Hoc Analyses

Based on the significant correlations found, post hoc analyses were performed using hierarchical multiple regression to attempt to predict productivity and turnover using the variables collected in the study.

Hierarchical Multiple Regression: Turnover and Productivity

Hierarchical regression: Dependent Variable: Turnover

In predicting Turnover Intentions, three levels of variables were used. The demographic variables of Rank, Specialty, Site, and Gender were entered first. This first regression showed that none of these variables were significant predictors of Turnover. WESR Cla, WESR Ctl, and MBI were included next. At this level none of the variables were shown to be significant predictors of Turnover. The EIPS was added in the last level, once the other variables were accounted for. In this hierarchical multiple regression, none of the variables collected were shown to significantly predict Turnover. A table displaying these regression results is found in Table 4.

Table 4. Hierarchical Multiple Regression, Dependent Variable: Turnover

Level 1.	B	SE B	β	t	Sig
Rank	.119	.08	.16	1.31	.20
Specialty	-.08	.37	-.03	-.20	.82
Gender	.03	.62	.01	.07	.95
Site	.16	.23	.09	.76	.44

Level 2.	B	SE B	β	t	Sig
Rank	.07	.10	.09	.69	.40
Specialty	.01	.36	.00	.00	.99
Gender	.30	.61	.06	.46	.64

WESR Cla	.15	.17	.11	.88	.36
WESR Ctl	-.01	.16	-.01	-.06	.93
MBI	-.08	.06	-.19	-1.35	.17

Level 3.

Rank	.09	.10	.12	.01	.37
Specialty	.01	.37	.00	.01	.97
Gender	.53	.64	.10	.83	.40
WESR Cla	.08	.19	.05	.41	.68
WESR Ctl	-.03	.17	-.02	-.14	.88
EIPS	.62	.42	.20	1.48	.13

Hierarchical Model, Dependent Variable: Productivity

In predicting Productivity, three levels of variables were used. The demographic variables of Rank, Specialty, Site, and Gender were entered first, none of which were shown to be significant predictors of Productivity. WESR Cla, WESR Ctl, JIG, and MBI were included next. JIG ($\beta = .41, p < .05$) was shown to be a significant predictor of Productivity. The EIPS was included last. After controlling for the above mentioned variables, and after accounting for the effect of EIPS, JIG remained the significant predictor of Productivity ($\beta = 2.21.41, p < .05$). A table displaying these regression results is found in Table 5.

Table 5. Hierarchical Multiple Regression, Dependent Variable: Productivity

Level 1.	B	SE B	β	t	Sig
Rank	.12	.08	.16	1.31	.18
Specialty	-.08	.37	-.03	-.20	.84
Gender	.03	.62	.01	.07	.95
Site	.16	.23	.09	.76	.44
Level 2.					
Rank	.07	.10	.09	.69	.50
Specialty	.01	.36	.00	.01	.99
Gender	.30	.61	.06	.46	.64
Site	.02	.22	.01	.06	.93
WESR Cla	.15	.17	.11	.88	.38
WESR Ctl	-.01	.16	-.01	-.01	.93
MBI	-.08	.06	-.19	-1.35	.17
Level 3.					
Rank	.09	.10	.12	.91	.37
Specialty	.01	.37	.00	.01	.97
Gender	.53	.64	.10	.83	.40
Site	.04	.22	.01	.15	.86
WESR Cla	.08	.19	.05	.41	.68

WESR Ctl	-.03	.17	-.02	-.14	.88
MBI	-.05	.06	-.15	-1.05	.30
EIPS	.62	.42	.20	1.48	.13

Summary of Results

Chapters I through III introduced this study, examined the relevant literature, and described the methodology for the study. This chapter, Chapter IV, presented the results from this study. Briefly, the data from the study showed a significant negative relationship between Employee Involvement Management Practices and Burnout, as measured by the EIPS and the Emotional Exhaustion subscale of the MBI.

