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14. ABSTRACT

Age-appropriate video intervention toolkits (VIT) were designed and piloted with military children ages 3 to 5, 6 to 11, and 12 to 19 dealing with military deployment separation to assess for resiliency, develop coping skills, and monitor for mental health risk. Adults were educated about available resources to address stress and dysfunctional reactions to separation as well. Questionnaires revealed that 63% of children (N = 86) were unaware of materials available to them. Short-term video efficacy was demonstrated by a 15% increase in knowledge of community resources after viewing the videos. 24% of children felt they could talk more easily about issues after seeing the program. Facilitator's guides were provided to stimulate discussion afterwards. 18.2% (N = 14) of children screened positive for pre-deployment stress with the Pediatric Symptom Checklist (PSC), comparable to national norms. An additional 9.1% (N = 7) asked for assistance, suggesting that potentially 24.1% of today's deploying families may require assistance, education, or counseling. The VIT encouraged parents and children to ask questions and seek out appropriate intervention before, during, and/or after deployment leading to appropriate interventions that decrease adverse effects of deployment separation.

15. SUBJECT TERMS

Video intervention toolkits; Military deployment separation; Resiliency; Coping skills; Mental health risk monitoring; Facilitator's guides; Pediatric Symptom Checklist (PSC); Age-appropriate community intervention; Reserve and National Guard communities.

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Deployment Effects on Children and Adolescents: Designing and Deploying a Developmentally Appropriate Educational and Screening Video Program for Military Families

A graduate management project submitted in partial fulfillment of the Army-Baylor Graduate Program in Health and Business Administration

By

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Fort Sam Houston, Texas

March 22, 2009

Disclaimer per Army Regulation 360-5

The opinion, assertions, and views contained herein are those of the author and are not to be considered as official policy or position or as reflecting the views of the Department of the Army, the Army Medical Department Center and School, the Department of Defense or the United States Government.

Diamond Elementary School, Fort Stewart, GA – Site #1 for the pilot study.

ACKNOWLEDGMENTS

This Graduate Management Project is the culmination of hundreds of hours by scores of volunteers who had the vision and drive to develop an interventional educational video program to educate military children and their families on deployment stress issues, providing them with improved coping skills and enhanced resiliency. Special thanks to my friend and colleague, Reserve COL Chaplain Gregg Drew, 104th ASG Army Reserve Chaplain and Religious Education Coordinator in Hanau, Germany, who had the original vision to put together an interactive puppet program for children on this topic as the troops returned from their first deployment, hopefully avoiding common reunion difficulties seen in military families over and over again. What resulted was a new Department of Defense (DoD) program that is being used by all Services and Components that has the potential to educate and improve treatment of military families by civilian healthcare providers throughout the United States now and into the future. Combined with existing pamphlets that educate the civilian community on what the military family goes through (Martin, Rosen & Sparaceno, 1999; Pavlicin, 2003), it has become a mixture of case study, healthcare screening ethical considerations, regulation review for provision of healthcare, policy analysis (or lack thereof), and strategic management of behavioral health resources. Hopefully the program will, in fact, decrease the negative effects of long deployments, especially as the families reunited after the long separation. Thank you, Gregg.

The research aspect of the program was initiated in conjunction with the Army-Baylor Masters Program in Healthcare Administration, the Brook Army Medical Center (BAMC) and Eisenhower Army Medical Center (EAMC) Institutional Review Boards (IRB) in conjunction with the BAMC Department of Adolescent Medicine. My associate investigators were COL Elisabeth Stafford, MAJ Keith Lemmon, and COL James Nold. Patient faculty readers included

LTC Marsha Patrick, LTC Nick Coppola, and MAJ Cynthia Childress. The faith, trust and support of the Winn Army Community Hospital, COL Brian Goodrich and his staff, as well as the belief in the project and help from MAJ Christopher Warner, 3rd ID psychiatrist, is much appreciated in allowing for the pilot research project to occur at Fort Stewart, Georgia with the 3rd ID. The families and their children were very helpful and accommodating, as were the schools that opened their doors and classrooms to us.

The project has the potential for national attention thanks to partial funding and grants, initially by the USAREUR CTOF Chaplains, then by the American Academy of Pediatrics (AAP) Friends of Children Fund (see Appendix A, Investigation and Grant Application Summary Sheet), the AAP Military West Chapter with Healthy People 2010 and by military contracting at the Army Medical Department (AMEDD) Center and School. This funding, along with the patience of my Army-Baylor preceptor, COL Karl Kerchief, allowed time and resources for improvement of the original research (puppet) video and expansion of the project to include a second teen video with research into a web-based format.

The energies required to complete this project have been enhanced and multiplied by my partner and co-writer/producer, MAJ (Dr.) Keith Lemmon. Thanks to his persistence and drive, this program has been placed into the hands of a coalition of community providers and family advocates who are taking advantage of the U.S. Congress's interest in care provided to both wounded active duty service members and their family members by the Office of Family Policy via Military OneSource, Military Homefront, and the Pentagon Channel. Through Keith's efforts, the American Academy of Pediatrics has included the videos as part of their deployment tool kit along with the Sesame Street Workshop (2006) version for toddlers. In getting the video intervention toolkits (VIT) in front of Mrs. Barbara Bush and the AAP, they are being

reproduced and made available not only to active duty military units and their families, but also civilian communities and organizations ready to help National Guard (NG) and Reserve units who do not have military treatment facilities (MTF) nearby (e.g., Alaskan National Guard and the National Federation of Families for Children's Mental Health). Through Keith's efforts, Operation Purple Camps are now using the video and facilitator's guides to provide onsite interventions for military children with deployed family members throughout the United States and Europe. With the national need for scientific inquiry into effectiveness of interventional treatments for children (Weisz, 2000), the author's hope is that this program might be the first of a string of developmentally appropriate interventional tools for children who are enduring separation from their parents for any variety of reasons, not only war, following the effective methods of published authors (Schoenwald & Hoagwood, 2001).

Mr. Poe Discusses Family Reunion After Deployment and the accompanying teen video, *Military Youth Coping with Separation: When Family Members Deploy,* complete with facilitator's guides, resource lists and Military Youth Stress Management Plan, have already been distributed to several thousand people throughout the United States responding to personal requests from military units and community providers who have been looking for just such a tool. The authors have distributed them at both civilian and military medical conferences as well as to individual military organizations within the Reserves, National Guard, and Veteran Affairs. The research intervention videos and support documents, to include the Sesame Street Workshop program for preschoolers - *Talk, Listen, Connect: Helping Families Cope with Military Deployment* (http://www.sesameworkshop.org/tlc/index.php) - can be seen on one of four support websites on the Internet.

1. Army Behavioral Health - http://www.behavioralhealth.army.mil/families/index.html

2. AMEDD Center & School - https://www.cs.amedd.army.mil/youth.aspx
3. American Academy of Pediatrics (AAP) - www.aap.org/sections/unifserv/deployment/index.htm
4. MilitaryOneSource - www.militaryonesource.com

Special thanks to my wife of 31 years, Pam, who entered military life with me at year 10 and has been with me every step of the way since, staying flexible and developing contingency plans for our own military deployment separations while raising our three boys, often in my absence. She reviewed every word of every re-write of this paper and was involved in every aspect of the project, making puppets, sewing clothes, reading scripts, conducting auditions, and making food for the multitudes of volunteers who have passed through our doors seeing this dream to its completion.

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ABSTRACT

This descriptive research project presents the pilot implementation of age-appropriate video intervention toolkits (VIT) designed to develop coping skills and resiliency in children ages 3 to 19 dealing with military deployment. In addition, the VITs educate their guardians and community care givers on resources available to help all address stress and dysfunction. Attitudes, demographics, and knowledge questionnaires (ADKQ) piloted with families at Fort Stewart, GA revealed that only 74.5% (N = 53) of adults were aware of available materials for children about deployment issues. Moreover, 63% of their children (N = 86) were unaware that support materials were available specifically for them. Short-term video efficacy for imparting information was supported by 85% of adults and 80% of children indicating that they were confident in their knowledge of community deployment resources before seeing the videos while 95% stated they were better informed after the viewing, a 10-15% increase. Although 24% of children felt they could talk more easily about issues after seeing the program, 24% still said it was difficult to discuss. Of 87 children screened for pre-deployment stress with the Pediatric Symptom Checklist (PSC), 18.2% (N = 14) scored positive for possible mental health conditions needing referral to some level of assistance, comparable to national norms. However, an additional 9.1 percent (N = 7) scoring negative on the PSC requested further assistance, indicating potentially 24.1% of today's deploying families perceive need for assistance, education, or counseling. The video format encourages parents and their children to ask questions and seek out appropriate intervention before, during, or after deployment. Utilization of the screening and intervention tools are projected to build coping skills and resiliency, leading to prevention, detection, and proactive treatment interventions to decrease adverse effects of deployment separation.

INTRODUCTION

> Every family member is impacted when Mom or Dad takes the pledge to defend our country and risk his or her life to do so… When military members…have confidence that their spouse [family] believes in what they do for a living, they are better able to concentrate on their duties. Sometimes that concentration is the difference between life and death…Behind every hero is a unit, a team, or a family…people both on and off the battlefield. Military family members tend to quickly develop four characteristics in order to survive: (1) a keen sense of humor; (2) a sense of adventure; (3) the ability to develop courage in a variety of challenges; and (4) a strong sense of family. When Americans support our troops, they play a key role in our nation's defense. Military families…are common in their need for affirmation, encouragement, and helping hands.
>
> Ellie Kay, Introduction to *Heroes at Home* (2002), p. 11-13

Military operations since 9-11 (September 11, 2001) are producing a strain on the military health care delivery system due to prolonged deployments with ongoing casualties over the years (Express-News, 2002). Approximately two million children are living in Active Duty and Reserve military households affected by prolonged deployments (Military Family Resource Center, 2006). For the first time in history, according to the Military Family Resource Center, the number of military dependents (spouses and children) outnumbers Active Duty and Reserve members of the military. A major concern of the current protracted global war on terror (GWOT) is how it will impact the short and long-term social, financial, and emotional well-being of family members—and most importantly, the children (Chartrand & Siegel, 2007). Policy decisions to implement quality educational or medical services in support of military

families require evaluation tools that are age-appropriate, valid, reliable, and cost effective. In fact, the Agency for Healthcare Research and Quality (AHRQ) invited researchers in 2001 to "conduct research related to the effects of … organizational structures and processes on the cost, quality and equity of health care services." We have the same needs seven years later - "to (a) improve clinical practice, (b) improve the health care system's ability to provide access to and deliver high quality, high-value health care, and (c) provide policymakers with the ability to assess the impact of payment and organizational changes on outcomes, quality, access, cost, and use of health care services" (AHRQ, 2001). Chartrand (2007) reminds us that it is the entire pediatric community, military and civilian practitioners alike, who must accept the challenge to develop and implement effective interventions. The interventions, additionally, will require a solid understanding of the scope and nature of deployment stresses affecting our children. This project aims to delineate the scope of the problem related to deployment separation, address the evaluation for and provision of first line mental health education, evaluation, and treatment services within the Military Health System (MHS), and present a delivery methodology to implement an effective program.

Over 500,000 U.S. troops have served in Iraq and Afghanistan, and about half are active Reservists and Guardsmen (Tan, 2008). More than 4,250 U.S. military members have died in the war since it began in March 2003 according to an Associated Press tally (CBC News, 2009), and 30,960 U.S. service members have been wounded in hostile action (USA Today, 2009). These events have devastating effects on the families (The Institute for Trauma and Stress at the NYU Child Study Center, 2002; Jensen & Shaw, 1996). According to the Pentagon's first detailed screening of service members leaving a war zone, one in four U.S. troops are coming home with health problems that require medical or mental health treatment. More than 3,700 service

members said they had concerns that they might "hurt or lose control" with someone (Army Center for Health Promotion and Preventive Medicine, 2006). An amendment to the Defense Authorization Act of 2007 required that the military establish guidelines to determine when a deploying or a returning service member should be referred for an in-depth mental health evaluation.

Unfortunately, family violence occurs with deployments, especially after the "honeymoon period" wears off on reintegration of the active duty Service Member (ADSM) (Pincus, House, Christenson, & Adler, 2001; Pincus & Nam, 1999; Peeble-Klieger & Klieger, 1994). Gibbs, et al., (2007) found that the overall rate of child maltreatment was higher during the times when the soldier-parents were deployed compared with the times when they were not deployed. From this data the authors surmise that enhanced support services may be needed for military families during periods of increased stress. Violence and general family dysfunction has been looked at by the National Center for Health Statistics (NCHS [1994]) in general, but rarely specific to military families and their children. A time-series analysis of Texas child maltreatment data from 2000 to 2003 by Rentz, et al (2007) examined changes in the occurrence of child maltreatment in military and nonmilitary families over time and the impact of recent deployment increases. The study revealed that deployment-related stress does impact the occurrence of child maltreatment in military families. The rate of occurrence of substantiated maltreatment in military families was twice as high in the period after October 2002 (the 1-year anniversary of the September 11th attacks) compared with the period prior to that date. Findings indicate that both departures to and returns from operational deployment impose stresses on military families and likely increase the rate of child maltreatment. The authors suggest that

intervention programs should be implemented to mitigate family dysfunction related to deployment stress.

Issues leading to intimate partner violence (IPV), as discussed in a pamphlet from the Centers for Disease Control website called "Intimate Partner Violence: Overview," (2006), are not unlike a couple coming back together after an extended military absence, especially if couple relationships are not solid before separation. This type of violence, violence that can be physical, sexual, or psychological to a current or former dating partner or spouse (Plichta, 2004), took place in 2002 at Fort Bragg, North Carolina, on the return of active duty soldiers to their spouses, and prompted the origination of this project. Five deaths that summer involved couples with existing marital problems undergoing the stress of separation while soldier-spouses were away in Afghanistan (Gegax & Barry, 2002). Four cases involved male soldiers killing their wives; the fifth, a woman, was charged with killing her husband, a Special Forces major (CBS, 2002). The North Carolina Child Advocacy Institute, in their September 2004 report, stated that "children in active duty military families (around Fort Bragg)... are fatally abused at two times the rate as in non-military communities" (NCCAI, 2004, p. 1). An investigative report into the killings found that family support groups at Fort Bragg, now called family readiness groups (FRG), serving nearly 45,000 soldiers, with 5,000 families living on base and another 21,000 military families in nearby communities, provided inconsistent support for soldiers returning from deployment. Support varied from unit to unit (ARCOM, 1993).

