A METATHEORETICAL ANALYSIS OF SOCIAL SUPPORT THEORY IN APPLICATION TO MILITARY POST TRAUMATIC STRESS DISORDER

by

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Abstract A METATHEORETICAL ANALYSIS OF SOCIAL SUPPORT THEORY IN APPLICATION TO MILITARY POST TRAUMATIC STRESS DISORDER

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More organizations, researchers, and practitioners are now measuring social support with military Post Traumatic Stress Disorder PTSD; however, many are measuring very different specific variables under the overarching title of social support. These differences have created complications when interpreting the data. A number of different outcomes have been noted in empirical research regarding the relationship between military PTSD and social support.. This is a secondary analysis of previously published research, similar to a research synthesis. George Ritzer's (1989) metatheoretical analysis method is used. Social exchange theory and social network theory are discussed as they relate to social support theory. Three research questions are answered by the following points: First, social support theory evolved in response to an onslaught of research in stress theory. Next, when measuring social support, it is important to specify the particular conceptualization and type of support. Also, measurement of stress with specificity of types of stress is important when addressing social supports with the intention of positive health outcomes. Lastly, social work can help guide research in social support and PTSD by creating and evaluating models of research design that are specific. Three models of research design are proposed in the

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discussion section of the paper. In order for social work practitioners to apply social support research with intervention for PTSD, then practitioners must have empirical evidence that such application is beneficial with population-specific variables in mind. This project adds to the knowledge base of social work, so that social workers may more confidently interpret social support data when considering its contributions to intervention targeted towards military PTSD.

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Nature of the Problem

The U.S. military has recorded rates of veterans with mental health struggles definitively since World War II. The diagnoses, definitions, and perceptions of mental health have changed substantially with the years. The Vietnam War brought new light on the issue of mental health for veterans. In 1970 the United States Congress held a hearing in response to growing concerns regarding the mental health care of veterans, for the first time. The diagnosis of Post Traumatic Stress Disorder in 1979 paved the way for how we now view and address mental health care for veterans (Jaycox & Tanielian, 2008). "Many people who survive severely traumatic events will develop PTSD. Survivors of combat are the most frequent victims..." (Morrison, 2015, p. 219). Veterans of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) are at an increased risk of a mental health diagnosis when compared to veterans of other conflicts, according to the United States Department of Veterans Affairs (VA; 2014). Veterans who are newly discharged from military service are also at highest risk of experiencing negative social problems (Igen et al., 2012). A compilation of health care utilization data from the VA in 2014 revealed that since 2002 approximately 1,791,420 veteranshave become eligible for VA health care. The data also indicate post traumatic stress disorder (PTSD) and depression as the two most prevalent behavioral health concerns for veterans of OIF, OEF, and Operation New Dawn (OND) (United States Department of Veterans Affairs, 2014). The Wounded Warrior Project released its 2014 alumni survey citing social support as one of its measures of "Physical and Mental Well-Being" (p.5) for injured veterans. Since veteran experiences of the recent conflicts are unique, and the care for these individuals must address the unique needs of this population, the role of

social support in mitigating PTSD and promoting civilian community reintegration has been the subject of recent empirical research.

Empirical Outcomes of Research on Military PTSD and Social Support Four main outcomes were observed in the literature on the association between social support and military PTSD. Outcome A (Duax, Bohnert, Rauch, & Defever, 2014; Pietrzak, Johnson, Goldstein, Malley, & Southwick, 2009; Price, Gros, Strachan, Ruggiero, & Acierno, 2013; Wilcox, 2010) represents an association between an increase in social support and a decrease in PTSD symptom expression, directionality not indicated. Outcome B (King, King, Taft, Hammond, & Stone, 2006; Tsai, Harpaz-Rotem, Pietrzak, & Southwick, 2012; Laffaye, Cavella, Drescher, & Rosen, 2008) reflects an erosive model, described as increases in PTSD severity that then lead to a decrease in social supports. Outcomes C and D both indicate an increase in PTSD symptoms or onset. Outcome C (Chapman, Elnitsky, Thurman, Spehar, & Siddharthan, 2013; Dinenberg, McCaslin, Bates, & Cohen, 2014) occurs when low levels of social supports lead to an increased likelihood of PTSD symptom expression. Curiously, Outcome D, reported by one study (Hoyt & Renshaw, 2014), is characterized by an increase in social support associated with an increase in PTSD symptom expression. The four different outcomes illustrate the complex relationship between PTSD severity and social support supported in the literature.

Outcome A- Greater Social Support, Decrease in PTSD

Duax et al. (2014) investigated "emotional hiding", PTSD symptom expression, and levels of social support. The sample size consisted of 536 veterans from OIF/OEF, of whom 29.29% screened positive for PTSD, according to the primary care PTSD screen (PC-PTSD). Social support was measured on a likert scale, in regards to how much support the veteran felt they received from family, friends, coworkers, and the community. Emotional hiding was also measured on a likert scale in response to how

much the veterans felt they had to hold back in sharing emotions and cognitions. When the units of social support were analyzed, the study found that each additional unit of social support was linked to a decrease of 8 percent in the chances of PTSD diagnosis. It is noted that this study found a significant connection between likelihood of PTSD diagnosis and lower support from "friends." There was not a differentiation between nonmilitary friends and military friends in this study, which was indicated by the authors as an area for future research. The authors indicate that directionality cannot be assessed by their study design (2014).

Pietrzak et al. (2009) investigated how resilience and social support may serve as protective mechanisms against PTSD symptom expression. The Postdeployment Social Support Scale (PSSS) was used to measure social support. This study found that higher resilience and social support was associated with a decrease in PTSD symptoms. Wright, Kelsall, Sim, Clarke, & Creamer (2013) present findings in their systematic review indicating results of the 2009 study as an outlier (according to the Forest plot provided in the article) when compared to the other synthesized studies. This review further suggests that based on the 27.1 % response rate and the higher severity of symptoms from respondents, the Pietrzak study was perhaps affected by a bias in its subject selection.