Organizational Commitment was not found to be significantly related to Employee Involvement, as measured by the OCQ and the EIPS. Interestingly, Job Satisfaction was found to have a significant positive relationship to Employee Involvement Management Practices, with Job Satisfaction being measured using the JIG scale. Also of interest, was that of the three subscales drawn from the WES-R to measure Organizational Climate, only the Involvement and Clarity subscale were shown to be significantly correlated to Employee Involvement, whereas Control was not significantly correlated.

Hierarchical multiple regression was used to compare effects of the variables. In predicting Turnover Intentions, demographic variables were included first to partial out their influence, then WESR Cla, WESR Ctl, and MBI was included. The EIPS was added last to assess if, even after the other variables were entered first, employee involvement would still be a significant contributor to the variance in Turnover. This regression showed that after accounting for the above variables Rank, Specialty, WESR Clarity were significant predictors of Turnover Intentions.

In predicting Productivity the same sequence of variables was used. This regression showed that despite significant correlations being found between productivity and other variables, none of them were able to significantly predict Productivity.

CHAPTER V

Discussion

This final chapter includes the following: a summary of the study; a discussion of hypotheses regarding the relationship between reported levels of Employee Involvement Management Practices and Burnout, Organizational Commitment, Organizational Climate, Job Satisfaction, Job Turnover, and Productivity and Performance; a discussion of the results obtained for each research objective; limitations of the study; recommendations for future research; insights and observations, and conclusions.

Summary of the study

The purpose of this study was to increase understanding of the relationship between Employee Involvement Management Practices, Emotional Exhaustion, Organizational Commitment, Organizational Climate, Job Satisfaction, and Job Turnover in a population of military mental health providers working in the United States Navy. Other demographic variables were collected to explore the relationship between rank, gender, specialty, and worksite and the above variables. Hierarchical multiple regressions were used to examine the extent to which the variables could predict perceived Employee Involvement Management Practices, and correlations were used to understand the complex relationships between the research variables and the demographic variables.

Main Research Hypotheses

Hypothesis 1: Ratings of Employee Involvement Management Practices

will be significantly negatively correlated to self-reported levels of Emotional Exhaustion as measured by the MBI. This study found that the correlation between the respondent's ratings of EIPS and Emotional Exhaustion was statistically significant.

The correlation between the two variables was found to be significant, Pearson's $r(77) = -.35, p < .001$. The negative correlation between Employee Involvement Management Practices and Emotional Exhaustion, allows the null hypothesis to be rejected. The data reflected a negative relationship between Burnout, as measured using the Emotional Exhaustion subscale, and Employee Involvement.

Based on the data, this sample was reporting an overall high level of burnout (18.54, $SD = 6.33$) as measured using the Emotional Exhaustion subscale of MBI, even compared to norms. According to Maslach et al (1996) scores from 0-7 indicate low burnout, 8-15 indicate moderate burnout, and scores 16 or above indicate high burnout. Of note are the other significant correlations for Burnout and Employee Involvement, which might help explain this negative relationship.

Burnout was significantly negatively correlated to Productivity, Site, WES-R Clarity, Job Satisfaction, and was significantly positively correlated to Turnover Intentions. This relationship is also found elsewhere in the literature review. Individuals who are burned out are more likely to experience low levels of involvement with their

job, have less clarity about their work duties, be less satisfied with their jobs, and be more likely to leave their jobs.

Much speculation has been made in the media about the effect of deployments on service members, noting the burden of repeated deployment on service members and their families (APA, 2007). However during the literature review for this study, few studies were found about the burden on health care providers and mental health care providers for this patient population back in the garrison environment. The negative correlations found between worksite and burnout may suggest that for military mental health providers, they are more likely to be burned out working in garrison, in the hospital environment, responding to this increasing patient load as compared to working closer to the front lines in the deployed or operational environment. This suggests that a focus on improving the garrison/MTF environment for the military mental health provider may have a moderating effect on the development of burnout.

