DEVELOPMENT AND VALIDATION OF THE SWEET ARMY CULTURE SCALE (SACS)

BY

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For all the children of the United States Army, past, present, and future

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Table of Contents

Abstract

Military children are often unspoken or underrepresented casualties of modern day wars. The purpose of this study was to develop a method of empirically measuring civilian mental health professionals' perceived knowledge of the culture of the United States Army. The rational-empirical approach was used during instrument development. The study was divided into three phases: item generation, Army expert panel review, and a pilot study with mental health professionals. Ten experts provided quantitative and qualitative data to inform scale item revisions prior to the pilot study. A revised version of the scale was administered to 97 professionals. Three separate versions of the scale were tested throughout the course of the study.

Principal component analysis with varimax rotation extracted three factors (Army Knowledge, Army Family Processes, and Adaptability of Army Families) explaining 70.96% of the total scale variance. The Cronbach's alpha was 0.98 and the factor loadings ranged from .42 to .84. These findings show the presence of a strong factor structure. Face and content validity was established via the expert panel. The final result was a 30-item, self-report scale that measures the perceived knowledge of Army culture of mental health professionals in a variety of settings. The SACS-Charlie version reflects an initial attempt to measure the most potent knowledge that mental health professionals need to know in order to provide effective and appropriate services for Army children and families. Subsequent studies can further address this goal.

Keywords: scale development, factor analysis, reliability analysis, military psychology

Development and Validation of the Sweet Army Culture Scale (SACS)

Military children are often unspoken or underrepresented casualties of modern day wars. With the United States' on-going and recent involvement in Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn (OEF/OIF/OND) in Afghanistan and Iraq, respectively, the frequency of parental deployment to war zones has increased to an unprecedented level in recent years (Engel, Gallagher, & Lyle, 2006; Lester & Flake, 2013). Additionally, the composition of the military is comprised of more women, married Soldiers, and Soldiers with children than ever before (Rotter, 1999).[1] Statistically, of the 229,015 OEF/OIF veterans who sought services since 2002, 37% experienced mental health symptomology, amid risks that grow substantially higher with increasing numbers of deployments (Munsey, 2007). Specifically, the rate of Post-Traumatic Stress Disorder (PTSD) and suicide is rising (Munsey, 2011). These factors lead to calls for more psychologists to help the military, veterans, and veterans' families (Munsey, 2011). Cornum, Matthews, and Seligman (2011) indicated that improved screening and expansion of mental health services are essential for the military. A paradigm shift from a treatment-focused system to a prevention program would be beneficial for an institution the size of the Army.

Amen, Jellen, Merves, and Lee (1988) stated that the most prominent concern for military families is the effects of parental deployment on children. Gottman, Gottman, and Atkins (2011) indicated three factors that leave families at risk: isolation, youth or inexperience, and the cumulative stress effect. The effects of continued separation from

[1] Capitalization of the word "Soldier" for all official Army publications was ordered by then Army Chief of Staff, Gen. Peter J. Schoomaker in December 2003. Army regulation AR-25-50 has been revised to match this directive. Coon, C. (2003). Soldier- and that's with a capital 'S'. *Stars and Stripes.* Online. Internet. Retrieved from http://www.military.com.

parents, because of multiple deployments, create unique stress for children of these Soldiers (Mitchum, 1999; Lester & Flake, 2013). Researchers have found that difficulties during deployment and reintegration with families following deployment were positively associated with number of months of deployment (Chandra et al., 2010; Chandra et al., 2011; Everson & Camp, 2011; Lester et al., 2011; Lester & Flake, 2013; Willerton & MacDermid, 2011). Many factors, including parental military career, pre-existing mental health conditions of the child, and parental mental health, may contribute to how a child will cope with repeated deployments. Common deployment challenges for children include adjusting to life without a parent, assisting the non-deployed parent, reintegration, the role of the returning parent and routines, and worrying about the next deployment (Chandra, et al., 2011). Some of these children experience deployments consistent with trauma and bereavement patterns (Webb, 2002).

Park (2011) indicated that most research pertaining to military children and families has been completed by active duty Soldiers, veterans, or their immediate family members. This statement has important implications for the mental health services provided for military families, for most of the individuals who conduct research on this population are already connected to the military in some way and, thus, may initially have a better understanding of the cultural nuances of the military. Hall (2011) suggested that the military is a unique culture that equalizes people from many backgrounds, including socioeconomic status, gender, and ethnic groups. This alignment is primarily accomplished through accentuating the importance of the group as opposed to the individual. Moreover, various misperceptions regarding the military often affect the perceptions of civilian counterparts providing support services to military children and

families (Cozza, Chun, & Polo, 2005; Cozza & Lerner, 2013; Hardaway, 2004). Despite their personal positions on the War on Terror or other military issues, mental health professionals have a moral obligation to support Soldiers and their families (Davis, Ward, & Storm, 2011). This point is particularly important when pondering the fact that civilian mental health professionals will provide the bulk of the services to Army children and families. While the conflicts in Iraq and Afghanistan will end in the coming months, the emotional scars of years of war will remain with children and families for some time to come. It is essential that mental health professionals understand these children and families in the context of their Army lifestyle.

The present study created and validated a measure of the military culture of the Army, called the Sweet Army Culture Scale (SACS). This measure could be useful for empirically-based training of mental health professionals, which in turn will create more culturally sensitive services for Army children and families.

Mental Health of Army Soldiers

The modern Army Soldier has faced war conflicts and operational conditions unprecedented in the entire history of the United States Army (Booth et al., 2007). As the world becomes more technologically advanced and interconnected, new challenges are created for those who have chosen to defend the national security. The American Soldier is also changing. There are more military dependents in present times than there has ever been in Army history (Booth et al., 2007). While the Soldier trains, prepares, and deploys in defense of the national security, there are spouses and children left behind to handle their own personal challenges in today's current military climate. As with wars and conflicts of the American past, current Soldiers will also struggle with mental and behavioral health challenges in the midst of the stress-inducing deployment schedules that have been required for Iraq and Afghanistan (Booth et al., 2007). The mental health of Army Soldiers has never been a more important topic to address than it is today. While most Soldiers are remarkable with their resilience, some will develop significant mental health challenges, and many will experience short term adjustment difficulties, such as agitation, insomnia, and concentration issues (Hoge et al., 2004; Shea, Vujanovic, Mansfield, Sevin, & Liu, 2010). These challenges merit recognition and assistance as well. It is, therefore, essential for mental health professionals charged with the care of Soldiers and their families to understand the changes of the composition of the modern Army, the nature of the current conflicts, the mental health status of today's Soldiers, Post-Traumatic Stress Disorder (PTSD), the movement from reactive response to Soldier mental health to proactive response, and the effect the mental health of Soldiers will in

turn have on the spouses and children left behind. These topics are more thoroughly explored in the forthcoming sections.

Composition of the Modern Army

The modern American military has drastically changed and evolved since the Vietnam era, particularly regarding the composition of service members. Rotter (1999) stated that since the Vietnam era, the military includes more women, married service members, dual career military couples, and members with children, and more military spouses working outside of the home. Additionally, Applewhite and Mays (1996) stated that the Department of Defense's (DoD) change to an all-volunteer force in 1973 contributed to an augmentation of married Soldiers with children. Previously, single Soldiers were the norm. These composition changes result in additional family members who must be cared for while Soldiers are training, assigned to temporary stateside duty, or deployed overseas. The Army has recognized that in order for Soldiers to be prepared fully to perform their defense duties, their families and personal business must be cared for as well. Families must be strong in order for the Army to function at full operational capability (Booth et al., 2007). In other words, the well-being of the family and the Solider is essential for mission readiness. Changes in the composition of the Army also mean significant shifts in the mental health needs of Soldiers. It is important to note that it is not just the Soldiers who have changed, but also the composition of Army families, the type of conflicts fought, and the stress that families endure (Booth et al., 2007; Clever & Segal, 2013; Lester & Flake, 2013).

Nature of Current Conflicts

In order to have an accurate understanding of Soldiers' mental health, knowledge of the wars they are fighting is essential. Information will be presented pertaining to how missions have changed, how the Iraq war has differed from other historical American conflicts, challenges faced during the Afghanistan war, and the contemporary operating environment in which Soldiers must work daily.

Changes in missions. The types of missions and duties that are required of Soldiers are changing and unprecedented. Engel et al. (2006) stated that the unit to which a Soldier is assigned, and the missions completed, dictate how often overseas deployment occurs and how long it will last. Missions are determined by world events and national defense policy, and with recent conflicts in Afghanistan and Iraq, the number and length of military deployments have increased at an unprecedented level in comparison to earlier conflicts (Booth et al., 2007; Lester & Flake, 2013; Varcoe, Lees, & Emper, 2003). For example, during the Vietnam War most Soldiers were only away for year-long deployments. The OIF and OEF conflicts have had Soldiers deploying multiple times, sometimes for up to 15 months in length. This duration creates unique stress on the families left behind and the Soldiers assigned to complex duties and missions. Furthermore, missions are more diverse in nature (Morath, Leonard, & Zaccaro, 2011). For example, Soldiers are frequently facing ambiguous situations, and, as Morath et al. (2011) noted, "This is especially true when the military operation is against an insurgent or irregular force that does not wear uniforms, ignores international laws of warfare, and seeks to blend with the local noncombatant population" (p. 457). The complexity of combat missions and repeated deployments in Iraq and Afghanistan is unprecedented. At

this point, the long-term effects of these factors on Soldiers' mental health have not been quantified.

Iraq war. The nature of the war in Iraq is unlike any the military has witnessed in the past. In 2006, a team called the Iraq Study Group released a report that discussed the war in Iraq, suggesting that during the initial years of the invasion "violence [was] increasing in scope, complexity, and lethality. There are multiple sources of violence in Iraq: the Sunni Arab insurgency, al Qaeda and affiliated jihadist groups, Shiite militias" (Baker et al., 2006, p. 3). Initially, sectarian violence hindered the stability that the Iraqis and the American military were struggling to maintain. Most attacks on American military have come from the Sunni Arab insurgency or the former members of the Saddam regime. Foreign fighters often play supporting roles or carry out suicide operations with the insurgency. The largest number of Iraqi civilian deaths also stems from this sectarian violence. In addition to the Sunni insurgency, Shia militias, such as the Madhi Army and the Badr Brigade, are another faction the military has to handle. The Madhi Army, led by Moqtada al-Sadr, and the Badr Brigade have become integrated into the Iraqi police force. During the initial years of the invasion, four provinces of Iraq (Baghdad, Anbar, Diyala, and Salahad Din), comprising roughly 40% of Iraq's population, were the most violent areas of the country, with parts of the Kurdish north and Shia south the most stable. In addition to a complex system of violence, political complexities within Iraq also exist as the Shia, the majority of Iraq's population, has gained some semblance of political power for the first time in over 1,300 years (Baker et al., 2006).

In addition to training Iraqi security, the U.S. military, along with troops from 27 coalition forces and the Iraqis, was left to take on this complex system of violence in Iraq. The U.S. Army initially took on the Baghdad area and the north, the U.S. Marines were in Anbar, and coalition forces secured Basra and the south (Baker et al., 2006). With American troops embracing multiple deployments, many were involved in the initial combat operations as described by the Iraq Study Group. Baker et al. (2006) further stated that almost all U.S. Army and Marine combat units and many National Guard and Reserve units have deployed to Iraq. The heavy use of National Guard and Reserve units, in addition to complex combat missions, has also been unprecedented.

Mission in Afghanistan. It is essential to understand the differences in the missions in Iraq versus Afghanistan. The war in Afghanistan is the longest conflict in American history and has even exceeded the Soviet Union's occupation of the country (Afghanistan Study Group, 2010). It is the second most expensive war in United States history, behind only World War II. OEF has been more expensive than the Korean and Vietnam wars combined. The length of American military operations in Afghanistan has unique influences on the mental health of Soldiers and, ultimately, their families. Additionally, the cost of the war in Afghanistan has disillusioned the American public about the war. Public disenchantment with the Afghanistan war affects the level of support provided to Soldiers and their families from surrounding communities. The importance of community involvement to the psychosocial and mental health functioning of families will be further explained in forthcoming sections.

In general, the Afghanistan war is perceived as a conflict between the Karzai government and the Taliban. This perspective is a grave oversimplification of the

situation in Afghanistan. The ethnic, sectarian, regional, and religious differences noted in the country are intricately complex. In some ways, these challenges have significantly interfered with the American and coalition mission. The ethnic group of the Pashtuns dominates Afghani land in the south. There are also rural and urban differences, especially in the Pashtun communities. The tribal conflicts in Afghanistan are more complex than those found in Iraq (Afghanistan Study Group, 2010). There is also a significant regional influence from neighboring India, Pakistan, Iran, and Saudi Arabia (Afghanistan Study Group, 2010).

Based on the Study Group's research, the role of the United States in Pakistan and Afghanistan is to prevent the country from becoming a home base for terrorists and blocking hostile access to Pakistan's nuclear weapons. The Study Group recommended that the continued role of the United States should focus on power sharing and political inclusion in the country among major parties, downsizing the force in southern Afghanistan to avoid radicalizing the Pashtuns, encouraging economic development for preventing human trafficking, terrorism, and drug trafficking, and encouraging regional powers to contribute to the long-term stability of Afghanistan. For instance, the role of non-Arab Muslim states such as Indonesia and Turkey can assist in education and human rights actions (Afghanistan Study Group, 2010).

According to the Study Group, continued focus on the Taliban is counterproductive and unnecessary. The likelihood of the Taliban gaining widespread power throughout Afghanistan is negligible. The argument is further supported by indicating that Al Qaeda is distributed geographically throughout the globe and further action against the Taliban will do little for the overall effort. Instead, the Study Group

recommended more counter-terrorism efforts, increased diplomacy, and less military presence. From the stance of foreign policy, reduced military presence will result in a shift pertaining to the missions of the Soldiers in the Afghanistan theater during forthcoming months and years. The relevance to the mental health community is the necessity of vesting in services for the military, veterans, and their families for the long-term.

Contemporary operating environment. Morath and collaborators (2011) stated that the decade long war has been strenuous for the military, particularly the Army and Marines. Presently, an emerging issue pertains to the transition of forces, especially the Army, from deployment to garrison-based operations. Military leaders are studying the way this process unfolded following World War II and Vietnam conflicts, however, current conflicts have had an unprecedented level of intensity and sustained wartime. Thus, comparisons to previous conflicts may be moot, at best. Further, Morath et al. (2011) indicated that "the contemporary operating environment is characterized by unprecedented lethality, complexity, tempo, and variety" (p. 455). The effects of these conditions transcend Soldiers, military leaders, and families and are widespread and not yet understood. The general public's level of awareness and support is also lacking. It is plausible that there will be a significant increase in the incidence of mental health challenges among Soldiers and their families for many years to come.

Mental Health During Deployment

In addition to understanding the current conflicts, mental health findings from the operating theater are significant. Since 2007, the Office of the Army Surgeon General has sent military mental health expert teams to Iraq and Afghanistan to investigate the

current mental health status of Soldiers. Their specific findings in each front, recommendations for Army-wide change to its approach for mental health intervention, risk factors for development of mental health problems while deployed, and protective factors against significant mental health problems are discussed next.

OIF/OEF military operations. Military operations have occurred in Afghanistan (OEF) since October 2001 and are slated to continue until the end of 2014. Operations in Iraq (OIF, OND) occurred from March 2003 to December 2011. In February 2008, a Mental Health Advisory Team (MHAT), established by the Office of the U.S. Army Surgeon General, released its fifth report on the mental health status of deployed Soldiers since the 2003 invasion of Iraq. The MHAT is a group of military mental health experts who know appropriate treatment and interventions relevant to the Army and combat setting. At the request of Army Central Command, the mental health team looked not only at Soldiers in Iraq (as they had done in previous years), but also at Soldiers in Afghanistan and Kuwait. Both mental health teams (one sent to OIF and one to OEF) were staffed with personnel from Walter Reed Army Institute of Research and the U.S. Army Medical Research Unit—Europe. Both teams reported key findings and recommendations specific to both OIF and OEF; however, the theater-specific recommendations of mental health on the ground were not included in the report because of operational security (OPSEC). Background, overall findings, and non-theater specific recommendations were discussed (MHAT, 2008).

Mental health findings in theater. In October and November 2007, MHAT personnel deployed to Iraq and Afghanistan to assess the mental health status of Soldiers in theater. Their findings were based on 2,295 Soldier well-being surveys from OIF, 699

Soldier well-being surveys from OEF, group interviews with Soldiers, and survey/interview of in-theater behavioral health, primary care, and unit ministry personnel (MHAT, 2008).

Iraq mental health findings. The MHAT's findings from OIF suggested that the percentage of Soldiers screening positive for mental health conditions was similar to previous MHAT studies of prior OIF deployments, and that unit morale had significantly risen since 2006. The increase in unit morale appears to be primarily caused by the gradual decrease of the stigma of pursuing mental health treatment in theater and the increased support of unit command in Soldiers' mental health. With increased support of fellow Soldiers, the mental health concerns would not seem as detrimental to Soldiers' duties. Despite the aforementioned finding, when compared to 2006, Soldiers reported difficulty accessing mental health services in theater, because of mental health personnel shortages and burnout rate (MHAT, 2008). The prevalence of acute stress, depression, and anxiety combined was 17.9% of the total surveyed. The amount of combat that Soldiers were exposed to varied according to their military occupational specialty, but overall, combat exposure declined from previous years (MHAT, 2008). Other findings included reports of Soldiers experiencing difficulty completing duties because of mental health concerns and marital separation. The experience of personal challenges is problematic, considering the importance of completing the missions while deployed. Reports of such concerns increased with each month into the deployment, but declined in the last third of the deployment time, likely because of redeployment optimism, which is anticipated returning to the States. Soldiers on their third or fourth deployment were at a significantly higher risk for mental health concerns than those on their first or second

deployment. Soldiers' suicide rates continued to be elevated above historical Army rates, mostly because of failed relationships with spouses and significant others. Failed relationships are caused more by the quality of the relationship prior to deployment than the deployment itself (Karney & Crown, 2011). Longer and more frequent deployments strain already challenged marriages.

Afghanistan mental health findings. The mental health team in OEF indicated that the rate of Soldiers screened positive for mental health concerns similar to the rates seen in OIF. Mental health concerns were defined as the combined prevalence of acute stress, depression, and anxiety. OEF also reported suicide rates, mainly caused by failed relationships with spouses/significant others, higher than typical Army rates. For OEF, there was even more difficulty with accessing mental health services, because of personnel shortages and the nature of the combat missions in Afghanistan. Furthermore, the mental health personnel available experienced difficulty accessing Soldiers in need because of dispersion of their location. Afghanistan Brigade Combat Team Soldiers reported levels of combat exposure similar to or higher than combat exposure experienced by Soldiers in Iraq. In other words, overall in 2007, combat exposure increased in Afghanistan and decreased in Iraq. The effects of increased combat for OEF were likely not yet apparent at the time of this report, and will be described further in forthcoming sections.

Army-wide mental health intervention changes. Based on the above findings in Iraq and Afghanistan, the MHAT team suggested several recommendations, including the addition of mental health personnel in the military or contracted civilian psychiatrists, psychologists, and social workers to provide necessary services for personnel in theater.

To alleviate the effects of deployment on Soldiers, MHAT proposed that Soldiers who have deployed multiple times should be considered top priority for Temporary Duty Assignments, which are typically shorter in duration and often are in a safer, stateside location. All Soldiers should also have more acceptable "dwell time," or time between deployments, a situation that is currently an Army-wide issue. Dwell time is stateside duty, which generally means more time at home with the family and away from direct combat exposure. Regarding the suicide rates seen in the Army, MHAT recommended that marital and family counseling be considered as a medical benefit for Soldiers and suicide prevention training adapted to converge on deployment phases and resiliency-building for Soldiers enduring relationship concerns.