Price et al. (2013) sought to investigate how social support might interact with exposure therapy treatment outcomes for veterans of OIF and OEF. The study consisted of 69 OIF and OEF veterans with a diagnosis of PTSD. The Medical Outcome Study-Social Support Survey (MOS-SSS) was used to measure social support in this sample. It is worth noting that prior to exposure therapy the sample exhibited Outcome C: low levels of social support associated with higher levels of PTSD. When treatment outcomes were measured, it was found that higher levels of emotional/informational

forms of social support corresponded with better treatment outcomes; thus, reduction in PTSD symptom expression in response to evidence-based treatment was found due to be associated with social support.

Wilcox (2010) measured social support with the Multidimensional Scale of Perceived Social Support (MSPSS). The sample consisted of 83 male, married, combat veterans who served between 2001 and 2008 in the Army. The study notes that female combat veterans did not choose to participate in the study, but they were invited to participate. Higher levels of social support were found to correlate with lower levels of PTSD symptoms. The study did differentiate among 3 different sources of support, noting that support from friends was not related to PTSD; however, they did find that support from family and military peers was related. It seems that "peers" and "friends" have different definitions in this study. No clear definition of "military peer" is provided. One may assume that a peer is someone who works alongside or is in the same environment as the individual, and a friend is a more close, personal relationship. No distinction between military and non-military friends was made in this study.

Outcome B- Erosion Model

King, King, Taft, Hammond and Stone (2006) investigated social support and PTSD, with regard to directionality. A sample of 2249 male veterans from the first Gulf War was used. Social support was measured by structured interview and MOS-SSS. Data on social supports and PTSD symptom expression were gathered at two different times. The study found that over time PTSD symptoms increased and the social supports decreased. The authors concluded that PTSD symptoms erode social support for military veterans.

Tsai et al. (2012) studied coping, social support, and resilience as possible mediators in the relation between social functioning and PTSD. The sample was 164

veterans of OEF/OIF, of whom 52 percent screened positive for a PTSD diagnosis. For measure of social support, the PSSS was utilized. In the assessment of social functioning, partner satisfaction, family cohesion, and life satisfaction all were indicated at lower levels for veterans who indicated positive for PTSD. Social support scores by PSSS were also lower. Further review into these dynamics of one's social life may have implications for how we discuss the construct of social support.

Laffaye, Cavella, Drescher, and Rosen (2008) also found an erosive effect on social supports as the result of chronic PTSD. Erosion was primarily seen in level of support from non-military friends. The sample size was 128 male veterans who were diagnosed with PTSD.

Outcome C- Lower level of support followed by Increased PTSD

Chapman et al. studied (2012) 14 male veterans of OEF/OIF with mild traumatic brain injury (mTBI) and PTSD co-morbidity. In this study, social support was measured using the Unit Support Scale (USS). Loss was assessed using the questions : "While deployed did you lose a buddy or valued leader" and "While deployed did a spouse or girl/boy friend leave you?" (p.155) Social supports decreased as losses increased. Also addressed was the level of stress that loss of a combat peer can produce, comparable to the death of a spouse. The losses were then correlated with increased susceptibility to PTSD symptoms, especially an increase in avoidance/numbing and arousal symptoms. This study is significant, because it addressed stress (loss), social support, and specific PTSD symptoms. It is also a directional in that a retrospective measure of social support was taken to measure support prior to the trauma, and then compared to a measure of support levels after development of PTSD symptoms. The sample size in this study is very small, but should drive more interest in the ways we define or describe stress and loss of social support.

Dinenberg et al. (2014) measured the "development" (p.294) of PTSD in veterans. A baseline of social support was established 5 years prior to screening for PTSD. Those who had lower levels of social support at baseline were more likely to screen positive for PTSD in the 5 years that passed. This study is important for a number of reasons. Directionality can be assessed here, without a possible bias due to recall accuracy. Also, social support results were broken down into three categories: appraisal, tangible, and belonging. The tangible and belonging supports were associated strongest with future PTSD development while appraisal support was not associated. This is key in understanding the complexities with inferring that "social support" is beneficial with PTSD intervention, because certain types are shown to have effect while others are not. One limitation of the study is that the sample population was "older men," (p.296) aged 37 to 94 in September 2000-December 2002, and it did not include veterans from OEF or OIIF.

Outcome D- Increased support mechanism, increased PTSD

Hoyt and Renshaw (2012) identified that emotional disclosure is a specific mechanism through which social support is utilized. Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS). The author sought to discover the impact that emotional accounts of an experience had on the PTSD symptoms. They measured disclosure to people with military experience and disclosure to those with no military experience. One of the key findings of this study was that, "...greater disclosure of positive emotions to listeners with shared combat experiences at Time 2 was significantly associated with more symptoms of posttraumatic stress" (p. 197). This is a curious account of how a mechanism of social support contributed to increased symptomatic expression of PTSD. This finding is consistent with earlier findings of null therapeutic effect or deleterious effect of peer "rap groups"/"rap group

therapy" among Vietnam veterans (Cahoon, 1984; Escobar et al., 1983; Smith, 1985)This should be noted for further review, especially as peer mentors are utilized in the practice of interventions with veterans of OEF/OIF across the country.

Conclusion of Empirical Research Discussion

While many believe that certain social supports are a key factor in one's behavioral wellness, the professional opinions and conclusions are difficult to parallel, at best. There is a delicate balance that must be found in understanding the theory of "social support" in relation to PTSD. The use of the term social support tends to refer to a number of aspects of one's interpersonal life. The Medical Outcomes Study Social Support Survey (MOS-SSS) instrument addresses four practical expressions of social supports: emotional/informational support, positive social interactions, affectionate support, and tangible support (Sherbourne & Stewart 1991). The research studies conducted on social support in reference to treatment and deleterious impacts in behavioral health are usually based on these four expressions of social Support (Price, Gros, Strachan, Ruggiero, & Acierno, 2013). Another measure, the Social Support Questionnaire, uses 3 types of perceived support to include tangible support, but informational support are separated (Sarason, Levine, Basham, et al. 1983). Further review of how these social supports are categorized may aid in implementation of interventions.