In considering the relationship between Employee Involvement and Burnout, it is also helpful to examine the correlations between Employee Involvement and the other survey and demographic variables. Based on the data, the significantly positive relationship with WES-R Clarity suggests that when employees are concerned about and committed to their jobs and know what to expect in their daily routine and have rules and policies clearly and explicitly communicated to them, they will feel more employee involvement with their work environment. The significant positive relationship between Employee Involvement and Job Satisfaction as measured by the JIG seems to correspond to this, suggesting that employees who feel involved with their work environment will feel more satisfied with their jobs. The significant negative relationship between

Employee Involvement and Job Turnover, illustrates the inverse of that relationship. Namely that the less the employee feels involved with their job, the more likely they are to be thinking about leaving their job.

Hypothesis 2: Ratings of Employee Involvement Management Practices will be significantly positively correlated with ratings of Organizational Commitment as measured by the OCQ.

This study did not find that the correlation between the two was statistically significant, $r(77) = -.01, p = .86$. This was a surprising finding, given that Employee Involvement was shown to have a significant relationship with other work-related variables, and even a significant negative relationship with the Turnover question which was drawn from the OCQ. Explanations for this may be drawn from looking at the relationship between the OCQ with other variables. Along with rank, the OCQ was the only variable to have a significant correlation with WES-R Control, which assesses the extent to which management uses rules and pressures to keep employees under control. The significant negative correlation between the two suggests that when military mental health providers feel that their work environment places more emphasis on policies and regulations, when they are expected to follow set rules in doing their work, and when they feel that supervisors are watching them closely they are likely to feel less commitment to their organization.

Another interesting series of correlations involved the OCQ and rank. Based on the way rank was scored, higher scores on rank indicated higher rank or civilian status

versus military status. The positive correlation between the OCQ and rank suggests that junior officers would feel less commitment to their jobs, whereas senior officers and civilians would be more likely to feel more job commitment.

Interestingly, Job Satisfaction was also found to have a significant positive relationship with Organizational Commitment, Pearson's $r(77) = .33, p < .002$. As military mental health providers experience increased organizational commitment to their work site and their organization at large, their job satisfaction will increase. Organizational Commitment also had a significant positive correlation with Productivity, Pearson's $r(77) = .51, p = .000$, suggesting that as commitment at the job increases, so does an employees' productivity and job performance.

Hypothesis 3: Ratings of Employee Involvement Management will be significantly positively correlated with reported ratings of Job Satisfaction as measured by the JIG.

A Pearson product-moment correlation coefficient was computed to assess the relationship between the respondent's ratings of EIPS and Job Satisfaction. This study found that the positive correlation between the two was statistically significant. Pearson's $r(77) = .33, p < .05$. The positive correlation between Employee Involvement Management Practices and Job Satisfaction allowed the null hypothesis to be rejected.

That Job Satisfaction would increase as Employee Involvement increases corresponds to existing research on Job Satisfaction. In research with participants in an

employee involvement program, participants reported higher levels of loyalty and commitment to their organization, increased job satisfaction, and a more positive view of management and labor relations (Grawitch, 2007). That Employee Involvement may contribute to increased job satisfaction has important repercussions for managers.

Looking over the data from this study, the JIG also showed significant positive correlation with Productivity, Organizational Commitment, and Clarity, and significant negative correlation with both Burnout and Turnover Intentions. It is clear that Job Satisfaction has potentially strong protective factors in terms of the work environment of military mental health providers, as it appears to be related with good performance and productivity, and with lower burnout and lower intentions to leave one's job.

Hypothesis 4: Ratings of Employee Involvement Management Practices will be significantly positively correlated with overall Organizational Climate as measured by the Involvement, Clarity, and Control subscales of the WES.

A Pearson product-moment correlation coefficient was computed to assess the relationship between the respondent's ratings of EIPS and their responses to the WES Clarity and WES Control subscales. This study found that the correlations between EIPS and WES Clarity were statistically significant, while the correlation between EIPS and WES Control was not. As a result the null hypothesis could not be rejected.

The correlation between EIPS and WES Clarity, Pearson's $r(77) = .40, p < .001$, showed a positive correlation between Employee Involvement Management Practices and Clarity. The correlation between EIPS and WES Control was not found to be significant

Pearson's $r(77) = .01, p = .85$. Based on these results it appears that certain aspects of Organizational Climate, as defined in this study, did have a significant relationship with Employee Involvement Management Practices.