Mental health differences between types of Soldier units. In May 2009, a subsequent Mental Health Advisory Team (MHAT), also established by the Office of the U.S. Army Surgeon General, released their most recent report on the mental health status of deployed Soldiers since the 2003 invasion of Iraq. Data were collected from combat platoons and support/sustainment samples, such as medical, finance, supply, mechanics, deployed to Operation Iraqi Freedom. Unfortunately, Operation Enduring Freedom in Afghanistan was not reviewed. The central findings indicated that 11.9% of the Soldiers were experiencing significant mental health problems, such as acute stress, depression, and anxiety, which required treatment. In the combat platoons, the rates of mental health problems were significantly lower each year the report was conducted, with the exception of 2004. Despite lower levels of mental health problems, Soldiers were still in combat and theater conditions vastly divergent from being stateside. For support and sustainment samples, the percentage of mental health problems remained steady year after year,

approximately 12.3% of the sample. Despite the overall level of acute mental health problems gradually decreasing year after year, the rate of divorce and legal separation intent actually increased across MHAT reports for the combat sample, with 16.5% considering divorce or legal separation from their spouses. This finding suggests that while mental health problems decreased, interpersonal challenges with spouses increased. Marital challenges are to be expected, for deployment is a less than ideal condition for already strained relationships. The rate of mental health problems in the support and sustainment platoons remained similar at 17.2%. Martial satisfaction had significantly declined over the past several years. Martial dissatisfaction was reported to be more extreme for lower ranked enlisted personnel (E1-E4) rather than non-commissioned officers (NCO's, E5-E9), who are higher ranked than enlisted personnel. Contrary to what is believed commonly, marital satisfaction is not directly influenced by multiple deployments or length of dwell time (MHAT, 2009); instead, relationships that are stressful prior to deployment are further complicated by the added strain of physical separation.

Risk factors. The most recent MHAT team to Iraq (2009) indicated various risk factors for mental health problems among Soldiers. Overall, combat exposure rates were significantly lower than every year except 2004. There was an inverse relationship between dwell time and mental health problems. Lower amounts of dwell time were significantly related to higher levels of mental health problems and intent to leave the military. Since Desert Storm, the ideal Army deployment rotation allows for dwell time between 30 and 36 months. The Army has not been operating at this level throughout the duration of the Iraq and Afghanistan conflicts. On average, many units have experienced

only 12 to 18 months of dwell time. The dwell time does not simply consist of time at home with family. Currently, during their dwell time, most Soldiers are engaged in pre-deployment training exercises, out-of-state temporary duty assignments, and long duty hours. For an entire generation of Soldiers, frequent duty has been the norm for over a decade. Rest time is almost non-existent, for preparation for the next deployment begins almost as soon as the previous one ends.

The level of morale was also inversely related to intent to leave the military. Other results suggested that the number of deployments was not related to suicidal ideation in Soldiers and that the multiple deployment effect was particularly strong in the support and sustainment units as opposed to the combat units. This is consistent with the aforementioned finding that the rates of mental health problems remained steady in the sustainment and support platoons as opposed to the combat platoons (MHAT, 2009). The difference in mental health challenges across various platoons may be attributed to the gradual decline of combat operations in Iraq over the past few years in preparation for troop withdrawal in December 2011.

MHAT (2009) also identified an important protective factor that promoted resiliency in many Soldiers pertaining to their mental health status- positive officer leadership. The most defining aspect of this leadership was that support was being carried out by senior NCO's rather than commissioned officers. Furthermore, the leadership was conducted via smaller caseloads, meaning that fewer Soldiers were assigned to unit leaders, thereby allowing for more comprehensive monitoring and follow-up. Positive leadership is a component endorsed in the Army's Comprehensive Soldier Fitness prevention program, which is a prevention program that was developed

and implemented Army-wide, partially in response to the MHAT recommendations (Cornum, Matthews, & Seligman, 2011). The importance of positive leadership is further explored in the J-MHAT-7 recommendations and findings from 2010.

J-MHAT-7 to OEF. From July to September 2010, the Office of the Surgeon General and the United States Army Medical Command sent another group of behavioral health experts to conduct additional comprehensive research on the mental and behavioral health of military personnel in the OEF theater. The report was released in 2011. For J-MHAT-7, samples from both the Army and Marines were taken. Only the results of the Army samples will be reported in more detail (J-MHAT-7, 2011).

Research methods included the use of surveys, focus groups, and interviews with behavioral health providers. Comparisons in data pertaining to the Army were made from the J-MHAT-7 to the MHAT-VI from 2009, because the same types of units were sampled across studies. These comparisons provided important data about the longitudinal status of troop mental health conditions (J-MHAT-7, 2011).

The researchers collected 911 surveys from 40 Army maneuver platoons. They used a cluster sampling method in order to reduce bias and for the ease of conducting sampling in a war zone. This sampling method was replicated from previous MHAT years. The cluster sampling method further reduces error caused by sampling, and allows for increased confidence that differences across years is caused by the independent variables, not sampling error. The data analysis was compared to the samples from three previous OEF samples (J-MHAT-7, 2011).

Overall Soldier well-being was operationally defined as lack of psychotropic medication use, suicidal ideation, stress, anxiety, or depressive symptoms, and overall

individual and unit morale. Behavioral health rates were influenced by combat, relationship problems, operational tempo (OPTEMPO), and deployment concerns. Individual morale was lower than in previous report years. There was no evidence across report years that marital status was a consistent predictor of mental health symptoms. Results further indicated that unit morale was unchanged, but individual morale had decreased, in comparison to 2009 and 2005. Acute stress levels were higher than in previous years. Acute stress, depression, and anxiety levels were measured, and composite scores indicated higher rates of psychological problems than in previous years. Interestingly, suicidal ideation rates remained unchanged. Medication use because of combat stress or psychological challenges was present in 3.7% of the sample. This rate of medication use was lower than a demographically comparable civilian sample, which implies that despite complex operating environments and increased psychological problems, medication use is still lower than the general civilian population (J-MHAT-7, 2011).

Risk factors among Soldiers included increased combat exposure relative to 2009. In fact, the combat levels reported were higher than in previous MHAT studies in OEF or OIF. Multiple deployments were also another significant risk factor. Soldiers in their third or fourth deployments reported more psychological problems than Soldiers in their first or second deployments (J-MHAT-7, 2011).

Factors that seemed to be protective in nature (defined as low levels of psychological problems despite high combat exposure) included unit climate variables. The unit cohesion and perceived unit readiness was higher than any other OEF MHAT data reported. Additionally, increased NCO leadership was reported, in comparison to

leadership rates reported in 2005 and 2009. Interestingly, there was no change in commissioned officer leadership ratings. During focus group sessions, leadership roles during pre- and postdeployment and deployment were the primary emphasis, especially because small unit leadership was identified as a protective factor in MHAT-VI. Compared to 2009, behavioral health stigma perception levels appeared to be unchanged. Despite an increased number of days outside of the FOB for combat missions, there were also significant reductions in barriers to mental health care. Trainings for suicide awareness and stress were higher than in 2009, likely because of several Army-wide prevention program initiatives (J-MHAT-7, 2011).

Rank and months deployed was controlled for in the statistical analyses. The samples were predominantly comprised of male E1-E4 Soldiers. Little data were collected from officers, senior NCO's, and females. Furthermore, researchers pointed out that maneuver unit samples are not representative of the entire deployed population. Army specific recommendations included continued staffing ratios of 1:700 to 1:800 for dispersed Army units. Additionally, according to the researchers, resilience trainings need to be validated through research studies using randomized trials and quasi-experimental studies. An increased need exists for evidence-based factors that promote resiliency. Researchers particularly emphasized focus on leadership training and pre-deployment resiliency training. They also recommended that two providers and two technicians be assigned to each BCT (J-MHAT-7, 2011). It may also be imperative to investigate further why the leadership of commissioned officers doesn't seem to be changing.

Key findings from interview of behavioral health personnel indicated an increase in providing services outside of the Combat Stress Control location. Providers further indicated that their pre-deployment training was not adequate, which is a compelling finding considering Army-wide attempts to increase trainings. Pursuing specific trainings for behavioral health staff may also be prudent.

As a result of the widespread in-theater research that has been conducted in operating environments in Iraq and Afghanistan, there is more evidence to support an institution-wide movement from reactive to proactive approaches for mental health initiatives and prevention programs for Soldiers and their families.

A Proactive Response to Mental Health Needs

In recent years, there has been a gradual movement towards a preventative approach to mental health in the Army, in part from recommendations made by the Department of Defense's task force mental health team. Research supports a change in Army systems from reactive treatment to proactive prevention (Cornum et al., 2011). Movement toward a preventative model will require renovation of the current system and increased collaboration between the Army and civilians. The increased focus on mental health concerns for Soldiers has also illuminated the issue of a shortage of mental health professionals to meet the needs of Soldiers and the volume of needed mental health screening.

Renovating the current military system. In June 2007, the Department of Defense (DoD)'s Task Force on Mental Health released a report on the current status of military mental health and the essential changes that must be incorporated in order to accommodate military families. The Task Force recommended that the DoD expand the

current capabilities of the system to address appropriately the mental health needs of military members and their families. This finding is also supported by Booth et al. (2007). The current system focuses on identifying and treating disorders rather than prevention and promotion of resiliency: components the Task Force identifies as vital for an appropriately functioning military force (DoD, 2007). The Task Force, similar to the MHAT, suggests that the occurrence of psychological symptoms increases with multiple deployments. Analysis of the Post-Deployment Health Re-Assessment (an internal Army assessment of mental health upon returning from a deployment) suggested that 38% of Soldiers were reporting psychological symptomology (DoD, 2007). Psychological concerns of the families have not yet been quantified.

More recent efforts to renovate the current system for the Army include expanded efforts for suicide prevention, embedded mental health units, and expanded prevention services for domestic violence and sexual assault.

Collaboration between military and civilians. In light of these findings, the Task Force suggested a new vision for renovating the current military mental health system. The essentials that the Task Force reasoned need to be incorporated involve changing the internal Army culture to support psychological health. There has been a history of stigma regarding mental health in the Army, but this trend is slowly starting to remediate. The Task Force indicated that mental health is indispensable for Soldier performance, thus health assessments and referrals should become an expected routine in Army life. Collaboration between civilian agencies and the Army should occur to address the needs of families. The Task Force indicated that collaborative effort should become a formalized procedure and protocol of the Army. Mental health policies should

also be revised to incorporate current psychology research. Additionally, recruitment of added mental health personnel should be a priority (DoD, 2007).

Munsey (2007) further indicated that the DoD Task Force intends to increase availability of funding and personnel for mental health. The reduction of the stigma pertaining to mental health services across military branches will also be a primary focus. The American Psychological Association (APA) advocated for federal investiture of the Center for Deployment Psychology, which is a training facility endorsed by the DoD for professionals engaged in the provision of services for military families (Munsey, 2007).

Shortage of mental health professionals. Other research and policies indicate that organizations exclusively providing services to military members and veterans, such as the Department of Veteran Affairs (VA), are experiencing personnel shortages. According to APA news articles, the VA recently hired more psychologists and continues to advocate against mental health stigma (Munsey, 2007). Military leadership and Congress are also becoming increasingly aware of this situation, as evidenced by increased initiatives to reduce mental health service stigma and partnerships with the APA for the Center for Deployment Psychology, which offers training to civilian providers (Munsey, 2007). The Army also continues to struggle with a shortage of active duty psychologists. According to statistics provided by the American Psychological Association, the Army has 20% of an approved 123 positions vacant (Munsey, 2007). Adequate numbers of mental health professionals practicing in the active duty and civilian sectors is essential to meet increasing demands for services as a result of OEF/OIF/OND.

Screening for mental health concerns. The VA is also altering policies, so that veterans are automatically screened for mental health concerns and Traumatic Brain Injury (TBI) during an initial visit. Cornum et al. (2011) also stressed the importance of increased screening and expansion of mental health services for Soldiers. Referrals for mental health services lead to an evaluation within 24 hours, and crisis situations will receive a treatment plan and diagnosis immediately. According to Munsey (2007), the VA is hoping to avoid another Vietnam era in terms of the mental health challenges faced systemically. For example, several veterans of the Vietnam conflict have endured chronic and unrelenting mental health concerns, even decades following their combat experiences. The system still struggles with providing for Vietnam veterans. Many veterans did not seek or receive services for their combat exposure for several decades following the Vietnam War, which is very likely caused by the stoic nature of Soldiers and the stigma that has historically been synonymous with mental health services. With the unprecedented nature of the Iraq and Afghanistan conflicts, without appropriate mental health intervention and prevention efforts, the long-term effects of these deployments on military families and Soldiers may be unfathomable. Post-traumatic stress and maladaptive coping methods, such as substance abuse, may result in domestic violence, child abuse, and dangerous violence toward the military and/or civilian community. It is advisable that the Army increase mental health and relationship screening of Soldiers prior to personnel going on active duty.

In summary, there has been increased focus on the mental health of Soldiers for the past decade, because of the conflicts in Iraq and Afghanistan. Research has established that Soldiers and their operational conditions have changed substantially since

the Vietnam era. Mental health data provided by military expert teams have indicated the importance of understanding current conflicts in Iraq and Afghanistan and the status of Soldiers' mental health while deployed and when they redeploy, particularly symptoms relating to PTSD. Although research has acknowledged that the Army needs to move to a more proactive and preventative model for treating mental health concerns of Soldiers, significant problems still exist with a shortage of mental health professionals within the Army and professionals needed to implement expanded mental health services and increased screening. Even if a Soldier does not experience clinical levels of symptoms, readjustment and subclinical symptoms can still result in domestic violence, substance abuse, child abuse, and increased divorce rates. Although the literature reviewed shows that there needs to be increased collaboration between civilians and the Army, what is not quantified is the level of increased services required for the mental health services of military children and families. Even more importantly, if civilians and the Army need to collaborate more often, it is essential for civilians to understand the mental health of Soldiers and all of the contextual realities of current operating environments. The civilian role in the provision of mental health services to Army children and families must be established and ways of measuring civilian understanding of the Army culture provided.

Post-Traumatic Stress Disorder

One of the most significant mental health conditions that some Soldiers will develop as a result of combat and military exposure is Post-Traumatic Stress Disorder (PTSD). Symptoms, prevalence among Soldiers and treatment will be discussed.

Symptoms. The symptoms of PTSD can be grappling for a Soldier exposed to combat and other deployment stressors. In order to be diagnosed with PTSD, a person must have experienced a traumatic event that would have potentially compromised his or her physical or emotional integrity. Being a witness to or even hearing of a similar situation occurring to a loved one may also qualify as a traumatic event. Additionally, indirect exposure to a traumatic event, usually in a professional capacity, could qualify. Symptoms must persist for several weeks after the event. Some of the significant symptoms of PTSD include reliving of the trauma (intrusion symptoms), either through intrusive memories of the trauma, nightmares, or flashbacks, in which the person actually believes that he or she is experiencing the traumatic event again in real time. Other intrusion symptoms include prolonged distress or continual sympathetic nervous system activity. Avoidance of triggers of the trauma is also common. Hypervigilance, or being abnormally aware of surroundings, is another symptom. Finally, many people with PTSD will experience hyperarousal, which often manifests physiologically through sleep difficulties, insomnia, or difficulties concentrating. Still others may engage in self-destructive behaviors or aggression, or experience alienation from others, constricted affect, negative beliefs about the self and the world, self-blame, or dissociative amnesia. There are also clinical specifiers for dissociation and delayed expression (5th ed.; *DSM–5*; American Psychiatric Association, 2013).

Prevalence amongst Soldiers. Many of the soldiers who have been deployed to Iraq and Afghanistan have returned from deployments and faced the challenge of readjusting to normal life. This transition can make everyday tasks appear impossible to the Soldier who may be simultaneously re-experiencing the traumas of combat.

Significant numbers of Soldiers also have children and the typical experiences of combat-related fear and psychological problems after returning from war, often result in difficulty completing parental duties (Corbett, 2007).

Chartrand and Siegel (2007) suggested that approximately 17% of troops returning home from combat deployments in Iraq and Afghanistan experience significant mental health symptomology consistent with Post-traumatic Stress Disorder (PTSD), with Iraq being the most directly associated. More recent combat that has occurred in the Kandahar province of Afghanistan and in many areas near the border of Pakistan may also increase the instances of PTSD, although, the prevalence has yet to be empirically quantified.

Treatment. Munsey (2007) stated that several treatments suggested by the International Society for Traumatic Stress Studies, a comprehensive non-profit organization that conducts international traumatic stress research, are being adapted for treatment of PTSD symptomology in OEF/OIF/OND veterans. Treatments approved include (a) prolonged-exposure therapy, which involves recalling traumatic memories in a controlled fashion and subsequently learning to evaluate the situation; (b) cognitive processing therapy, which also has an exposure component and cognitive strategies for handling false beliefs; (c) stress-inoculation training, where anxiety is managed with breathing, muscle relaxation, and positive self-talk; and (d) other forms of cognitive-behavioral therapy, such as cognitive restructuring (DeAngelis, 2008). Springle and Wilmer (2011) also identified stress inoculation (e.g., muscle relaxation, role playing, assertiveness training, thought stopping, self-talk), eye movement desensitization and reprocessing (EMDR), and patient education as recommended treatments for PTSD.

Treatment of PTSD is vital, especially to address the potential effects it can have on a Soldier's family, personal life, and by extension, performance on Army missions.

Price, Gros, Strachan, Ruggiero, and Acierno (2013) pointed out that much of the research that indicates social support is a protective factor for both prevention and treatment of PTSD has been conducted on samples that have suffered natural disasters. Using a sample of 69 OIF/OEF veterans with PTSD (n = 43) and subthreshold PTSD (n = 26), the researchers investigated the role of social support in veterans' experiences with PTSD. Veterans with psychotic symptoms, suicidal ideation/intent, and/or substance dependence were excluded from the sample. Veterans within the sample were treated with exposure therapy and subsequently had their symptoms assessed. Results indicated that increased emotional support was related to better treatment response. Additionally, reduced positive social interactions were associated with increased PTSD symptoms at the start of treatment. Researchers postulated that increased emotional support buffers a sense of safety. Further, evidence indicated that increased isolation will maintain and/or exacerbate symptoms of PTSD. Interestingly, tangible support and positive social interaction were not associated with symptom rate of change during treatment. Social support explained 11% of the variance.

Negative Effects for the Army Family

Child abuse. Ellis (2008) indicated that after the invasion of Iraq, the rates of child abuse in military families rose to higher rates than in civilian families. Prior to this conflict, the inverse was true. Gibbs, Martin, Kupper, and Johnson (2007) specified that among families of enlisted Soldiers in the U.S. Army with founded reports of child maltreatment, rates are greater when the Soldiers are on combat-related deployments.

This finding suggests that the perpetrator is often the non-deployed parent suddenly overwhelmed with the task of single parenting while the Soldier is deployed. Gibbs et al. (2007) also found that rates of moderate or severe maltreatment were higher, most particularly in neglect cases. Physical abuse occurred more likely during non-deployment time and less likely during deployment. This finding suggests that non-deployed parents were more likely to engage in neglect during deployment, while the Soldier was more likely to engage in physical abuse cases while home. This significant finding suggests that mental health intervention is needed during all stages of the deployment cycle for both the Soldier and the family.

Domestic violence. McCarroll et al. (2003) evaluated levels of domestic violence in the homes of 313 active duty male Soldiers who deployed to Bosnia for six months, and 712 male Soldiers who had not deployed. Results from a questionnaire indicated that deployment was not a statistically significant predictor of domestic violence among Soldiers. Their research, however, found that younger Soldiers, those with reported incidents of predeployment domestic violence, non-white race, and off-post residences increased the probability of postdeployment domestic violence; suggesting that the presence of the aforementioned predicting factors increased the likelihood of domestic violence regardless of deployment. Newby et al. (2005) further indicated that deployment was not a significant predictor of postdeployment domestic violence. Younger wives and those who were victims of predeployment domestic violence were also more likely to report postdeployment violence, which relates back to the prior strength of the relationship.

Divorce rates. Karney and Crown (2011) provided interesting insight into the reality of divorce rates in the military. The level of detail provided in this study has not been indicated in other studies. The researchers conducted statistical analysis of the entire military across branches, not just a sample. Active duty service members are required to report changes in marital status to the authorities of their respective military branch. General findings of the analysis indicated that service members who marry later are at a lower risk of marriage termination. Females are at higher risk of divorce (except for female Army officers), and couples without children were more likely to divorce. Interestingly, the rates of divorce are somewhat higher for black enlisted and officer personnel in the Army; however, when controlling for demographic variables, the Army has significantly lower racial differences in family outcomes than the civilian population does. The most significant findings that Karney and Crown (2011) reported were the insignificance of deployment itself on divorce rates. With the exception of the Air Force, all components of active duty, reserve, and National Guard personnel actually saw benefits from deployment for marriage, or there was no significant effect at all. The greatest positive effects for maintaining marriage was actually for those who were most vulnerable for marriage dissolution. The more time spent deployed, the lower the subsequent risk of divorce for parents. Deployment actually enhanced marriage stability for many. The researchers did point out, however, that this finding is a short-term, rather than a long-term, implication. When the family separates from the military, there is no empirical evidence currently available to indicate effects of deployment in the long-term.