Social Work Principles

Emphasis on the social work ethical principle of importance of human relationships establishes a need for social workers to get involved in the conversation about social supports. The involvement of social work with vulnerable populations further calls the social work profession to veterans with PTSD. Clinical social workers must know that they are implementing interventions using social supports for veterans with PTSD in a way that is beneficial and not harmful. This necessitates a competency in the relationship between military PTSD and social support. In research that has been done on the relationship between PTSD in recent combat veterans and social supports, social workers are somewhat absent. This thesis project fills a research gap in social work in better understanding social support theory for the development of interventions for military populations, in order to address the onset and life sequelae of PTSD. The thesis study addresses the following research questions: When and in what context did social support theory research begin? What factors help discern differential empirical outcomes in social support and military PTSD research? How can social work guide future social support and PTSD research with military populations?

Method

The metatheorizing method was used to investigate the development of social support theory to address these research questions. Metatheorizing is a natural, critical view of theory that manifests over time in the eyes of social scientists, parallel to a research synthesis of empirical studies (Ritzer, 1989).

Ritzer describes three types of metatheorizing, each differentiated by the result. The first type is "metatheorizing as a means of attaining a deeper understanding of theory" (1991, p.270). The first type has four subtypes: internal intellectual, internalsocial, external-intellectual, and external-social approach. It is possible, as some have done, to merge the multiple subtypes of this first type in one analysis. Ritzer gives an example of this, Lewis Coser's 1956 book The Functions of Social Conflict. The second type is "metatheorizing as a prelude to theory development" (1991, p.270). Marx's work in theory on capitalism is an example of the second type. The third type is "metatheorizing as a source of overarching theoretical perspectives" (1991, p.270). Walter Wallace's disciplinary matrix is an example of the third type (1988). Further, there is much flexibility in the actual implementation of a metatheoretical look at theory, with multiple types often integrated in with one analysis. I will focus on the first type and subtype (internal intellectual) in my work, but a merging of multiple types/subtypes does occur as the work progresses. While it is not always the case that this form of analysis is done in a historical context, it often makes sense to approach the analysis through a historical lens as will be done here (Ritzer & Stepniski, 2014).

Ritzer uses some specific tools to structure the first type of metatheoretical analysis. The tools he uses are paradigm, paradigm bridging, micro-macro, integrated paradigm, and theoretical synthesis. A look at individual paradigms leads to identification

of certain common areas of overlap within theories, which can then serve as a bridge for the individual paradigms. Ritzer looks very critically at the development of the micro and macro approaches to social analysis, and metatheory encourages the use of both a micro and macro view in theory. The willingness to integrate paradigms and synthesize theories makes a metatheoretical perspective quite unique and useful for implementation in practice.

Others have explained that metatheory assists in creating a structure for which research questions are developed. More relevant to social support and military PTSD is the usefulness of metatheorizing "to account for a specific class and range of phenomena" (Abrams & Hogg, 2004, p.100). First, the analysis examines early references to the term "social support", with its development through history. The analysis includes "supports" that may be identified as prevalent in the military and veteran populations during treatment, such as family, military peers, and non-military friends. Specific military social life dynamics as relating to deployments, discharge of service, and reintegration with civilian life are assessed as to how they fit into the domains of social support theory.

Metatheory in Social Work

Often times a metatheoretical perspective enables scholars to bring abstract concepts, such as the human lived experience, into the respected setting of research. Metatheoretical work assists in understanding the full context of a theory's application in social work. Francis Turner and Malcolm Payne are two social work scholars who have done work in metatheorizing (Forte, 2014). Metatheory is especially beneficial to the field of social work, as empirically based practice is such a significant part of how social workers practice. Witkin notes, "Metatheory undergirds the methodology and logic of empirical practice" (1997, p.1). Witkin argues that the case for metatheory in the

profession is further made when professionals share an understanding that social workers are called to amplify the voices of the populations they serve. In An Introduction to Using Theory in Social Work Practice, James A. Forte (2014) takes a strong stand for the use of metatheory in social work research:

> The professional toolbox of theories has become larger and larger over the last several decades. When a sloppy social worker looks into the toolbox to pick the tools needed for a particular task in a particular setting, he or she may feel overwhelmed by the number and the disorder of the tools collected...in this lesson [on metatheory], I offer a way to organize theories for professional purposes so the toolbox will be orderly and the selection process will be manageable (p. 100).

In order to further develop application of social support theory, a better understanding of the theory is necessary. More specifically, social support theory may have potential to transform the lives of veterans with PTSD due to combat exposure when framed to create interventions.

A metatheoretical look at social support to understand it clearer in an internalintellectual way is the main framework for this endeavor. The literature on social support and military PTSD does present mixed findings; however, after a metatheoretical analysis of social support, the foundations from which these dissimilar findings emerge become discernible

Results

Historical Review of Social Support Theory

Early references to "social support".

The term "social support" was used in theology, philosophy, and political literature in the early 1900's. References date as far back as 1894, by Miller, S.D. In this early article it was a term used to describe a concept closer to the realms of "public opinion" and the support of a concept by the public (Miller, 1894). In 1904, Josiah Royce likens social support to "comradeship" in a philosophical journal. 1908 theological literature refers to one's pursuit of social support akin to the pursuit of co-operation (Coe, 1908). A sociology article from 1910 about criminal and anti-social behavior addresses the need for "constant social support" in connection to engagement in the social environment (Baldwin, 1910 p.830). References from 1914-1925 were higher in concentrations of political/public opinion topics (Newell, 1924; Gilkey, 1914; Parmelee, 1914; Bobbit, 1920; Lyons & Barnes, 1925). In 1928, a medical journal discuses social support as a factor of analysis in suicide research (The British Medical Journal, 1928). In 1932 an article discussing ethics refers to "social support" as the actual support from one's network of relationships of specific choices one makes (Clarke, 1928).

Social support theoretical work from the 1970's through the 1990's was a result of the movement toward research in stress theory and potential buffering techniques . This is likely in response to the many studies conducted on life stress after the creation of the Social Readjustment Rating Scale (Holmes & Ray 1967). Stress theory is related to social support theory, in that alleviation of stress is the means which social support is expected to bring positive health benefits. Social support research is theoretically well suited with PTSD in a similar sense, given the emphasis of stress in the disorder.

Peggy Thoits.

1982.