Hypothesis 5: Ratings of Employee Involvement Management Practices will be significantly negatively correlated to reported Turnover Intentions as measured by the OCQ.

The negative correlation between EIPS and Turnover was found to be significant Pearson's $r(77) = -.29, p < .01$. This suggests that as employees experience more involvement at work, they are less likely to leave their jobs, or otherwise have lower turnover intentions.

Another interesting note from the data was that all the Turnover questions had a significant negative relationship with rank, suggesting that the higher in rank the respondent was, the less intention they had to leave their job. The higher in rank the individual was, the more likely they were to have higher organizational commitment, and the less intention they had to leave their job. Perhaps there is a protective factor towards promoting in rank, or even in being a civilian. To extrapolate further, perhaps the more junior in rank a military mental health provider, the more likely they are to be thinking about leaving their job and feel less committed to their job. This does not bode well for the future, given the feedback from the most recent American Psychological Association report of the state of mental health treatment in the military (2007). That report indicated that more importance needs to be placed on retaining mental health providers, and

reducing turnover. Today's junior officers will, hopefully, become tomorrow's senior officers and decision makers. The data from this study only reinforces the importance of policy makers finding ways to retain their junior providers, and shows policy makers that the incorporation of Employee Involvement Management Practices may be a significant way not only to reduce turnover, but to also improve other work-related variables.

Hierarchical Multiple Regression: Post Hoc Analyses

Based on the significant correlations found in the data, post hoc analyses were performed on the data to assess the degree to which Employee Involvement Management Practices could predict Turnover Intentions and Productivity.

Predicting Turnover Intentions

In a hierarchical multiple regression attempting to predict Turnover, the demographic variables of Rank, Gender, Specialty, and Site were entered first all at once to partial out their effect. With these variables Rank and Specialty were shown to be significant predictors of Turnover. Clarity, Control, and Burnout were added next; Rank and Specialty were still significant predictors, and Clarity was shown to also be a significant predictor of Turnover. When Employee Involvement was added last, unfortunately it did not appear to be able to significantly predict Turnover. This is especially unfortunate given the significant correlation and this study's hypotheses. It appears that Rank, Specialty, and Clarity are better able to predict Turnover, in this model, than Employee Involvement.

Looking at how the junior ranking military mental health providers responded to the Job Satisfaction and Burnout measurement tools compared to those of more senior rank, they tended to report lower Job Satisfaction and higher Burnout. This trend, along with Rank's significant interaction with Turnover Intentions reflects the recommendations from the 2007 APA report, when its authors recommended improvement in the training and retention of military mental health providers. Moving forward with this information, it appears that focusing on the junior ranking providers would help to avoid the development of Burnout, of poor Job Satisfaction, and of high Turnover Intentions in the future.

This regression suggests that clear roles and expectations is an important area to explore in terms of keeping military mental health providers from leaving their jobs. The impact for company commanders and military medical commanders from this information is significant, as it appears that by promoting and fostering better job clarity, they can reduce Turnover among their military mental health providers.

The effects of Rank and Specialty on Turnover Intentions among the military mental health provider population has not been well documented in the literature and suggest this to be a fruitful area for future research. However the takeaway message for military decision makers, who often cannot control the rank or numbers of specialists they have on staff, is that Clarity could be a useful variable to focus on in trying to retain staff and keep important providers from leaving the military. Ways to put this into practice are clear and consistent position descriptions and standard operating procedures that can help promote job clarity and educate staff members on expectations from their work site. In the military the focus is often on flexibility, and adaptability, however this

focus could be hurting the clarity that this research suggests as important in reducing turnover.

Another way to address this issue is better turnover between departing and arriving staff members. This would help maintain some consistency between staff members, and would help the rest of the staff members adjust with each staffing change.