Reserve Army Chaplain and Community Religious Education Coordinator, COL Gregg Drew, looking to prevent a "Fort Bragg" incident from happening within his Army unit in Germany in 2003, asked the author to put together a family violence intervention brief for military leaders along with a puppet production for the children of the community to make them

all aware of the potential problems that could arise when families reunite after long deployments. The Army has implemented intervention programs and websites (See Appendix I) to assist with monitoring for symptoms of depression and anxiety among military troops (Chedekel & Kauffman, 2006). There is an overlap between IPV and child maltreatment (Appel & Holden, 1998). However, there were few resources for children utilizing video tape or CD-ROM. In 2004, Community and Family Support Center (CFSC), Army Community Services, produced *Your Buddy CJ* for children ages 3-5 years. None integrated a proactive screening tool for children until the release of *Talk, Listen, and Connect* by the Sesame Street Workshop in August 2006 for the same age range. Missing was a similar tool for elementary and teen aged youth. The pediatrician author and reserve chaplain collaborated to establish a program for children hoping to decrease the risk of family violence within his group, especially for the children. Rather than putting on a one-time event, they recorded the presentation on VHS tape, and the rest, as they say, is history.

This applied management research project developed and piloted a new interventional tool to develop decision making and problem solving skills in children and teens to assist them in dealing with the effects of the constant strain on mental health functioning of children within military families undergoing separation from a family member deployed to war. The case study is valuable in demonstrating the tool as an educational product no different than those we use in our school systems where "value added" indicates we get "educational value" for each participant using the program with clear benefit and return on investment (Arkansans for Education Reform Foundation, 2007).

Conditions Prompting the Study - Statement of the Problem

In his 2003 review "Depression and Anxiety in Childhood and Adolescence: Identification, Intervention, and Prevention," Jimerson referred to studies from the 1990s that demonstrated a background depression rate in the United States of 9.5% and 12% in children and teens, respectively.

> Over the last thirty years, no well-designed study has found that military students differ from their civilian counterparts on behavioral and mental health variables. In fact, studies have shown that psychopathology levels among students from military families are at or below levels reported in similar studies of civilian youth. A survey of 6,000 military adolescents found that most military teens were similar to civilian teens in terms of physical and mental health and social behaviors. Students' frequency of anti-social behavior was not significantly different from their civilian counterparts. However, military teens reported significantly lower alcohol, marijuana, and inhalant use across eighth, tenth and twelfth grades compared with their civilian peers. (Jimerson, 2003, p. 11)

Teens are less likely to self-report risk behaviors depending on both cognitive and situational factors (Brener, Billy & Grady, 2003), but they certainly have unique issues as a military son or daughter from their civilian counterparts (Huebner & Mancini, 2005).

Family stress and work-site problems for the spouse left at home 'single-parenting' with acting-out children, a necessity of military life, have been noted (Hoffman & Reiss, 1977; Frankel, Snowden & Nelson, 1992). A research program under the auspices of National Institute of Mental Health (NIMH) with two decades of experience in the prevention of serious childhood acting out conducting home visits by the Nurse Home Visitation Program have documented increased risk for violence associated with low income and being a single parent (NIMH, 2006),

both inherent in military life given the rates of pay of the enlisted troops and 'single parenting' of long deployments. In the 1991 National Health Interview Survey (NHIS), the National Center for Health Statistics, for the first time, asked detailed questions about income specific to family members in the armed forces living in the home (National Center for Health Statistics, 1994). In their pamphlet "Families in the Military," the American Academy of Child and Adolescent Psychiatry (2004) points out that "A family that loses the active presence of a parent through separation faces significant challenges and stress." W.G. Black (1993) pointed this out during the Gulf War in particular. "During the parent's deployment, family members may feel isolated, unsupported and anxious.... Families who have little or no contact with extended family and/or the military community may be especially vulnerable to stress. In families with existing medical, emotional or behavioral problems, a parent being away can be especially difficult" (American Academy of Child and Adolescent Psychiatry, 2004).

A review of multiple materials available on military deployment stress (see Appendix I) reveals that few are specifically targeted to children and teens having difficulty verbalizing what they are feeling. For instance, pre-school to kindergarten age children may demonstrate guilt and magical thinking, and believe that they are actually responsible for a parent being gone for long periods (Amen, Jellen, Merves & Lee, 1988) without being able to verbalize it. Materials for pre-school children need to be designed with this in mind. Dysfunctional reactions may lead directly or indirectly to school absenteeism and failure, social isolation, family emotional abuse and violence, psychosomatic medical complaints, and depression. Significant Family Readiness Group (FRG) support information addressing mental health effects of military deployments on children is available to families, support groups, and medical professionals in written format, to include coloring books for the children (Corder & Haizlip, 1991), but an interactive video/DVD

format, arguably a more effective way to get the message across to children to enhance functional coping behaviors and decrease anxiety during the deployment, have not been available to date. Commands are reluctant to expend more resources on reproducing and distributing yet another educational, "free" handout unless it can be shown to add value over and above what is already being funded and utilized.

Active duty military programs have expended significant resources to deal with deployment related mental health and family dysfunction problems of active duty soldiers (Vasterling, 2006), but past materials have not been coordinated to proactively and consistently screen dependent children for behavior problems before and during deployment. Military and civilian primary care and mental health providers must deal with these issues on a regular basis. Military primary care and mental health professionals working with military children have had personal family deployment experiences of their own, and they are aware of the deployment cycle issues and prepared to offer support and resources to families with problems related to deployment (Pincus & Nam, 1999). Those who have had personal experience with broken linkages from family separation during deployment, developing physical and mental health symptoms themselves, understand it best, and understand first hand that everyone may be subject to the overwhelming effects of deployment (Lemmon et al., 2007). An excellent bibliography related to Deployment and Family Separation is published by Swan (2002).

Developing video intervention scenarios will not only assist the military and their families to plan for and prevent negative reactions to separation. Providers are appreciative of materials that can be used to educate patients/families in a less resource intensive manner than one-on-one clinical visits. The materials should prove all the more valuable for civilian providers who have not had a military deployment experience to draw on as they support

Reserve and National Guard (RNG) families in communities removed from any active duty installation (Vandesteeg, 2001). A recent survey of civilian pediatric practitioners at a major Texas University by Nance, Lemmon, and Stafford (2006) found that the majority of civilian pediatricians are aware of the emotional changes that take place in teens with deployment separation, but only forty-four percent feel that families experience mental health issues, specifically, forgetting they often manifest as somatic complaints. Although one hundred percent of pediatricians at least somewhat agree that children and adolescents with deployment issues needed to be identified, less than thirteen percent actively screen their patients. Stafford (2003) highlighted this shortfall in her call for all pediatricians to be trained and conduct screening for stress related to deployment separation. Screening would be particularly useful in California, Florida, North Carolina, Pennsylvania and Texas, the five states with the highest number of deployed reservists, many without the benefit of an active duty military post's resources nearby. Nance, Lemmon, and Stafford showed that eighty percent of civilian providers reported that they felt comfortable discussing the effects of a family member's deployment, but less than thirteen percent viewed themselves as a competent resource to assist with these issues.

This study deals primarily with screening for childhood mental health symptoms while providing cost-effective delivery of information regarding diagnosis, prognosis, and treatment options. It secondarily addresses safety and well-being of families undergoing stressful separations, enhancing their quality of life while promoting effective and appropriate utilization of health services delivery and resource allocation. In her story, "Siblings of the Mentally Ill Often Feel Forgotten" (National Public Radio, 2007), Karen Brown reports that siblings of chronically ill sisters and brothers are often overlooked and assumed to be "well," creating a "well sibling" syndrome where the "normal" child does not get adequate care. The attention

drawn to the parent in the war zone and politics that accompanies it, with the cost of warfare, may be causing the same condition and inadequacy of therapy for our military children.

Monitoring of active duty troops for mental health issues has been ongoing for deploying military service members in the form of the *Pre-Deployment Health Assessment* (PHA) (Assistant Secretary of Defense for Health Affairs, 2004; Department of the Army[DA], 2006; Medical Surveillance Monthly Report[MSMR], 2006) since the Fort Bragg incidents, but monitoring is not currently done for service member families, specifically the children. This would be the crucial beginning of a proactive, community-wide support program for military families. A prevention program of this type would serve to identify the extent of need for intervention before maladaptive behaviors require the need for emergent interventions and possible early redeployment (return) of the deployed service member (SM) from his or her deployed military unit, potentially affecting the successful completion of the unit's mission (Amen & Jellen, 1988). It is exceedingly important to remember that, before measures to identify the need for treatment or intervention are put in place, aggressive and effective interventional treatment options need to be made available within the community. Interventions are needed, not only within the medical realm, but also in the schools, churches, and social welfare arenas. This is the natural ethical consequence of conducting this type of research.

Provision of a proven educational video intervention program (VIP) to develop and improve effective coping skills and adaptive behavior mechanisms in military families dealing with deployment separation has not been available prior to August 2006 when the Sesame Street Workshop released their video for pre-schoolers entitled *Talk, Listen, Connect* (Sesame Street Workshop, 2006). Documenting mental health functioning in conjunction with a proactive mental health screening program that can monitor behavior trends and changes in level of

functioning throughout the deployment, however, is an additional service that needs to be considered. An appropriate survey instrument should be constructed, or identified, if already available, to evaluate existing and future interventional learning materials for dissemination to communities dealing with military deployment to develop adequate separation coping skills in children of deployed Soldiers and measures their mental health status before, during, and after the deployment. Standardization of health surveys requires attention to wording and context (Aday, 1996).

Specific issues related to addressing deployment stress and children with new educational and/or evaluation tools that require immediate attention are:

1. Information dealing with mental health effects of military deployments is available, but mainly in paper format; not the most effective way to reach children who are used to television, video and computer multi-media methods of obtaining information.

2. A resource video format, available on the Internet, will be particularly useful for children with visual and/or auditory learning preferences for whom traditional paper format(s) and school environments are not as effective.

3. Community and unit support personnel are overwhelmed with materials to help them educate families separated by long military deployments, so they are asking for evidence that the effort and resources required to include yet another program will be value-added and at least as effective as materials already on hand.

Purpose

The purpose of this study is to develop Deployment Video Intervention Toolkits (VIT) with accompanying developmentally appropriate instruments to assess educational effectiveness and to screen and monitor military children for deployment stress during a deployment.

Study Objectives

1. Demonstrate that knowledge and attitudes about deployment stress and community support services available to children and teens can be effectively relayed utilizing a video-format intervention tool targeted to children and adolescents in households exposed to military deployment.

2. Demonstrate the self-reported effectiveness of a program that develops successful coping mechanisms in children and educates users on the availability of community support programs to help them deal with separation.

3. Develop age appropriate video intervention tool with facilitator guide that may be implemented throughout the military/community as a stimulus for measuring a baseline of need for family intervention before significant family violence or dysfunction occurs.

4. Gather basic information about deployment separation effects on children documenting existing products that assist them, increasing appropriate use of mental health resources by children who are having problems coping with deployment separation, thereby improving family function outcomes during times of military deployment.

5. Discover, design or develop surveys and standardized screening questionnaires to be used in conjunction with interventional videos to gather baseline demographic and mental health and medical (physical) symptom data to allow a community of concerned professionals to follow

family progress over time during deployments, indicating when to intervene before stressors overwhelm the family's ability to function in a healthy way.

6. Research and pilot a standardized, developmentally appropriate, age-specific, survey (pediatric symptom checklist) to establish a baseline measure of need, valid for trending mental health status in children during deployments and the effects of separation on children.

7. Research developmentally appropriate, age-specific, educational interventions and video interventional toolkit (VIT) training materials that:

a. Educate, inform, and reassure children and their parent/guardians about the effects of deployment separation.

b. Generate age-specific and developmentally appropriate resiliency and coping mechanisms in children.

c. Highlight community support programs available to help children and their families better deal with the stress of long military deployments.

d. Educate community providers about military family lifestyles and ways to build resiliency and coping skills while preventing individual and familial dysfunction during deployment.

8. Develop a preventive mental health support program with the potential to decrease the incidence of emotional abuse and family dysfunction that often occur after the reunion "honeymoon period" wears off.

9. Design and produce a self-viewed educational distance-learning tool that will serve as the template for future programs as our country continues involvement in global peace initiatives with the war on terror.

10. Distribute the VIT from a website that can be used by any unit to implement a longitudinal educational and screening program to monitor and follow their families with a centralized data base Internet collection infrastructure in both military and civilian communities deploying any Component to war.

Importance and Military Relevance

According to the 2003 Demographics Report from the Military Family Resource Center (2004), there were nearly 1.2 million children of active duty members and nearly 650,000 children of Selected Reserve members. As of September 2006, the TRICARE Operations Center (TOC) showed 1,530,429 Army active duty (AD) and their dependents (ADD), with an additional 201,264 called up from the Reserves and National Guard (RNG). Current estimates suggest that 700,000 children, including all Services, are directly affected by military deployments, with at least one parent deployed overseas for military duty (American Psychological Association, 2007). Fort Hood, with 43,854 AD, has 37,799 ADD TRICARE Prime enrollees (M2, 2006). Schooled children alone make up 16,700 of ADD on Fort Hood.

Since 9-11 it is, unfortunately, a common occurrence to see daily articles about lack of resources in the military. In a 2007 newspaper article in San Antonio, TX, reporter Foy quoted a task force that visited 38 bases and posts, from all four armed services, including 13 bases overseas. It concluded that the "Military is failing on mental health." As a pediatrician in the military for 20 plus years, this author has found mental health services have always been in short supply, particularly for children, but especially so during this period of war. Foy's article emphasizes the "stigma" present when asking for mental health care in the military with its

perceived effect(s) on one's career. The task force suggested that problems stem from a dire lack of resources to treat ADSMs and family members for the increasing number of problems resulting from the extended war effort. The former consultant for Army psychiatry commented that soldiers find it bewildering that they are mandated to get screened dentally, but less is required for mental functioning, arguably the most important "health" one requires when carrying a loaded weapon in combat. The soldier feels his career would be affected by seeing a "shrink," while the command has a "need-to-know" if a problem exists. This "Catch-22" makes the need for a confidential assessment key and essential. Military parents are also reluctant to have their child seen for fear the need will be discovered by the command and affect the career aspirations of the soldier-parent. A universal screening program such as that offered with this paper would help remove the stigma from being evaluated.