Thoits identified many of the difficulties in measuring social support as a means to counter stress. Her work used the definition by Kaplan, et al. 1977 "as the degree to which a person's basic social needs are gratified through interaction with others" (Thoits, 1982 p. 147). The social needs are sustained by either socioemotional aid (affection, acceptance) or instrumental aid (money, information). Thoits describes a "social support system" which is a more descriptive term for the group of people in the individual's social network that the individual depends on for the socioemotional and/or instrumental aid (p.148). Thoits discusses how "functional" elements of the social support system can be operationalized, and includes a relevance in the distinction of specific participation in the support system. A portion reads:

Furthermore, sub aspects of the social support system may be examined; for example, the efficacy of socioemotional aid received from kin, as compared to that received from friends, or the amount of instrumental aid obtained from primary as opposed to secondary group members. These definitions explicitly direct the researcher's attention to various types, sources, and degrees of support received from significant others, and to the structural properties of support systems, foci which have been lacking in most previous work (p. 148).

In addition, Thoits makes the observation that measurement of life change

events often includes the loss or gain of relationships in the supportive network. She

identified that an event may be operationally and conceptually the same as a change in

support; and in turn life events may also cause further changes in the support system. In

closing, Thoits offers a solution with the use of longitudinal data; moreover,

measurements of prior supports are key in interpreting an impact of social support in

mediating stress from life events (Thoits, 1982).

1984.

Here, Thoits tested if a psychological vulnerability to negative life events could be reasoned by co-occurrence of "high event exposure and low social support resources" (p.453). The main findings suggest social supports counterbalance rather than have a direct interaction or buffering with stress. The main type analyzed in this study, emotional support, was not found to have a significant interaction with life events (Thoits 1984). *Stress and support.*

Jacobson (1986) integrates empirical work and theoretical work while establishing an interpretable synthesis of stress theory and social support theory. The author identifies the "needs," "transaction," and "transition" models of stress. The "needs" model asserts that an individual has specific needs which are met by social interactions and relationships with people; however, if these needs are not met then the individual experiences distress. An example of distress, according to the "needs" model would be loneliness due to lack of social relationships. The loss of a friend due to death in battle would fall into this category of stress; in addition the isolation that is often seen from the avoidance symptom of PTSD can also lead to this loneliness. The "transaction" model applies when an individual perceives their social needs in excess of the perceived social resources available, resulting in negative outcomes in the individual's well being. In the "transaction" model, the individual's ability to cope with distress is compromised. Military PTSD requires specific treatment and resources. When an individual with PTSD perceives those needs may not be met with available resources, distress may occur of specific choices one makes to the "transaction" model. The" transition" model of stress is especially relevant to military discharge process and reintegration into civilian life. "Transition" model of stress addresses stress sourced from sudden changes in an

individual's life that influence the way the individual views and interacts with the world and their place in the world.

Stress and social support interact, and this interaction is influenced by timing and type. Jacobson proposed that "theoretical integration reduces conceptual confusion and research ambiguity" (1986, p. 253). An integration of social support theory and stress theory is crucial for future understanding with PTSD. Jacobson's theoretical work matches emotional support as especially beneficial during crisis stress; informational support resources as most beneficial during transition stress; and tangible support as the most beneficial during deficit stress (a physical or economic deficit). *Social network, social exchange theory, and social support theory.*

Specht (1986) outlines the three conceptualizations of social support. He describes perceived support as a "subjective sense of support felt by person" (1986, p.219). Actual support is "actual support behaviors of others toward the person" (1986 p. 219). Finally, the social network a person participates in, which connects that person with other individuals is another conceptualization. Specht describes density in social network theory as the actors in one's social network having connections to other actors in that network. The military offers potential for density, in that the actors in a service member's network have a higher potential of knowing other actors in that service member's network. Density is present in a small military combat unit, in that the actors all know one another. Specht also notes that density is not considered "intrinsically desirable," but that it would be important for a person in a crisis and dependent life stages (1986, p. 226). Military service is not a dependent life stage, per se, but it is a life experience that requires high dependence on others for survival. This heightened level of dependence upon one another illustrates theoretical need for density in social networks during military service. Density also has its drawbacks. Dense social networks

limit interactions with others separate from the network. This influences the ways of interaction with various social environments, and the individual with a dense social network is less informed and experienced with interacting outside of that dense network. This can be seen, practically, upon military discharge in the struggles that a veteran may have reintegrating into civilian networks.

Later Development of Social Support Theory

Thoits.

2010.

In work on the discussion of stress and life strain in disadvantaged populations, Thoits highlighted the impact major life events may have had on future ability to cope with stress. Here, Thoits reviewed a scale by Wheaton from 1994, and identified traumas, such as combat, as a category of stress. Most importantly, the topic of stress proliferation is discussed in great detail (Thoits 2010).

2011.

One of the first distinctions made in this article is the focus of "social support" as a positive term. The author also identifies the potential disadvantages of a strictly positive term, including the reality that some relationships can be "tense, conflicted, or overly demanding." Thoits even goes so far as to say that some relationships may be the sources of stress, and even some well-intentioned demonstrations of support may be received in a negative way. Thoits identifies 7 mechanisms that can be viewed as constructs of the theory. Thoits identifies these constructs as a means of attaining health benefits by incorporating social ties. Those constructs are social influence/social comparison; social control; behavioral guidance, purpose, and meaning; self-esteem; sense of control or mastery; belonging and companionship; and perceived social support. Further, social support is described as multidimensional in Thoits' work. It is described as having manifestations that are visible, invisible, deliberate, unintentional, reciprocal or lacking in reciprocity. These ways in which social support manifests in its everyday implementation are complex (2011). Perception of support is identified as a major channel in connecting these social ties to health goals.

Social Support Theory in Military Research

Suicide prevention

DeBeer et al. (2013) investigated how PTSD and Major Depressive Disorder (MDD) co morbidity may interact with social supports so as to indicate likelihood of suicidal ideation in OIF and OEF veterans. It noted that low social support in conjunction with PTSD-MDD co morbidity resulted in the highest reports of suicidal ideation, when compared to similar symptom expression and reports of high social support. This is worth noting with heavy implications in practice. The authors emphasize the importance in "evaluation of the accuracy of perceptions about social support, and strategies to increase social support resources...to incorporate during interventions aimed at reducing risk of suicide" (2013 p. 360) The role of social support on the risk of suicidal ideation in the context of PTSD in a military population is discussed by other scholars as well (Pietrzak, Russo, Ling, Southwick 2011; Jakupcak et al., 2010)

Erosion and cognition.