Predicting Productivity

In a multiple regression attempting to predict Productivity using Rank, Specialty, Gender, Organizational Climate as measured by the WESR Clarity and Control scales, Job Satisfaction as measured by the JIG, and Employee Involvement as measured by the EIPS more support for the importance of Employee Involvement was found. Employee Involvement were found to both be significant predictors of Productivity, and together were able to account for 25% of the variance in Productivity. To further compare these two variables a step wise regression was run, with EIPS entered first and accounting for only 13% of the variance in Productivity, the JIG accounted for an additional 4%. Both were found again to be significant predictors of Productivity. Based on VIF of 1.24 for EIPS and 1.24 for the JIG suggested that a low level of multicollinearity was present. Regardless, again looking at the significant correlation between the JIG and the EIPS suggests that further research is needed to understand the relationship between these two phenomena.

A Hierarchical Linear Model regression was done to predict Productivity. Demographic variables were not significant, nor were Organizational Climate variables. The JIG was a significant predictor, and even after entering this first, the EIPS was found

to be a significant predictor as well. Again, that both are significant predictors of a workplace, even when all the other variables are entered first via HLM regression suggests that the relationship between these two variables needs to be explored further. Also, another takeaway message from this data is that it appears Job Satisfaction and Employee Involvement are the most important, of the variables assessed in this study, in predicting Productivity. More important than rank or specialty, and suggest that providers who are satisfied with their jobs and feel involved in their workplace are the most productive.

Two-Sample T-test on similar Navy Burnout study

A T-test was performed on MBI Emotional Exhaustion results from a study by Ballenger-Browning, Schmitz, Rothacker, Hammer, Webb-Murphy, and Johnson (2011) that had investigated "Predictors of Burnout Among Military Mental Health Providers." This study had used the MBI with a sample of 97 mental health providers from a United States Naval hospital in San Diego. Their results found mean scores on the MBI Emotional Exhaustion scale of 16.6 (SD = 9.9). Two-sample T-test found no significant differences between the scores for MBI Emotional Exhaustion in this study (M=18.68, SD=6.402) and in the Ballenger-Browning et al.'s study (M=16.6, SD=9.9); $t(172)=1.36$, $p = 0.18$.

Limitations

This study contained several limitations.

1. Small sample- only one branch of the military was used, and the nature of the sample (deployment, austere environment, operational commitments) could have prevented more participation.
2. The Employee Involvement Practices Scale, used to measure Employee Involvement Management Practices, was a relatively new tool and good norms do not exist as of yet. A review of the literature showed that there is not a well normed and well validated tool for assessing employee involvement. Also, since Job Satisfaction and the Clarity scale of the OCQ correlated so highly with this measure, more research is needed to explore the distinct differences between Employee Involvement and these variables. Based on the correlations, it appears that it is a significant area for research however more work is needed to help differentiate it from other workplace phenomena.
3. Questions from the OCQ were used to measure Job Turnover. Past studies have asserted that OCQ, along with measuring Organizational Commitment, also measures intentions to remain or intentions to turnover (Shore & Martin, 1989; Mowday, Steers, & Porter, 1979). In past studies, OCQ questions such as those used to measure Turnover were not used, for fear of confounding research results. This study used those very questions to intentionally assess Turnover Intentions. It is possible that asking a specific Turnover question, independent of the OCQ tool, may have solicited different Turnover Intentions results.
4. Despite 300 military mental health providers being contacted via electronic mail to participate in the study, only a total of 97 participated, with only 77 completing all

sections of the survey. It is possible that providers were unable to access their electronic mail during the time of administration due to being in deployed or otherwise austere environments. Also the practical issues of having enough time to complete a 25-30 minute survey could have been an inordinate amount of time away from patient care and clinical work for this population. A briefer version of this survey, or the administration in large groups versus individually could yield increased responses.

5. Another limitation is related to using an online web based survey system. Participants were not able to start the surveys, leave, and then return at a later date to complete them. In essence, the potential participant needed to complete all surveys in one sitting in order to fully give their responses. Some participants might not have been aware of this limitation, had started completing the surveys, closed their connection for some reason and were then unable to get back to their partially completed survey.

6. Another limitation is that no demographic information was available for the total number of provider staff that declined that declined to participate due to the confidentiality of the email distribution list being managed by the specialty leader. Due to the anonymous nature of the survey materials it was not possible to investigate further the individuals who did not participate.