Coping skills during deployment have been discussed in various studies. Medway, Davis, Cafferty, Chappell, and O'Hearn (1995) documented that deployment separation is related to emotional distress for spouses and causes children to internalize behavior problems. Interestingly, the children's behavior was primarily determined by the mother's level of distress and perceived family disruption. Conceivably, if the mother's level of stress is decreased, the child's behavior would change in a positive way. Military support group perceptions were shown to moderate distress levels positively for families with high family disruption. Gender roles also affect the ability to cope (Patterson & McCubbin, 1984). Wives experiencing the least distress coped by accepting and balancing lifestyle, being optimistic, developing self reliance and self esteem.

On examining the importance of organizational supports on family adjustment to Army life in a period of increasing separation, Rohall and colleagues (1999) discovered that, among enlisted

soldiers deployed for 19 months versus seven months, higher ranked enlisted soldiers show higher family adjustment within each unit. Leader support and morale were very strong predictors of positive family adjustment (Rohall, Segal, & Segal, 1999). In studying problem trends during deployment, Wood, Medford, Scarville and Gravino (1995) found that waiting wives adjusted more successfully if they had a social support network of family and/or friends to call on. They specifically noted that participation in family support groups (FSG) were very important to those who adjusted successfully and suggested that units may predict who will have eventual problems on redeployment since most with high separation adjustment also had high reunion adjustment. Personal redeployment guides are available to FRGs to assist Service-members with these adjustments (De Leo, 1996). Health problems were also associated with low adjustment to separation, suggesting a brief review of the family's health records makes sense as a pre-deployment checklist item.

Extended separation from loved ones causes stress and anxiety in each family member according to their developmental level and position in the family (Black, 1993). The ability to screen and conduct counseling with soldiers and family members within the local community by providers with proper credentials and knowledge of deployment issues has taken on new importance with the global war on terror, especially with frequent deployments to life-threatening combat situations. Children in these communities experience a broad range of reactions to family member deployment, including anger, sadness, fear, confusion, feelings of abandonment, loss, anxiety, and depression (O'Keefe, 2005). These reactions can lead directly or indirectly to significant dysfunctional behaviors, such as school absenteeism and failure, social isolation, family emotional abuse and violence, psychosomatic medical complaints, and depression.

Promoting natural resiliency skills of military children, particularly the teens, has been the passion of David Milne. He discusses the quality of "resilience" in youth in "Troubled Teens Tap Well of Resilience." Milne (2007) identified three general categories of protective factors that are crucial to the success of behaviorally troubled teens to find a resource of resilience and turn their lives around. They are: (1) taking responsibility for their own lives; (2) skill at reflecting about past behaviors and their consequences; and (3) being able to develop and sustain positive relationships. These statements are uncanny in that they paraphrase statements made by military teens in making the teen video tool produced for this project.

Resources are required to adequately support military families, specifically the children, who are striving to cope with the anxiety and fears of long separations from their family member due to life-threatening combat situations with a very real possibility of death or disfigurement. Effective policy to support provision of these services must draw on the body of knowledge from management science, ethics, economics, medical science, especially mental health and resiliency literature, and developmental educational training models. A program is long overdue to screen military children for underlying mental health issues before, during, and after deployment (like the program for their military deployed parents) and to provide interventional learning materials that will effectively extend limited community resources to provide healthy, functional ways to cope with the stress of prolonged military deployment without necessarily having to make an appointment with a mental health sub-specialist, such as a psychologist or psychiatrist. Eventually, this research will lead to an interventional methodology that is very practical and versatile; one that can be done in the home or in large community groups, on paper, with a face-to-face group facilitator, or by web and electronic follow-up. It will include use of surveys and

statistical evaluation to show efficacy of the program as well as validity of a medical screening program for mental health issues for military dependent children and teens.

Similar to the Health Risk Appraisal, Part II, the questionnaires developed and piloted with this project are preventive measurement tools to be used to identify and treat the mental health needs of military children before they escalate to a level that compromises the deployed soldier's ability to complete his/her mission (Jellinek, Murphy, Little, Pagano, Comer, & Kelleher, 1999). The predictive capability of questionnaires depends on the instruments' reliability and validity (Senier, Bell, Strowman, Schempp & Amoroso, 2003). The intent of the survey instrument, in this case, utilized with children, is to identify those who would benefit from a positive intervention to keep them healthy while the active duty service member is deployed. A valid instrument has value in that it reveals the potential for use of a standardized health status assessment program for resource planning, making comparisons about the health status of beneficiary groups, evaluating intervention programs, and assessing trends in health behaviors (Senier, et al., 2003). An effective video intervention format, in addition, delivered in person or via the Web, has the potential to reduce health care costs and improve access to needed care by enabling the first screening intervention to be done by families and the community at large, saving the medical subspecialty mental health resources for the more difficult and substantiated cases of need.

LITERATURE REVIEW

U.S. and Army Health Promotion Programs

The prevalence of depression and acting out behavior is on the increase in all U.S. communities, ranging from the 9.5% in children to 12% in teens (Jimerson, 2003; Zoroya, 2005).

Current estimates on levels of anxiety and depression are unavailable in part because we do not proactively screen nor collect diagnostic mental health data on our children as an enterprise. It is likely that family disruption occurring due to military deployments is a major factor affecting these changes. Current global engagements are resulting in longer separations than those of the past 10 years, often exceeding 12 months. Deployed service members, whose child is not coping well with the separation, may be called home (redeployed prematurely), adversely impacting unit mission completion (Patrin, 2000). It is imperative, therefore, that we do all we can to help children cope in healthy ways.

Population-based strategies, in the parlance of the World Health Organization (2002), should lower the risk of serious health problems in the entire population. The best health risk assessments assess for risk factors found in life style habits, personal medical history, and family medical history. Individuals are surveyed to identify high risk individuals so that they can be provided intervention before serious problems occur. The DOD health risk appraisal (HRA) was developed for adults to measure initial risk and also allows for close monitoring. The best health risk appraisal serves as both an educational and diagnostic tool, not simply as a method to gather information for research (Senier et al., 2003). Health risk appraisal methodology is popular within the civilian sector as well as a way to control the rising cost of health care through the use of preventive medicine. The Army utilized the HRA with active duty Soldiers for over a decade before utilizing the survey as a valid survey tracking tool in 1998 (Senier et al., 2003).

Tracking a child's mental health profile with eventual need for healthcare services in mind is an evidence-based process in line with challenges proffered in the Institute of Medicine report, *Crossing the Quality Chasm* (Institute of Medicine, 2001). If instituted within the military, a pediatric well-being screening program covering the deployment cycle would cover

all six of the reports identified areas of quality improvement – Safety, Effectiveness, Patient-Centeredness, Timelines, Efficiency, and Equity.

Army Deployment Mental Health Support Programs

Mental health disorders were reported in more than 26% of soldiers returning from Iraq and Afghanistan in the Government Accountability Office Mental Health Disorders Report in 2002. In contrast, less troops (1 in 6) returning from Iraq met the screening criteria for major depression, generalized anxiety disorder or PTSD in 2005 (Department of Defense, 2005). Hoge, Auchterlonie, & Milliken (2006) conducted a review of all Army soldiers and Marines who completed the routine post deployment health assessment between May 1, 2003 and April 30, 2004, on return from deployment to Afghanistan, Iraq, and other locations. Mental health problems were reported by 19.1% of service members returning from Iraq, 11.3% from Afghanistan, and 8.5% from other locations. While 35% of Iraq war veterans accessed mental health services in the year after returning home, only 12% were actually diagnosed with a mental health problem. In contrast, Eaton and colleagues (2008), reporting from the Division of Psychiatry and Behavioral Sciences at Walter Reed Army Institute of Research, reported that military spouses have similar rates of mental health problems compared to soldiers. Interestingly, spouses were more likely to seek care for their mental health problems because they are less concerned with the stigma of mental health care than the soldiers. Spouses sought out primary care physicians most often, rather than specialty mental health professionals. Divorce rates for military personnel rose by 28% in 2004 with a 53 % increase overall since 2000 (Zoroya, 2005), with 2008 seeing a higher rate than at any time in at least 16 years, according to Pentagon data (Zoroya, 2008). About 4 percent of married enlisted troops obtained

divorces during fiscal year 2008. Included in these figures are The Army National Guard, Army Reserve and Marine Corps Reserve, reminding us that this not an active duty component only issue. This alarming statistic is sure to increase the stress on military children.

Commanders know that the health and fitness of Soldiers is critical to the operational readiness of a unit and that unhealthy personnel can compromise the ability of a unit to accomplish its mission (Wright, Huffman, Adler & Castro, 2002). CPT Eric Bowman, acknowledged the need for a system-wide evaluation of U.S. Army soldiers using medical surveillance and systematic collection of health data to maximize medical readiness of military personnel and counter medical threats to deployed mission accomplishment (Bowman, 2005). This process was formally begun by collecting personal Service Member health data in 1986 with the implementation of DoD Directive 1010.10, Health Promotion and Disease/Injury Prevention, mandated with the Army Health Promotion Program (AR 600-63, 1996). This program initiated health promotion activities for all branches of the military, both active and reserve components, by the various DOD community support agencies. This study aims to develop a model for a similar program to evaluate family member readiness status. In fact, AR 600-63 specifies mandated use of a health risk appraisal by providers to screen Soldiers, family members, Army civilians, and retirees for health risk factors (AR 600-63, 1996). It is time to advance past evaluating only individual Soldiers.

Military community service programs, in general, are promulgated on the premise that a relationship exists between dissemination of community education products targeted to specific age groups based on the presumption that family members have inadequate information available about services being offered. Whether family members will seek help outside the family constellation in the community to help them deal with concerns about separation and fear of

injury, or death, of the deployed family member is directly related to their environment, history of prior deployment, history of family or community stresses or support factors, and availability of appropriate resources to help them make the decision to seek out a definitive evaluation or therapy (Hardaway, 2004).

Active duty military programs expend significant resources to screen for and deal with deployment related mental health and family dysfunction with programs based out of Army Community Services (ACS). Their theme is "Self-Help, Service and Stability." They offer a self-help assessment for adult counseling that helps children secondarily, but they offer little directly for children, especially materials that have been piloted and studied for efficacy. The Youth Center simply offers teen activities without evaluation possibilities (Army Community Services Website, 2007).

Website programs are increasingly available by organizations other than the ACS for deployment-affected families (see Table 1). In "Coping with the Stress of Ongoing Military Operations: Information for Military Families," the National Committee for Post Traumatic Stress Disorder covers the signs of the emotional impact of stress, whether acute or with symptoms arising over weeks and months -- symptoms like difficulty completing tasks, trouble concentrating, fear and anxiety about the future, crying for no apparent reason, headaches or stomach problems, irritability and anger, difficulty sleeping, sadness and depression, or feeling withdrawn. It lists stress issues for the spouse such as concerns about a loved one's safety, economic hardship, the challenges of coping as a single parent, and simply dealing with missing a partner (www.ncptsd.va.gov). Note that a good screening instrument for children would ideally include similar signs and symptoms. Mental Health America (MHA) champions "Operation Healthy Reunions," a first-of-its-kind program providing education to reduce the

stigma of seeking mental health care so that soldiers and their family members will be more likely to request and receive prompt counseling when early signs of stress arise. This website distributes educational materials on such topics as reuniting with your spouse and children, adjusting after war, depression, and post-traumatic stress disorder (PTSD), but it does not include research to show efficacy or improved family functioning in conjunction with those materials. MHA materials remind the audience that the listed reactions are common responses to military separation, emphasizing that everyone experiences stress differently. Children should not necessarily compare their progress with others around them (http://www.mentalhealthamerica.net/reunions). While this may be true, noting that others are going through the same things is a very valuable fact to take into account.

Table 1

Websites with Deployment Information for Children

Organization	Website	Content
Mental Health America champions "Operation Healthy Reunions"	http://www.mentalhealthamerica.net/reunions 1-800-969-6642	Education, reducing mental health care stigma, online screening tools
"Coping with the Stress of Ongoing Military Operations: Information for Military Families"	www.ncptsd.va.gov	Signs of emotional impact of stress, tips for coping
TRICARE	www.tricare.osd.mil	Mental health benefits programs
Military OneSource	www.militaryonesource.com 1-800-342-9647	24-hour access, assessments, videos, referrals to MH professionals
Uniformed Services University of the Health Sciences	http://www.usuhs.mil/psy/CTChildrenCopeDuringDeployment.pdf	Child coping skills
SOFAR (Strategic Outreach to Families of All Reservists)	www.sofarusa.org/downloads/sofar_children_	Age-specific

	pamphlet.pdf	deployment info
Advancing the Health of the Family Left Behind	http://www.usuhs.mil/psy/CTCHealthFamilyLeftBehind.pdf	Health promotion
Helping Our Children Deal With War	http://www.mentalhealthamerica.net/reunions/infoWarChild.cfm	Age-specific hints for reunion issues
Deployment Health Clinical Center	www.healthyminds.org	Mental health topics and referral service
American Psychiatric Association (APA)	www.pdhealth.mil/family.asp	Deployment health clinical center
DoD Deployment Health Clinical Center	MYArmyLifeToo.com	Operation READY
Army Community Services (ACS) Army Families Online	http://www.armyfamiliesonline.org	Referral sites

Tips for coping with the separation are provided, including talking about personal experiences (especially with support groups found at most military installations), taking care of physical health, limiting exposure to the news media, engaging in relaxing activities, and seeking out activities that are energizing and positive, such as volunteering for a worthy cause, taking care of children, maintaining family routines, keeping lines of communication open, and seeking help when not doing well. These points are all covered by the intervention video developed for this research as well.