Brancu et al. (2014) performed secondary analysis of data obtained between 2005 and 2011 from those who had served in the military after September 11, 2001. The study found highest levels of social support in veterans without behavioral health diagnoses. The text likens its results to other research that supports the "erosion model," and even an additional model noted as the "cognitive model." The erosion model implies that PTSD symptoms cause deterioration in interpersonal resources. The cognitive model is described as increased cognitions of a threat, leading to reductions in social support. A major outcome of this study was that veterans diagnosed with PTSD experienced very minimal buffering effects from social support; however, social support was interpreted as having a buffering result for veterans with mental health conditions other than PTSD. The authors suggest "co-morbidity may be less important in considering the role of social support in PTSD and evaluating specific mechanisms for this lack of social support benefit will be important in future studies" (Brancu et al. 2014, p.90).

Family, military peers, and non-military friends.

Wilcox (2010) and Thoits (1982) both emphasize the benefit of measuring specificity with types of relationships that may offer support. Based on the empirical study from Wilcox, the threat of erosion in support is higher for non-military friend relationships. The threat of erosion to family relationships is not significant according to Wilcox (2010). Further empirical screening and analysis should be conducted to substantiate or challenge these claims, as this specificity can have major implications in the understanding of PTSD symptomatology and its effects on personal relationships. Military peer loss in combat as been Further, military peer or military friend relationships should be explored more specifically as a protective factor in alleviating stress and symptoms of PTSD for combat veterans. In addition, the maintenance of these relationships after military discharge should be explored as potential risk reducers in development of life stress and problems due to PTSD in combat veterans. *Potential vulnerabilities in military relationships*.

Practitioners should screen for asymmetrical relationships before recommending specific increase in support from those relationships. The wounded Warrior Project 2014 alumni survey demonstrates a number of veterans concerned with a lack of trust or break down of trust in relationships with military leadership. The military rank system may predispose military members to a higher rate of asymmetrical relationships as well. Asymmetrical relationships- "attained through coercion, bribery, or misrepresentation. Support so attained may result in threats to the self-esteem of the intended recipient and a negative response from the intended giver" (Specht, 1986 p. 233). In her empirical analysis of social exchange among older adults, Goodman found that asymmetrical relationships are basically unstable (1985). Therefore, the clinician should move cautiously in attempting to enlarge clients' social network.

Post Traumatic Stress Disorder (PTSD)

DSM-5 criterion.

The National Center for PTSD's website describes the DSM-5 diagnostic criteria for PTSD. "Criterion A: stressor," requires a person to have experienced, witnessed, learned it has occurred to close friend, or have repeated professional exposure to extreme details from one or more traumatic events. "Criterion B: intrusion symptoms", requires one of the following in which re-experiencing of the trauma occurs: "intrusive memories" that are "recurrent" and "involuntary;" "traumatic nightmares"; "dissociative reactions"; "intense or prolonged distress" after reminders of the trauma; and physiological reactions after reminders of the trauma. "Criterion C: avoidance," requires an intentional effort to avoid "thoughts or feelings" related to the trauma; or "external reminders" of the trauma. "Criterion D: negative alterations in cognitions and mood," at least two sections of this criterion are required. A difficulty with memory recall relating to the traumatic event; "persistent negative beliefs" about self or the world around oneself; self-blame or blame of others for the cause of the event, though the blame is misguided; persistence of emotions that are negative and directly related to the trauma; a loss of interest in previously high prioritized activities; feelings of alienation; and difficulty experiencing positive emotions. "Criterion E: alterations in arousal and reactivity," at

least two symptoms are required in this criterion. They include "aggressive behavior;" "self-destructive behavior" or recklessness; hyper vigilance; heightened startle response; difficulty concentrating; and "sleep disturbances." Criterion F explores duration of symptoms. Criterion G explores the functional impairment, including social impairment. Criterion H covers exclusion of symptoms- clarifying that the problems are not related to medication, substance abuse, or other ailments (2015, p.1).

The lived experience of PTSD manifests differently to a number of different people through a variety of experiences. Levels of stress produced from the lived experiences of symptoms in Criteria B-E are most likely to affect personal relationships. These symptom clusters may be a good place to start for development in identifying life stress levels and types within PTSD symptomatology.

Discussion

The research questions are revisited in this discussion. The first research question addressed when and in what context social support theory developed. Social support theory was birthed in response to developing research on stress theory. Stress theory is at the foundation of how social support is measured, and to what end it is developed for positive health outcomes. The next research question addressed factors that may help discern differential empirical outcomes in social support and military PTSD research. Specificity of social support types and clear disclosure of the social support conceptualization used will help interpret empirical outcomes. No standard measures for level of stress within PTSD symptomatology currently exist, while stress is a crucial variable in understanding how social support theory may be applied in behavioral health practice with PTSD. Closer attention to the types of stress and specific problems identified as a part of, or sequelae to, the PTSD symptoms will aid in interpreting any possible interaction or counterbalancing effect that social support may have in treatment or prevention of PTSD. The last research question addressed how social work can guide future social support and PTSD research with military populations. Social work can guide future research by creating and evaluating models of research design that may lead to clearer empirical outcomes. The following three main models of design will aid in interpreting research findings, for example.

Model 1: Pre-deployment Intervention

The first model, examines pre-deployment social support levels with an emphasis towards pre-deployment intervention research. The levels of specific social supports (emotional, tangible, informational) at Time 1, prior to deployment, are then analyzed in comparison to levels of specific stress measured within PTSD symptomatology after deployment. The types of support and stress are to be clearly outlined and compared. This first model allows researchers to test the hypothesis that pre-deployment social support may offer resources that aid in coping with trauma, reoccurring traumas, or chronic stressors experienced during deployments so that stress from PTSD is likely to develop with less frequency and/or intensity.