The significance of the long-term effects of deployment on marriage is indicated, for Lester et al. (2011) proposed that the reintegration period is often stressful on

marriages and parent-child relationships. Professionals working with military families need to be cognizant of the functioning of the family during all points of the deployment cycle, particularly during the reintegration period. Long-term care also needs to incorporate the needs of the military child and family.

Mental Health of Military Children and Families

A key concern associated with the wars in Iraq and Afghanistan are the short and long term social, emotional, and financial effects on the children and families of deployed Soldiers (Chartrand & Siegel, 2007; Cozza et al., 2005; Flake, Davis, Johnson, & Middleton, 2009; Lester & Flake, 2013; Osofsky & Chartrand, 2013; Siegel & Davis, 2013). For the first time in history, the number of military dependents, such as spouses and children, outnumbers the Active Duty and Reserve members of the military (Chartrand & Siegel, 2007).

When specifically considering children's adjustment, Webb (2002) suggested that individual factors mediate how a child will respond to deployment. For instance, age, developmental stage, cognitive level, temperamental characteristics, adjustment at school/home, peer relationships, and overall health are predicting factors. Webb (2002) further indicated that a combination of the individual characteristics of a child, the nature of the trauma (deployment), and level of family support contribute to the manner in which the child will cope.

Amen et al. (1988) specified that a Soldier's family concerns can interfere with his or her performance in military duties, increase the likelihood of Absence Without Leave (AWOL), and lead to retention complications. In 1983, the Army Chief of Staff, General John Wickham, emphasized the importance of accentuating the physical and

emotional well-being of the Army family because of its role in overall military effectiveness. The Army termed 1984 the Year of the Military Child and 1985 the Year of the Military Family. Thus, the vitality of military family readiness has been recognized since the post-Vietnam era; however, society still continues to struggle with providing appropriate mental health services to this population (Chartrand & Siegel, 2007; Cozza et al., 2005; Cozza & Lerner, 2013; Davis et al., 2011; Engel et al., 2006; Flake et al., 2009; Pynoos, 1993; Willerton and MacDermid, 2011).

Child Mental Health Factors

The importance of military child mental health factors is paramount. Prior child psychopathology, gender, developmental level, and the effects of trauma are considered next.

Prior psychopathology. Drawing on their clinical experience as active duty military mental health professionals, authors Amen et al. (1988) indicated that previous child psychopathology is one of the key determinants of predicting the effects of deployment on the overall functioning of the child. Their experience occurred in the years of the aftermath of the Vietnam War and during the years prior to the Operation Desert Storm conflict. Contrary to popular civilian belief in the 1970s (post-Vietnam), data from the post-Desert Storm era does not support assumptions that school-aged military children experience a higher level of psychopathology than their civilian counterparts as reported in research collected via the use of standardized psychological measures and structured clinical interview of military children (Jensen et al., 1995). Research during Operation Desert Storm, which was a combative deployment, indicated that children experienced increased depressive symptomology, but these symptoms rarely

reached pathological or clinical levels (Chartrand & Siegel, 2007). The nature of the wars in Iraq and Afghanistan where conflicts are lasting years rather than months and families dealing with multiple deployments differ from Desert Storm, so the generalization of results from previous to current conflicts is indistinct (Chartrand & Siegel, 2007; Cozza et al., 2005). There is support, however, in present day research that indicates that prior child psychopathology does indeed still play an essential role in a child's experience of parental deployment.

Post September 11 (9/11) research, such as Cozza et al (2005), indicated that comparison of children of active duty members, reservists, and civilians resulted in no significant differences regarding anxiety and psychopathology levels. This finding is consistent with prior research (Amen et al., 1988; Jensen et al., 1995), even in a different context. In fact, military children generally experienced fewer behavioral and emotional symptoms than civilian children; however, these findings do not negate the stress of deployment. Intervention should still be pursued for those that experience sub-clinical symptoms. Based on these findings, to generalize or assume that all military children will experience psychopathology or resilience or to discount the emotional and mental needs of those in the middle is not advisable.

Researchers have indicated that military children experiencing at-risk or clinically significant levels of psychological symptoms also experience difficulty with deployment adjustment. Webb (2002) stated that clinical presentation of children typically centers on post-traumatic stress, generalized anxiety, and depressive symptoms. Cozza et al. (2005) further designated that anxiety and depression increases during deployment as a result of direct relation to family stressors and parental psychopathology, but not, however, as a

function of deployment itself. Moderate increases in internalizing and externalizing symptoms were noted in children whose parents were deployed in combat regions; however, symptoms rarely presented at a clinical level. Clinical symptomology occurred more frequently in children with prior mental health issues (Cozza et al., 2005). Thus, it has been well documented across the past several decades that even despite significant differences in military conflicts, the mental health status of children prior to parental deployment is an important element to consider. Mental health status is pertinent for children affected by current conflicts, as well as a key factor to contemplate for future military conflicts that will likely be unprecedented in nature, given the ever-changing technological advancement of modern times and the globalization of the world's economies.

Gender. Numerous researchers, such as Cozza et al. (2005), Engel et al. (2006) and Pynoos (1993), have established that boys are at higher risk for complications during deployments. For example, Chandra et al. (2011) reported that parents of boys experienced more behavioral and emotional challenges during deployments; however, these researchers also found that girls experience more difficulty than boys adjusting during the reintegration stage after the parent returns home from deployment. This finding suggests that support systems should be present not only during the deployment, but also afterwards and should be specifically tailored to each individual child.

Developmental level. Amen et al. (1988) specified that in addition to previous child psychopathology, emotional development and the developmental level of the child will be key factors in predicting the effects of deployment on the child's psychosocial

functioning. Several studies have established that younger children are at higher risk for complications during deployments (Cozza et al., 2005; Engel et al., 2006; Pynoos, 1993).

Smith (2011) provided some insight into the effects of repeated separation caused by military deployment on infants. Secure attachment levels with parents can be disrupted. Even if the child is sufficiently supported during deployment, the reintegration process can be overwhelming after the deployment is finished, leaving even the youngest of military children at risk for psychological distress and discomfort. Young preschool age children will also react to deployment in specific ways.

Amen et al. (1988) suggested that being pensive regarding the upcoming deployment often leaves parents inattentive to the emotional needs of children. Some parents may refuse to discuss the upcoming departure, partially to protect children from becoming worried or upset. Siegel and Davis (2013) indicated the importance of providing preschoolers with reassurance of safety and security. In general, these scenarios can contribute to a child, particularly of preschool age, experiencing confusion or guilt. As preschoolers typically lack logical thought, they may blame themselves for the parental departure. More specifically, preschool children are more likely to experience guilt and self-blame for parental absence.

School-aged children may also blame themselves for the departure of their parents and may exhibit regression or exacerbation of pre-existing problems (Siegel & Davis, 2013). This finding provides further credence to earlier discussions pertaining to screening for child psychopathology prior to deployment. School-aged children and adolescents may begin to feel lonely before the parent even departs, in part because of increased inattentiveness from the parents. Older children may be more likely to worry

about their civilian parent's reaction to the deployment. Adolescents may openly address their concerns with the deployment, or they may deny their concerns altogether. They will typically seek support among their peers.

Depending on their age group, children may also experience specific reactions during the deployment stage. For instance, preschool children may experience difficulty with witnessing maternal distress, resulting in externalizing behavior (Amen et al., 1988). Further, preschool children may serve as the target for older children to express internal anger and frustration, which is exacerbated by older children's underlying feelings of guilt surrounding parental departure. School-age children may also try to assume the role of the absent parent, resulting in a sense of responsibility regarding the emotional stability of the remaining parent (Amen et al., 1988). Enuresis, encopresis, depressive symptoms, increased aggression, and school-related difficulty may also occur.

Adolescents may cope with emotions by becoming involved in risk taking behavior with peers; however, at times, new feelings of independence may manifest. Everson, Herzog, and Haigler (2011) emphasized that for adolescents, while some will experience significant psychosocial difficulties during deployment and most will be resilient, it is still essential to consider the emotional reactions of those in the middle. Many adolescents may experience subclinical levels of emotional distress, increased withdrawal behavior, and only marginally complete their academic work. Focus and mental health intervention may be warranted for these military children as well. Schools and pediatricians are probably in the best position to identify at-risk military children presenting with symptoms that fall somewhere in the middle. Thus, remaining

acquainted with families experiencing the deployment cycle that are served by a practice or organization is of utmost importance to their functioning and support.

Trauma. Researchers propose that parental deployment elicits a similar emotional experience as children who witness traumatic events. Although there are few studies that focus exclusively on military children experiencing parental deployment, the existing findings are profound for military-connected children. Greenwald (2005) stated that adverse life events can have a trauma-like impact on children, for deployment can clearly be considered a prolonged traumatic event. Some children are resilient through the trauma, while others develop psychological symptoms.

Webb (2002) suggested that children of deployed Soldiers experience the emotional process of bereavement and trauma in ways parallel to loss of a loved one, presence of physical or sexual abuse, or witnessing a natural disaster. The foremost difference between the experiences of deployment, versus children who experience other types of trauma is the process of reminiscencing about the person who is gone. Children of deployed Soldiers experience what is referred to as complicated bereavement, as opposed to the typical bereavement of other types of trauma that a child might experience, such as death, natural disaster, or abuse. During normal bereavement, the child typically experiences ambivalent happy, sad, and regretful feelings; however, talking about the situation and processing the stress of the trauma will allow the child to mourn. In traumatic bereavement, the child avoids anything that reminds him or her of the person who died as a result of the manner of death. During complicated bereavement, the child experiences a distorted mourning process, resulting in adoption of coping mechanisms that produce developmental impairment and emotional trauma, such as risky

sexual behavior, substance abuse, self-injurious behavior, or regression to infantile behaviors. Webb (2002) further indicated that children enduring parental deployment will experience complicated bereavement. Despite the presence of trauma-like emotions of experiencing a deployment, not all children will require clinical treatment for psychological symptoms. All children, regardless of resilience factor or level of psychological symptoms, need a consistent support system.

Non-deployed Parent Mental Health Factors

Stress coping style and prior psychopathology. Using the Pediatric Symptom Checklist, Parenting Stress Index- Short Form, and the Perceived Stress Scale, Flake et al. (2009) surveyed 101 Army spouses, each with a deployed Soldier and a child between the ages of five and twelve. The sample was demographically similar to recent Army population statistics. Parents reported levels of psychosocial difficulties that were statistically significantly higher than national normative samples. Parental stress predicted child psychosocial problems, such as internalizing, externalizing, and attentional, and spouses whose stress was clinically significant had children that scored in a higher risk level. Linear regression analyses revealed that demographic variables that significantly predicted child psychosocial functioning were parental education levels, parental age, and enlisted military rank of the deployed parent. Length of parental separation, the deployment itself, race, ethnicity, child gender, and child age were not associated with child psychosocial outcomes. The most statistically significant risk factors of psychosocial difficulties manifesting in children with high risk levels were poor community perception and support of the military (Flake et al., 2009). Thus, civilian

awareness of the challenges faced during the deployment cycle could make a significant impact on Army children and families.

Amen et al. (1988) suggested that parental emotional maturity and quality of marriage will affect the child's overall emotional development, including the ability to adapt. Hall (2011) indicated that many military children are born to young, emotionally immature parents who often are far from their natural support systems. Amen et al. (1988) explained that mothers of children treated during deployment are typically experiencing psychological symptomology. At times, children may be used to compensate for the psychological needs of the mother in the presence of marital problems. State anxiety in children is also predicted by the mother's level of depressive symptomology (Mitchum, 1999). The mental health status of children during non-combative deployment depends on the number of family stressors and level of maternal psychopathology (Chartrand & Siegel, 2007).

Hall (2011) also offered an important point regarding the coping styles of military families in the context of military life; there is always perpetual fear, planning for disaster, and the need for constant readiness for change. As a result, many families are pushed beyond tolerable stress levels, but family members feel a need to remain stoic for their Soldier. The unbearable stress levels can augment any pre-existing psychological difficulties.

Deployment Factors

Routine versus wartime deployments. Engel et al. (2006) indicated that the United States deployed 1,048,884 troops to Afghanistan and Iraq between 2001 and 2005. The Army went from having 8% of troops deployed in 2001 to over 36% deployed

in 2005. Between 2002 and 2006, parental deployment affected 132,154 children of Army Soldiers (Engel et al., 2006). Applewhite and Mays (1996) indicated that children who have experienced maternal separation because of deployment did not significantly differ from those who experienced paternal separation in terms of psychosocial functioning.

Applewhite and May (1996) studied deployed Army families with children between the ages of four and eighteen. The samples of deployed mothers versus fathers were even at 55 per group. The level of family stress, age of the child at the first extended separation, birth order of the child, number of family moves, and the rank of the active duty parent were all statistically controlled. The children of deployed fathers were more likely to be first born and younger than children of active duty mothers at the time of the first extended deployment. The children of deployed mothers were more likely to be growing up in single parent homes, and the mothers were more likely to be enlisted personnel. The results of the study revealed that the two groups received comparable assessment results in the quality of psychosocial functioning when the aforementioned factors were controlled statistically. This finding further indicates that psychosocial functioning is more likely a function of some of the factors that the researchers controlled in the study, not as a function of maternal versus paternal separation. Additionally, the focus of psychosocial intervention needs to be on other factors, not the separation itself. A study conducted on Air Force mothers found similar results.

Pierce, Vinokur, and Buck (1998) conducted a study on children's psychosocial functioning pertaining to maternal deployment during Desert Storm and Desert Shield and two years-post deployment. The most significant predictor of child adjustment

problems during the war was the number of changes the child experienced in life. The most significant predictor of adjustment two years postdeployment was maternal mental health status. The children's adjustment challenges during the war did not predict adjustment challenges after the war. Further, mothers who had younger children presented with higher levels of mental health challenges.

Kelley (1994) reported that routine deployments (regular peacetime missions) affect military families less than those that are not routine and likely a result of war. Within the family structure, routine deployments resulted in an ability to maintain supportive relationships, whereas wartime deployment resulted in diminished family cohesiveness and increased internalizing/externalizing problems in children. Many families with Soldiers deployed to Iraq and Afghanistan are likely experiencing factors that characterize wartime deployments.

Emotional triangle of deployment. Everson and Camp (2011) postulated in their research that one of the most daunting tasks for military families is the balance of military versus family roles. An emotional triangle exists among the service member, family, and the military. One of the fundamental cultural aspects of the military is that the mission always comes first, often even over the family. Everson and Camp (2011) indicated that all Soldiers are affiliated with a particular unit within the Army and are to comply with systemic expectations. Their families are considered an extension of the Soldier's oath to the military, and therefore are also bound to adhere to its cultural norms, as painful as some of them may be. Hall (2011) indicated that always being mission ready is a core essential of military life. The dedication to fellow Soldiers, at times, must come before a Soldier's dedication to his or her family. Despite this fact, Soldiers will

still often harbor a deep sense of duty to their families as well as to their country and mission. Thus, the emotional triangle can sometimes become convoluted and difficult to cope with.

Stages of deployment. Amen et al. (1988) broke down deployment and its impact on families into three stages: predeployment, deployment, and postdeployment, suggesting that there are typical reactions of the parents that occur in each stage, which will in turn affect the preschool, school-aged, and adolescent children in the family. During the predeployment stage, couples experience a "double bind of wanting to be close but needing to distance themselves as a defense against the pain of separation" (Amen et al., 1988, p. 442). The consequences of this phenomenon often manifest in the form of anger or frustration. Many wives begin the separation process before the husbands even depart, mainly to work through any emotions that they may be experiencing. As a result of the consequences of the "double bind," conflicts are often frequent during this stage, for leaving someone is easier when the task is completed in anger. In some families, Soldiers may leave with some conflicts still left unresolved, which can have effects on how the family handles the deployment.

During the deployment stage, Amen et al. (1988) suggested that military spouses could react in a variety of ways. Some wives may be relieved after departure in regards to simply enduring the deployment in order to put the apprehension and ordeal of the experience behind them, while others may experience depressive symptoms. Household problems may be blamed on the absent spouse, with increased leniency regarding child discipline, overprotection of children, and becoming neglectful of children as a result of engrossment in outside obligations or distractions being additional reactions, further

illustrating the vitality of assessing each family for individual differences. Acceptance of the duties of a Soldier and living in a military community contribute to a positive adjustment during separation. Several spouses may gain a new sense of independence and strength, which may create tension during the postdeployment phase, because the non-deployed spouse will not initially want to relinquish this level of independence upon the Soldier's homecoming (Amen et al., 1988). This finding is also consistent with current research (Davis et al., 2011).

Postdeployment is predominantly the most difficult stage of deployment (Amen et al., 1988; Hall, 2011). For example, many couples ponder the reunion for many weeks prior, at times resulting in alteration of wardrobe and outward appearance, and planning special family meals and outings. Families and Soldiers will often contemplate how ideal life will be upon return, in spite of prior problems left unresolved (Amen et al., 1988). Soldiers may become threatened by the novel independence of adolescent children and their spouse, or perhaps experience distress regarding the clingy or rejecting behavior of young children (Amen et al., 1988). Spousal satisfaction with the military, support systems in the community, and coping during the reintegration stage of deployment also affect children's reactions to deployment (Amen et al., 1988). Two of the key reasons that postdeployment is often the most difficult is that the effects of parental absence for daily routines and major child milestones can be extremely challenging for children to cope with and accept (Hall, 2011).

Military life stressors. Hardaway (2004) outlined various stressors that are typically present in military lives. The author suggested that stressors may be routine (i.e., changes in school systems, frequent moves, separation from parents during training

exercises), acute and severe (i.e., war-time deployment, negative civilian attitudes regarding military, injury or death of parent), or chronic (i.e., living in violent and isolated areas, threats of terrorism). Pre-existing mental health disorders in both children and non-deployed parents also elevate the effects of the aforementioned stressors. Mitchum (1999) indicated that the level of the military parent's pay-grade, number of years in the military, length of marriage, father's level of education, and the mother's participation in counseling assist with prediction of the children's behavior and emotional experience regarding deployment. Mansfield et al. (2010), in attempt to find correlations between spousal deployment and mental health diagnosis, included the age of the wife and the Soldier's number of deployments to OIF/OEF in their statistical models because of finding that these two variables consistently confounded their results in the inverse and positive directions, respectively. Thus, this finding provides further empirical evidence of the importance of the number of deployments and the age of the spouse when considering how to conceptualize family functioning.

Everson and Camp (2011) indicated that various characteristics of military life, such as frequent relocation, previous long-term deployments, combat deployment, larger families, and military spouses being younger than spouses in the general civilian population, may increase risk of psychosocial difficulties in children and families. It is, therefore, vital for mental health professionals to have a thorough understanding of family functioning within the context of military culture in order to provide effective treatment for families during parental deployment.

Davis et al. (2011) interviewed eleven Army wives (ages 20 to 34 years) to gain insight into their perspectives of deployment and interactions with civilians. Their

interviews broadly identified two main themes: wives were experiencing an “emotional rollercoaster” during deployment, and they felt silenced by their interactions with community civilians. Some of the negative aspects regarding deployment that were identified were last minute schedule changes pertaining to leave time being cancelled, deployment lengths being extended, dwell time cut short, not being able to count on supported return dates, and often erratic emotions. Despite the identified difficulties of deployment, many of the wives recognized many positive elements to deployment, including higher levels of confidence and independence, new social support systems, a new sense of self-discovery, and positive changes in their marriages (Davis et al., 2011). This apparent dichotomy of how Army spouses experience deployment exudes both strength and unrequited emotional distress often not understood or experienced by the civilian world. This point has powerful and significant impacts on military children and how mental health professionals should provide services for military families.

In summary, interactions among child factors, non-deployed parent factors, and deployment factors create important psychosocial information for mental health professionals to understand in the context of providing services for Army children. While information is known about how children of various developmental levels, gender, history of psychopathology, and trauma-like reactions will cope with parental deployment, many Army families indicate that they think there is a significant disconnect between their deployment experiences and civilian understanding of their lives. Research has also established what the emotional stages of deployment are and the importance of understanding military life stressors in the context of child and family mental health status. While several empirical studies have been conducted over the course of the past

decade in relation to the mental health needs of Soldiers and their families, most studies have focused on specific psychosocial interventions. What is not known is the level of competence that mental health professionals actually have in applying this knowledge or whether many are even aware of research pertaining to military children and families.