Many websites listed in Table 1 are developing downloadable materials targeted specifically to help children cope with deployment, most notably the Uniformed Services University of the Health Sciences, our federal medical school in Bethesda, Maryland, with their pamphlet entitled, "Helping Children Cope During Deployment" which also refers the reader to American Academy of Child and Adolescent Psychiatry (http://www.aacap.org/publications/factsfam/DISASTER.HTM) and Substance Abuse and Mental Health Services Administration

(http://www.mentalhealth.samhsa.gov/cmhs/TraumaticEvents/tips.asp). Another excellent offering is by SOFAR (Strategic Outreach to Families of All Reservists) providing excellent age-specific information on common reactions to deployment from Levin and Daynard (see Table 2). Advancing the Health of the Family Left Behind provides age-specific information to help children deal with war. The Deployment Health Clinical Center is the site established at Walter Reed Army Medical Center that offers Operation READY, a training and information resource developed by Army Community Service to assist service members and families with the deployment process. It offers some videos for the soldier and spouse, not the children. Active duty families can access TRICARE mental health benefits programs at the TRICARE website. In addition, Military OneSource provides 24-hour access to information and help for anyone associated with deployments, at 1-800-342-9647 or through the website. Mental Health America is also available at 1-800-969-6642 or through the website. This will be crucial information to disseminate to research families so that they may obtain assistance, if needed. Referral information, both local and generic, must be included in the research program information as well. Online screening tools are available through Mental Health America as well in the form of the *Mental Health Self-Assessment Program* (https://www.militarymentalhealth.org/welcome.asp) and *Depression Screening* (www.depression-screening.org), sponsored by the National Mental Health Association. Unfortunately, none of these resources screen children or teens. Military OneSource is perhaps the best single source for deployment resources in that it has links to the pre-school video and toll-free numbers to mental health providers in every location. The Military OneSource consultants provide brief assessments and referrals to mental health professionals across the country for six free counseling sessions. The American Psychiatric Association (APA; www.healthyminds.org) also has information about a broad range

of mental health topics and will help locate a psychiatrist in any patient's area. One particularly useful site for kids to get help is the National Military Family Association (NMFA at www.nmfa.org). The NMFA provides information about Operation Purple Camps, summer camps for military children, where the 12 and over teen resiliency video was initially filmed. Army Families Online (http://www.armyfamiliesonline.org) provides referral services for Army soldiers, civilians, retirees, veterans and families addressing all issues and concerns. For mental health services, they refer to One-Source where active-duty soldiers can connect to their chaplain or someone in their chain of command. This site provides an excellent review of deployment phases.

Table 2

Common Reactions to Deployment (by age group)

Preschool Children	
Possible feelings	Possible resulting behaviors
Confusion	Clinginess and increased demands for attention
Guilt (e.g., guilt for causing the parent to leave)	Trouble separating from parent
Surprise (e.g., surprise about everything feeling so different)	Irritability
	Aggression and angry outbursts
	Attention-getting behavior (+ and -)
	A return to younger behavior (e.g., thumb sucking, bedwetting)
	Sleep disturbances
	More easily frustrated/harder to comfort
	Acting out scary events
Elementary Children	
Possible feelings	Possible resulting behaviors
Same reactions as preschool children, plus…	New behavior problems (or intensification of already existing problems)
Sadness (e.g., sadness about the lack of a sense of normalcy, the loss of the parent's presence)	Regression behaviors
Anger	Rapid mood swings (e.g., angry outbursts followed by clinging behavior)

Worry about deployed parent's return	Changes in eating and sleeping
Worry whether remaining parent will leave too	Anger at both parents (for disrupting normal way of life and sense of security)
Adolescents	
Possible feelings	Possible resulting behaviors
Anger	Misdirected anger (e.g., acting- out, intentionally hurting, cutting themselves)
Sadness	School problems (e.g., sudden and/or unusual changes)
	Appearance of apathy (e.g., loss of interest, non-communication, denial of feelings)
Depression	Significant weight loss
Anxiety	Possible drug or alcohol abuse
Fear	Regressive behavior
	Increased importance of friends

Adapted from D.E. Levin and C.I. Daynard, 2005

The Effects of Child Well-Being on Mission Accomplishment

DOD Directive 1010.10 established the development of individual programs at DoD installations to create health promotion activities, health education programs, and health screening of beneficiaries. The importance of a system-wide evaluation was recognized by General Bell, Commander, United States Army Europe, who emphasized early detection of problems followed by appropriate intervention when soldiers returned from combat (Bowman, 2005). The emphasis on the soldier is understandable, but a noticeable lack of emphasis on how much the well-being of the family affects the quality and accomplishment of the soldier's mission persists. While the HRA has been used to screen soldiers since 1988, assessment has not advanced past evaluating individual Soldiers. It is time to take note of reviews that list the factors that help families to negotiate their way through separation events (see Tables 3a-c).

Table 3a

Factors Predisposing Families to Difficulties With Deployment

Preceding family dysfunction
Mental health issues in children or parents
Special needs children
Particular closeness to the deployed parent
Recent family relocation with limited support systems in place

Adapted from D. G. Amen, L. Jellen, E. Merves and R. E. Lee, 1988

Table 3b

Factors That Contribute to the Child's Adjustment to Father Absence

Child emotional development
Developmental stage of child
Emotional development of each parent
Stability of the parents' marriage
The mother's reaction to the father's absence
The wife's level of satisfaction with the military
Level of community social support
How the parents handle the reunion

Adapted from D. G. Amen, L. Jellen, E. Merves and R. E. Lee, 1988

Table 3c

Factors That Moderate the Impact of Maternal Absence on Child Behavior and Development

Child age - varies with type of maternal absence
Child sex - boys are more vulnerable than girls, in general
Genetic factors - may render some children more vulnerable to environmental trauma
Temperamental style – can make a child more resilient and affects parental interaction
Cognitive abilities - highly intelligent achievers show low rates of behavioral disorders under

family stress and adversity

Self-esteem & self-efficacy – effective coping skills correlates with overall feelings of self-worth, confidence, and conviction in ability to deal with life's changes

Adapted from A. I. Sugawara, 1991

A visionary look at the potential effectiveness of a family pre-deployment risk assessment questionnaire was instituted by the author with the 3rd Armored Cavalry in November 1999 before deploying to Bosnia (Patrin, 2000, see Appendix C). Family medical conditions that could disrupt the mission by unexpected early redeployment of the Service Member were looked for and identified for enrollment in the Army Exceptional Family Member Program (EFMP) with a pre-deployment screening instrument and interview. Pilot results at the Mission Readiness Exercise (MRE) in Nov 99 indicated that 37% of family members required update of prior enrollment prompting establishment of communication links with rear detachment medical personnel providing for more efficient handling of interventions as they arose. A risk assessment algorithm (see Appendix C) was developed to assist in arranging for appropriate professional assistance for families within the community. This proactive intervention kept three key and essential medical personnel (15%) in Bosnia until mission completion that might otherwise have had to return early to the States. A similar screening program is provided for employment with the deployment video program associated with this research.

In the 2005 Department of Defense Survey of Health Related Behaviors Among Active Duty Military Personnel, all Service personnel were asked to separately appraise stress levels attributed to work and family challenges, as well as the degree to which the experience of stress interfered with the performance of their military jobs. Almost one-third of DoD Personnel attributed "a lot" of stress to work, compared with the less than 20% who attributed significant

stress to their personal lives. Rates did not differ significantly from a 2002 study. Army and Marine Corps personnel reported the most stress. 27.6 % of DoD personnel reported that work stress interfered "some" or "a lot" with the performance of their military job. 14.1% reported that stress attributed to family issues interfered with mission accomplishment.

Dr. David Callies, a pediatric psychologist at Madigan Army Medical Center leading school counseling sessions, said "Deployment can be especially hard on children, who can regress in skills, act out or become lethargic" (Huber, 2007). Deployment stress, he pointed out, affects not only the child, their at-home parent, the community at large, especially the schools, but also the soldier, who becomes concerned about how his or her child is changing and performing at school. Mission performance concentration is decreased when the mind strays to thoughts of home and family problems.

Developmentally Appropriate Educational Intervention Tools for Children

Dunn and Dunn (1992) revealed the benefits of a comprehensive method of teaching, adjusting teaching programs to each learner's abilities and developmental level (Dunn, Griggs, Olson, Gorman & Beasley, 1995). Attending to individual learning style "elements" increases acquisition of the intended message (Kremar & Albada, 2007). It is expected that up-to-date video methods utilizing these elements will increase message acquisition and in turn will enhance the ability of professionals working with youth to be able to provide meaningful support to military children experiencing difficulties with deployment separation. The authors also emphasized that children learn best by instruction by and from other students, a technique used in writing the video screenplays used in this paper.

Work done at the University of Pennsylvania School of Communications (Messaris & Sarett, 1981) highlights the theoretical ways in which a child's behavioral development is affected by parent-child interactions when dependent on the content of television programming as an explicit referent. They learned that an interventional video's ability to stimulate conversation and discussion of stress issues and ways to deal with them is particularly enhanced by "verbal exchange" when viewing programs on the screen. Four areas of development are affected: (1) the child's interpretational skills with regard to televised medium; (2) the child's repertory of cognitive categories regarding the real world; (3) the child's behavioral repertory, including both verbal and nonverbal items; and (4) the child's social relationships.

The effects of media are well-known and must be taken into account when designing informational tools for parents and their children. A 25 year meta-analysis of media-effects on children published in the journal of Human Communication Research provides numerous findings that emphasize the importance of providing educational and marketing tools meant for children in the correct format (Emmers-Sommer & Allen, 1999). First and foremost, age is related to processing ability, understanding, and attending to media. As children age, they better understand media messages, necessitating that the product be developmentally targeted to them, the audience and end-user viewing it. Second, the mass media tools are a significant source of learning, and therefore should be considered, even though they require more initial outlay of resources to produce. Third, media technique influences attitudes, which in turn, influence and shape behaviors. Skillful use of the media can have political, social, and educational implications in daily lives. The authors close by pointing out it is "the social responsibility of scholars (to) explore the positive effects of media as opposed to ones with potentially antisocial outcomes" (Emmers-Sommer & Allen, 1999, p. 495).

Regarding the use of puppets, animated cartoons, or teen interviews, Allison Alexander (2007), writing for the Museum of Broadcast Communications about children and television, stated not only that children devote much of their free time to watching television, but that visual media alone are seen as speaking a "universal language," accessible regardless of age. Today's children are used to this type of communication. The late 1950s programs set a precedent for the thirty-minute format as optimum, which influenced the research team to make the interventional video's length no longer than 30 minutes for this introductory series on deployment separation issues, fighting the urge to include more information. It was the 1960s when animation gained its prominence due to reduced costs resulting from limited action animation techniques and the clear appeal of cartoons to children. Recognizing the 1970s video craze, DVD screen menus are designed to resemble children's movie title pages and a teen video game. Animators were sought out for Mr. Poe and Friends due to the obvious success of cable network (e.g., Nickelodeon and Jimmy Newtron). The Children's Television Act of 1954, a British law, created the first commercial television network in the United Kingdom, ITV. The Children's Television Workshop (CTW) followed in the U.S. with a nonprofit organization created in 1967 (Museum of Broadcast Communications, 2007). Informational educational programming indicates that ages suggested for viewing appropriateness are not steadfast, but artificial, as younger children will watch "up" (in age appeal) but older children will seldom watch "down," unless they are watching down in an instructional mode for a younger sibling. Repetition is key to education and entertainment. Children prefer recognizable characters and stories. Congress, regulatory agencies, advocacy groups, and the television networks have struggled continuously over research findings, public responsibility, and popular response (Alexander, 2007).

Stanford psychologist Albert Bandura's social learning theory suggests that children easily learn and model behaviors observed on film or television based on a concept of triadic reciprocality (Freeman, Mahoney, Devito, & Martin, 2004). He states that conversation alone or trial and error experiences, difficult to come by, are not the most effective ways to get people to decide to do the right thing. "Coping with the demands of everyday life would be exceedingly trying if one could arrive at solutions to problems only by actually performing possible options and suffering the consequences" (Bandura, 1977, p. 27), rather, we benefit from the power of example, observing others by vicarious experience. Modeling others experiences, we potentially gain as much impact as direct exposure to the event. Through media effects, Bandura (1977) cautioned that "children and adults acquire attitudes, emotional responses, and new styles of conduct through filmed and televised modeling" (p. 39). The VIT enables the child (and parent) to access learning programs and subsequently community mental health providers of all kinds based on similarities between the viewer of the video and child on the screen.

Alexander (2007) wrote that the context and message of the media, the way in which the material is presented, also plays a significant part in how the message is received. Therefore, the Poe script was written with positive reinforcement language to enhance interactive communication behavior. He emphasized that television research also tells us that the presence of an adult in the viewing or imitation context is a significant factor in the modeling of desired behavior. The child tacitly looks to the adult, giving time to share a program, as indicative that the actions seen are condoned and would be rewarded if repeated. This fact is not well understood by many parents, from the author's experience as a pediatrician.

Correlational studies within cultivation research relates television media viewing to subsequent beliefs and attitudes as learned symbolic representations that serve to guide

subsequent behavior (Lerner & Steinberg, 2004). One of the many implicit theories of children's attraction to the screen is that children's viewing is governed by the novelty of the visual stimulus and rapid formal features such as movements, visual complexity, cuts, pans, zooms, all which produce an "orienting reflex" (Alexander, 2007). Thus, the animated upgrade of Mr. Poe includes more action, flashbacks, and attention to character design. In addition, active television viewing (attention) is linked to comprehension. When visual or auditory features of television content suggest to the young viewer that it is designed "for children," attention is turned to that content (Museum of Broadcast Communications, 2007). This realization led to an emphasis to produce the VITs as products made by families (and children), for families.

The theory of child attention patterns highlights the importance of understanding specific developmental stages when showing video formats to certain ages (Alexander, 2007). Attention to television is fragmentary before the age of two. Visual attention increases during the preschool years, with a major shift in amount and pattern of attention occurring between 24 and 30 months, as noted by the Sesame Street folks in programming for the pre-schoolers in the film *Talk, Listen, and Connect.* Beginning around the age of eight, visual attention to television decreases when viewing becomes less of a novelty for the child, triggering the need for content change. Therefore, the puppet format of Mr. Poe was converted to an animated version. Comprehension of forms and conventions, or "formal features," is grounded in developmental stages, prompting the use of the storytelling 'flashback' format for the 'Tweeners,' ages 8-12 (Siegel, Coffey, & Livingston, 2001), in this three-video package.