Model 2: Post-Deployment Intervention

The second model, starts without measure of social support taken prior to deployment. Some research has asked individuals what their level of support was prior to deployment, but this is not the most accurate or specific way to measure social support. This retrospective measure only gives us insight into one of the conceptualizations of support, perceived support. This model will be the most common one in application, as most researchers are not yet able to measure pre-deployment the social support of their participants. Here, the measure of stress within PTSD symptomatology is conducted after deployment, and then a measure is conducted of current post-deployment levels and types of social support. This model also requires a second instance to measure of stress within PTSD after first measure of post-deployment social support. A hypothesis that support from social resources may reduce, increase, or leave unchanged already established PTSD symptoms may be tested with Model 2.

Model 3: Erosive Effects of PTSD

The third model measures social support prior to deployment. The measure of stress within PTSD is conducted post-deployment, followed by a second measure of social support. The levels of types of support are compared from time one (pre-deployment) to time two (post-deployment). Here, multiple measures of social support and PTSD over time may continue to further understand the relationship over an extended period of time (time 3, time 4, etc). Most important is the pre-deployment

measure and post deployment measure of types of social support, with development of stress from PTSD in between the two initial measures of support.

Implications for Social Work

Implications for Future Research

Empirical studies should be conducted using the three models outlined in this paper. A special emphasis on the difference between specific personal relationships in military populations should also be examined. In order to better understand the specifications of stress and support with combat veterans, an emphasis of research needs to be placed on levels of stress generated by PTSD symptom expression. Ultimately, if a PTSD diagnosis exists, it is assumed that much stress exists in the veteran's life. Those practical manifestations of stress should be identified, classified, and measured so that an intervention, utilizing social support theory may be most effective. This research has implications for military families, in that this stress often overflows from the individual to also affect the family. Also, the research on suicidal ideations should be further developed in relation to social support and PTSD.

Implications for Policy

Advocacy in the local, state, and national levels is necessary to educate law makers, researchers, and clinicians about the need for better measure of stress within PTSD development and progression so that proper social support intervention strategies post and pre-deployment may be developed. The Veterans Affairs drives a substantial bulk of empirical research in PTSD and veterans, and getting support from the department would advance the work by leaps and bounds. In addition, advocacy groups such as Wounded Warrior Project can influence policy through their research and outreach. Cooperation with these advocacy groups is necessary to build an alliance of support for veteran needs in research and practice.

Implications for Theory

Social support theory has a fit for the social work profession. Empowerment for individuals through healing of and adaptation to stress through human relationships is what social workers encourage as helping professionals, and this is what social support theory encourages. The development of social support theory came in response to an onslaught of research on stress theory; moreover, development of social support theory erupted from a genuine desire to help people mediate the negative effects of stress in their lives by turning to human relationships as the aid.

Implications for Practice

Social workers encourage long term and lasting treatments for behavioral health concerns. While medications can help, it is understood in the social work profession that skills teaching is imperative for the empowerment of the individual. A hope that our clients will not need us one day is intrinsic in what we do. Additionally, with the reality of managed care, professionals are limited in the amount of time a treatment may be administered. Employing the positive effects of personal relationships as a preventive and/or treatment plan for military PTSD increases self-sufficiency of clients, while reducing the amount of time they must spend in a behavioral health clini

Conclusion

The realties of war are grotesque, gory, hostile, traumatic, stressful, and extremely tolling on the human psyche. This first must be realized when working with clients who have been immersed in these realities of war. An overall disposition of humility, concern, and positive regard is necessary on part by the professional. Social workers have been advocating on behalf of military populations for the fair treatment and access to care for many years, and emerging practices must be developed to meet the emerging generations of military members/veterans. Types and timing are most important when discussing empirical outcomes of social support research with military populations. Presence of support does not guarantee utilization with the result of health benefits. In order to better discern research findings with PTSD and social support, the social work professional will need to know the timing of supports (pre-deployment or postdeployment), types of stress (Crisis, transition, or deficit), and types of supports (emotional, informational, and tangible) measured.

References

- Abrams, D., & Hogg, M. A. (2004). Metatheory: Lessons from social identity research.
 Personality & Social Psychology Review (Lawrence Erlbaum Associates), 8(2),
 98-106. Baldwin, M.J. (1910). The basis of social solidarity. American Journal of Sociology, 15(6), 817-831. The University of Chicago Press. Retrieved from:http://www.jstor.org/stable/2762490
- Baldwin, M.J. (1910). The basis of social solidarity. American Journal of Sociology, 15
 (6), 817-831. The University of Chicago Press. retrieved from: http://www.jstor.org/stable/2762490
- Bobbitt, F. (1920). The objectives of secondary education. *The School review, 28(10),* 738-749. The University of Chicago Press. Retrieved from: http://www.jstor.org/stable/1078496
- Brancu, M., Thompson, N. L., Beckham, J. C., Green, K. T., Calhoun, P. S., Elbogen, E.
 B., & ... Wagner, H. (2014). The impact of social support on psychological distress for U.S. Afghanistan/Iraq era veterans with PTSD and other psychiatric diagnoses. *Psychiatry Research*, *217*(1/2), 86-92.
- Brief, D. J., Rubin, A., Keane, T. T., Enggasser, J. L., Roy, M., Helmuth, E., & ...
 Rosenbloom, D. (2013). Web intervention for OEF/OIF Veterans with problem
 drinking and PTSD symptoms: A randomized clinical trial. *Journal of Consulting*& *Clinical* Psychology, 81(5), 890-900.
- Cahoon, E. P. (1984). An examination of relationships between post-traumatic stress disorder, marital distress, and response to therapy by Vietnam veterans (couples group, RAP group therapy) (Order No. 8416066). Available from ProQuest Dissertations & Theses Global. (303287611). Retrieved from:

https://login.ezproxy.uta.edu/login?url=http://search.proquest.com/docview/ 303287611?accountid=7117