7. A majority of the sample were junior officers compared to the senior ranks or civilian providers. Therefore this sample may not be completely representative of all military mental health providers in the United States Navy. Also, responses from this junior, less-experienced and less-trained group may have skewed overall results on the assessment tools.

Suggestions for future research

Employee Involvement was shown to have significant correlation with not only many of the job related variables collected, but also the demographic variables as well. Despite post hoc analyses showing that Employee Involvement could not significantly predict Turnover and Productivity in this study, the significant correlations still suggest that Employee Involvement warrants further study. What cannot be denied is its strong correlation with Burnout and Job Satisfaction. More needs to be done to understand how Employee Involvement can be better utilized to reduce burnout and improve job satisfaction.

It is clear from the data collected for this study that there is a strong relationship between Employee Involvement Management Practices and the work environment. That there is a strong relationship between productivity and turnover also highlights the importance for managers and supervisors to consider Employee Involvement practices when managing the workplace. It appeared based on the data that junior, or otherwise more inexperienced and less trained, military mental health providers are more likely to be less committed to their job, less satisfied with their job, and more likely to be thinking about leaving their jobs has serious implications for the future of military mental health. Research suggests that the consequences of the combat and extended deployment are only just now starting to be understood in the increase of coverage on PTSD and TBI (APA, 2007). The implications for the future, that the demand on the military mental health system are not likely to decrease any time soon, emphasizes the importance of understanding how to retain these less committed, less satisfied, junior personnel. The use of EI practices such as increasing sharing of information, increasing skills and

knowledge, and redistributing power, should reduce work stress through providing greater utilization of skills, increased personal control, less role ambiguity, and increasing participation in decision-making are important in keeping these junior personnel interested in staying on board. The use of command climate surveys, clearer communication along the chain of command, clearer communication between both providers and their parent organization and providers and their service member population is key.

One main recommendation for further research is another administration of this type of study to capture more respondents, with more thorough demographic data collected. It would have been informative to capture respondents who were deployed, recently returned from deployment, or had never deployed, and explored for significant differences between these groups. Currently there is some gender discrepancy among deployers, with operational roles in the United States Marine Corps only open to male providers. However with recent diversification of other traditionally male settings to female officer, such as submarines and aircraft carriers, it is possible that we will see more equitable gender distribution among deployments.

Another recommendation is administration of this type of study in the other military branches that employ mental health providers. The United States Army and the United States Air Force both have uniformed military mental health providers among their rank. However the services differ in their deployments. Traditionally the US Army has undergone the longest deployments, with in-country deployments typically ranging from 12 to 14 months. The US Navy currently deploys its service members for 6 months, and the US Air Force deploys its service members for 4 months. However with the

current high operational tempo, Individual Augmentee deployments have become more frequently used. These deployments take service members from across all military branches to fill needed deployment taskers. This means that a US Navy service member might find themselves deployed with US Army group or with a US Air Force group. This change in military culture, and loss of group identity and group cohesion for the individual service member, may predispose them to development of job stress and loss of social supports. It would be helpful to compare these Individual Augmentee deployers to traditional unit deployers, for differences in Burnout, Organizational Commitment, and other work-related variables.

Of note is that in this sample, the respondents reported high levels of Burnout, low levels of Organizational Commitment, low Clarity in their Organizational Climate, yet still felt that they were performing well and producing good care. It is significant to note the high level of Burnout among this sample of military mental health providers. While the research is robust on the recipients of the military mental health system, research is lacking on the providers who provide this care. Decision makers and policy makers would do well to note this high Burnout among US Navy psychologists, psychiatrists, social workers, and other providers. Based on their results they appear to feel that their jobs have less than clear rules and policies, and that they do not feel highly committed to their organizations. Coupled with the result that 21 out of the 77 respondents reported higher than average Turnover Intentions, this does not bode well for retention and work force preservation.