Interventional programs are not intended to be given to children to go watch on their own, as interaction with parents during viewing increases comprehension and learning from television (and videos), especially beginning in middle childhood, when co-viewing peers and

siblings typically talk about the action they see, evaluating it for relevancy to their world. Parental comments on the importance, truthfulness, and relevance of media are common, and important, at this age. In order to encourage discussion, the facilitator's guide is a very important component of the VIT, as parents and their children can respond to questions with evaluative and interpretive comments, explanations of forms and codes, and/or discussions of morality or desirability of behavior. This concept of children learning from, as well as being entertained by, television was revolutionized by the premier of Sesame Street in 1969. Sesame Street Workshop research has shown that young children can learn and retain skills from the show (Sesame Street Workshop, 2006). It is hoped that the medium's ability to teach indirect lessons will come into play with the deployment intervention series of DVDs.

Gardner (1993a), a developmental psychologist who proposed a theory of multiple intelligences, emphasizes the need to know your learner and how they learn best, in contradiction to the prevailing psychometric perspective. For some students, the visual aspects of complementary resources–textbooks, films, or even videotapes for visual preference, are not enough for effective comprehension to occur. If one wishes to reach all viewers, including children with a higher risk of problems during a deployment due to developmental delays, providing a variety of learning modalities is important from anecdotal experience of this writer, a developmental and behavioral pediatrician and Exceptional Family Member Program Director in the Army for 20 years. For these special children, providing manipulatives with tactile interactions may be preferred. Auditory learning may be best for many, in addition to learning from printed materials. In *Frames of Mind: The Theory of Multiple Intelligences*, Gardner (1993a) reveals the importance of adjusting to learning styles of the learner, a point also made by O'Brien (1989). It is therefore incumbent on the military and the parents/guardians to strive to know and understand their

child's needs as they provide educational assistance to help their children cope with deployment stress. Other researchers (Dunn et al, 1995) discovered that the closer the match between students' learning styles and their teachers' teaching styles, the better the outcomes of the learning sessions. Parents' observations of their child's learning style are an important consideration in providing the best learning situation for the child (De Bello, 1996). Ultimately, students who have learned, adapted, and survived deployment may be best able to benefit from teaching themselves with DVD "instructors." R. Dunn and K. Dunn (1992) revealed the benefits of this comprehensive model of learning styles because not only are individuals affected by the various elements of learning style, but many of the learning elements, when combined, enhance the maximum effect from the academic experience. Therefore, it is equally important to consider the learning environment in which to present the interventional materials. The Dunn and Griggs (1995) Learning Style Model reveals that students are affected by five main factors (see Table 4) when maximizing the learning environment. The factors suggest the environmental setting that will have the best effect on student learning outcomes with a DVD-video format when delivered in an adult and/or peer interaction format.

Table 4

The Dunn Learning Style Model - Five Factors Affecting Student Learning Outcomes

Factor	Components
1. the immediate environment	sound, light, temperature, and furniture/ setting design
2. their own emotionality	motivation, persistence, responsibility, opportunity to do things their own way,
3. their sociological preferences	learning alone or in different-sized

	groups
4. their physiological characteristics	perceptual strengths represented by auditory, visual, actual, kinesthetic, and sequenced (time) characteristics
5. their processing inclination	global/analytical, right/left, impulsive/ reflective

Source: "Learning styles: Theory, research, and practice," by R. Dunn, 2000, *National Forum of Applied Educational Research Journal*, 13 (1), p. 3-22.

Utilizing the Dunn Learning Style Model offers a reliable and valid method to consider each viewer's learning style traits (Shaughnessy, 1998). Concerning the *immediate environment*, some require quiet while concentrating, while others learn better with other sounds present, as distracters or 'white noise,' if you will. Pizzo and Dunn, in their 1990 research, showed that attending to this factor led to students achieving significantly higher standardized test scores when taught in congruent, rather than incongruent, environments. Some concentrate better in brightly illuminated rooms (watching on TV), while others prefer soft light (computer projections). Fluorescent lighting over-stimulates certain learners leading to hyperactivity and restlessness, which can be a distraction to others in the room (Dunn, Dunn & Price, 1989). The video format allows for individual or group events, in dark or light rooms that are cool or warm (Hart, 1981). The facilitator can provide the best seating environment with some preferring chairs, others lying on mats, some up close, others in the back with a parent close by.

Assessing each student's *emotionality* also affects their ability to learn. Who better, then, to present the interventional material than their parent, who knows them best? Inner motivation, persistence to complete assignments, even ability to take responsibility for their own behavior and work, are affected by giving them the opportunity to do things in their own way (Dunn &

Dunn, 1992). Giving them control of the DVD controls may be all some students need in this regard.

Sociological factors are crucial, in the military environment especially, where most children are part of a "unit." Variations enhancing deployment intervention training may include learning alone, in pairs, in small groups at school or church, as part of a FRG family night, with an authoritative adult in charge (a family readiness group leader or the parent). Teens are much more likely to want to control their learning experience (Dunn & Dunn, 1992) to include with whom they learn.

Physiological characteristics are based on the learner's perceptual strengths. They include carefully choosing the time of day, amount of stimulation, maximizing energy levels, and ability for mobility while studying the materials so as not to be confined to one desk space, for instance (Dunn & Dunn, 1992). The ability to *process information* varies with learners. Some are more analytical and persistent; they may desire to view the entire video selection to get the task done at one time, while others need to come to a place where they may opt to stop and pick it up later. Conducting the interactive experience into smaller units of time with natural breaks, or video pauses, will be important for many attendees based on learning style and developmental status, which is not necessarily the same based on age alone. The child and teen scripts were written to accommodate for either style by breaking the presentation up into chapters of 5-10 minutes each. Of course, the astute teacher (or parent) knows the students who will benefit from attention to right or left brain dominance and impulsive (rapid) versus more reflective (time consuming) information sequencing. The more analytically minded, known for using the left brain hemisphere when thinking, will want to get right into learning and progress quickly, while the more artistic, "right-brained," might request and require repeat viewings.

Ideally, educational facilitators will test and identify students' learning styles accurately with evaluation tools (Beaty, 1986). However, it is beyond the scope of this project since resources will not be available for the average parent and FRG leader, even if they did have the training to conduct the testing. Environmental adjustments for the VIT will mostly be made based on the facilitator's knowledge of the viewing audience. That said, an added benefit from the intervention can be realized in stress reduction by considering each student's learning style, which can lead to improved self-esteem (Martin & Potter, 1998). This may be the crucial element to achieving optimum stress reduction for a child with a parent in a combat zone while the child bravely carries on back in garrison, waiting for their return, taking on additional family duties. At-risk students who have self-esteem specifically addressed exhibit more confidence and accept more responsibility for their own learning (Perrin, 1990). When children understand how they learn, and are allowed to make adjustments in that process, they have more control of their environment and will be more likely to ask for what they need (Martin & Potter, 1998). This learned skill in itself can provide for resilience and flexibility during a long deployment separation. In the end, the child's parent is the person most crucial in understanding the concept of individual learning style and how it can lead to more complete and satisfying learning of concepts being presented (Guild & Garger, 1985). The astute FRG or health care facilitator will be well served in helping parents understand and apply this technique in their daily interactions with each child.

Developing Age-Appropriate Educational Tools That Enhance Coping and Resiliency Skills

In developing a program to build coping skills and resiliency, Gardner's (1993a) theory of multiple intelligences emphasizes the need to know your learner. In *Frames of Mind: The*

Theory of Multiple Intelligences he stressed the importance of addressing seven independent intelligences (see Table 5) rather than seeing each learner in a one dimensional way (Smith, 2008). This enables the individual "to perform transformations and modifications of one's perceptions" and "to recreate aspects of one's experiences" (Gardner, 1993a, p 173) that will assist them in developing more functional and useful coping skills.

(1) *Verbal* or *linguistic intelligence* is the capacity to employ words effectively, orally or in writing, using that capacity to discuss or write questions and feelings down, generating discussion. Videos with questions work well for this type of intelligence.

(2) Children with more *logical* or *mathematical intelligence* have the ability to use inductive and deductive reasoning to solve abstract problems and understand complex relationships. They are able to utilize delayed gratification as they can classify, predict, and prioritize what's happening to explain cause-and-effect. Working one-on-one with an educator develops this coping mechanism ability in younger children.

(3) The third type of intelligence is *visual spatial* where the child has the capacity to perceive the visual world accurately and recreate visual experiences. Visual perceptions then mix with prior knowledge, experience, and emotions surrounding deployment separation to help the child cope with them (American Education Network Corporation, 1999). They have the ability to explore and understand issues by painting, drawing, or sculpting to share with others.

(4) Physical skills such as coordination, balance, dexterity, strength, flexibility, and speed come from having *bodily* or *kinesthetic intelligence*. The student with this strength is best allowed to assume any position they like while learning. Sometimes they need to be isolated from others who need more structure to accommodate learning.

(5) Patterns of sounds and the ability to respond emotionally are strengths of the fifth intelligence, *musical* or *rhythmic*. It represents the "capacity to perceive, discriminate, transform, and express" (Armstrong, p 2) what they perceive around them with music, singing or instruments to express emotions and ideas, especially with an emotionally charged group discussion as might happen with deployment separation mixed with a fear of injury to their deployed family member.

(6) The sixth *interpersonal intelligence* gives the child the ability to quickly grasp and evaluate moods, intentions, motivations, and feelings of other people, making them very sensitive to facial expressions, voice and gestures as interpersonal cues. They are the 'body language' talkers, using verbal and nonverbal communication skills to get the point across and build trust and respect. They often lead and motivate others in a group to achieve a mutually beneficial goal (Bellanca, 1997).

Table 5

Seven Types of Intelligence Used to Enhance Learning of Coping Skills

Intelligence	Coping Skill Application
1. *Verbal/Linguistic Intelligence* - the capacity to employ words effectively, orally or in writing.	Verbally discuss or write questions and feelings down to generate discussion
2. *Logical/Mathematical Intelligence* - ability to use inductive and deductive reasoning, to solve abstract problems, understand complex relationships	Coping skills are about delayed gratification; the logical thinker can classify, predict, and prioritize, understanding cause-and-effect. (Younger children develop this intelligence as they work one-on-one.)

3. *Visual/Spatial Intelligence* - capacity to perceive the visual world accurately and recreate visual experiences. Visual perceptions mixed with prior knowledge, experience, and emotions of deployment separation.	'Discuss' issues by painting, drawing, or sculpting their issues.
4. *Bodily/Kinesthetic Intelligence* - imparts physical skills such as coordination, balance, dexterity, strength, flexibility, and speed.	Allow the student to assume any position they like while learning, isolating them from others who need more structure to accommodate learning.
5. *Musical/Rhythmic Intelligence* - patterns of sounds and ability to respond emotionally are strengths; represents "capacity to perceive, discriminate, transform, express" what they perceive around them.	Consider use of music, singing or instrumental, to express emotions, ideas, with an emotionally charged group discussion
6. Interpersonal Intelligence - ability to quickly grasp and evaluate moods, intentions, motivations, and feelings of other people; sensitivity to facial expressions, voice and gestures using interpersonal cues.	Use verbal and nonverbal communication skills to get point across, building trust and respect to lead and motivate others in group to achieve a mutually beneficial goal. Seen in children who notice and are sensitive to moods of adults
7. Intrapersonal Intelligence - an accurate picture of oneself (strengths and limitations); awareness of inner moods, intentions, motivations, temperament, desires with capacity for self-discipline, self-understanding, self-esteem. Indicates child needs	Gives capacity to distinguish a feeling of pleasure from one of pain and, on the basis of such discrimination, to become more involved in or to withdraw from a situation, a coping skill we'd like all

time to think, to reflect, to complete self-assessments.	affected by deployment to have.
8. Naturalistic Intelligence – (added later) learn best through nature, outdoors.	Bring discussion outdoors or back into the home where parent is absent.

Sources: Compiled from American Education Network Corporation, 1999, *AENC's Educational philosophy – Recognition of Howard Gardner*; T. Armstrong, 2000, *Multiple Intelligences in The Classroom*; J. A. Bellanca, 1997, *Active Learning Handbook: For the Multiple Intelligences Classroom*; H. Gardner, 1993a, *Frames of Mind: The Theory of Multiple Intelligences*; and M. K. Smith, 2002, *Howard Gardner and Multiple Intelligences: The Encyclopedia of Informal Education*.

(7) Finally, we have *intrapersonal intelligence*. This intelligence gives the owner the ability to accurately picture one's strengths and limitations. They are very aware of their inner moods, intentions, motivations, temperament, and desires, giving them the capacity for self-discipline, self-understanding, and self-esteem (Armstrong, 2000). These children require time to think, reflect, and complete self-assessment. Interestingly, they have the capacity to distinguish a feeling of pleasure from pain, thereby becoming more involved in or to appropriately withdraw from a situation (Gardner, 1993b). This is a coping skill all affected by deployment would do well to develop.

(8) An added trait was identified after the first seven and is called *naturalistic intelligence* where a person learns best through nature and outdoor events. Moving the discussion outdoors or even back into the home where the parent is absent can enhance the coping mechanisms for this child.

It is prudent to apply learning theories to any product being used to impart coping and resiliency skills to military families and children if we are to be successful in helping children develop strengths, mastery of their situation, and a meaningful connection with the content areas being presented. Additionally, it is important to ensure the products include maximum cultural

diversity (Dumas, Rollock, Prinz, Hops & Blechman, 1999) with a variety of family experiences so that the largest numbers of viewers may relate (Gardner, 1993a; Avery, 1998). Use of the research and education outcomes literature by Gardner (1993a) and Dunn (1998) makes it is possible to construct relevant interventional educational video programs for deployed families while the Andersen Behavioral Model provides variables that will enable measurement of the impact of the interventional videos in proactively guiding needy children to appropriate community intervention services to achieve desired outcomes during deployments.