- Cavan, R. S. (1928). Suicide. *The British Medical Journal, 2(3527), 259-260.* BMJ. Retrieved from: http://www.jstor.org/stable/25329680
- Chapman, P., Elnitsky, C., Thurman, R., Spehar, A., & Siddharthan, K. (2013). Exploring combat-related loss and behavioral health among OEF/OIF veterans with chronic PTSD and mTBI. *Traumatology*, *19*(2), 154-157.
- Clarke, M.E. (1928). A phenomenological system of ethics (I). *Philosophy 7 (28)*.
 414-430. Cambridge University Press. Retrieved from: http://www.jstor.org/stable/3746575
- Coe, G. A. (1908). What does modern psychology permit us to believe in respect to regeneration? *The American Journal of Theology*. *12(3)*, 353-368. The University of Chicago Press. Retrieved from: http://www.jstor.org/stable/3154590
- Cobb, S. (1995). Social support as a moderator of life stress. In A. Eward, J. E. Dimsdale,
 B. T. Engel, D. R. Lipsitt, D. Oken, J. D. Sapira, ... H. Weiner (Eds.), Toward an integrated medicine: Classics from 'Psychosomatic Medicine,' 1959–1979 (pp. 377-397). Arlington, VA.: American Psychiatric Association.
- Coser, L (1956). The functions of social conflict. New York: Free Press.
- DeBeer, B. B., Kimbrel, N. A., Meyer, E. C., Gulliver, S. B., & Morissette, S. B. (2014).
 Combined PTSD and depressive symptoms interact with post-deployment social support to predict suicidal ideation in Operation Enduring Freedom and Operation Iraqi Freedom veterans. Psychiatry Research, 216(3), 357-362
- Duax, J. M., Bohnert, K. M., M. Rauch, S. A., & Defever, A. M. (2014). Posttraumatic stress disorder symptoms, levels of social support, and emotional hiding in

returning veterans. Journal of Rehabilitation Research & Development, 51(4), 571-578.

- Dinenberg, R., McCaslin, S. E., Bates, M. N., & Cohen, B. E. (2014). Social support may protect against development of Posttraumatic Stress Disorder: Findings from the heart and soul study. *American Journal of Health Promotion*, 28(5), 294-297.
- Escobar, J. I., Randolph, E. T., Puente, G., Spiwak, F., Asamen, J. K., Hill, M., & Hough,
 R. L. (1983). Post-traumatic stress disorder in Hispanic Vietnam veterans: clinical phenomenology and sociocultural characteristics. *The Journal of nervous and mental disease*, *171*(10), 585-596
- Forte, J. A., (2014). An Introduction to using theory in social work practice. New York: Routledge.
- Franklin, M., Hintze, M., Hornbostel, M., Smith, S., Manglitz, C., Noftsinger, R.... Fales, A. (2014). 2014 Wounded warrior project survey report of findings. Wounded Warrior Project. Retrieved from: http://www.woundedwarriorproject.org/media/ 691673/2014-wwp-alumni-survey-report.pdf
- Gilkey, C. W. (1914). The function of the church in modern society. The American Journal of Theology, 18(1), 1-23. The University of Chicago. Retrieved from: http://www.jstor.org/stable/3155034
- Goodman, C.C. (1985) Reciprocity among older adult peers. *Social Service Review 59(2)* 268-282.
- Hanley, K. E., Leifker, F. R., Blandon, A. Y., & Marshall, A. D. (2013). Gender differences in the impact of posttraumatic stress disorder symptoms on community couples' intimacy behaviors. *Journal of Family Psychology*, 27(3), 525-530.
- Holmes, T.H., Rahe, R.H., (1967). The social readjustment rating scale. *Journal of Psychosomatic Research 11*, 213-218.

- Hoyt, T., & Renshaw, K. D. (2014). Emotional disclosure and Posttraumatic Stress symptoms: Veteran and spouse reports. *International Journal Of Stress Management*, 21(2), 186-206.
- Igen, M. A., McCarthy, J. F., Ignacio, R. V., Bohnert, A. B., Valenstein, M., Blow, F. C., & Katz, I. R. (2012). Psychopathology, Iraq and Afghanistan service, and suicide among Veterans Health Administration patients. *Journal of Consulting And Clinical Psychology*, 80(3), 323-330.
- Jacobson D. E., (1986). Types and timing of social support. *Journal of Health and Social Behavior, 27(3), 250-263.*
- Jakupcak, M., Vannoy, S., Imel, Z., Cook, J., Fontana, A., Rosenheck, R., & McFall, M. (2010). Does PTSD moderate the relationship between social support and suicide risk in Iraq and Afghanistan War Veterans seeking mental health treatment? *Depression And Anxiety*, 27(11), 1001-1005.
- Jaycox, L., Tanielian, T.L., Rand Corporation, Rand Health, California Community
 Foundation. (2008). Invisible wounds of war: psychological and cognitive injuries,
 their consequences, and services to assist recovery.
- Kaplan, B.H., Cassel, J.C., & Gore, S., (1982) Social support and health. *Medical Care 15(5)* 47-58.
- Keane, T. M., Scott, W., Chavoya, G. A., Lamparski, D. M., & Fairbank, J. A. (1985).
 Social support in Vietnam veterans with posttraumatic stress disorder: A comparative analysis. Journal of Consulting and Clinical Psychology, 53(1), 95-102.
- Kemp, J., Bossarte, R. (2012). Suicide Data Report, 2012. Department of Veterans Affairs mental health services suicide prevention program. Retrieved from: http:// www.va.gov/opa/docs/suicide-data-report-2012-final.pdf