Summary

Based on these results it does appear that employee involvement had significant relationships with several of the variables collected for this study. Several of the studies hypotheses were able to be supported by the correlational data, and strong significant correlations were found between Employee Involvement and Turnover, Productivity, Clarity, Burnout, and Job Satisfaction. However, results also indicated that predicting Turnover and Productivity is difficult, and that despite strong correlation Employee Involvement was not able to hold its own against the other variables in predicting variance in the above variables. The takeaway message here is that in the complex world of military mental health, there is no magic bullet to help reduce turnover or increase productivity. Clarity was the only variable that commanders can control that was able to have a significant predictive relationship with Turnover. It is possible that the principles of Clarity, of consistent and clear expectations and for employees and a workplace that creates jobs that are clear and well-defined, could be useful workplace practices in the military mental health environment.

Military decision makers may not have a lot of control of the rank and specialty make-up of their staff, and as a result may not have a lot of control over the effects of these variables on turnover and productivity, this is unavoidable in this fast-moving and high operational tempo military. So the task left for decision makers is with the staff they have, after accounting for these demographic variables, how to improve their performance, keep them on the job, and ultimately ensure that they are providing the best clinical care possible. Furthermore, job satisfaction may not be something that is in a decision maker's control, as it is unique to each employee and an intrinsic phenomena.

Increasing trust, increasing skill, improving communication, and creating opportunities for individual employee's to succeed and excel are things that military already does well in the training of its service members. The promotion of a team environment, where instead of individual deficits in training dragging the team down, the combined expertise of the team allows each member to grow is already something the military does well in the deployed environment, and in the operational environment. It appears that the use of these practices in the military mental health environment is potentially useful, and likely a fruitful area for future training and research.

Table 6: Main results

	Turnover	Productivity
Rank	$t(68) = -2.23, p < .05$	
Specialty	$t(68) = 2.00, p < .05$	
WESR Clarity	$t(68) = -2.26, p < .05$	$t(64) = 2.37, p < .05$
Employee Involvement	$t(68) = -1.25, p = .20$	$t(68) = 1.48, p = .13$

Conclusions

This study intended to show the relationship between Employee Involvement Management Practices and Burnout, Job Satisfaction, Organizational Climate, Organizational Commitment, and Turnover Intentions. The population studied was

military mental health providers working in the United States Navy. Motivation for this study was based on research suggesting that providers in the military mental health care system are facing unprecedented demands on their clinical abilities. It is undeniable that patient care can always be improved, and with recent conflict the demand will only continue. It is hoped that through further understanding of the impact of Employee Involvement Management Practices, the quality and consistency of the mental health treatment of military service members and their families will improve. It was shown that there are significant correlational relationships between Employee Involvement and Organizational Commitment, Productivity, Burnout, and Turnover Intentions. However, it was also shown that in terms of actual predictive power Employee Involvement could not better predict Turnover Intentions and Productivity than the other variables collected. Regardless, in terms of contributing to the literature on military mental health providers, this study was able to help illustrate the difficulties facing military mental health providers today, and hopefully will lead to increased upper level support for these providers. That high burnout was found, as well as low job satisfaction, is troubling as the future of military deployments and involvement in the global war on terror continues. The importance of keeping trained and experienced military mental health providers on staff so that they can rise up through the ranks to help develop and implement effective policy, is undeniable. The task facing military decision makers is a daunting one. However, with the military oath of pursuing honor, courage, and commitment, this task is part of the commitment.

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Appendix A.

Consequences of Burnout: Correlations of work-related variables with Burnout as measured by the MBI