Theoretical Framework to Predict Health Care Utilization and Outcomes - The Andersen Behavioral Model: A Healthcare Outcomes Community Conceptual Model

The Andersen Behavior Model, developed in the 1960s, is perhaps the most well known and applied model for discussing access to health care (Goldsmith, 2002) exploring how and why an individual utilizes healthcare services (Andersen, 1995). The Andersen model was originally developed to explain health services use and had an individual level focus. Expansion in 1973 by Andersen and Newman emphasized the external environment and predisposing, enabling and need factors as they apply to individual utilization of health care. The 1974 Aday and Andersen variation was the first time the model was explicitly used to explain access to healthcare including a customer satisfaction variable, although they did not formally define access. Concern for the importance of the external health care environment gained prominence over time culminating with an Andersen and Davidson (1997) update of the model to explain oral health utilization by examining exogenous determinants of health that lead to health behaviors and outcomes, either good or bad. Feedback loops were also added. This is the variation referred to in this paper (see Figure 1). The current model summarizes a system wherein individual behaviors are elicited by environmental factors within and outside the health

care system that lead to utilization of healthcare (or lack thereof) with resultant healthcare outcomes. Feedback loops are also considered. The result is an extremely useful set of constructs that provide a template and structure for inserting screening, evaluation, and interventional treatments that hopefully will connect patients with appropriate, proactive, high-quality healthcare options from the outset that are also cost-effective, leading to utilization of specialty services only after primary care assessment and treatment has begun.

The utilization of healthcare behavioral model includes three basic factors, or constructs: (1) predisposing (patient) characteristics/ demographics; (2) enabling support structures/ resources; and (3) individual needs, as perceived by self or clinical evaluation.

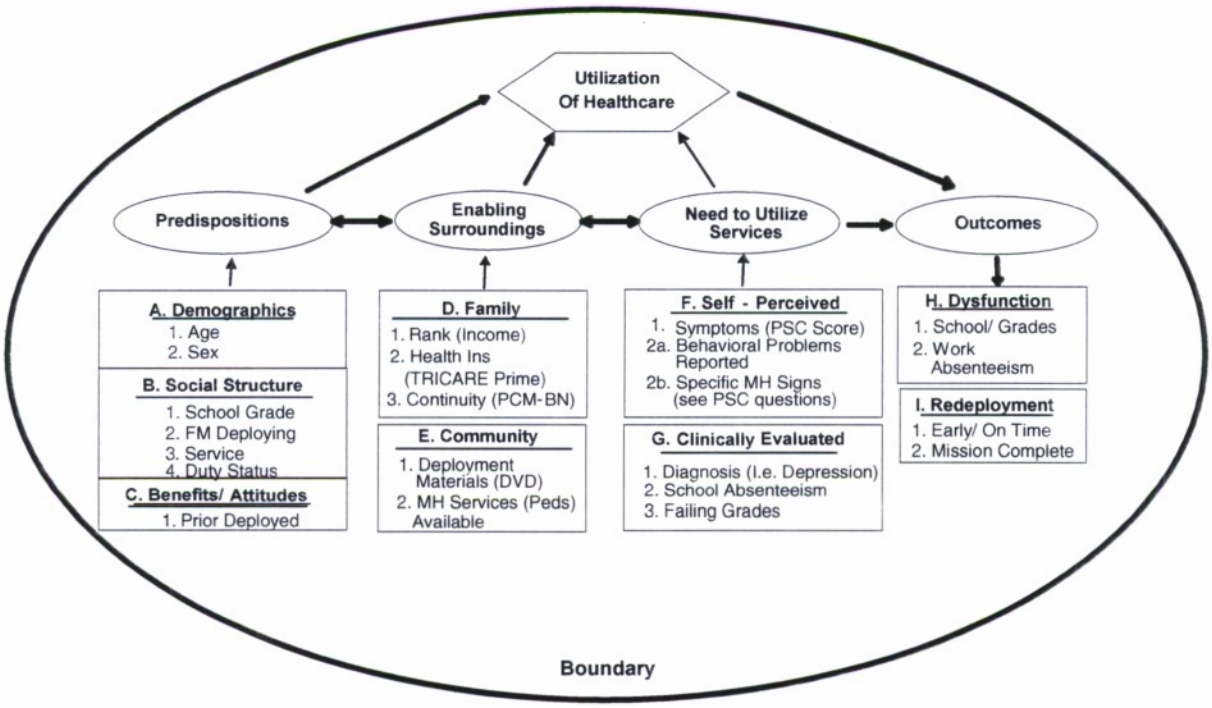

Figure 1. The Andersen-Davidson Behavioral Model to Explain Utilization of HealthCare. The drawing is the author's adaptation of the Andersen and Davidson conceptual framework.

Healthcare outcomes come about as a result of the behaviors of the patient, which are dependent on three constructs: predispositions, enabling surroundings, and needs. Adapted from "Ethnicity, aging, and oral health outcomes: a conceptual framework," by R.M. Andersen and P.L. Davidson, 1997, *Advances in Dental Research, 11* (2), p. 203-209 and "A Framework for the Study of Access to Medical Care" by L. Aday and R. Andersen, 1974, *Health Service Resarch, 9*(3), p. 208–220.

Predisposing characteristics (variables) are listed in the figure under each construct. The parameters of each construct define a model that suggests the tenants of behavior that lead to health care usage, or avoidance, and resultant outcomes for the child, family, or Service Member. Applied to military deployment intervention programs, the model suggests variables that might cause children (or their parents) to access and utilize information offered through community mental health services, such as school counselors, for deployment separation stress, and perhaps why they access (or do not access) the care, suggesting ways we might intervene to effect more positive outcomes (Flaherty & Garrison & Waxman, 1998).

The "*predisposition construct*" includes the child's (family's) background. Are they "predisposed" to seek or have healthcare available? How were they raised, what is their socio-economic status, and what are the expectations of their peer group? Do the family's values and attitudes about healthcare use lead them to get help or avoid it as sign of being "weak"? What actions have they demonstrated over the years in this regard? Is the child a boy or a girl? Which Service is the sponsor with? Does that Service "own" the post community services or are they a tenant unit on the installation? Is the sponsor an active duty or Reserve soldier? How long have they been on active duty? Does the spouse know about services available from prior deployments? These are just a few of the variables to consider that could lead to direct utilization of healthcare or enable or predispose the child to easy access to services.

Predisposition variables may also affect, or strengthen, the perceived need for services under the "need" construct. They are all independent variables, with the actual utilization of healthcare services or outcomes from same the dependent variable.

The "*enabling surroundings construct*" could includes many groupings, but for the purposes of deployment of the VIT this study will look at family and community support structures (i.e. educational tools such as the video developed in this study) that will either support the patient in their decision to seek healthcare or inadvertently place barriers in the way of access. Does the family structure and availability of transportation allow for getting to the doctor's office? Do the community and school, if age-appropriate, provide counseling services? Certainly the job and, in the case of the military, the rank (and income) of the sponsor, availability of healthcare insurance (i.e. TRICARE) and the quality of healthcare available in the military treatment facility (MTF) and the local Network would increase continuity and referral for needed services in a proactive, preventive way would be strong enablers to access and subsequent utilization of healthcare services. This is much less a problem in the military with TRICARE Prime where active duty dependents neither pay copayments nor any portion of their coverage premiums. Enablers are often related to whether government regulations and/or insurance programs exist to facilitate or act as barriers to healthcare utilization. A positive healthcare enabler would be coordinated availability of appropriate mental health resources in the community. With the high rate of mental health services utilization among Operation Iraqi Freedom veterans after deployment, it is a challenge to ensure adequate resources to meet the mental health needs of returning veterans, much less the children of those veterans (Hoge, Auchterlonie, & Milliken, 2006).

For children, peer pressure relationships can be strong enablers or disablers. The VIT intervention places a video education event into the child's environment that provides other children (peers) as models to instruct, advise and recommend further actions to the viewer. This method will be particularly intriguing as a means of accomplishing behavior decisions appropriate to the strategies of the healthcare organization. Strong unit leadership, particularly in the rear detachment, with a vibrant Family Readiness Group (FRG) would be a welcome enabler to a child with weak coping skills and resiliency. Included for consideration is the variable of well-trained mental health providers with the capacity to meet the need of the community, perhaps in a Wellness Readiness Center or Soldier-Family Assistance Center (SFAC) at the post Army Community Services (ACS) office. Again, having these environmental enablers in the area may increase utilization of care. Employing a risk-assessment program like that mentioned by the author before the deployment to identify needs and enroll in the EFMP would also be an appropriate variable to include for measurement in this construct category that demonstrated improved outcomes with less early redeployments during deployment to Bosnia.

Simply having deployment educational materials available does not necessarily act as a positive enabler if a proactive marketing and delivery program is not in place to get materials into the hands of those who need them. A shared media option by the parent and child is much more likely to be successful, judging by television commercial literature showing the positive effect on a mother's buying behavior for her child through actual and subliminal messages with a well-crafted visual and audio message (Sheikh, Prasad & Rao, 1974). Saturday morning television programs ultimately result in adult behavior to purchase what the child wants, especially breakfast cereals (McNeal, 2000; Kuribayashi, Roberts & Johnson, 2001). An interventional video relating actual family deployment stories, delivered by children for children,

is more likely to get the mother to "buy" the healthcare visit "message" and also to consider a pediatrician, teacher, or a chaplain for help in a community stretched thin for mental health specialty resources. Ultimately, a well-managed program will guide the families to seek out the highest quality and appropriate intervention more times than not.

The '*need to utilize services*' construct is operationally defined and grouped as a real or measured need or awareness of self-perceived indicators that medical assistance is required at any particular time, either by signs and symptoms noticed by the child and family or by those measured by clinical personnel. The newly constructed deployment stress awareness self-report using the Attitudes, Knowledge, and Demographics Questionnaire (AKDQ) (see Appendix J) and presence of clinical symptoms reported on the Pediatric Symptom Checklist (PSC) screening tool (see Appendix K) provide a measure of need under this construct. Many researchers have studied the use of self, peer, and teacher reports to identify children with behavioral disorders (Epkins, 1993; Epkins & Meyers, 1994), but few have come up with a screening tool with the high reliability and validity of the Pediatric Symptom Checklist (PSC) (Jellinek, Murphy, & Burns, 1986). Positive outcomes should follow subjects who receive the video intervention and show an understanding of where to get help with deployment stress. Those who score high on signs and symptoms of personal dysfunction and stress on the PSC indicating risk for poor outcomes on separation hopefully will use information from the intervention to utilize available healthcare resources in their community. This standardized tool has already been used to evaluate children showing signs of post-traumatic stress syndrome for mental health intervention needs after exposure to violence in a randomized controlled study (Stein et al., 2003). Various researchers have studied schools as the center of screening for psychosocial functioning (Gall, Pagano, Desmond, Perrin & Murphy, 2000), but these collaborators evaluated the effectiveness

of a collaboratively designed school-based interventional tool, specifically for reducing children's symptoms of PTSD and depression in 2001-2002, choosing to study only 6th grade students. Their students were assessed before the intervention and three months after for parent-reported psychosocial dysfunction with the PSC, similar to the way the screen can be used with deployment separation. Compared to the wait-delayed intervention group (no intervention), students randomly assigned to the early intervention group had significantly lower scores on psychosocial dysfunction. Stein and colleagues (2003) emphasized that communities have had "increasing calls for development of effective mental health interventions that can be delivered within the constraints of community settings in which children and adolescents are commonly seen" (p. 608). Additional *need* metrics to consider, aside from measures with the PSC, would be absenteeism at school or class failure (poor grades) due to impaired psychosocial functioning as indicators that the child could use an intervention before more serious dysfunction occurs. As with the prior construct variables, findings of need as a result of the screening surveys could prompt a community to re-look existing barriers to healthcare utilization and implementation of positive enabling programs to counter and improve future findings. Ultimately, this model presents multiple variables (measures) that could be acted upon to decrease harmful early redeployment of deployed service members due to familial dysfunction back home (Amen & Jellen, 1988). See Appendix N for a list of independent and dependent variable metrics to be considered for future study use.

Model Constructs and Variable Relationships

Relationships between the Constructs and their Variables lend themselves to interesting working hypotheses and possible outcomes. Those considered with this piloting of the survey tools are mentioned below.

1. Parent/Guardians, children (pre-schoolers and tweeners), and adolescents with deployed service members, after viewing age-appropriate video resource materials, will demonstrate an increased level of understanding of family deployment issues (by self-report).

2. Children viewing video resource materials targeted to their age level will show a lower level of stress and anxiety on the Pediatric Symptom Checklist initially, before deployment (and at multiple phases in future studies), than children who have not seen the video but have access to the same written materials locally.

3. Concordance will be demonstrated on post-viewing questionnaires between children and their parents in the way they view the family deployment experience after viewing a video-format educational intervention.

Propositions

Four outcome propositions, formulated after consideration of the healthcare utilization conceptual model, are listed below.

1. Providing developmentally age-appropriate educational (video) resource materials that demonstrate healthy ways to handle deployment issues will serve as the first line therapy in developing healthy coping skills leading to positive outcomes during and after a long deployment separation.

2. Providing developmentally age-appropriate educational (video) resource materials will enable a child and/or parent to use appropriate alternative intervention opportunities in their

community, thereby decreasing the need to access the healthcare system (primary doctor or mental health specialist).

3. Proactive clinical screening activities of self-evaluated signs and symptoms will influence self-perceived need, thereby leading to earlier access to appropriate levels of healthcare intervention or avoidance of unnecessary appointments.

4. Children who are well-informed about healthy (functional) ways to cope with separation stress will have improved outcomes related to deployment separation.

METHODS AND PROCEDURES

Video Intervention Toolkit (VIT) Development

COL Stephen J. Cozza wrote about the effects on children during the current Global War on Terror and Operation Iraqi Freedom (OIF) in 2005 (Cozza, Chun, & Polo, 2005). He followed up this paper a year later in his work with the Center for the Study of Traumatic Stress at the Uniformed Services University of the Health Sciences (USUHS) stating that a good monitoring program would cover stress, sleep, depression, withdrawal, alcohol use, healthy relationships, and how individuals are getting along. Especially important is whether parents are talking with their children about changes in healthcare, social and extended family interactions, and daily routines (Cozza, 2006). Asking about changes in symptoms and functioning over time are crucial and incorporated into this study methodology.