- King, D. W., Taft, C., King, L. A., Hammond, C., & Stone, E. R. (2006). Directionality of the association between social support and posttraumatic stress disorder: a longitudinal investigation. Journal of Applied Social Psychology, 36(12), 2980-2992.
- Laffaye, C., Cavella, S., Drescher, K., & Rosen, C. (2008). Relationships among PTSD symptoms, social support, and support source in veterans with chronic PTSD. *Journal Of* Traumatic Stress, 21(4), 394-401.
- Lyons, L. S. & Barnes, N. W. (1925). Factors conditioning marketing management. *The University Journal of Business*, *3(4)*, 321-349. The University of Chicago Press. Retrieved from: http://www.jstor.org/stable/2354678.
- Miller, D. S. (1894). The relations of "ought" and "is." International Journal of Ethics, 4 (4), 499-512. The University of Chicago Press. Retrieved from: http://www.jstor.org/stable/2375668
- Morrison, J. (2014). DSM-5 Made Easy: The Clinicians Guide to Diagnosis. New York: Guilford Press. 217-220. National Center for Post Traumatic Stress Disorder (PTSD). (2015). DSM-5 criteria for PTSD. Retrieved from: http:// www.ptsd.va.gov/professional/PTSD-overview/dsm5_criteria_ptsd.asp
- Newell, A. (1924). Northwest and Hudson's Bay companies. *The Washington Historical Quarterly, 15(3), 199-204*. University of Washington. Retrieved from: http://www.jstor.org/stable/40474818
- Parmelee, M. (1914). The economic basis of feminism. Annals of the American Academy of Political and Social Science, 56, 18-26. Sage Publications, Inc. Retrieved from: http://www.jstor.org/stable/1011974
- Pietrzak, R. H., Johnson, D. C., Goldstein, M. B., Malley, J. C., & Southwick, S. M. (2009). Psychological resilience and postdeployment social support protect

against traumatic stress and depressive symptoms in soldiers returning from operations enduring freedom and Iraqi freedom. *Depression And Anxiety*, *26*(8), 745-751. doi:10.1002/da.20558

- Pietrzak, R. H., Russo, A. R., Ling, Q., & Southwick, S. M. (2011). Suicidal ideation in treatment-seeking Veterans of Operations Enduring Freedom and Iraqi Freedom: The role of coping strategies, resilience, and social support. *Journal of Psychiatric Research*, *45*(6), 720-726.
- Price, M., Gros, D. F., Strachan, M., Ruggiero, K. J., & Acierno, R. (2013). The role of social support in exposure therapy for Operation Iraqi Freedom/Operation
 Enduring Freedom veterans: A preliminary investigation. *Psychological Trauma: Theory, Research, Practice, And Policy, 5*(1), 93-100.
- Ritzer, G. (1991). The recent history and the emerging reality of American sociological theory: A metatheoretical interpretation. Sociological Forum, 6(2), 269.
- Ritzer, G., Stepnisky, J. (Eds.). (2013). *Sociological theory* (9th ed.), Boston: McGraw Hill.
- Ritzer, G. (1989). Collins does metatheory (again) and he's (pretty) good at it. *Symbolic Interaction*, 12(1), 81-84.
- Royce, J. (1904). The eternal and the practical. *The Philosophical Review*, 13(2), 113-142. Duke University Press on behalf of Philosophical Review. Retrieved from: http://www.jstor.org/stable/2176445
- Sarason, I.G., Levine, H.M., Basham, R.B., et al. (1983). Assessing social support: The Social Support Questionnaire. *Journal of Personality and Social Psychology*, 44, 127-139.
- Sherbourne C, D., & Stewart, A, L. (1991). The MOS social support survey. *Social Science And Medicine*, *32*(6), 705-714.

- Smith J. R. (1985). Rap groups and group therapy for Vietnam veterans. In S. M. Sonnenberg, A. S. Blank, and J. A. Talbott (eds.). The trauma of war: Stress and recovery in Vietnam veterans, (pp. 167-191) Washington, DC: American Psychiatric Press.
- Specht, H. (1986). Social support, social networks, social exchange, and social work practice. *Social Service Review*, *60(2)*, 218-240
- The British Medical Journal 2(3257) 259-260. (1928) Suicide by Ruth Shonle Cavan. Retrieved from http://www.jstor.org/stable/25329680
- Thoits, P. A. (1982). Life stress, social support, and psychological vulnerability: epidemiological considerations. *Journal of Community Psychology*, *10*(4), 341-362.
- Thoits, P. A. (1984). Explaining Distributions of Psychological Vulnerability: Lack of Social Support in the Face of Life Stress. *Social Forces*, *63*(2), 453-481.
- Thoits, P. A. (1995). Stress, Coping, and Social Support Processes: Where Are We? What Next? *Journal of Health & Social Behavior*, *36*, 53-79.
- Thoits, P. A. (2010). Stress and health: Major findings and policy implications. *Journal of Health & Social Behavior*, *51*(1), S41-S53. doi:10.1177/0022146510383499
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal Of Health & Social Behavior, 52*(2), 145-161
- Tsai, J., Harpaz-Rotem, I., Pietrzak, R. H., & Southwick, S. M. (2012). The role of coping, resilience, and social support in mediating the relation between PTSD and social functioning in veterans returning from Iraq and Afghanistan. *Psychiatry: Interpersonal And Biological Processes*, 75(2), 135-149.
 doi:10.1521/psyc.2012.75.2.135

United States Department of Veterans Affairs. (2014). *Analysis of VA health care utilization* among Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and *Operation New Dawn (OND) Veterans*. Retrieved from http://www.publichealth.va.gov/docs/epidemiology/healthcare-utilization-reportfy2014-gtr2.pdf

- Wallace, W.L., (1988). Toward a disciplinary matrix for sociology. In N.J. Smelser (ed.), Handbook of sociology, 23-76. Newbury Park, CA: Sage
- Weis, R.S. 1976 "Transition states and other stressful situations: their nature and programs for their management." P 213-232 in Support Systems and Mutual Help: Multidisciplinary *Explorations*, edited by G. Caplan & M Killea, New: York: Grune and Stratton. In Jacobson D. E., (1986). Types and timing of social support. *Journal of Health and Social* Behavior, 27(3), 250-263.
- Wheaton, B (1994). Sampling the stress universe. Stress and mental health:
 Contemporary issues and prospects for the future. In W. Avison & I. Gotlib (eds), (77-114) New York: Plenum.
- Wilcox, S. (2010). Social relationships and PTSD symptomatology in combat veterans. *Psychological Trauma: Theory, Research, Practice, And Policy*, *2*(3), 175-182.
- Witkin, S. L. (1997). Another Visit to Empirical Practice Land. *Social Work Research*, *21*(3), 205-207.
- Wright, B. K., Kelsall, H. L., Sim, M. R., Clarke, D. M., & Creamer, M. C. (2013). Support mechanisms and vulnerabilities in relation to PTSD in veterans of the Gulf War, Iraq War, and Afghanistan deployments: A systematic review. *Journal of* Traumatic Stress, 26(3), 310-318.

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