Mental Health Professionals: Cultural Issues in Serving Military Families

Mental health professionals who provide care to Soldiers, veterans, and their families have numerous child, parent, and military life factors to consider when assessing, treating, and promoting preventative measures for their military-connected clients. An understanding of the military culture is essential for successful treatment of the population. It is commonplace and ethical for mental health professionals to consider cultural factors in their practice; however, this topic tends to be applied to differing ethnic, racial, or religious backgrounds. Mental health professionals should also consider that the military has a distinct and unique culture. Within that culture is the subculture of the Army, a branch of the military that has been heavily involved in the Iraq and Afghanistan conflicts.

General guidelines. It is important to note that many key mental health professionals, particularly those in schools, may not even know which children in their facilities are military affiliated. For example, Bradshaw, Sudhinaraset, Mmari, and Blum (2010) conducted a study in which school focus groups for mobile military families were asked about common stressors facing these children. Findings suggest that military children have high levels of social and emotional maturity, appreciation for diversity, and empathy for others. Several school staff members also indicated that they would not be able to distinguish between a civilian and a military child in general. This finding has

serious implications for military children. Children reported feeling stressed by the mixed positive and negative stereotypes they experienced from being labeled a "military brat." Accentuating the strengths of military children and also understanding their unique difficulties, especially during deployments, provide valuable opportunities to implement preventative mental health programming, preferably in collaboration with officials from Army bases to consider the well-being of the child holistically in all environments.

Cozza et al. (2005) indicated that as a result of the Iraq war, several unsubstantiated conclusions regarding military children and families are presumed by civilian mental health professionals, likely because of assumptions pertaining to the vulnerabilities of the military population and a lack of understanding of the military culture. The military is often stereotyped as a homogenous population, rather than the complex and heterogeneous entity it truly is (Cozza et al., 2005). In fact, the military equalizes very diverse people, perhaps more so than any other entity in American society (Booth et al., 2007). As with any culturally diverse population, mental health professionals must remain aware of their own biases and perceptions about the military in general and military children in particular. Effective assessment and treatment is integral to the military family's success with mental health services.

Hall (2011) stressed the importance of working with military families from a systemic perspective. There will often be issues with continuity of care, for many mental health services for military families may only be brief. Springle and Wilmer (2011) indicated that Soldiers and their families are more likely to seek mental health services in the community as opposed to services offered on the military installation. The pursuit for community services is because of the ongoing stigma that exists within the military

culture about receiving mental health care. In other words, it is perceived that community services will be more confidential than installation services (Springle & Wilmer, 2011). Most services are sought for children, whose mental health challenges may be feared to reflect poorly on the Soldier. Children are often held to the same behavioral and character standards as the Soldier (Hall, 2011).

The military is a very bureaucratic and hierarchical entity and adhering to its cultural norms is essential for thriving within the culture. This adherence is a key factor in providing appropriate assessment of the mental health challenges of children and families in the context of the military life itself. Additionally, current military life stressors, parental mental health statuses, and parental military experiences are essential areas to consider during the assessment process (Corbett, 2007). Despite these recommendations, no structured assessment tools are available to assist community mental health providers in asking questions pertaining to military life. The absence of reliable and valid measurement tools may adversely affect the assessment process, for important questions of note may be overlooked during intake and evaluation.

Davis et al. (2011) conducted interviews with eleven Army wives to gain insight into what they want civilian therapists to know about them and their deployment experiences. Army wives stated that therapists can best assist military families by normalizing and validating the emotional experience, assisting with recognizing coping strategies, and promoting positive civilian and military connections. The wives also expressed concerns with perceptions that their respective local communities provided little to no understanding of the experience of deployment. Others wives expressed beliefs of feeling forgotten. When the deployment experience was acknowledged,

responses were full of clichés (e.g., “I’m sorry,” “I know how you feel”), false assumptions, or politically charged statements. The Army wives further indicated that the community can effectively help by validating the deployment experience for Army families. The importance of understanding the cultural diversity of the Army is essential to be successful with the population. Army Soldiers, spouses, and children need and deserve culturally sensitive mental health services that take into consideration the unique aspects of their lifestyle. Currently, however, there is little empirical guidance of specific interventions to employ with Army children and families and also no empirical methods of testing civilian knowledge of Army culture.

Prevention approaches. According to Willerton and MacDermid (2011), many civilian mental health professionals are not aware of the services available for Soldiers and military families. The Army offers several programs for prevention of various difficulties that families may endure. Children and family services are offered through Morale, Welfare, and Recreation (MWR) and Army Community Service (ACS). Specific programs include those that provide assistance for life skills such as financial, relocation, and employment readiness, survivor outreach programs for families that have lost Soldiers in combat, the Exception Family Member Program (EFMP) which provides advocacy for children with special needs, the Army Family Team Building (AFTB) program to acculturate new families to Army life, and the Family Advocacy Program (FAP) to assist families that are at risk of various psychosocial challenges. These existing programs encompass some of the prevention recommendations outlined in the research literature and emulating the programs in schools and communities is advisable for a greater variety of service options.

Amen et al. (1988) specified preventive methods that clinicians can implement with parents to alleviate children's reactions to deployment. During the predeployment stage, clinicians should encourage parents to spend time discussing with children why, where, and how long their parents will be deployed. For preschool children, conceptualization of time intervals can be accomplished. Additionally, the deploying and remaining parent should both spend individual time with each child. Children should be encouraged to express their feelings regarding the upcoming deployment (Amen et al., 1988). During the deployment stage, family routines, particularly concerning rules and discipline, should remain similar to predeployment. Regular correspondence, family and couple time upon return, avoidance of arguments pertaining to whose experience was worse (spouse versus Solider), alone time for each spouse, and a gradual transition regarding the Soldier's discipline of the children is further advised (Amen et al., 1988).

Schools can assist military families with a variety of activities, such as offering child development seminars, becoming familiar with the experiences of families before, during, and after deployment, inviting military members to speak to faculty, coordinating with social work agencies, and gaining the understanding that becoming military-friendly does not equate promotion of war (Anweiler, 2008). Gaining a thorough understanding of Army culture is also essential to providing effective mental health and preventative services to Army families, and to know how to reach out to those children that are military-connected.

Cultural competence. The development and measurement of cultural competence has been a prominent focus of scholarly study in mental health since the 1990s (Constantine & Ladany, 2001; Fuertes, Bartolomeo, & Nichols, 2001; Pope-Davis

& Coleman, 1997; Sue et al., 1998). Recent research has indicated the vitality of cultural competence in the provision of mental health services, such that the ability to appropriately apply culturally-sensitive interventions for clientele as a result of awareness of various cultures and personal perceptions is essential (APA, 2003). Arredondo et al. (1996) indicated that recognition of the limits of one's expertise, understanding discomfort with other cultures, seeking consultation and continuing education to develop skills, awareness of stereotypes, knowledge of family structure, and familiarity with research are imperative for cultural competence. Most cultural competence research has been applied to groups that have ethnic and racial diversity; however, it is also vital to understand and acknowledge that the military is also its own unique culture. Given that each branch of the military is a unique culture, competence in the culture of the Army is essential for mental health professionals who work with Army families. Measurement of general cultural competence has been conducted for several years.

General cultural competence measures. One of the initial instruments developed to measure cultural competence is the Cross Cultural Counseling Inventory (CCCI), accomplished by observer evaluation of a counselor engaged in provision of services for a racially or ethnically diverse client (Hernandez & LaFromboise, 1985). Ponterotto, Gretchen, Utsey, Rieger, and Austin (2002) reviewed additional instruments measuring cultural competence that were developed in the early 1990s using a self-report approach. The Multicultural Awareness/Knowledge/Skills Survey (MAKSS; D'Andrea, Daniels, & Heck, 1991), the Multicultural Counseling Inventory (MCI; Sodowsky, 1996), and the Multicultural Counseling Awareness Scale (MCAS; Ponterotto et al., 1996) were

the three instruments developed. The MCAS will be reviewed in greater depth, for the SACS was based loosely on its development in terms of statistical development.

Ponterotto et al. (2002) devised two studies to address a revision of the MCAS. Results of their initial factorial analysis support a 2-factor (Knowledge, Awareness) best fit model, similar to the original MCAS. Their initial revision study conducted exploratory factor analysis (EFA), whereas the second study focused on confirmatory factor analysis (CFA) and reliability/validity measures (Ponterotto et al., 2002). Ponterotto et al. (2002) included 525 students/professionals in counseling psychology for their initial EFA study. The second study conducted by Ponterotto et al. (2002) met guidelines in the literature for CFA with a participant sample of 199.

In their revision of the MCAS, Ponterotto et al. (2002) eliminated the social desirability items, changed the Knowledge/Skills factor to simply Knowledge, and renamed the instrument the Multicultural Counseling Knowledge and Awareness Survey (MCKAS). The MCKAS is comprised of 20 Knowledge items (all positively worded) and 12 Awareness items (10 of which are negatively worded, such that high scores indicate high levels of awareness). Initial convergent, criterion-related, and discriminant validity and internal consistency reliability measures were conducted with a sample of 199 counselors-in-training. Internal consistency was reported as .85 for both the Knowledge and Awareness subscales, respectively.

The MCKAS Knowledge subscale is convergent with all MCI subscales, such that there is a significant correlation and medium effect size (MCI Knowledge r =.49, Skill r = .43, Awareness r =.44). The MCKAS Awareness subscale is significantly correlated, and thus, has a large effect size with the MCI Counseling Relationship scale.

Psychometric limitations of the MCKAS include little information regarding construct validity and criterion-related validity linking scores with successful provision of culturally competent practice (Ponterotto et al., 2002).

Research on measurement of general cultural competence is important, for it establishes that the mental health field has recognized the importance of empirical self-assessment of cultural competence.

Army cultural competence. A significant need exists for empirical measurement of civilian understanding of military culture. Most professional literature on military cultural competence pertains to the clinical experience of military psychologists. Little to no research has been done to assess empirically civilian knowledge of important cultural aspects of the military. Hardaway (2004) discussed that mental health professionals should understand the military command system and culture to suggest appropriate recommendations for treatment, and Hall (2011) discussed the importance of military culture and its role in therapy with children and families. As with any type of multicultural counseling, understanding the worldview of the families is vital. For military families in particular, essential considerations of the culture include the military need for secrecy and denial, commitment to the mission above all else (even family), and the role of honor and sacrifice. Mental health professionals should also remember that the majority of military families seek services because of challenges with the children, and as such, the focus of therapy is often on assisting caregivers with maturation of their parenting styles (Hall, 2011).

Hall (2011) described the military as a "culture that is very inward focused, with consistent structure and hierarchy" (p. 36). What is vital to comprehend is that this

hierarchy is essential for the overall functioning of the culture and, thus the effectiveness of military interventions. As Hall (2011) indicated, the effectiveness of hierarchy is an unwritten assumption of military systems the world over and is not simply unique to the United States Army.

Drawing from their own experience as military mental health professionals and Soldiers, Reger, Etherage, Reger, and Gahm (2008) suggested that the Army is a cultural group with unique language, norms, and beliefs; therefore, cultural competence is essential for the proper mental health treatment of Army personnel. The authors also indicated that guidelines from the American Psychological Association (APA) require that supervision, training, experience, or consultation be conducted for provision of services with unique groups. These recommendations are especially important, "as the demand for civilian psychologists increases, the Army may be required to rely more heavily on civilians with minimal military exposure" (Reger et al., 2008, p. 22). The authors named four broad areas that illustrate the culture of the Army: vocabulary, rank, norms of behavior, and belief systems (Reger et al, 2008). These areas of Army culture are further supported by the writings of Hall (2011).

***Language and vocabulary*.** Fluency in the Army language is crucial for civilians providing treatment for military families; however, the Army language is comprised primarily of acronyms, and often civilian mental health professionals do not understand them. Awareness of common Army acronyms and terms for procedural issues is essential, for Soldiers may experience difficulty trusting service providers without prior military experience. For example, "The differences between a unit, company, brigade, and other organizational terms are essential" (Reger et al., 2008, p. 24).

Rank. Knowledge and awareness of the importance and differences in rank are also vital. Soldiers are adept at determining rank instantaneously from glancing at a uniform, thus providing important nonverbal communication. In addition, a comprehension of the difference between enlisted personnel, non-commissioned officers (NCO's), commissioned officers, and warrant officers is also essential, for rank will communicate possible environmental stressors, accepted social dynamics (e.g., when to address by rank), and the power in relationships. For example, "A 22-year old officer who has been in the Army for three months technically outranks an enlisted Soldier who has been in the Army for 30 years. However, the nature of their relationship will generally be very different than that between the same officer and another young, enlisted Soldier" (Reger et al., 2008, p. 25). Civilian mental health providers are also expected to be familiar with rank structure and its implied effects on daily life (Reger et al., 2008).

Springle and Wilmer (2011) indicate that there are other subdivisions within the military culture of which civilians should also be mindful, including the difference between combat Soldiers ("warriors") and support Soldiers (e.g., medical), officers versus enlisted personnel, NCO's versus commissioned officers ("Mustangs vs. College Boys"), those in the military for a short time versus those who serve for life, Soldiers who have attended the academy (e.g., West Point) versus those who have not, and active duty Soldiers versus Guard or reserve Soldiers (e.g., "weekend warriors" or "citizen soldiers"). It is important for providers to understand the differences between these distinctions because they have important implications for the power and authority perception of other Soldiers and their families. In turn, this perception also has significant impact on their social interactions with one another.

Norms of behavior. Army norms of behavior are components of a complicated bureaucratic system. Activities such as salute, dress, addressing others, coming to attention, and socialization have distinct rules, some of which are unwritten (Reger et al., 2008).

Civilian psychologists contracting with the military are often considered officer equivalents to enlisted Soldiers, resulting in client behavior during treatment that may appear atypical from civilian clientele. For instance, Soldier clientele may address the psychologist as "sir" or "ma'am," wait to sit after the psychologist is seated, and demonstrate a high level of politeness (Reger et al., 2008).

Belief systems. Comprehension of Army belief systems is also vital for appropriate delivery of services, particularly regarding group mentality and national defense. For example, "The mission is of utmost importance, serving in the Army requires personal sacrifices, anyone who joins the Army should be ready to fight" (Reger et al., 2008, p. 27) are common Soldier beliefs. Although the stigma is diminishing, traditionally, the pursuit of psychological treatment has been perceived as a weakness, thereby making a Soldier unfit for combat, a fate of the utmost insult. Overall, compared to demographically similar United States samples, the Army has lower rates of mental health concerns, although the expectations of performance are much higher (Reger et al., 2008).

Civilian providers regularly experience difficulty comprehending Soldiers' inability to quit their jobs without dire consequence and their lack of control over life decisions (e.g., location of residence, separation from loved ones), for these choices are commonplace in the civilian workforce (Reger et al., 2008). There are also unique

confidentiality structures to consider within the military, such as command notification when a Soldier is referred for substance abuse treatment. Reger et al. (2008) conclude that exposure to Army culture, observation, and training on military regulations are appropriate methods for civilians to become more Army culturally competent.

Current Study

The previous research discussed the importance of understanding the stressors experienced by military families, and of considering cultural factors in the assessment, treatment, and prevention of mental health challenges experienced by military families. It is important for mental health professionals to be aware of Army-specific culture, as defined through language, belief systems, behavioral norms, and rank, in the context of providing services for military families and children. These aspects are considered salient areas of knowledge essential for professionals to understand in order to conduct appropriate practice with Army children and families. While the conflicts in Iraq and Afghanistan will end in the coming months, the emotional effect of years of war will remain with children and families for some time to come.

The purpose of this study was to develop a method of empirically measuring civilian mental health professionals' perceived knowledge of the culture of the United States Army. The study created and validated a measure of the culture of the active duty Army called the Sweet Army Culture Scale (SACS). The measure is based on aspects of Army culture pertinent to mental health professionals providing services to Army children and families. This measure was predicted to be useful for empirically-based training of mental health professionals, which in turn will create more culturally sensitive services for Army children and families. There have been no empirical methods of

testing civilian knowledge of Army culture. It was expected that there would be a specific factor structure for the instrument and that there would be differences between the military-connected communities and the non-military connected communities. The current study investigated the following aspects of the SACS:

- Does the SACS have face/content validity?
- What is the factor structure of the SACS?
- What is the internal reliability?
- Are there differences in scores for mental health professionals practicing in military-connected communities versus practicing in non-military connected communities?

Method

Phases of the Study

Dawis (1987) discussed the utilization of a rational-empirical approach to instrument development, in which initial development involved measures of content validity, item analysis, factorial analysis, and focus groups regarding the inclusion and discussion of items. The present study used this method for the scale development of the Sweet Army Culture Scale (SACS). The study was conducted in a series of three phases: initial item generation, Army expert panel review, and a pilot phase with mental health professionals. In a book chapter written several years later, Dawis (2000) further suggested use of exploratory interviews on the subject matter with people from the population prior to writing items. According to suggestions from Dawis, the current study completed this step through consultation with Army culture experts. The Army expert panel also provided content validity for the SACS. Additionally, Dawis (2000) recommended pretesting the item pool on a small sample as part of the scale development. The current study followed this recommendation via the pilot phase of the study.

During initial item generation, the SACS-Alpha version (see Appendix A) was produced using previous research, the principal investigator's personal experience as an Army child and spouse, current Army literature, and informal interviews with Soldiers. During the second phase of the study, Army experts provided feedback and Likert ratings about the proposed question bank (see Appendix B). This expert panel feedback, consistent with the recommendations of Dawis (1987; 2000), was the foundation of the revisions for the next version of the scale entitled SACS-Bravo (see Appendix C). The

SACS-Bravo version was administered during the third phase of the study to a pilot sample of mental health professionals. Following the pilot phase of the study, statistical analysis was conducted to inform of further revisions needed to the SACS. The SACS-Charlie version (see Appendix D) was a culmination of the analysis recommended by Dawis (1987; 2000), including item analysis, reliability analysis, and factor analysis. The forthcoming sections describe the phases of the study in greater detail.

Item Generation and SACS-Alpha Version

The SACS is specific to the active duty Army and is a measure of perceived knowledge of Army culture, for pertinent to mental health professionals providing services to Army children and families. The Army Reserves and the National Guard were not considered in the creation and validation of the scale, as these groups have distinctive differences from the active duty Army. The initial dimensions of the scale were based on the four broad areas identified by the clinical experience of military mental health professionals: Language, Belief Systems, Behavioral Norms, and Rank (Reger et al., 2008). In other words, the scale was initially based on the theoretical framework of Reger et al. (2008). An initial bank of 7 to 15 items was generated in each area: Language, Belief Systems, Behavioral Norms, and Rank. Scale items were generated based on review of existing literature, consultation with enlisted Army personnel, review of deployment readiness materials from the United States Army, and the principal investigator's personal experience as an Army child and spouse. The resulting SACS was comprised of 50 items and can be seen in Appendix A.

Expert Panel Review and SACS-Bravo Version

One of the primary functions of the second phase of the study, the expert panel, was to assist with further item refinement and generation, which was accomplished via use of quantitative Likert scales to assess the relevance and clarity of the items. Qualitative data was collected through the use of open-ended questions in order to elicit feedback for additional items; therefore, the second phase of the study is thus consistent with recommendations from Dawis (1987; 2000). Additional details pertaining to the professional composition of the expert panel and the procedures used during data collection are discussed next.

Participants. A target of nine to twelve people familiar with Army culture and mental health services for Army families was set for the expert panel review. Current or former Army psychologists, current Army officers, current enlisted Soldiers, and paraprofessionals from Army Community Services (ACS) from a rural Army base in the Northeast were invited to comprise the expert panel. ACS paraprofessionals were included because they are involved in teaching new families about Army life and culture. The experts were recruited via (a) researcher site visits to an Army installation to speak with ACS and command, (b) outreach to leaders from the American Psychological Association's Society for Military Psychology, (c) contact with the Center for Deployment Psychology, (d) outreach to school psychologists who work in Department of Defense schools, and (e) contact with community mental health agencies that consult with the United States Army.

The resulting review panel consisted of ten Army culture experts, including four school psychologists in DoDEA or military-connected schools, an active duty officer

currently deployed overseas, an enlisted Soldier, two active duty military psychologists, and two civilian military psychologists. This expert panel is considered an ideal mix representing the settings from which the sample was recruited. An additional six people had expressed initial interest; however, they opted out of participating or did not return materials. The principal investigator conducted site visits to ACS offices, but follow up communication was not answered. This outcome is not hypothesized to implicate the expert panel, for ACS is comprised of paraprofessionals who connect Army families to services and not actual mental health professionals.