The process to build a Video Intervention Toolkit to assist families and deploying units in developing functional coping skills and individual resiliency involved a multiphased process that began with (1) exploration of the appropriate educational tool to use to inform leaders, families, and units of the options available to them while a sponsor is deployed; (2) development of

facilitator's handouts and guides to use when marketing and implementing the intervention; and (3) research and development of the pilot survey to evaluate initial knowledge, acceptance, and efficacy of the videos as well as search for a screening questionnaire to establish a baseline level of stress and need for intervention in children facing deployments. The resultant components of the deployment resiliency VIT are listed in Table 6.

Table 6.

Components of the Video Intervention Toolkit

Component	Source/ Input
1. Educational Tools	
A. Talk, Listen, Connect Pre-School Video	Sesame Street Workshop Team, Military consultants
B. Mr. Poe and Friends Animated Video	Existing materials, Subject Matter Experts, Families, Volunteers, Film and editing consultants
C. Military Youth Coping With Deployment Video	Adolescent interviews at Operation Purple Camp, Existing materials, SMEs, Families, Volunteers, Film and editing consultants
2. Handouts and Guides	
A. Facilitator's Guide for each video	Educational research, script synopses, consultant input
B. Informational Handouts	Published by Army Community Services
3. Evaluation and Screening Tools	
A. Attitudes, Knowledge, Demographics Questionnaire	Patrin, G. (2006) Army-Baylor Healthcare Admin course
B. Pediatric Symptom Checklist	Jellinek, et al (1999)

The Attitude, Knowledge, Demographics Questionnaire (AKDQ) is a survey developed to collect demographics, baseline attitudes and level of understanding of deployment cycle stress issues specifically for this research project, using a 5-point Likert scale (see Appendix Ja, Jb for Adult and Child versions). Commanders suggested to the researchers that another informational program was not required by their families. They felt that their families already knew about deployment and where to get assistance from having prior deployment experience as well as materials available from Army Community Services. They questioned the need to produce and market another educational product. The attitude and knowledge questions establish what the viewer knew about deployment stress and assistance *before* seeing the video. The same questions are collected afterwards to ascertain if the video gave them new information. This same information could be used to evaluate which families eventually go on to get assistance based on level of knowledge before deployment. The demographics questions provide information about predisposing and enabling factors to study eventual utilization and outcomes as outlined with the Andersen Behavioral Model. However, since the AKDQ is a brand-new measurement tool, its reliability to produce consistent, predictable responses over time remains to be seen (Bohrnstedt, 1983). In fact, with the operations tempo as high as it is, it is hoped that the AKDQ can be administered via face-to-face or web-based formats with similar, consistent responses. Since the AKDQ is a new questionnaire, to increase content validity, military providers (physicians, nurses, mental health providers, and chaplains) currently working with deploying families reviewed the questions to be sure they addressed the domain of interest, deployment separation stress (Senier, et al, 2003; Black, 1993).

The Pediatric Symptom Checklist (PSC) (see Appendix Ka, Kb for child [PSC] and teen [PSC-Y] versions, respectively) is very similar to the HRA II used to assess deploying sponsors

and is already a standardized and validated tool. As with the HRA, PSC data has the potential to influence policy and health decision making, so the questionnaire must measure what it is intended to measure. The PSC is easy to implement (Jellinek & Murphy, 1990), having only 35 items on one page that are rated as "never," "sometimes," or "often present" and scored 0, 1, and 2, respectively. Item scores are summed and the total score is recoded into a dichotomous variable indicating presence of psychosocial impairment by comparing the child's score to an established cut-off norm that indicates probability for pathology and benefit with healthcare access. For four and five year-old pre-school children, whose parents record answers about their child, the PSC cut-off is 24 or higher. For children aged six through sixteen, poor outcomes of deployment separation are suggested due to impairment in psychosocial functioning for a score 28 or higher (Little et al, 1994; Pagano et al, 1996) or a positive response by the child (or parent) to the final question - "Do you (does your) child have any emotional or behavioral problems?" Parents fill out the screen for children up to age eight. Items left blank are simply ignored (score = 0). If four or more items are left blank, the questionnaire is considered invalid. The PSC was specifically selected as a standardized mental health symptom checklist screening tool with high face validity to identify and track children at high risk who might benefit from definitive mental health support counseling or therapy. Using a Receiver Operating Characteristic Curve, Jellinek, Murphy, Robinson, et al (1988) found that a PSC cutoff score of 28 has a specificity of 0.68 and a sensitivity of 0.95 when compared to clinicians' ratings of children's psychosocial dysfunction. Using the screening tool, 68% of children (or their parent) identifying themselves as possibly needing services (PSC-positive) were also identified as impaired by an experienced clinician, thereby saving scarce physician time. Conversely, 95% of children scoring negative on the screening tool (PSC-negative) feel that they are handling their stresses well, and clinicians

evaluating them determined that indeed the children were unimpaired, a very high specificity. (For details on interpreting the PSC validity/ reliability and other statistical measures, see Appendix Kc.) While there may be some false positives with this screening measure, it would be a better use of scarce clinic resources than seeing every deployment affected child in an actual outpatient visit. The opposite extreme of waiting until children start having negative outcomes before scheduling them to see a counselor or other community provider is unacceptable. Repeated use of the checklist with the same child allows for discovering and trending changes in their status by collecting and analyzing data over a period of months while the deployment is underway. Future predictive validity for the PSC may be measured by tracking the health outcome of an individual over time once a significant behavior has been identified.

Sample

An estimated 1.9 million children have a parent in uniform (Zoroya, 2005). In 2007, a total of 700,000 children in the United States within all four Services and the Reserve/ National Guard were affected by a deployment (AAP, 2007) in some way. The number of children with at least one deployed parent at just one Army post, Fort Hood, is approximately 16,700 (House Appropriations Committee Report, 2003). Inclusion criteria for the sub-population participating in the pilot administration of the VIT with survey tools included dependent children of active duty Army soldiers at a single Army post, Fort Stewart, Georgia, affected by deployment separation with at least one parent deployed or preparing to deploy for at least 6 months duration. The children were categorized into three age groups: 1) children ages 3-5 years old (Pre-Schoolers); 2) children ages 6-11 years old; and 3) adolescents ages 12-18 years old.

All participating children were family members of a deployed Service Member, and they were TRICARE Prime enrollees on the Army post with adequate access to pediatric mental health specialties either on post or in the surrounding civilian community, and could access an appointment by calling the hospital, clinic, TRICARE, or by self-appointing utilizing Military OneSource.

Initial Pilot Test of the VIT

To prepare for use of the surveys and video tool in a future prospective cohort study design that could establish baseline measures to be reassessed over time, the survey tools were presented to children and their parents facing deployment at Fort Stewart, Georgia. This initial descriptive research pilot deployment of the age-appropriate questionnaire, symptom checklist, and deployment issues videos was conducted to validate that the information could be transmitted with a video and that improvements in healthcare could be realized by taking the time for the intervention before deployment of the sponsor. Figure 2 shows the pilot study structure with O_1 representing initial observation measurements with the AKDQ and the PSC. X indicates the intervention, the pilot video viewing with the parent and child utilizing the appropriate video per age of the child. The follow-up AKDQ collection after viewing the video is represented by O_2.

$$O_1 \; X \; O_2 \; O_3 \; O_4$$

Figure 2. Study Design. The standard base-line and follow-up case study plan provided for an initial Observation (O_1) followed by viewing of the interventional video (X). Ideally, additional Observations (O_2, O_3, O_4) would then occur at regular intervals throughout the deployment,

perhaps after every 2-3 months, until the Service Member returned. For the pilot study, the second observation occurred immediately following the video viewing.

The pilot research to collect baseline efficacy data was conducted at Fort Stewart, GA from 28 February to 5 March 2007. Ninety-nine (99) children within 56 families participated in the pilot of the PSC survey and AKDQ in conjunction with the showings of the videos. Originally 61 families participated with most from the 3rd Infantry Division (ID). Seven additional families were added before closing out the pilot study for a total of 68 families. Follow up reassessments occurred between August 2007 (6 months) and June 2008 (15 months). The participants, both guardians and children, had to speak and read English. Demographic data were collected from families who responded to invitations to come to pilot showings of the videos (see Tables 7a-b). A "family" could consist of a single parent or interested community member, both parents, guardians or grandparents, bringing a child. While the majority of the participants were children with parents preparing to deploy (81%), 19% were already deployed as the forward detachment. In reference to the emotional stages of deployment, most were in the early phase of Deployment (see Table 8 for phases and lengths of time). 12% of families attending the sessions were not deployed and did not have a family member deploying, perhaps part of the rear support element, or were post deployment, yet interested in participating. Their data is included as adult participants in the ADKQ analysis only to ascertain if the videos instilled knowledge about deployment coping skills.

The Fort Stewart post and medical commands as well as school leaders were informed of the pilot study objectives, risks, and proposed benefits. Established post leadership approached active family support/readiness groups (FSG/FRG) anticipating a deployment within the

upcoming six months and invited them to participate. Post FRG volunteers were informed that an informational session would occur at local schools and conference rooms over a one week period. Deployment information would be handed out along with a "free DVD" about deployment (see marketing flyer in Appendix E). The potential impact to normal operations to include an increase in children needing to be seen for identified stress reactions was emphasized (see Appendix D for Impact Statement). Clinic staff prepared for a potential 20% of participants needing to see a mental health provider acutely.

Table 7a

Adult Participant and Sponsor Demographics

	Category	N	%
Adult Participant Relationship to Child	Parent of child	45	88
	Guardians/Other	5	10
	Grandparents	1	2
Deployed Sponsor Gender	Male (Dad)	2	96
	Female (Mom)	45	4
Deployed Sponsor Pay Grade	Enlisted	14	61
	Officer	9	39
Deployed Sponsor Branch of Service	Army	43	86
	Navy	1	2
Deployed Sponsor Service Component	Active Duty	44	90
	Active RES/ NG	5	10
Deployment Status	Currently Deployed	10	19
	Deployment Pending	42	81

Number of Deployments	None	12	23
	One	8	16
	Two	14	27
	Three	6	12
	Four	3	6
	Five	8	16
	Average		**2.7**

Source: VIT Toolkit Pilot with 53 Families (Totals vary depending on complete data from each participant.)

Table 7b

Child Participant Demographics

	N	%
Age Group		
Pre-School (3-5 years)	14	16.3 %
Elementary (6-11 years)	49	57 %
Youth (12-18 years)	23	26.7 %
Gender		
Male	49	57 %
Female	37	43 %

Source: VIT Toolkit Pilot

Most subjects were recruited using the FRG communication system already established at Fort Stewart. The children and their parent or guardian were invited to an initial meeting to receive standard deployment support resources/handouts currently available to all participants at Fort Stewart and to view the age appropriate video for the child or teen, with the intent to send the DVD home with each family after the viewing. The families were informed of the study

objectives by the Principal Instructor (PI) or Assistant Instructor (AI). All participants were asked if they would participate in a study of effectiveness of the video toolkit before and after viewing it, reminding all that they did not have to participate in the study and that all would have the opportunity to view the video and take it home with them, regardless of their participation in the study. Those answering "Yes" were enrolled and informed consent (adults and teens) and assent (children under 12 years old) were obtained from the participants before viewing the video (see Appendix G and H for informed consent and assent forms). Parent-guardians signed informed consent and assent statements for themselves and their children 3-11 years old with teens 12 and older signing their own forms. For families with multiple eligible children all of the eligible children were invited to participate in the study.

Table 8

The Emotional Stages of Deployment

Stage of Deployment	Timing
Pre-deployment	Varies with train-up period
Deployment	1st month
Sustainment	Months 2 thru length of deployment -1
Re-deployment	Last month
Reunion*	First month back
Post-deployment/ Reintegration	2-6 month after re-deployment

Adapted from *The Emotional Cycle of Deployment: A Military Family Perspective* by S.H. Pincus, R. House, J. Christenson, and Adler in the Army Medical Department Journal, PB 8-01-4/5/6 Apr/May/Jun. L. E., 2001.

* The "Reunion Stag" has been added by the authors as a specific time requiring evaluation and intervention.

Investigators presented a standard statement on the purpose of the study and requirements (see Appendix L), assigned study identification numbers (see Appendix M), and collected informed consent and assent forms (Appendix G & H). Study numbers were assigned to protect anonymity. One family did not wish to participate but wanted a copy of the video. Products currently available to the families on baseline deployment separation effects on children were made available along with the pilot DVDs. The Attitudes, Knowledge, & Demographics Questionnaires were administered before viewing the videos to determine what the participants knew about deployments and how comfortable they were with finding help or being helped with deployment issues (see Appendix J). All child/youth participants also completed the Pediatric Symptom Checklist (PSC) survey appropriate for age (see Appendix K) indicating how they were currently feeling about themselves. The parents filled out the surveys for their child 3-6 years old and assisted with their child 7-11 years old, while teens, 12-18 years old, filled out their own Pediatric Symptom Checklist – Youth Report (PSC-Y) as a pre-intervention baseline. Teens completed their own surveys and questionnaires at all times. All participants answered pre-video viewing questions, viewed the intervention video appropriate for their age group. Children ages 3-5 years old viewed the toddler video, *"Talk, Listen, Connect."* Children age 6 to 11 years old watched *"Mr Po and Friends Discuss Family Reunion,"* and teens 12 to 18 years old viewed *"Youth Coping With Deployment."* (see Table 6). The participants then filled out the final knowledge survey questions afterwards without further discussion. Three baseline ADKQ questions were evaluated both pre and post viewing of the video to determination short-term video effectiveness of the video to pass on available deployment resources information. Repeat questions for adults were:

14. I know where to go in my community to seek out support when I, or my family, are experiencing problems during family military deployment.

15. I am comfortable discussing effects of family military deployment with children.

16. I view myself as a competent resource to assist children with deployment issues.

Additional post-viewing questions were:

17. Should the video program be made available to all people (children, parents, and community leaders) dealing with deployment?

18. Will you use this video and facilitator's guide again in the future?

Repeat questions for the children and youth were:

14. It's easy to talk about how I'm feeling when mom or dad (or other family member) goes away.

15. I know where to get help if I am having problems at home or in school.

Additional post-viewing questions were:

16. Do you feel it was good and should be shown to other kids and their families?

Most questions utilized a 5-point Lickert Scale indicating "Strongly Agree, Agree, Uncertain, Disagree, or Strongly Disagree." A summary of the activities required of each participant are included in Table 9.