Manlove (1997)	childcare workers	Turnover intention	r = .27
Gillespie (1980)	healthcare workers	Health	r = -.44
		Negative attitude toward clients	r = .43
Meier (1984)	teachers	Beck Depression Inventory	r = .53
Wienberg (1983)	direct care providers	Guilt	r = .41
Berkeley (1977)	teachers	Turnover	r = .36
Maslach & Jackson (1982)	physicians		
	Emotional exhaustion	Patient avoidance	r = .27
		Negative attitude toward clients	r = .33
Lee & Ashforth (1990)	human service workers		
	Emotional exhaustion	Psychological strain	r = .62
		Physiological strain	r = .49
		Helplessness	r = .85
Lee & Ashforth (1996)	direct care providers		
	Emotional exhaustion	Turnover intention	r = .37
		Job involvement	r = -.03
		Job satisfaction	r = -.26
	Depersonalization	Organization commitment	r = -.38
		Turnover intention	r = .24
		Job involvement	r = -.09
		Job satisfaction	r = -.33
	Personal accomplishment	Organizational commitment	r = -.33
		Turnover intentions	r = -.13
		Job involvement	r = -.10
		Job satisfaction	r = .22
		Organization commitment	r = -.02
Koeske & Thomas (1995)	social workers		
	Emotional exhaustion	Intrinsic job satisfaction	r = -.45
		Organizational job satisfaction	r = -.27
		Global job satisfaction	r = -.53
Baruch-Feldman et. al. (2002)	police		
	Emotional exhaustion	Job satisfaction	r = -.40
		Productivity	r = -.62
Best et. al. (2005)	health care employees		
		Job Satisfaction	r = -.60
		Perceived organizational constraints	r = .33
		Core self- evaluations	r = -.35
Schmidt (2007)	government employees		
	Emotional exhaustion	Work stress	r = .56

	Organizational commitment	$r = -.22$
	Job satisfaction	$r = -.50$
Depersonalization	Work stress	$r = .27$
	Organizational commitment	$r = -.20$
	Job satisfaction	$r = -.36$

Appendix B.

Employee Involvement Management Practices and Burnout among Military Mental Health Providers

You are invited to participate in a study that will evaluate your perception of Employee Involvement work practices, your evaluation of your work environment, and your attitude towards your work. The study is conducted by Lieutenant Steven Fernandez, mental health provider at Naval Hospital Jacksonville Mental Health Department. Lieutenant Fernandez can be reached at #904-542-3473 ext. 165 / raymond.fernandez@med.navy.mil. This study is being conducted as part of doctoral dissertation/graduate program requirements. The dissertation advisor for this study is Dr. Patrick Sherry, PhD, ABPP who may be contacted via #303-871-2495 / psherry@du.edu.

Your participation is invited to help increase awareness of working conditions for military mental health providers, and this research has potential to benefit working conditions for military mental health providers in the future. Participation in this study should take about 30 minutes of your time. Participation will involve responding to 169 questions about burnout, job satisfaction, organizational commitment, organizational climate, and job turnover. Participation in this project is strictly voluntary. The risks associated with this project are minimal. If, however, you experience discomfort you may discontinue participation at any time. We respect your right to choose not to answer any questions that may make you feel uncomfortable. Refusal to participate or withdrawal from participation will involve no penalty or loss of benefits to which you are otherwise entitled. There is no compensation or possible benefits promised for completing or participating in this study, again participation is completely voluntary.

Your responses will be identified by code number only and will be kept separate from information that could identify you. This is done to protect the confidentiality of your responses. Only the researcher will have access to your individual data and any reports generated as a result of this study will use only group averages and paraphrased wording. However, should any information contained in this study be the subject of a court order or lawful subpoena, the University of Denver might not be able to avoid compliance with the order or subpoena. Although no questions in this interview address it, we are required by law to tell you that if information is revealed concerning suicide, homicide, or child abuse and neglect, it is required by law that this be reported to the proper authorities.

If you have any concerns or complaints about your participation, please contact Susan Sadler, Chair, Institutional Review Board for the Protection of Human Subjects, at 303-871-3454, or Sylk Sotto-Santiago, Office of Research and Sponsored Programs at 303-

871-4052 or write to either at the University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121.

You may print out and keep this page for your records. By participating in the study you confirm that you have read and understand the statement below. If you do not understand any part of the statement below, please ask the researcher any questions you have.

“I have read and understood the foregoing descriptions of the study called “Relationship between Employee Involvement Management Practices and Burnout among Military Mental Health Providers”. I have asked for and received a satisfactory explanation of any language that I did not fully understand. I agree to participate in this study, and I understand that I may withdraw my consent at any time.”

By initiating this survey, you are indicating that you voluntarily agree to participate in this research study. Please click on the link below to start the survey. Thank you for your time and consideration.