Procedures. The input of the expert reviewers was sought to refine the 50 SACS-Alpha questions in preparation for the pilot phase of the study. Evaluating relevance, clarity, and readability, the experts completed Likert ratings for each SACS-Alpha item. The items were listed according to the proposed scale dimensions of Language, Rank, Norms of Behavior, and Beliefs (see Appendix B). There was also a comments section alongside each item for explanation of ratings and potential item additions that experts believed were important for professionals working with Army families should understand about Army culture. This open-ended format for comments was used to gather useful qualitative data for scale revisions, such as suggestions for additional items and candid feedback from experts.

The experts were contacted by telephone, email, and/or face-to-face consultation to determine their preference for receiving the SACS-Alpha review forms. It was anticipated that some experts might be deployed overseas or stationed in another state or country, which would affect method of scale dissemination. The SACS-Alpha version review form and demographics questionnaire was then emailed or mailed to experts, with

the majority (*n* = 9; 90%) receiving the scale via email. Follow-up interviews for further clarification or consultation were anticipated to occur via email, telephone, and/or in person as necessary, per Dawis (1987; 2000). However, it was only necessary to follow up with four experts via email.

During the second phase, additional items were generated, some items were removed, and some items were revised based on the feedback from Army experts. The revisions resulted in the SACS-Bravo version, which was used for the pilot phase. The SACS-Bravo version had a total of 69 items (see Appendix C). The decisions made about the revisions are discussed in more detail in the Results chapter.

Pilot Phase and Administration of the SACS-Bravo Version

The SACS-Bravo version was distributed to various groups of mental health professionals and used to calculate reliability indices and factor analysis to confirm or disconfirm the existence of the four dimensions proposed by Reger et al. (2008). This pilot sample phase of the study was also consistent with the Dawis (2000) recommendation pertaining to pretesting scale items on a sample. The pilot sample survey responses were used for exploratory factor analyses, calculating internal consistency, item analysis, and anticipated comparison of pilot results between groups. Based on analysis of this data, the SACS-Charlie scale was produced as a refined version of the scale.

Participants. The pilot study sample was designed with approximately 200 participants as the lower limit goal and 400 participants as the upper limit goal. The goals were set by the principal investigator to stay consistent with literature recommendations and uncertainty going into the research as to what number of items would be on the final

version of the SACS. Dawis (2000) sets sample guidelines for scale development at 100 respondents minimal and 400 to 500 as the ideal number. Other research has indicated that the sample size should be five times the number of items in the scale (Lounsbury, Gibson, & Saudargas, 2006).

Ultimately, the pilot sample involved 97 participants. Mental health professionals (e.g., psychologists, psychiatrists, mental health counselors, school counselors, school psychologists, social workers, psychiatric nurse practitioners, marriage and family therapists, paraprofessionals) who work in school and clinical settings in military-connected communities and non-military-connected communities served as the participants for the pilot phase. They were predominantly from a rural area in the Northeast.

Procedures. During the pilot phase, scale questions for SACS-Bravo were randomized and not organized by category, as was done for the expert review phase (see Appendix C). The measure and demographics questionnaire was completed by all participants entirely online through Survey Monkey.

Participants were divided into two distinct groups to assess differences between responses of mental health professionals in military-connected communities and non-military connected communities. Location was anticipated to be sufficient enough for separating the response groups based on likelihood of direct contact with active duty Soldiers and their families. Recall that Army National Guard and Army Reserves families were not included in this study, for their experiences are significantly different than the Army culture experienced by the active duty group. Non-military connected communities were operationally defined as communities 90 or more miles away from the

perimeter of the Army installation. This distance was intended to decrease the likelihood of a large contingency of active duty Army families residing in the community, attending local schools, or using local mental health agencies. Military-connected communities have a larger contingency of active duty families residing within the geographic area of an Army installation and were operationally defined as the 50 miles perimeter surrounding an installation. Both respondent groups were drawn from a primarily rural region, but were recruited to be as homogeneous as possible. For example, both school and clinical personnel were recruited in both groups.

Access was gained to participants via State Education Department listings for all school districts around the Army installation and those in geographic areas farther away. Access to clinical and community professionals were attained via county mental health website listings, phone book listings, and insurance panels for areas farther away from the installation. Clinical and community professionals near the Army installation were accessed via listings available through installation personnel for Soldiers and families seeking assistance and also from the principal investigator's knowledge of the geographic area. A health advocacy organization with a network of health providers for the Army installation was also contacted to recruit from their provider listings. Army Public Affairs was contacted to disseminate materials to active duty providers on the installation; however, because of federal sequestration and the high volume of deployments, it was impossible to attain permission to submit materials to the Medical Department Activity (MEDDAC) as a result of understaffing in the Public Affairs department.

Initial recruiting for the pilot phase involved face-to-face researcher site visits, email, or telephone contact, depending on commanding officer or supervisor instructions. It was anticipated that active duty Soldiers or professionals in schools or community clinics might need to complete the SACS-Bravo via hard copy, for completing surveys via email is against some companies' security policies; however, email and letters containing the appropriate links to the survey were acceptable for all respondents in the pilot phase. The SACS-Bravo pilot version was thus distributed via email or letter with a URL taking participants to a link at the Survey Monkey website for the survey and informed consent documents.

Demographics and exploratory questions. Demographic and exploratory variables pertaining to the participants were assessed in three broad areas: pertinent personal information, military affiliation, and professional information. Personal information assessed included sex, ethnicity, and age. Military affiliation questions included historical or current military experience, immediate family military experience (spouse, children, parents, siblings, or grandparents), overseas deployment experience history (either personally or immediate family), and distance in miles from an Army installation. Professional information assessed included questions about whether professional development is often pursued, if professional journals are consulted on a regular basis, type of professional employment setting (e.g., school, community, or Army), job title, professional organization affiliations, ethnicity of families on caseload, and whether regular supervision is received (see Appendix E).

In summary, the data collection phases assisted with generation of qualitative and quantitative data that was used to develop the SACS through three various versions:

SACS-Alpha, SACS-Bravo, and SACS-Charlie. The specific statistical and data analysis methods that led to the decisions for revisions are outlined in more detail in the Results chapter.

Results

Expert Panel Review and SACS-Bravo Version

The expert panelist comments and ratings of relevance, clarity, and readability, of the SACS-Alpha led to a number of decisions, including the removal of reverse questioning format, deletion of questions, revision of question wording, and addition of new items for the SACS-Bravo. The number of items was expanded from 50 items in the original item bank to 69 items (see Appendix A & C). These changes, and the reasons supporting these decisions, are discussed next.

Likert rating. Table 1 lists the frequencies for all Likert ratings and all comments on the SACS-Alpha items. Items that had a low relevance rating from at least two expert reviewers were removed. The criteria were set by the principal investigator for pragmatic reasons. Low clarity and readability ratings were addressed through revisions of the wording of items as indicated by panelists and deletion of ambiguous items (see Table 1). Items with low clarity ratings that could not be addressed with wording revisions were also rated as low by panelists in the relevance ratings and subsequently deleted. In total, 16 of the original 50 items were deleted because of low relevance ratings: 4 items from the Language dimension, 5 items from the Rank dimension, 6 items from the Norms of Behavior dimension, and 1 item from the Beliefs dimension. These deleted items are italicized in Appendix A.

Two questions that met the aforementioned criteria for lower relevance ratings were kept in the item bank because of extremely strong support and positive comments from other raters. The first item, *I understand why being unfit for combat is of the utmost insult to a Soldier*, had two low relevance ratings and produced a reviewer's comment of

"Due to levels of PTSD, this is judgmental content." The impact of PTSD on rendering a Soldier unfit for combat, which is widely perceived as an insult, is precisely why the experience of trauma is so devastating to a Soldier. The Soldier is struggling with mental health challenges secondary to combat experiences as well as stigma and loss of identity as combat-ready. Because of the importance of this statement in gauging preparedness for providing military mental health services, the decision was made to include this question in the revised item bank for the SACS-Bravo version. The second item, *I am aware of the reasoning behind the saying 'We are in the profession of defending democracy, not practicing it,*' produced a reviewer's comment of "IQ loading- may want to ask about or allude to understanding hierarchical nature of the Army. Defend the Constitution, not democracy." The item was ultimately retained because all respondent mental health professionals in the pilot sample and users of the final scale would have at least a Master's degree and would be presumed to understand the Army hierarchy. In addition, there was substantial positive support for the question from other reviewers (see Table 1).

The reverse questioning format was also removed. Despite being supported in the literature as a valid method for scale construction, the majority of the expert panel rated the switch between negative and affirmative as confusing, thus detracting from essential face and content validity for the measure (see Table 1). Because the SACS is screening for knowledge and not pathology, reverse questioning is not needed to search for inconsistent pattern responses. Upon further reflection, the principal investigator determined that revere questioning would not add value and did not need to be present for a robust scale.

In addition, a qualitative, open-ended question was on the expert review form that invited participants to suggest fake acronym items for a validity scale. Only one participant responded with suggestions. It was difficult to determine if the proposed items would detect invalid response patterns, especially because the suggestions came from only one person. The fake acronyms were not written in advance. If fake acronyms had been presented in a quantitative manner with a coded Likert scale, the response rate may have been higher. Finally, the MCAS and MCKAS measures of ethnic cultural competence did not include validity questions. Although these measures and the SACS are based on different factor structures, the SACS development was based on the aforementioned measures in terms of statistical development. The validity questions were removed from consideration in the SACS-Bravo version because of only one response. Ultimately, it was decided that the fake acronyms would not add any value to the scale.

Addition of new items. One of the purposes of the expert panel was generation of additional items. Dawis (2000) recommended writing more items than would be used in the finalized scale. More specifically, he suggested that during development of self-report scales, twice as many items as are wanted in the final scale should be written.

Not all of the items that were suggested by expert reviewers were included in the SACS-Bravo. The proposed items that were not retained did not pragmatically fit with the original items that were kept in the scale. Some items were too specialized to the Army population to be relevant to mental health professionals, some were too specific to Soldiers and not to the families, and others were too broad and ambiguous. The proposed items that were added related specifically to important knowledge about Army children and families that would be essential for effective mental health services. Items related to

(a) the importance of understanding Army health care processes ("I am aware of how TRICARE processes referrals" and "I can explain the time and process involved in obtaining psychiatric services for Army children"), (b) the effects of the deployment cycle on families ("I understand and can describe the deployment cycle," "I can explain the processes to plan for the care and control of dependent family members," and "I can explain typical redeployment and reintegration challenges that families face"), (c) Army installation support services available for families ("I can explain the significance of an MFLC and when to contact him or her," "I know what a Gold Star family is," and "I know who the post School Liaison is and how to contact him or her"), and (d) the moving process for families ("I understand why the moving process for families involves a 'hurry up and wait' mentality") were most relevant. The proposed items, along with retained items from the SACS-Alpha primarily involving the Language and Beliefs dimensions, made up the SACS-Bravo version. In total, 16 of the original 50 items were deleted (see Appendix A), and 35 items from expert panelist suggestions were added, for a total of 69 items for the SACS-Bravo version (see Appendix C).

Other issues from reviewers. One expert raised concerns with equal weighting of questions in each of the four theoretical categories (Language, Rank, Norms of Behavior, and Beliefs). Three of the four categories had 14 or 15 items, and one category had 7 items initially. The equal weighting of categories was resolved through the addition of new questions and factor analysis following the pilot phase. Furthermore, exploratory factor analysis identified the item loadings even when scales had uneven numbers of items.

Another expert raised concern with multicollinearity; however, this is not an issue for the present study, for logistic regression analyses were not conducted on the pilot sample. Overlap between items on each factor was addressed through additional statistical analysis via exploratory factor analysis.

In summary, some items in the scale were deleted, others were revised, and many new items were added based on expert feedback (see Table 1). Likert scales provided basic quantitative data and open-ended comments provided qualitative data. Items with higher relevance ratings gave credence to face and content validity. Some expert reviewer concerns were raised regarding two controversial items, equal weighting of items, and multicollinearity; however, all of these concerns were addressed via item revisions and data analysis on the SACS-Bravo version.

Pilot Phase and Revisions to the SACS-Bravo Version

The pilot phase was used to reduce the scale to the utmost relevant and reliable items most likely to produce a valid and useful scale. In a literature review pertaining to shortening self-report scales, Stanton, Sinar, Balzer, and Smith (2002) acknowledged that there is scant research available. Many researchers use item-total correlations, factor analysis, and central tendency/variance methods, and items with low variability are often discarded. In addition, item-total correlations can be used as a measure of the internal worth of a scale (Stanton et al., 2002). This research is further supported in the guidance of Dawis (2000) on scale development. The pilot study used these methods to evaluate the SACS-Bravo version with the intention of further revision.

Participant demographics. In total, the pilot phase yielded 107 respondents out of 700 surveys distributed to individuals personally or via a central agency contact. The

response rate was 15.29%. Of the 107 people who returned the scale, 97 respondents completed the entire SACS- Bravo version. Within the sample size of 97, one person opted not to answer the any of demographics questions; thus, the demographic descriptive statistics are based on 96 of the 97 respondents in the sample (see Table 2). Respondents ranged in age from 28 to 68 years (n = 91, 5 skipped the question) and 100% of the sample identified as non-Hispanic white (n = 95, 1 skipped the question). In regard to gender, 75% of the sample identified as female (n = 72) and 25% identified as male (n = 24).

Pertaining to military affiliation, 94.79% of the sample indicated that they have never served in the Armed Forces. Five people reported military services (4 in the Army, 1 in the Navy). Of the five people who reported current or former military service, three had deployed overseas. A higher percentage of respondents (72.92%; n = 70) reported immediate family members in service in all branches of the military, except the Coast Guard, with Army or Navy service being the most frequently identified. Fifty-one respondents reported that family members had been deployed to a variety of overseas conflicts, including World War II, Vietnam, Korea, Desert Storm, OIF/OND, and OEF.

Professionally, respondents were primarily employed in school settings (71.88%; n = 69) as school psychologists, counselors, or social workers. Clinical or community settings, including private practice, hospitals, agencies, and outpatient clinics, were the second highest percentage of respondent employment settings (25%; n = 24). The professionals included social workers, counselors, psychologists, and nurses. No psychiatrists responded to the survey, although surveys were distributed to several potential recruits in the field. One respondent identified as employed in an Army

affiliated hospital and four respondents indicated employment in other military affiliated health settings, such as military hospitals and clinics. The majority of the sample reported consulting professional journals (n = 71) and engaging in professional development activities (n = 70) every few months. The number of professionals who receive supervision was varied in response, with most respondents selecting every few months (42.71%; n = 41) and the least number of respondents selecting every few years (4.17%; n = 4), respectively.

There was a disproportionate representation of military-connected community mental health professionals (n = 66) versus non-military-connected community mental health professionals (n = 15) in the pilot sample. Proximity to a major Army installation in miles was used to assess how likely a mental health professional would be providing services to active duty Army families. Ten respondents were uncertain of the distance to the nearest Army installation and could not be part of the comparison group. Because of the disparity in the sampling response rate, comparisons between the two distinctive groups would be, at best, qualitative. As such, one of the research hypotheses was not able to be tested; the study was not able to test if there were discernible differences in responses pertaining to community type (military connected versus non-military connected).

Also of important note is the ethnic make-up of professionals' caseloads. Ninety-six respondents reported on caseload ethnic diversity. All of the respondents indicated work with non-Hispanic white clientele (n = 96). Providing services to clients of Black or African American descent was reported by 91.67% of the respondents (n = 88). Service delivery to clients of Hispanic or Latino/Latina and Asian or Asian American

descent was reported by 82.29% and 59.38% of respondents, respectively (n = 79; n = 57). Lastly, 48.96 % reported providing services to clients of American Indian or Alaska Native descent, and 30.21% of respondents reported service delivery to Hawaiian or Other Pacific Islander clientele, respectively (n = 47; n = 29).

Item reliability. The reliability analysis using Cronbach's alpha of all 69 items was 0.99. In total, 99 respondents answered all of the scale questions, but 97 were considered standardized for the purpose of statistical analysis according to SPSS. These reliability results are considered acceptable according to research standards. More specifically, a Cronbach's alpha of at least .80 is recommended in the initial stage of scale development (Lounsbury et al., 2006; Ponterotto & Constantine, 2006). Furthermore, item-total correlations can be used as criteria for item selection and/or deletion (Dawis, 2000; Lounsbury et al., 2006; Stanton et al., 2002). As such, item-total correlations were also analyzed. Average item-total correlations were .73, with a range of .39 to .87. The item response mean, based on a 5-point Likert scale, was 2.08, with a range of 1.34 to 4.27 (see Table 3). Even though several of the items attained acceptable item-total correlations, retaining all 69 items would be grossly inefficient to the scale as a whole.

Based on research consulted, acceptable item-total correlations were defined as at .60 or above; therefore item-total correlations for retained items ranged from .61 to .87. Five items did not have acceptable item-total correlations: "I understand why a Soldier is mandated to follow almost any order given by a superior," "I understand the definition of the term 'redeployment'," "I know what a Gold Star family is," "I know who the post School Liaison Officer is and how to contact him or her," and "I can explain what

'BRAC' is," attaining item total correlations of .56, .39, .58, .49, and .58, respectively. Two items ("I understand the definition of the term 'redeployment'" and "I can explain what 'BRAC' is") were not retained. The other three items, despite having lower item-total correlations, were retained for pragmatic reasons. These items are discussed further in subsequent analyses. The statistical analysis of the entire pilot scale begins to address the research question pertaining to the internal reliability of the SACS.

Exploratory factor analysis. Exploratory factor analysis was conducted to identify item clusters and items with poor fit. Dawis (2000) indicated that factor loading can be used for determining the minimum cutoff for items and to guide pragmatic decisions of items to preserve. Inspection of the EFA correlation matrix yielded primarily significant relationships. The Kaiser-Meyer-Olkin measure of sampling adequacy was .86, and the Bartlett's test of sphericity reached statistical significance, suggesting that the correlation matrix was suitable for factor analysis.

Eight factors were extracted via principal component analysis with a varimax rotation. The eight components explained 76.99% of the cumulative variance; however, 54.93% of the variance was explained by the first component alone. Additionally, upon inspection of the scree plot with all 69 items, there is a significant drop after only three components. Research recommendations from Costello and Osborne (2005) indicated that use of the scree plot is the best method for decisions regarding the number of factors retain. Several scale items cross-loaded on more than one component with no discernible conceptual patterns. Finally, the scale is considered grossly inefficient with all 69 items included within the matrix, which provided factors explaining little variance. The research question pertaining to whether the SACS has a 4-factor structure does not seem

to be supported in the statistical results, and a three-factor structure seems more plausible conceptually. An important decision point in the research occurred at this juncture. The 4-factor structure was the structure on which the item development of the SACS was based; however, the data supports a 3-factor structure. Additional data and item analysis occurred to determine the specific factor structure the SACS presents. Both the theorized 4-factor structure and the 3-factor structure suggested by the data are more thoroughly investigated in forthcoming statistical analyses.

Scale by theorized dimension. In order to further analyze the research question pertaining to the 4-factor structure, each theorized dimension was investigated individually. Reliability analyses were conducted via Cronbach's alpha and item-total correlations, and exploratory factor analysis was used to analyze the items further.

Language. The 20 items originally conceived to be a part of the proposed Language dimension attained an internal consistency estimate of Cronbach's alpha of 0.96 and item-total correlations indicated correlations ranging from .62 to .83, which are considered acceptable by research terms (Stanton et al., 2002). The only item with a low and unacceptable item-total correlation was the Redeployment item, with a correlation of .34. This low item-total correlation is consistent with the findings when analyzing the reliability of the entire pilot scale with all 69 items included in analysis. Exploratory factor analysis was also conducted on the items. The Kaiser-Meyer-Olkin measure of sampling adequacy was .91 and the Bartlett's test was significant. Principal component analysis with varimax rotation was conducted, extracting three factors that explained 71.42% of the variance in the correlations between the 20 items. There was considerable cross-loading of items across components. The Redeployment item was removed from

the EFA; however, the results were not much different. These results suggest that the data does not organize into a Language dimension.

Rank. The 17 items originally conceived as the Rank dimension produced a Cronbach's alpha of 0.95. Acceptable item-total correlations ranged from .69 to .83. Unacceptable item-total correlations were the Enlisted and School Liaison items, with .60 and .53 correlations, respectively. The low item-total correlation for the School Liaison item is consistent with the findings when analyzing the reliability of the entire pilot scale with all 69 items included in analysis. In the exploratory factor analysis of this dimension, varimax rotation extracted two components explaining 68.72% of the cumulative variance. The KMO was .93 and the Bartlett test was significant. There was some cross-loading, although not as much as was noted with the purported Language dimension items. The data indicate that items do not establish into a Rank dimension.

Norms of Behavior. The Norms of Behavior dimension consisted of 19 items and achieved a Cronbach's alpha of 0.97. Acceptable item-total correlations ranged from .65 to .87. Only one item, Mandated Order, had a low item-total correlation of .58. Again, this finding is consistent with the reliability analysis of the entire pilot scale. Exploratory factor analysis with varimax rotation extracted a 3-factor structure, thereby explaining 75.65% of the variance between items. Once again, the correlation matrix yielded significant relationships, the KMO was .93, the Bartlett test was significant, and cross-loading across components was documented. Consistent with the aforementioned dimensions, the data do not support use of a Norms of Behavior dimension.

Beliefs. The Beliefs dimension consisted of 13 items and attained a Cronbach's alpha of 0.94. Item-total correlations ranged from .60 to .83. The unacceptable item-

total correlation was LDRSHIP at .59. Exploratory factor analysis of the Beliefs items resulted in a 2-factor extraction with 68.36% of the variance explained. Results were consistent with the other proposed dimensions; therefore, none of the proposed four factor dimensions were supported in the data.

Scale Refinements and SACS-Charlie Version

In order to lower the number of items in the scale and attempt to increase the overall variability of the scale, an analysis of the frequency distributions of the item responses was conducted. Revisions were made with hopes of finding a more satisfactory factor structure. Item analysis, reliability analysis, and exploratory factor analysis were conducted on the resulting SACS-Charlie version (see Appendix D).

Frequency distribution and item analysis. The frequency distributions of responses were available for 99 participants. All questions had at least two or more respondents that used the entire selection criterion across the Likert scale (1 = not at all true; 3 = somewhat true; 5 = completely true). The criteria for deletion of an item were if 75% of the respondents picked 1 or 2 on the Likert scale, if the mean was below 2.0 for the item, and/or if the item was deemed ambiguous or misleading. This was to ensure that there was appropriate variability amongst the items and was pragmatic in nature. Low ratings were eliminated because a lack of variability compromises the psychometric properties of the overall scale. Conceptually, lower responses indicate lower levels of participant identified perceived knowledge of Army culture. Criteria were not set for answers on the higher end of the spectrum (4 or 5) due to a lack of responses of this nature. If there had been a trend of responses on the higher end, then similar criteria would have been set for the higher end (i.e., 75% of respondents picking 4 or 5 or a mean

above 4.0 for the item). Conceptually, responses of this nature would have indicated high levels of perceived knowledge. This phenomenon was noted with one item about "redeployment." Further, lack of variability on either end would also consequently compromise scale psychometric properties. Of the original 69 items on the SACS-Bravo, 39 items were deleted based on the aforementioned criteria and 30 items were kept (see Table 3 & 4). In addition to analysis based on means and standard deviations, seven items that did meet the established criteria were deleted for reasons related to face validity. These reasons will be further explained next.

More specifically, the item "I understand the definition of the term 'redeployment'" was deleted based on the fact that it was the only question in the entire scale where the variability was in the high end of the Likert scale, with most respondents indicating a 4 or a 5 on the scale. One possible explanation for this finding is conceivable confusion as to the real meaning of the word. "Redeployment" does not mean that troops are going back to overseas assignments. In fact, this means that troops currently in theater are returning home. Given that this was the only item in the scale to have a high response rate at the level of a 4 or 5; it is highly plausible that there may have been misperception of the significance of the word. Another explanation could be that this term is highly exposed more than others due to media coverage of the wars and stories about the troops. The term may also be considered ambiguous.

The items "I can explain the appropriate customs and courtesies for acknowledging superior officers," "I can explain the key differences between a combat arms Soldier and a support Soldier," and "I know what it means for a Soldier to have his

or her weapon taken by the commander," despite meeting basic criteria, were ultimately deleted due to not fitting with the rest of the items pragmatically.

The item "I can explain the significance of 'Taps'" was deleted due to possible perceived multiple meanings of the word and no way to systematically infer which meaning the respondents were referring to. More specifically, Taps is a military bugle call that is played at funerals to honor the fallen. It may also be perceived as TAPS, which is the Tragedy Assistance Program for Survivors, a program to assist children that have been impacted by the loss of a parent or older sibling who was KIA (Killed in Action). Lastly, the respondent may have also perceived the item to be referring to the Transition Assistance Program, which assists Soldiers and their families that are preparing to separate from military service and transition back to civilian life. Due to its ambiguous content, the question was ultimately deleted. The items "I understand the varying levels of responsibility of specific Army ranks and missions" and "I know how frequently families move" were also deleted due to broad content, which may also lead to ambiguity.

Three items, "I understand why a Soldier is mandated to follow almost any order given by a superior," "I know what a Gold Star family is," and "I know who the post School Liaison Officer is and how to contact him or her," were retained despite low item-total correlations in the total pilot scale exploratory factor analysis due to achieving criteria set for the frequency distribution and for high face and content validity amongst expert panelists.

Four items, despite not meeting the frequency distribution criteria set by the principal investigator for item reduction, were also kept intuitively for face and content

validity purposes. The items "I am aware of how TRICARE processes referrals," "I understand the role of Military OneSource," "I can explain the time and process involved in obtaining psychiatric services for Army children," and "I can explain the processes to plan for the care and control of dependent family members" were kept due to the emphasis of these items from expert panelists and the fundamental importance of mental health professionals understanding these aspects of Army life in order to provide culturally sensitive, and ultimately, effective services.

Reliability analysis. Cronbach's alpha of the 30 retained items was .98. All of the item-total correlations were acceptable, with the exception of the Mandated Order, School Liaison, and Gold Star items, with item-total correlations of .60, .50, and .55, respectively. These results are consistent with the pilot scale total analysis. Reliability of the SACS with the retained 30 items was achieved. Exploratory factor analysis (EFA) was performed on the remaining items. The three items with unacceptable item-total correlations were retained for pragmatic reasons because of face and content validity. In addition, the items attained an acceptable factor loading in the EFA.

In summary, items were deleted based on low variability in item responses, lack of clarity, redundancy, or better operationalization of the construct with an alternate item. The SACS-Charlie version ended up with 30 items based on frequency distributions and item analysis. Reliability and factor analyses were done on the SACS-Charlie using data from pilot respondents to determine the psychometric properties of the scale.

Exploratory factor analysis. The Kaiser-Meyer-Olkin measure was 0.94 and the Bartlett's test was significant for SACS-Charlie, indicating that the 30 retained items were appropriate for factor analysis. Principal component analysis with varimax rotation

extracted three factors, explaining 70.96% of the variance. The three factors were named Army Knowledge, Army Family Processes, and Adaptability of Army Families. Loadings for the 30 items are found in Table 5. Per the recommendations of Costello and Osborne (2005), examination of the scree plot further supported the decision to retain three factors. Orthogonal (varimax rotation) and oblique rotations were used and were similar. Costello and Osborne (2005) specify that an adequate to strong factor loading is .50 or higher, indicating a solid factor. They further indicate that a factor loading of .30 or higher is the minimum value that is considered acceptable. The decision was made to use .50 as the factor loading minimum criteria to ensure a robust factor structure. The factor loadings ranged from .42 to .84, with all but one of the 30 items attaining a factor loading of above .50 consistent with the aforementioned criteria. These findings show the presence of a strong factor structure for the SACS-Charlie version (see Table 5).

The one item with a lower, yet still psychometrically acceptable, loading was "I know what a Gold Star family is." Due to expert panel endorsement of the item and minimally acceptable psychometric properties as an individual item, the decision was made to retain the item for further testing in future studies. Some cross-loading of items was present, but the effect was minimal. The item "I can explain the time and process involved in obtaining psychiatric services for Army children" cross-loaded on Factors 2 and 3. It was decided to retain the item on Factor 3 rather than Factor 2 because obtaining psychiatric services is more of a coping method to manage some of the stresses of Army life rather than a process experienced more universally by families. The item "I can explain the difference between 'leave' and 'R & R'" cross loaded on Factors 1 and 2. The decision was made to retain the item on Factor 1, as it theoretically fits closer with

knowledge that is suitable to the Soldier and Army itself. Finally, the item "I understand why the moving process for families involves a 'hurry up and wait' mentality" cross loaded on Factor 1 and 2. This item was retained on Factor 2, as it pragmatically fits with family processes and procedures more so than Soldier processes and procedures.

The three factors are conceptually identified as Army Knowledge, Army Family Processes, and Adaptability of Army Families. The first factor, Army Knowledge, is comprised of 15 items and reflects knowledge of policy, procedure, and culture. Factor 1, Army Knowledge, explained 58.59% of total scale variance. Examples of items that loaded on the factor include "I am aware of the general content of the Soldier's Creed," "I understand the difference between enlisted personnel and officers," "I understand why being unfit for combat is of the utmost insult to a Soldier," and "I understand the significance of 'mission first' and the impact that it has on the individual Soldier and their family." The second factor, Army Family Processes, is comprised of nine items and measures knowledge of typical procedures and processes more specific to families. A variance of 8.85% is accounted for by Factor Two. Items include "I am aware of the role of the FRG," "I can explain the role of the American Red Cross for military families," and "I can explain typical redeployment and reintegration challenges that families face." The third factor, Adaptability of Army Families, is comprised of six items and reflects various options available to families for coping with the challenges of Army life. A variance of 3.52% is accounted for by Factor Three. Items include "I know what a Gold Star family is," "I am aware of how TRICARE processes referrals," and "I can explain the time and process involved in obtaining psychiatric services for Army children."

Costello and Osborne (2005) postulate that a suitable factor structure is one in which item loadings are about .30, few items cross load on factors, and no factors have fewer than three items loaded. All of these criteria are met by the SACS-Charlie (see Table 5). As such, the SACS-Charlie meets basic criteria for psychometric adequacy during the initial stages of scale development.

Discussion

In regard to the research questions for the current study, the questions pertaining to the reliability and validity of the scale have been adequately addressed. The reliability of the SACS-Charlie, in terms of correlation matrixes and internal consistency has exceeded established research expectations for the initial stage of scale development. The face and content validity was also established through the expert panel review.

One of the most striking implications of the pilot study results is that there was limited variability between the respondents that were in closer proximity to the Army installation. This finding suggests that even mental health professionals currently working with Army children and families may perceive that they lack essential knowledge about the Army culture, or perhaps that additional discussions and training about cultural topics pertaining to Army families would be welcomed. It is also important to gain some insight into whether mental health professionals in military-connected communities perceive the presence of adequate professional support that promotes confidence in service delivery ability. Thus, the need for a validated scale is paramount for future training opportunities for all communities. Training opportunities could also be used as a means to provide professionals with support systems that are of dire importance in the helping professions.

The present study did not find a 4-factor structure, as was originally theorized using Reger et al. (2008). None of the four factors (Language, Rank, Norms of Behavior, and Beliefs) appeared to be relevant in the data and were subsequently replaced by a factor loading more directly connected to the data (Army Knowledge, Army Family Processes, and Adaptability of Army Families). A 3-factor structure seems to be more

appropriate. The data consistently indicated a 3-factor structure when looking through the three versions of the SACS. The writings of Reger et al. (2008) may have been primarily focused on the mental health needs of the Soldier and not the whole family when theorizing on areas of needed professional cultural knowledge. The differences in the data may be attributed to the specific goal of the SACS to be relevant to providing direct services to Army children and families, not just the Soldiers themselves. The long-term mental health needs of children and families have not yet been quantified. It is highly plausible that when looking at an Army family holistically the essential knowledge is different than when only considering Soldier needs; although, it is important for professionals to understand that both interact within a cultural context that differs from the rest of American society.

The present study was not able to test the hypothesis regarding differences in military-connected vs. non-military-connected communities due to sample size disparities. Interestingly, the results also showed that many of the professionals that did live in proximity to the Army installation perceived that they didn't know many of the items anyway, as evidenced by lower scores across most ratings. These low scores provide further credence to the importance of the development of the SACS because low scores indicate lower levels of perceived knowledge of Army culture. The majority of the pilot sample (75%) identified as school mental health professionals. When considering possible training of personnel to work with Army families, schools particularly need to be invited to attend. It is essential to support the work and well-being of the mental health professionals themselves as well as the services provided directly

and indirectly to children and families. This step is important for increasing perceived knowledge of Army culture.

The 30 items that comprise of the SACS-Charlie version address child-specific items, family-specific items, and items that all mental health providers should know (and that may be more relevant to the way that Soldier factors and family factors interact in a greater cultural context). Item content variety is necessary to accomplish the focus of the scale, which is to test mental health professionals' perceived knowledge of Army culture pertinent to children and families. Examples of child-specific items include "I can explain the time and process involved in obtaining psychiatric services for Army children," "I know who the post School Liaison Officer is and how to contact him or her," and "I can explain the processes to plan for the care and control of dependent family members." Family-specific items include "I understand the significance of 'mission first' and the impact that it has on the individual Soldier and their family," "I am aware of the role of the FRG," "I know what a Gold Star family is," "I can explain the significance of an MFLC and when to contact him or her," and "I can explain typical redeployment and reintegration challenges that families face." Items that cover knowledge about general Army culture include "I am aware of the general content of the Soldier's Creed," I can explain the definition of an 'MOS,'" "I understand the difference between enlisted personnel and officers," "I understand why being unfit for combat is of the utmost insult to a Soldier," and "I know how long a typical deployment is." As was established in the literature review, child factors, family factors, and Soldier-specific factors all interact within a cultural context to influence the emotional, social, cognitive, and behavioral needs of the children and families that live their lives within that culture. Thus, the

SACS-Charlie is needed to assist professionals with making salient treatment and intervention decisions that will be effective. When perceived cultural knowledge is higher, treatment decisions will thereby be more culturally sensitive.

The final result was a 30-item, self-report scale that measures the perceived knowledge of Army culture of mental health professionals in a variety of settings. The reliability of the revised 30-item measure was very respectable, with face and content validity established via expert panel review, and the SACS- Charlie begins to address the construct validity. The 30 items retained in the SACS-Charlie version reflects an initial attempt to measure the most potent knowledge that mental health professionals need to know in order to provide effective and appropriate services for Army children and families. Subsequent studies can further address this goal.

Limitations

The current study has several limitations that need to be addressed with follow-up studies. First, the diversity in the sample should include more professionals from a military background. Only five professionals identified as providing services in direct military settings. Recruitment efforts with Army Community Services (ACS) were not successful. ACS is comprised of paraprofessionals that link families to professional services and provide trainings about Army life to new families. Future attempts to link the SACS to more relevant training opportunities for mental health professionals would involve consultation with ACS. In addition, attempts to access MEDDAC professionals were not successful due to current federal challenges the military has been enduring. Differences between community and school professionals should also be tested, in addition to military and non-military communities. Finally, no psychiatrists responded to

the study. This should also be an area of focus in any follow-up studies, for psychiatrists play a vital role in treating mental and behavioral health. Some methods that could be used in follow-up studies to enhance psychiatrist participation include increased site visits to practices, targeted mailings explaining the study, and consultation with key leaders in the American Psychiatric Association. Outreach to military psychologists was used for the expert panel review phase. A similar method may increase psychiatrist participation in follow-up studies.

Secondly, all respondents identified as non-Hispanic white. Ethnic diversity in a sample is extremely important to establishing a more representative sample; however, diversity limits in the current sample may have been influenced by the geographic locations and the large contingency of school staff in primarily rural school districts with little ethnic diversity among staff. Interestingly, the professionals identified the clientele on their respective caseloads as being extremely ethnically diverse, further reflecting the diversity of the composition of the Army. Caseload diversity likely occurred due to most respondents being in close proximity to an Army installation, thereby increasing the ethnic diversity present in their respective communities.

Third, the pilot study was conducted in the geographic region of one state. Local cultures of Army platoons and brigades can vary due to the various types of MOS duties that a particular installation specializes in. The main Army installation in which pilot sampling occurred is home to brigades that deploy overseas on a frequent basis because of their specialization in conducting operations and missions in a wide range of terrain with light infantry tactics. This may have impacted the pilot sampling in significant ways. For example, high levels of operational tempo (OPTEMPO) promotes more

exposure to combat for the Soldiers, increased levels of separation from children, and high levels of cumulative stress. These factors likely create high need levels that can strain local mental health infrastructure. Additionally, the Army population is highly transient at the specific post in which sampling occurred, which may contribute to perceptions within the Army family that the local community is not supportive of the unique sacrifices and lifestyle that is required in the Army culture. Future testing on the SACS-Charlie should occur in geographic regions with other Army installations to tease out local subcultures within the Army.

Fourth, comparison between military-connected and non-military connected communities would be qualitative at best, because of inequitable sample distribution. There was a low response rate to the survey in communities further from the installation. In order to increase the likelihood that respondents would answer how far away the nearest Army installation was, the question was open-ended. In the future, this question should be close-ended. Additionally, similar outreach techniques used in the expert panel should be used with non-military communities to further inform professionals that they could make an important contribution to the validation of the scale, even though they do not directly work with Army families.

Lastly, the item responses reflect overall low variability; however, the items in SACS-Charlie can undergo additional testing in future studies. Even so, the SACS-Charlie version has strong psychometric properties in this initial phase of development that exceed the recommended statistical levels set by researchers that study scale development (Dawis, 2000; Lounsbury et al., 2006; Ponterotto & Constantine, 2006; Stanton et al., 2002).

Further Research

The SACS-Charlie requires further development and reliability/validity measures. The SACS-Charlie should not be used for practice purposes until additional development has occurred; however, the scale is ready for additional research. First, it was premature to conduct test-retest reliability on the SACS-Charlie even with the acceptable internal consistency achieved; however, this should be pursued in further studies. Test-retest reliability can be expected with the SACS-Charlie, for perceived knowledge will be more permanent following intervention with mental health professionals about Army culture. Cultural competence can be considered achieved when professionals rate their perceived knowledge on the higher end of the Likert scale (4 or 5) for most items rather than predominantly identifying with the lower end of the scale (1 or 2), as was demonstrated with the present study's sample. In addition to further addressing reliability, future studies could focus on designing specific intervention training models for professionals working with Army children and families.

The SACS-Charlie achieved respectable levels of face and content validity and began the process of addressing construct validity; however, more research is needed for the latter. More specially, criterion and discriminant validity needs to be addressed. The absence of external criterion data in the present sample is problematic; however, there are no co-existing measures of Army cultural competence. Criterion validity can still be addressed with alternate methods in future studies. One method might be to compare scores on the SACS-Charlie with measures of client satisfaction. Initially, concurrent validity might be achieved through client satisfaction measures within a clinic or school along with the SACS-Charlie being administered to the treating practitioner. Over time,

predictive validity can be achieved by measuring client outcomes with single-case study designs. Convergent validity of the SACS-Charlie may be addressed in future studies by collecting scores on measures of ethnic cultural competence with established reliability and validity. The two constructs, Army cultural competence and ethnic cultural competence, may be closely related, especially when considering the Army as an institution that is a great equalizer of people with diverse backgrounds. Future studies should also differentiate between confidence level and perceived knowledge of Army cultural competence.

In addition, the SACS-Charlie should undergo an additional expert review, but with a sample of military spouses or civilians that work on an active duty Army installation. Focus groups and use of additional samples are recommended. The Army cultural competence of Army families should also be tested. Further, more testing should occur on additional samples of mental health professionals. There is need for cross-validation of the reliability and validity gains achieved in the SACS-Charlie.

Once further revisions have been made through more samples testing, the SACS-Charlie should be evaluated by mental health professionals as a possible training tool. The predictive value of the scale can be established by conducting regression model analysis using several correlated factors of client outcome. The proposed 3-factor structure of the SACS-Charlie also needs to be tested with confirmatory factor analysis. This method will allow for hypothesis testing of the factors, for confirmatory factor analysis will test via inferential techniques.

Implications

Dawis (2000) discusses the importance of the social utility of a scale. Given this implication, the SACS certainly has the potential to address the burgeoning problem of mental health care for Army families. Even with the current wars winding down, the effects will continue to be seen with Army children. The SACS has the potential to be one method that can give mental health professionals a tool to provide effective services to Army children and families. In other words, perhaps this research can assist with reducing the underrepresented casualties of the wars in Iraq and Afghanistan: help and healing for the emotional repercussions of war on the Army's smallest and most vulnerable members - children.

The three factors which emerged in the scale provide a balance for what professionals should know about Soldiers and the Army as individuals and an entity, and what professionals should specifically know about aspects of Army life that affect children and families more than the Soldiers. While the latter may appear to be solely relevant, the former is just as essential for mental health professionals to understand. The family, by extension, is a part of the Soldier's direct relationship with the Army. In order for services to be effective, they must be delivered in an appropriate cultural context. The Soldier's mission readiness will be affected by the readiness of the children and family to endure Army life, and vice versa. Thus, the measure, in order to be valid, needs to balance knowledge pertinent to the Soldier and the family. The SACS-Charlie has made important progress in attempting to validate an empirical measure in order to advance knowledge about providing services to Army children and families.

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Table 1

Expert Reviewer Likert Frequencies and Summary of Comments (*N* = 10)

Clarity	Relevance	SACS- Alpha Items	Comments
3- one 5- nine	3- one 5- nine	I understand the definition of the term "redeployment."	None provided.
5- ten	5- ten	I can explain the definition of an "MOS."	None provided.
4- three 5- six	4- five 5- five	I know what "OPSEC" is.	Revise to "I understand what OPSEC is."
4- one 5- nine	5- ten	If a Soldier, Army spouse, or Army child was talking about their upcoming "PCS", I would know what they were talking about.	Revise "Army child" to "Army dependent"
1- one 2- one 3- two 4- one 5- five	3- one 4- one 5- eight	I am unfamiliar with what the term "ETS" means.	Do not switch between affirmative and negative.
2- one 3- two 4- one 5- six	2- one 3- four 4- one 5- four	If a Soldier was discussing JRTC, I would recognize where it happens and what it means.	None provided.
5- ten	4- one 5- nine	I can explain the difference between a unit, company, and brigade.	Use squad or platoon. Unit is not a standardized term.
5- ten	4- one 5- nine	I am aware of what a FRG is.	Aware of the role of FRG
5- ten	4- one 5- nine	I am able to recognize a Soldier's rank simply by looking at his or her uniform.	Stripes?
4- one 5- nine	3- two 4- one 5- seven	I know what the term "E4" means.	None provided.
4- one 5- nine	3- two 4- one 5- seven	I know what an O3 is.	None provided.
1- one 3- two 4- one 5- six	3- two 4- two 5- six	I am unsure of the function of a Warrant Officer.	Do not switch between affirmative and negative.
4- one 5- nine	5- ten	I know the difference between a NCO and a commissioned officer.	None provided.
3- two 4- three 5- five	1- one 2- one 4- two 5- six	I can explain when to address Soldiers by their rank and when to avoid doing so.	None provided.
3- two 4- one 5- seven	3- two 4- one 5- seven	I would be able to identify common environmental stressors for the average Soldier just by knowing their rank.	Too broad depending on unit and mission- MOS/location specific. Patch showing the job would be more relevant.

2- one 4- one 5- eight	3- two 4- one 5- seven	I understand the varying levels of responsibility of specific Army ranks.	Consider deleting.
2- one 3- one 5- eight	3- one 4- two 5- seven	I can explain the key differences between a combat Soldier and a support Soldier.	None provided.
3- one 5- nine	2- one 3- two 4- one 5- six	I know what an NCOER is.	Delete.
1- one 3- one 5-eight	2- one 3- four 4- one 5- four	I am not aware of what an OER is.	Delete.
1- one 3- two 4- two 4- five	1- one 2-one 3- one 4- one 5- six	I can explain what an MFLC is and what his or her significance is.	I know how and when to contact him/her.
3- one 5- nine	2- one 5- nine	I know what the role of the MWR is.	I understand what MWR consists of.
2- one 3- three 5- six	3- three 5- seven	I know the roles of the ACS, ARC, and AER.	Split this question. Spell out American Red Cross.
4- one 5- nine	3- two 5- eight	I am aware of the UCMJ and its fundamental significance in Army life.	None provided.
4- three 5- seven	4- three 5- seven	I can explain the appropriate customs for acknowledging superior officers.	And courtesies.
1- one 5- nine	2- one 3- one 4- three 5- five	I know what the Soldier's Creed is.	What it is in general, or can they recite it?
1- two 4- one 5- seven	1- one 3- one 4- four 5- four	I am aware of the reasoning behind the saying "We are in the profession of defending democracy, not practicing it."	IQ loading- may want to ask about or allude to understanding hierarchical nature of the Army. Defend the Constitution, not democracy.
1- one 3- one 4- two 5- six	4- four 5- six	I am unfamiliar with what the seven Army values are.	Use the acronym LDRSHIP. This is more commonly used now.
3- one 4- two 5- seven	3- two 4- one 5- seven	I understand why being unfit for combat is of the utmost insult to a Soldier.	Due to levels of PTSD, this is judgmental content.
4- one 5- nine	2- two 3- two 4- one 5- five	I can explain what it really means to be Army Strong.	Not many Soldiers can.

4- one 5- nine	3- one 5- nine	I understand the significance of "mission first" and the impact that it has on the individual Soldier and their family.	Rated as very well liked.
4- one 5- nine	3- two 4- one 5- seven	I know what the Warrior Ethos is.	None provided.

Table 2
Participant Demographics for Pilot Sample (*N* = 96)

Item	Sample	Percentage	Range of Responses
Age*	91	--	28 to 68 years
Ethnicity	95	100%	Non-Hispanic Caucasian
Gender			
Female	72	75.00%	
Male	24	25.00%	
Armed Forces Service			
No	91	94.79%	1 Navy
Yes	5	5.21%	4 Army
Family Military Service			
Yes	70	72.92%	All branches except Coast Guard
No	26	27.08%	
Family Member Deployments	51	53.13%	WWII, Vietnam, Korea, Desert Storm, OIF/OND, OEF
Employment Setting			
School	67	71.88%	Psychologists, counselors, social workers, nurses
Clinical/Community	24	25.00%	
Military Affiliated	5	5.21%	

Note: * Some participants opted out of these questions. No psychiatrists responded to the survey.

Table 3
SACS- Bravo Scale Item Descriptive Statistics and Item-Total Correlations (*N* = 97)

Item	Mean	Standard Deviation	Item-Total Correlation
I understand the definition of the term "redeployment."	4.27	0.94	.39
I am able to recognize a Soldier's rank simply by looking at his or her uniform.	1.74	1.13	.77
I am aware of the UCMJ and its fundamental significance in Army life.	1.68	1.20	.73
I am aware of the general content of the Soldier's Creed.	**2.02**	**1.21**	**.76**
I can explain the definition of an MOS.	**2.02**	**1.57**	**.78**
I understand the difference between enlisted personnel and officers.	**3.34**	**1.38**	**.64**
I can explain the appropriate customs and courtesies for acknowledging superior officers.	2.25	1.20	.73
I am aware of the reasoning behind the saying "We are in the profession of defending democracy, not practicing it."	**2.77**	**1.36**	**.65**
I understand what "OPSEC" is.	1.60	1.20	.63
I understand the function of a Warrant Officer.	1.96	1.18	.83
I am familiar with the regulations regarding fraternization between enlisted and officers.	**2.45**	**1.34**	**.68**
I can explain LDRSHIP.	1.34	0.86	.67
If a Soldier, Army spouse, or Army dependent were talking about their upcoming PCS, I would know what they were talking about.	**2.56**	**1.77**	**.66**
I know the difference between a NCO and a commissioned officer.	**2.30**	**1.55**	**.73**
I understand why a Soldier is mandated to follow almost any order given by a superior.	**3.27**	**1.22**	**.56**
I understand why being unfit for combat is of the utmost insult to a Soldier.	**3.26**	**1.26**	**.68**
I am familiar with what the term "ETS" means.	1.82	1.35	.76

I would be able to identify the stress/danger potential for the average Soldier and their family based on identifying the patches on the Soldier's uniform.	1.62	0.99	.84
I understand the specific conditions in which a Soldier is legally bound to disobey a given order by a superior.	1.76	1.20	.75
I understand the significance of "mission first" and the impact that it has on the individual Soldier and their family.	**2.70**	**1.40**	**.80**
I can explain the differences between a platoon, company, and brigade.	**2.27**	**1.35**	**.83**
I can recognize the job of a Soldier by looking at the patch on his or her uniform.	1.53	0.93	.69
I am aware of the common penalties for disobeying a direct order.	**2.03**	**1.18**	**.79**
I know what the Warrior Ethos is.	1.55	1.04	.72
I am aware of the role of the FRG.	**2.03**	**1.54**	**.74**
I understand the varying levels of responsibility of specific Army ranks and missions.	2.01	1.16	.87
I know that Soldiers have several restrictions pertaining to international travel and even having associations that live abroad.	1.82	1.20	.75
I can explain the significance of "Taps."	2.34	1.36	.65
I am aware of what OPTEMPO means.	1.38	0.95	.69
I can explain the key differences between a combat arms Soldier and a support Soldier.	2.20	1.31	.73
I understand the meaning and significance of SOP to a Soldier's duty.	1.55	1.07	.74
I know what a Gold Star family is.	**2.10**	**1.62**	**.58**
I know what a TDY is.	1.85	1.46	.77
I can explain the significance of an MFLC and when to contact him or her.	**2.10**	**1.55**	**.64**
I can explain the meaning of a "ditty move."	1.46	1.06	.76
I know what it means for a Soldier to have his or her weapon taken by the commander.	2.13	1.30	.77

I know what an unaccompanied tour refers to.	1.72	1.21	.75
I understand what MWR consists of.	1.54	1.14	.68
I can explain the role of the Center for Deployment Psychology.	1.77	1.10	.79
I understand what it means to be a member of the Profession of Arms.	1.38	0.85	.74
I understand the needs of the WTU and their families.	1.62	1.22	.74
I can explain the role of the American Red Cross for military families.	**2.33**	**1.26**	**.79**
I can explain the function of a Command Directed Behavioral Health Evaluation.	**2.06**	**1.31**	**.84**
I can explain typical redeployment and reintegration challenges that families face.	**2.97**	**1.44**	**.77**
I understand and can describe what it means to "go to the field."	**2.75**	**1.48**	**.83**
I can explain the differences between ACS and AER and the services provided.	1.43	0.99	.74
I am aware of how TRICARE processes referrals.	**1.96**	**1.40**	**.77**
I understand why the moving process for families involves a "hurry up and wait" mentality.	**2.84**	**1.40**	**.75**
I understand DEFCON.	1.90	1.20	.66
I understand the difference between "Escalation of Force" and "Rules of Engagement."	1.86	1.15	.75
I know how long a typical deployment is.	**2.97**	**1.41**	**.72**
I understand and can describe the deployment cycle.	**2.31**	**1.41**	**.78**
I know the differences between "CONUS" and "OCONUS."	1.38	1.04	.72
I can explain the role of Operation Military Child.	1.90	1.29	.62
I understand the chain of command for civilians and military personnel working together.	1.88	1.25	.82
I can explain the difference between "leave" and "R & R."	**2.63**	**1.39**	**.80**

I understand the role of Military OneSource.	**1.96**	**1.42**	**.75**
I can explain the time and process involved in obtaining psychiatric services for Army children.	**1.96**	**1.31**	**.71**
I know what the term “garrison” means.	1.94	1.28	.83
I know who the post School Liaison is and how to contact him or her.	**2.04**	**1.61**	**.49**
I know and can explain medical retention standards (AR 40-501).	1.35	0.83	.79
I know what a “BCT” is.	1.45	1.14	.61
I understand the role of chaplains.	**3.01**	**1.19**	**.71**
I can explain the different ways a person can be separated from the Army.	**2.19**	**1.28**	**.86**
I know what a “MTF” is.	1.38	1.01	.66
I can explain the processes to plan for the care and control of dependent family members.	**1.84**	**1.15**	**.86**
I can explain the term “ramp up.”	1.86	1.15	.79
I know how frequently families move.	2.86	1.35	.71
I can explain what “BRAC” is.	1.54	1.18	.58

Note: Items in bold were retained in the revised SACS-Charlie version of the scale.

Table 4
SACS- Charlie Item Descriptive Statistics and Item-Total Correlations (*N* = 97)

Item	Mean	Standard Deviation	Item-Total Correlations
I am aware of the general content of the Soldier's Creed.	2.02	1.21	.76
I can explain the definition of an MOS.	2.02	1.57	.78
I understand the difference between enlisted personnel and officers.	3.34	1.38	.64
I am aware of the reasoning behind the saying "We are in the profession of defending democracy, not practicing it."	2.77	1.36	.65
I am familiar with the regulations regarding fraternization between enlisted and officers.	2.45	1.34	.68
If a Soldier, Army spouse, or Army dependent was talking about their upcoming "PCS", I would know what they were talking about.	2.56	1.77	.66
I know the difference between a NCO and a commissioned officer.	2.30	1.55	.73
I understand why a Soldier is mandated to follow almost any order given by a superior.	3.27	1.22	.56
I understand why being unfit for combat is of the utmost insult to a Soldier.	3.26	1.26	.68
I understand the significance of "mission first" and the impact that it has on the individual Soldier and their family.	2.70	1.40	.80
I can explain the differences between a platoon, company, and brigade.	2.27	1.35	.83
I am aware of the common penalties for disobeying a direct order.	2.03	1.18	.79
I am aware of the role of the FRG.	2.03	1.54	.74
I know what a Gold Star family is.	2.10	1.62	.58
I can explain the significance of an MFLC and when to contact him or her.	2.10	1.55	.64

I can explain the role of the American Red Cross for military families.	2.33	1.26	.79
I can explain the function of a Command Directed Behavioral Health Evaluation.	2.06	1.31	.84
I can explain typical redeployment and reintegration challenges that families face.	2.97	1.44	.77
I understand and can describe what it means to “go to the field.”	2.75	1.48	.83
I am aware of how TRICARE processes referrals.	1.96	1.40	.77
I understand why the moving process for families involves a “hurry up and wait” mentality.	2.84	1.40	.75
I know how long a typical deployment is.	2.97	1.41	.72
I understand and can describe the deployment cycle.	2.31	1.41	.78
I can explain the difference between “leave” and “R & R.”	2.63	1.39	.80
I understand the role of Military OneSource.	1.96	1.42	.75
I can explain the time and process involved in obtaining psychiatric services for Army children.	1.96	1.31	.71
I know who the post School Liaison Officer is and how to contact him or her.	2.04	1.61	.49
I understand the role of chaplains.	3.01	1.19	.71
I can explain the different ways a person can be separated from the Army.	2.19	1.28	.86
I can explain the processes to plan for the care and control of dependent family members.	1.85	1.15	.86

Table 5
SACS-Charlie Factor Loading

Item	Factor 1	Factor 2	Factor 3
I am aware of the general content of the Soldier's Creed.	**.60**	.22	.49
I can explain the definition of an "MOS."	**.62**	.18	.54
I understand the difference between enlisted personnel and officers.	**.74**	.19	.16
I am aware of the reasoning behind the saying "We are in the profession of defending democracy, not practicing it."	**.65**	.26	.26
I am familiar with the regulations regarding fraternization between enlisted and officers.	**.78**	.12	.30
I know the difference between a NCO and a commissioned officer.	**.64**	.19	.41
I understand why a Soldier is mandated to follow almost any order given by a superior.	**.83**	.19	-.07
I understand why being unfit for combat is of the utmost insult to a Soldier.	**.79**	.25	.14
I understand the significance of "mission first" and the impact that it has on the individual Soldier and their family.	**.72**	.32	.37
I can explain the differences between a platoon, company, and brigade.	**.62**	.47	.33
I am aware of the common penalties for disobeying a direct order.	**.70**	.21	.46
I understand and can describe what it means to "go to the field."	**.53**	.68	.29
I can explain the difference between "leave" and "R & R."	**.53**	.54	.37
I understand the role of chaplains.	**.58**	.35	.35
I can explain the different ways a person can be separated from the Army.	**.67**	.33	.50
If a Soldier, Army spouse, or Army dependent was talking about their upcoming "PCS", I would know what they were talking about.	.31	**.76**	.14

I am aware of the role of the FRG.	.23	**.72**	.37
I can explain the significance of an MFLC and when to contact him or her.	.11	**.84**	.27
I can explain typical redeployment and reintegration challenges that families face.	.50	**.69**	.22
I understand why the moving process for families involves a "hurry up and wait" mentality.	.57	**.55**	.23
I know how long a typical deployment is.	.48	**.76**	.07
I understand and can describe the deployment cycle.	.34	**.79**	.27
I understand the role of Military OneSource.	.22	**.64**	.55
I know who the post School Liaison Officer is and how to contact him or her.	.01	**.80**	.07
I know what a Gold Star family is.	.39	.20	**.42**
I can explain the role of the American Red Cross for military families.	.63	.20	**.56**
I am aware of how TRICARE processes referrals.	.26	.53	**.65**
I can explain the function of a Command Directed Behavioral Health Evaluation.	.50	.43	**.59**
I can explain the time and process involved in obtaining psychiatric services for Army children.	.13	.64	**.60**
I can explain the processes to plan for the care and control of dependent family members.	.46	.48	**.58**

Note: Bolded numbers indicate the specific factor loading of the item; Factor 1 represents Army Knowledge; Factor 2 represents Army Family Processes; Factor 3 represents Adaptability of Army Families.

Appendix A

Sweet Army Culture Scale-Alpha Version, Original Item Bank Prior to Expert Panel Review

Language Category:

1. I understand the definition of the term "redeployment."
2. I can explain the definition of an "MOS."
3. I know what "OPSEC" is.
4. If a Soldier, Army spouse, or Army child was talking about their upcoming "PCS", I would know what they were talking about.
5. I am unfamiliar with what the term "ETS" means.
6. *If a Solider was discussing JRTC, I would recognize where it happens and what it means.*
7. I can explain the differences between a unit, company, and brigade.
8. I am aware of what a FRG is.
9. I am not aware of what OPTEMPO means.
10. *I am not aware of what an Article 15 is.*
11. I know what a TDY is.
12. I am not sure what an unaccompanied tour refers to.
13. *I know what the term FOBIT means.*
14. *I can explain the role and importance of the Rear Detachment.*
15. I am aware of what the WTU is.

Rank Category:

1. I am able to recognize a Soldier's rank simply by looking at his or her uniform.
2. *I know what the term "E4" means.*
3. *I know what an O3 is.*
4. I am unsure of the function of a Warrant Officer.
5. I know the difference between a NCO and a commissioned officer.
6. *I can explain when to address Soldiers by their rank and when to avoid doing so.*
7. I would be able to identify common environmental stressors for the average Soldier just by knowing their rank.
8. I understand the varying levels of responsibility of specific Army ranks.
9. I can explain the key differences between a combat Soldier and a support Soldier.
10. *I know what an NCOER is.*
11. *I am not aware of what an OER is.*
12. I can explain what an MFLC is and what his or her significance is.
13. I know what the role of the MWR is.
14. I know the roles of the ACS, ARC, and AER.

Norms of Behavior Category:

1. I am aware of the UCMJ and its fundamental significance in Army life.
2. I can explain the appropriate customs for acknowledging superior officers.
3. *I am not aware of what the term "parade rest" means.*
4. *I know the difference between ACU's, dress blues, class A's, and class B's.*
5. *I am aware of what the position of attention is.*
6. I am unfamiliar with the regulations regarding fraternization between enlisted and officers.
7. I understand why a Soldier is mandated to follow almost any order given by a superior.
8. I understand the specific conditions in which a Soldier is legally bound to disobey a given order by a superior.
9. I am not aware of the common penalties for disobeying a direct order.
10. *I am unsure why an active duty Soldier is not allowed to travel more than 80 miles outside of their post without a mileage pass.*
11. *I understand that when a Soldier does go on leave, they have to have a vehicle inspection, travel plan assessment, and are briefed on safety.*
12. I am not aware that Soldiers have several restrictions pertaining to international travel and even having associations that live abroad.
13. *I know what a SOFA is.*
14. I understand the meaning and significance of SOP to a Soldier's duty.

Beliefs Category:

1. I know what the Soldier's Creed is.
2. I am aware of the reasoning behind the saying "We are in the profession of defending democracy, not practicing it"
3. I am unfamiliar with what the seven Army values are.
4. I understand why being unfit for combat is of the utmost insult to a Soldier.
5. *I can explain what it really means to be Army Strong.*
6. I understand the significance of "mission first" and the impact that it has on the individual Soldier and their family.
7. I know what the Warrior Ethos is.

Appendix B

Sweet Army Culture Scale- Expert Reviewer's Response

Please review the following questions for the measure, organized by theoretical category, and answer the rating questions at the end of each item. Comment sections are also provided for each category. Your answers to the rating questions and in the comment sections will be reviewed and used by the researchers for revising and editing the measure prior to the pilot phase of scale development.

Proposed Questions for Scale:

Language Category - The rating choices for the pilot participants on questions in the language category will be on a 5-point scale, with 1 being "Not at all true", 3 being "somewhat true", and 5 being "completely true."

Please rate a) the clarity and readability and b) the relevance of the questions in the language category with a numerical value between 1 and 5 in the boxes provided prior to each item, where a) 1 is "not at all clear" and 5 is "very clear" and b) 1 is "not at all relevant" and 5 is "very relevant"

Clarity	Relevance	Statement	Comments
		I understand the definition of the term "redeployment."	
		I can explain the definition of an "MOS."	
		I know what "OPSEC" is.	
		If a Soldier, Army spouse, or Army child was talking about their upcoming "PCS", I would know what they were talking about.	
		I am unfamiliar with what the term "ETS" means.	
		If a Soldier was discussing JRTC, I would recognize where it happens and what it means.	
		I can explain the differences between a unit, company, and brigade.	
		I am aware of what a FRG is.	
		I am not aware of what OPTEMPO means.	

		I am not aware of what an Article 15 is.	
		I know what a TDY is.	
		I am not sure what an unaccompanied tour refers to.	
		I know what the term FOBIT means.	
		I can explain the role and importance of the Rear Detachment.	
		I am aware of what the WTU is.	

Are there questions that should be deleted? (please answer in space provided)

Do you have suggestions for questions that should be added, especially knowledge that you think professionals working with Army children and families should have? (please answer in space provided)

Do you have suggestions for any fake acronyms that could be added to the language category to test for validity of people's answers on the scale?

Rank Category The rating choices for the pilot participants on questions in the rank category will be on a 5-point scale, with 1 being "Not at all true", 3 being "somewhat true", and 5 being "completely true."

Please rate a) the clarity and readability and b) the relevance of the questions in the rank category with a numerical value between 1 and 5 in the boxes provided prior to each item, where a) 1 is "not at all clear" and 5 is "very clear" and b) 1 is "not at all relevant" and 5 is "very relevant"

Clarity	Relevance	Statement	Comments
		I am able to recognize a Soldier's rank simply by looking at his or her uniform.	
		I know what the term "E4" means.	
		I know what an O3 is.	
		I am unsure of the function of a Warrant Officer.	
		I know the difference between a NCO and a commissioned officer.	
		I can explain when to address Soldiers by their rank and when to avoid doing so.	
		I would be able to identify common environmental stressors for the average Soldier just by knowing their rank.	
		I understand the varying levels of responsibility of specific Army ranks.	
		I can explain the key differences between a combat Soldier and a support Soldier.	
		I know what an NCOER is.	
		I am not aware of what an OER is.	

		I can explain what an MFLC is and what his or her significance is.	
		I know what the role of the MWR is.	
		I know the roles of the ACS, ARC, and AER.	

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Are there questions that should be deleted? (please answer in space provided)

Do you have suggestions for questions that should be added, especially knowledge that you think professionals working with Army children and families should have? (please answer in space provided)

Norms of Behavior Category The rating choices for the pilot participants on questions in the norms of behavior category will be on a 5-point scale, with 1 being "Not at all true", 3 being "somewhat true", and 5 being "completely true."

Please rate a) the clarity and readability and b) the relevance of the questions in the norms of behavior category with a numerical value between 1 and 5 in the boxes provided prior to each item, where a) 1 is "not at all clear" and 5 is "very clear" and b) 1 is "not at all relevant" and 5 is "very relevant"

Clarity	Relevance	Statement	Comments
		I am aware of the UCMJ and its fundamental significance in Army life.	
		I can explain the appropriate customs for acknowledging superior officers.	
		I am not aware of what the term "parade rest" means.	

		I know the difference between ACU's, dress blues, class A's, and class B's.	
		I am aware of what the position of attention is.	
		I am unfamiliar with the regulations regarding fraternization between enlisted and officers.	
		I understand why a Soldier is mandated to follow almost any order given by a superior.	
		I understand the specific conditions in which a Soldier is legally bound to disobey a given order by a superior.	
		I am not aware of the common penalties for disobeying a direct order.	
		I am unsure why an active duty Soldier is not allowed to travel more than 80 miles outside of their post without a mileage pass.	
		I understand that when a Soldier does go on leave, they have to have a vehicle inspection, travel plan assessment, and are briefed on safety.	
		I am not aware that Soldiers have several restrictions pertaining to international travel and even having associations that live abroad.	
		I know what a SOFA is.	
		I understand the meaning and significance of SOP to a Soldier's duty.	

Are there questions that should be deleted? (please answer in space provided)

Do you have suggestions for questions that should be added, especially knowledge that you think professionals working with Army children and families should have? (please answer in space provided)

Belief System Category The rating choices for the pilot participants on questions in the belief system category will be on a 5-point scale, with 1 being "Not at all true", 3 being "somewhat true", and 5 being "completely true."

Please rate a) the clarity and readability and b) the relevance of the questions in the norms of behavior category with a numerical value between 1 and 5 on the lines provided after each item, where a) 1 is "not at all clear" and 5 is "very clear" and b) 1 is "not at all relevant" and 5 is "very relevant"

Clarity	Relevance	Statement	Comments
		I know what the Soldier's Creed is.	
		I am aware of the reasoning behind the saying "We are in the profession of defending democracy, not practicing it"	
		I am unfamiliar with what the seven Army values are.	
		I understand why being unfit for combat is of the utmost insult to a Soldier.	
		I can explain what it really means to be Army Strong.	
		I understand the significance of "mission first" and the impact that it has on the individual Soldier and their family.	
		I know what the Warrior Ethos is.	

Are there questions that should be deleted? (please answer in space provided)

Do you have suggestions for questions that should be added, especially knowledge that you think professionals working with Army children and families should have? (please answer in space provided)

Appendix C

Sweet Army Culture Scale-Bravo Version, Revised Item Bank Following Expert Panel Review

Language Category:

1. I understand the definition of the term “redeployment.”
2. I can explain the definition of an “MOS.”
3. I understand what “OPSEC” is.
4. If a Soldier, Army spouse, or Army dependent was talking about their upcoming “PCS”, I would know what they were talking about.
5. I am familiar with what the term “ETS” means.
6. I can explain the differences between a platoon, company, and brigade.
7. I am aware of the role of the FRG.
8. I am aware of what “OPTEMPO” means.
9. I know what a “TDY” is.
10. I know what an unaccompanied tour refers to.
11. I understand the needs of the WTU and their families.
12. I understand and can describe what it means to “go to the field.”
13. I understand “DEFCON.”
14. I know the difference between “CONUS” and “OCONUS.”
15. I can explain the difference between “leave” and “R & R.”
16. I know what the term “garrison” means.
17. I know what a “BCT” is.
18. I know what a “MTF” is.
19. I can explain the term “ramp up.”
20. I can explain what “BRAC” is.

Rank Category:

1. I am able to recognize a Soldier’s rank simply by looking at his or her uniform.
2. I understand the difference between enlisted personnel and officers.
3. I understand the function of a Warrant Officer.
4. I know the difference between a NCO and a commissioned officer.
5. I would be able to identify the stress/danger potential for the average Soldier and their family based on identifying the patches on the Soldier’s uniform.
6. I can recognize the job of a Soldier by looking at the patch on his or her uniform.
7. I understand the varying levels of responsibility of specific Army ranks and missions.
8. I can explain the key differences between a combat arms Soldier and a support Soldier.
9. I can explain the significance of an MFLC and when to contact him or her.
10. I understand what MWR consists of.
11. I can explain the role of the American Red Cross for military families.
12. I can explain the differences between ACS and AER and the services provided.

13. I understand the difference between “Escalation of Force” and “Rules of Engagement.”
14. I can explain the role of Operation Military Child.
15. I understand the role of Military OneSource.
16. I know who the post School Liaison Officer is and how to contact him or her.
17. I understand the role of chaplains.

Norms of Behavior Category:

1. I am aware of the UCMJ and its fundamental significance in Army life.
2. I can explain the appropriate customs and courtesies for acknowledging superior officers.
3. I am familiar with the regulations regarding fraternization between enlisted and officers.
4. I understand why a Soldier is mandated to follow almost any order given by a superior.
5. I understand the specific conditions in which a Soldier is legally bound to disobey a given order by a superior.
6. I am aware of the common penalties for disobeying a direct order.
7. I know that Soldiers have several restrictions pertaining to international travel and even having associations that live abroad.
8. I understand the meaning and significance of SOP to a Soldier’s duty.
9. I can explain the meaning of a “ditty move.”
10. I can explain the role of the Center for Deployment Psychology.
11. I can explain the function of a Command Directed Behavioral Health Evaluation.
12. I am aware of how TRICARE processes referrals.
13. I know how long a typical deployment is.
14. I understand the chain of command for civilians and military personnel working together.
15. I can explain the time and process involved in obtaining psychiatric services for Army children.
16. I know and can explain medical retention standards (AR 40-501).
17. I can explain the different ways a person can be separated from the Army.
18. I can explain the processes to plan for the care and control of dependent family members.
19. I know how frequently families move.

Beliefs Category:

1. I am aware of the general content of the Soldier's Creed.
2. I am aware of the reasoning behind the saying "We are in the profession of defending democracy, not practicing it."
3. I can explain LDRSHIP.
4. I understand why being unfit for combat is of the utmost insult to a Soldier.
5. I understand the significance of "mission first" and the impact that it has on the individual Soldier and their family.
6. I know what the Warrior Ethos is.
7. I can explain the significance of "Taps."
8. I know what a Gold Star family is.
9. I know what it means for a Soldier to have his or her weapon taken by the commander.
10. I understand what it means to be a member of the Profession of Arms.
11. I can explain typical redeployment and reintegration challenges that families face.
12. I understand why the moving process for families involves a "hurry up and wait" mentality.
13. I understand and can describe the deployment cycle.

Appendix D

SACS-Charlie Version, Revised Scale Items after Pilot Phase

1. I am aware of the general content of the Soldier's Creed.
2. I can explain the definition of an "MOS."
3. I understand the difference between enlisted personnel and officers.
4. I am aware of the reasoning behind the saying "We are in the profession of defending democracy, not practicing it."
5. I am familiar with the regulations regarding fraternization between enlisted and officers.
6. If a Soldier, Army spouse, or Army dependent was talking about their upcoming "PCS", I would know what they were talking about.
7. I know the difference between a NCO and a commissioned officer.
8. I understand why a Soldier is mandated to follow almost any order given by a superior.
9. I understand why being unfit for combat is of the utmost insult to a Soldier.
10. I understand the significance of "mission first" and the impact that it has on the individual Soldier and their family.
11. I can explain the differences between a platoon, company, and brigade.
12. I am aware of the common penalties for disobeying a direct order.
13. I am aware of the role of the FRG.
14. I know what a Gold Star family is.
15. I can explain the significance of an MFLC and when to contact him or her.
16. I can explain the role of the American Red Cross for military families.
17. I can explain the function of a Command Directed Behavioral Health Evaluation.
18. I can explain typical redeployment and reintegration challenges that families face.
19. I understand and can describe what it means to "go to the field."
20. I am aware of how TRICARE processes referrals.
21. I understand why the moving process for families involves a "hurry up and wait" mentality.
22. I know how long a typical deployment is.
23. I understand and can describe the deployment cycle.
24. I can explain the difference between "leave" and "R & R."
25. I understand the role of Military OneSource.
26. I can explain the time and process involved in obtaining psychiatric services for Army children.
27. I know who the post School Liaison Officer is and how to contact him or her.
28. I understand the role of chaplains.
29. I can explain the different ways a person can be separated from the Army.
30. I can explain the processes to plan for the care and control of dependent family members.

Appendix E

Participant ID #: _____

Please complete the information requested below. (This information will not be shared or distributed in any form. It will be used solely for purposes of analyzing the information gathered during the study.)

Personal Information:

1. Please check your sex:
   ____ Male
   ____ Female

2. How would you describe yourself? (Please check one option)
   _____ American Indian or Alaska Native
   _____ Hawaiian or Other Pacific Islander
   _____ Asian or Asian American
   _____ Black or African American
   _____ Hispanic or Latino/Latina
   _____ Non-Hispanic White

3. What is your age? _____

Military Affiliation:

4. Have you ever, or do you currently, serve in the Armed Forces?
   a. If yes, which branch? _____
   b. If yes, have you ever been deployed overseas? _____

5. Has anyone in your immediate family (spouse, children, parents, siblings, grandparents) ever served in the Armed Forces?
   a. If yes, which branch? _____
   b. If yes, please specify which family member(s)
      _____
   c. If yes, has your family member(s) ever been deployed overseas?
      _____
   d. If yes to overseas deployments, which conflicts?
      _____

6. Approximately how far in distance (miles) is the nearest Army installation to your home? _____

Professional Information:

7. What type of professional setting are you employed in?
   _____ School
   _____ Clinical/Community
   _____ Army (including DoD contractor or DA civilian)
   _____ Other military mental health service setting (describe)

8. What is your job title? _____

9. How often do you attend professional development activities in your field?

   Never Every Few Months Annually Every Few Years

10. Do you consult professional journals on a regular basis?

    Never Every Few Months Annually Every Few Years

11. Do you receive regular professional supervision?

    Never Every Few Months Annually Every Few Years

12. What professional organizations are you affiliated with?
    _____
    _____
    _____
    _____
    _____

13. What are the ethnicities of the children and/or families on your caseload? (Check all that apply)
    _____ American Indian or Alaska Native
    _____ Hawaiian or Other Pacific Islander
    _____ Asian or Asian American
    _____ Black or African American
    _____ Hispanic or Latino/Latina
    _____ Non-Hispanic White

Appendix F

Informed Consent for Expert Reviewers

My name is Amanda L. Sweet and I am a doctoral candidate in the School Psychology Psy.D. program at Alfred University. I am the Principal Investigator of this research study, which examines the Army cultural competence of civilian mental health professionals. The purpose of this survey is to develop a method of empirically measuring civilian mental health professionals' understanding of the culture of the United States Army. The study will create and validate a measure of the culture of the active duty Army. The measure will be based on aspects of Army culture pertinent to mental health professionals providing services to Army children and families. This measure could be useful for empirically-based training of mental health professionals, which in turn will create more culturally competent services for Army children and families. There are presently no empirical methods of testing civilian knowledge of Army culture.

All of the questions in this survey are optional. You may choose to not answer any question, including those requesting information such as your age or ethnicity. You may choose not to participate or to discontinue participation at any time. As applicable, permission will be obtained from Army Public Affairs or supervisors.

This study poses no foreseeable risks. Please note that email is never a completely secure medium, however, measures have been implemented to maintain confidentiality, such as using randomly assigned alias identification codes, maintaining data on a password protected computer in a locked office, and reporting aggregated data and averages only. All personal information collected will remain strictly confidential. No information regarding participation will be shared with supervisors, commanding officers, or other Army, school, or agency personnel. All feedback obtained from the expert panel will be summarized and reported in group form by scale category, solely for the purpose of scale development. The benefits of participation in this research are enhancement of the role of empirically-based training for mental health professionals on Army culture. This will also improve service delivery for Army children and families.

By proceeding to the questions and review of the scale, you are giving your informed consent to participate in this research project. Any questions or comments pertaining to the project may be directed to Amanda L. Sweet (als18@alfred.edu; 315-955-2880), or her research advisor Dr. Nancy J. Evangelista (fevangel@alfred.edu; 607-871-2124.) Any questions pertaining to your rights as a human research participant may be directed to Dr. Danielle D. Gagne, Chairperson of the Human Subjects Research Committee (HSRC) as hsrc@alfred.edu; 607-871-2213. This research study has been reviewed and approved by the Alfred University Human Subjects Research Committee.

By proceeding with the expert review, you acknowledge that you have read the above and agree to participate in the study.

Signature for Consent to Participate: _____ Date: _____

Appendix G

Informed Consent for Pilot Study Participants

My name is Amanda L. Sweet and I am a doctoral candidate in the School Psychology Psy.D. program at Alfred University. I am the Principal Investigator of this research study, which examines the Army cultural competence of civilian mental health professionals. The purpose of this survey is to develop a method of empirically measuring civilian mental health professionals' understanding of the culture of the United States Army. This measure could be useful for empirically-based training of mental health professionals, which in turn will create more culturally competent services for Army children and families. There are presently no empirical methods of testing civilian knowledge of Army culture.

All of the questions in this survey are optional. You may choose to not answer any question, including those requesting information such as your age or ethnicity. Completion of this survey should take approximately 10 to 20 minutes. If you choose to participate, you will be asked a number of questions pertaining to your knowledge of Army culture and appropriate demographic information for statistical purposes. Your responses will be anonymous and you will not be asked to enter any identifying information. You can discontinue participation at any time. If you have already completed this survey, please do not do so again. As applicable, permission will be obtained from Army Public Affairs or supervisors.

This study poses no foreseeable risks. Please note that the Internet is never a completely secure medium, however, measures have been implemented to maintain confidentiality, such as using randomly assigned alias identification codes, maintaining data on a password protected computer in a locked office, and reporting aggregated data and averages only. All personal information collected will remain strictly confidential. Your name is not required. All responses obtained from the survey will be summarized and reported in terms of general group results.

The benefits of participation in this research are enhancement of the role of empirically-based training for mental health professionals on Army culture. This will also improve service delivery for Army children and families.

By proceeding to the questions and review of the scale, you are giving your informed consent to participate in this research project. Any questions or comments pertaining to the project may be directed to Amanda L. Sweet (als18@alfred.edu; 315-955-2880), or her research advisor Dr. Nancy J. Evangelista (fevangel@alfred.edu; 607-871-2124.) Any questions pertaining to your rights as a human research participant may be directed to Dr. Danielle D. Gagne, Chairperson of the Human Subjects Research Committee (HSRC) as hsrc@alfred.edu; 607-871-2213. This research study has been reviewed and approved by the Alfred University Human Subjects Research Committee.

By proceeding with the survey, you acknowledge that you have read the above and your agreement to participate in the study is implied.

Appendix H

Debriefing Statement for Experts and Pilot Study Participants

Thank you for participating in our survey! Your responses will assist in development of a measure to assess civilian mental health provider Army cultural competence. We hope to use this information to assist in improvement of training procedures related to Army culture, thereby improving mental health service delivery for the children and families of Soldiers in a variety of settings.

Amanda L. Sweet

EDUCATION:

	Alfred University, *Alfred, NY (APA accredited)*
2013	**Psy.D.**, School Psychology
	Alfred University, *Alfred, NY (NASP accredited)*
2009	**C.A.S.,** School Psychology
2007	**M.A.,** School Psychology
	State University of New York at Potsdam, *Potsdam, NY*
2005	**B.A.,** Psychology with honors Undergraduate GPA: 3.95, **Summa cum Laude** Thesis: The Effects of Preschool Pretend Play on Adult Divergent Thinking
2003	**Jefferson Community College,** *Watertown, NY* **A.A.,** Humanities and Social Sciences

PROFESSIONAL CREDENTIALS:

Certified School Psychologist, New York State
Nationally Certified School Psychologist-NCSP
Certified Trauma and Loss Specialist (National Institute for Trauma & Loss in Children)
Eye Movement Desensitization and Reprocessing (EMDR) Trained Therapist

TEACHING EXPERIENCE:

Adjunct Faculty of Psychology & Human Services

2010-present	**Jefferson Community College**
2010-present	**Columbia College of Missouri, Fort Drum Campus**
2008	**Alfred State College**

SCHOOL/CLINICAL EXPERIENCE:

2013-present	**Supervisor of Psychological Services,** *Jefferson Rehabilitation Center, Psychological Services Unit, Watertown, NY*
2009-present	**Behavior Intervention Specialist,** *Jefferson Rehabilitation Center & Bright Beginnings Preschool, Watertown, NY*
2008-2009	**School Psychologist Intern,** *Hillside Children's Center, Romulus, NY*
2007-2008	**Graduate Clinician,** *Wellsville Counseling Center, Wellsville, NY*