Participants were advised to review the video during the upcoming deployment before follow-up sessions (ideally at 2 and 6 month post intervention) when the PSC and PSC-Y would be re-administered. The intent was that PSC scores would again be tabulated immediately following those sessions. Six children were contacted 3-12 months after the initial intervention to inquire how they were doing to demonstrate the self-reported effectiveness of the program to develop

Table 9

Summary of Interventions Filled Out by Age and Role

	Adult ADKQ	Child/Teen ADKQ	PSC	PSC-Y
Subject 3-6 years old		X (by parent)	X (by parent)	
Subject 7-11 years old		X (with help)	X (with parent)	
Subject 12-18 years old		X		X
Parent of 3-6 year old	X			
Parent of 7-11 year old	X			
Parent of 11-18 year old	X			

NOTE: The ADKQ is filled out at enrollment (intervention 1) only. PSC and PSC-Y are filled out at enrollment and at any follow up evaluation during the deployment, ideally at 2-6 month.

successful coping mechanisms used by other children their age. Ultimately, the parents, teachers, and community providers also commented on what they learned about availability of community support programs and what they learned about dealing with the deploying unit.

Parent-guardians of the children who completed the survey demonstrating a positive PSC or PSC-Y score (14 out of 87, 18.2%) were contacted and advised to access the community services available to them. An additional seven children had parents who asked for intervention despite negative screening results raising the total number who required active intervention to 21. Therefore, 24.1% required some level of intervention due to this screening event. Web-based counseling appointment assistance through Military OneSource was available to any participant who did not wish to access services through local military-based resources. This information was given to all participants when they signed the informed consent. All AKDQ and PSC results

were tabulated using assigned research numbers to keep the results anonymous for each participant.

Attempts to collect repeat PSC data six months after deployment were problematic due to non-availability of the subjects, their parents, and/or the investigator(s). Only a handful (N = 10) of children were administered the PSC at varying times after the deployment was underway (O_3). Logistics did not permit repeated viewing and measurements for this pilot, but repeat viewings were encouraged to happen as many times at home as the family and child wished.

RESULTS

Attitudes, Knowledge, and Demographics Questionnaire Findings

The hoped for study size of 250-375 children did not materialize; neither did an expected 25-60 increase in clinic visits. The final sample size was 87 children with valid participation survey results. Approximately 10% of families attending were already being seen by their community support for difficulties at school or the home. The participating sample may have self-selection bias; the make-up may be skewed towards those who were already, or expecting, to have problems with the deployment. An additional 9% screened positive on the PSC survey, requiring an email and/or phone call from the investigator(s). Another 9% (N=7) asked for more input or face-to-face intervention, making the total workload after the initial intervention 21 visits (24% of participants). Knowing the possible need for intervention is extremely important for planning follow-up care resulting from screening efforts. However, it is important to recall that the intervention need not necessarily be with a physician or a mental health provider, but can

be with a friend, parent, teacher, counselor, or chaplain as well. This underscores the importance of making the screening event a community collaborative event.

Table 10

Attitude Knowledge Demographics Questionnaire Results (%) Before and After Intervention

Question	Strongly Agree/ Agree (Before)	Strongly Agree/ Agree (After)	Change
Adults			
Q10/14. I know where to get help in my community.	78	88	+10
Q11/15. It's easy to talk about deployment.	81	97	+16
Q12(16). I am a competent resource to assist children.	73	92	+19
Children			
Q11/14. It's easy to talk about deployment.	38	62	+24
Q12/15. I know where to get help in my community.	54	78	+24

Source: VIT Toolkit Pilot with N = 53 Adults
N = 87 Children (14 Preschoolers [16%], 47 Elementary [54%], 26 Teens [30%])

According to the results of the AKDQ (see Appendix J for questions), adults showed their concern for children with 96% feeling that children will have some negative mental health impact with deployment (Q7), while less, 75%, of their children agreed that kids will have issues (Q9). While 75% of adults knew there were deployment specific materials to aid them in assisting their children with stresses (Q1), 25% did not. Of concern, a full 66% stated they had no materials on hand despite their being available on the post, within the Family Readiness Groups (FRGs), and on line. One third had only the printed materials, meaning the most sophisticated interactive materials were not yet available to most families.

Only 15% of parent/guardians felt that children were aware of what was happening to them without assistance (Q8), while 52% disagreed or strongly disagreed that the child knew, suggesting that assistance is required to help them. A few more (19%) felt that their children already knew where to go to get help if needed (Q9), but a full 81% were either uncertain or disagreed that their children had the information before the intervention, again, despite all the effort put forth by Army Community Service and the unit commands to date.

The ultimate goal of this innovation, to increase awareness of children (patients), parent/ guardians, and community providers of deployment stress and ways to access services and address complex personal and familial mental health issues faced by children of deployed service members (Q10/14), is evident with an increase of 10% of adults and 15% of children (Q12/15) indicating that they were more confident in their knowledge of community deployment resources after seeing the videos. Of concern is 63% of children being unaware of any of the items available (Q3), and only 11% being aware of all three, printed, video, and Internet. One fifth (21%) were not sure where to get assistance in the community, but that number decreased by 9%

after the viewing. More adults felt they could discuss deployment issues after the intervention (Q11/15) by 16%. Perhaps more importantly, 24% of children stated that they could talk more easily about issues after seeing the program and knew where to go to get help. While 81% of adults are comfortable talking about deployment, 19%, or one-fifth are not, and should be offered materials and classes to assist them. Even after the event, 25% of children still state they are not comfortable or knowledgeable (Q11/14). Less adults (73%), felt they were a competent resource to assist children (Q12/16), their own or others, before the intervention, leaving 27% who were not sure. Post viewing, 93% feel better about themselves as first level intervention contacts, and those unsure dropped to only 8%, a 19% improvement.) Changes in AKDQ attitudes and knowledge results before and after seeing the age-appropriate videos are provided in Table 10.

The interactive videos initially encouraged children and their families to speak out about worries, fears, and concerns associated with long separations, as they were buzzing about the video speakers and characters on exiting the meeting places. One mother stated that her children "were talking up a storm all the way home. I never knew they were thinking about so much until we viewed the videos together." The materials promoted further discussion in the home and became part of the Fort Stewart community reintegration program. 90% of participants, both adults and children felt that the videos should be made available to all families (Q17). Those who disagreed were concerned that the materials open an area of concern that should be left alone unless it arose within the course of the deployment, when the materials could be introduced.

PSC and PSC-Y Results

Table 11

Description Statistics and Screening Results for the PSC and PSC-Y[1]

Variables	n	Mean	SD	Positive[2]	Help[3]	Total[4]	%
PreSchoolers (3-5)	14	14.9	7.5	2	0	2	14.3
Elementary (6-11)	47	16.4	10.5	7	5	12	25.5
Teens (12-18)	26	19.5	9.4	5	2	7	26.9
Totals	87	17.1		14	7	21	24.1

[1] Of the 99 children participating in the pilot, 87 had valid PSC test scores. Items left blank are ignored (score = 0). If four or more items are left blank, the test is considered invalid.
[2] Positive scores for three to five year-old children is 24 or higher; for children age 6-16 the cut-off score is 28 or higher (Little et al, 1994; Pagano et al, 1996).
[3] "Help" indicates parents or children who requested help and advice even though PSC scores were within normal limits.
[4] Total number of children needing follow-up care identified by screening

Descriptive statistics and screening results for the PSC and PSC-Y are provided in Table 11. Ninety-nine youth participated in viewing of the videos from 68 different families, 61 from Fort Stewart and seven (7) from elsewhere. Some did not completely fill out the PSC resulting in 87 valid surveys. Elementary age children made up the largest group with 47 (54%). Teens followed with 26 (30%) and toddlers made up 16% (n=14). The mean scores of 14.9, 16.4, and 19.5 for pre-schoolers, elementary, and teens, respectively, are within the range of scores for healthy patients. However, the percent of positive results within each age group of 14%, 15%, and 19%, with an average of 16% overall, are slightly higher than the means of 10-15% quoted by Jellinek and McGrath (2001) for children possibly in need of intervention. This result is not entirely unexpected given the current stress military children would be under with a parent going off to war. Recall that the parents fill out the survey for the youngest children (up to 6) and then

assist the older grade-school children in answering their questions. Two toddlers were recommended for evaluation as were seven children in elementary school. Again, not surprisingly, 50% of these children were already being treated for various concerns, among them attention deficit hyperactivity disorder (ADHD) and disruptive behavior. It is quite possible that the school meetings on the eve of another deployment announced just as the investigators arrived resulted in parent self-selection in choosing to be at the event because they were looking for relief (selection bias to be addressed in a future study). The teen group scored highest on the PSC for stress yet had the least demand for services (average teen score 19.5 vs 16.4 for elementary age and 14.9 for the preschoolers). Perhaps the most telling statistic overall is that 24% of attendees showed a need for intervention, whether by positive PSC result or by asking directly to see someone regardless of screening results. This was highest for the teens at 26.9%, followed by 25.5% for the elementary group. The thought that visits for ¼ of all pediatric patients are required might generate anxiety in the clinic personnel if not for the realization that it only indicates that they need some kind of intervention, and that a talk with their best friend may suffice. Prior to viewing the video, teens were either generally unaware of a need for counseling or unwilling to ask for intervention. However, the disparity of their scores suggests that they may be more troubled than the other age groups.

The PSC as a mental health screening tool revealed interesting baseline pre-deployment mental health status data. The three most and least common symptoms described in toddlers by their parents, exhibited by elementary age children, and reported by teens are listed in Table 12.

While a very small number of children (6 of 99, 1 teen and 5 elementary) were able to be contacted and followed-up as per the original research plan, their repeat surveys were interesting.

Table 12

Three Most and Least Common Symptoms Pre-Deployment on the PSC

Most Common Symptoms	Least Common Symptoms
	Toddlers (age 3-5)
1. Distractable	1. Doctor visit finds nothing wrong
2. Fidgety	2. Down on yourself
3. Want to be with parent	3. Less interest in friends
	Elementary (age 6-11)
1. Distractable	1. Doctor visit finds nothing wrong
2. Sad	2. Take things not belonging to you
3. Want to be with parent	3. School absence
	Teens (age 12-18)
1. More time alone	1. Take Things
2. Distractable	2. Doctor visit finds nothing wrong
3. Aches, Tired, Sleep	3. Act younger than age
	All Combined (3-18)
Distractable	1. Doctor visit finds nothing wrong
Sad	2. Take Things
Want to be with parent	3. Act younger than age

Source: PSC and PCS-Y (N = 86 Children = 63 Preschoolers [73%] and Elementary [57%], and 23 Teens [27%])

The teen scored much worse (doubled to 30) with scores higher for such items as "distractable" and "hyper." Four elementary aged students all improved over time, with only the

fifth slightly worse. It cannot be determined at this time whether the videos played a part in this change due to a lack of a control group. However, four out of the six improved in "understanding people's feelings" and three out of the six were "having more fun" and were "more interested in friends," all central topics of the videos. One third were "listening" better, 50% were having less "trouble sleeping" and "worried less, less afraid" now, with four out of the six "less clingy" and "less distractible," relating back to the conditions the children came to the session with. Parents and children alike stated they did refer to the videos again at least once during the deployment.

DISCUSSION

PSC Screening Survey: Ethics Risk

The 2002 DoD Military Family Quality of Life Survey indicated that separation was a common life stressor for military families (male 18.7%, female 21.2%). If Jimerson's (2003) assessment of background depression in U.S. children (9.5% and 12% in children and teens, respectively) were born out at Fort Stewart, potentially 180 positive screens would result from their total dependent population of children if all participated in this event (18,179). The risk of this potential impact was addressed by ensuring follow-up care was available for children with positive screening results. This was necessary since giving participants information about possible problems without a plan to assist them in dealing with the information would be unethical. To safeguard subjects from opening a "Pandora's Box" of heretofore undiscovered issues, parents of children scoring positive on the PSC (i.e. those reporting an excess of symptoms such as sleep disturbance, depression, or undue anxiety, scoring 28 or higher on the PSC or PSC-Y for those 6-18 years old, 24 or higher for pre-schoolers) were contacted

immediately and referral options offered to the appropriate local caregiver through established procedures. Fort Stewart was very supportive of this pilot and had family interventionists at the screenings to make appointments before the parents left with their videos. A combination of a New Parent's Group that had sufficient counseling hours to provide immediate counseling to any parent or child requesting it, appointments with medical primary care providers at the MTF, and the anonymous Military OneSource counseling program available on the Internet met the need for care at Fort Stewart.

PSC Screening Survey: Ethics Benefits

Principles for medical research and medical care declared by the World Medical Association Declaration of Helsinki (June 1964) emphasized ethical principles for medical research involving human subjects. It was adopted by the 18th WMA General Assembly in Helsinki, Finland, and allowed for a physician to combine medical research with medical care (intervention), "only to the extent that the research is justified by its potential prophylactic, diagnostic or therapeutic value." Interestingly, the first attempt to deploy this intervention tool to Fort Hood, Texas resulted in a declination by the Unit Commanders to being party to a controlled study, as they felt that the benefits of the video intervention (treatment) tool should be accessible to all participants from the beginning of the study. They stated that "the FRG spouses will not wait even 15 minutes before they share this tool with the control families," much less until the conclusion of the study. This caused the researchers to reconsider the methodology and use a self-control intervention model so all would receive the video tools after the first evaluation.

A pre-study hypothetical risk of adding more stress to families about to experience deployment, causing some of subjects to feel sadness or becoming upset after receiving the handout or video intervention was valid. A few children were reported by their parents to be more upset in the days after viewing the videos, purportedly because it served as a reminder that their parent was about to be deployed or was already gone, and they missed them. Although parents listed it as a draw-back to the intervention, they were also glad that they had participated, giving their child a chance to open up about these fears and concerns early on. Few required an unplanned healthcare visit to the clinic because of the PSC results or missed any school as a result of participating in the study. Therefore, it is surmised that the study had a positive impact on the children who participated and resulted in only a slight increase in the use of healthcare resources (increased workload). Alternative interventions existed for Fort Stewart families undergoing the deployment experience. Chief among them were the standard community (medical and school) support provided by the family, unit and installation support services already in place to support healthy functioning of our military families (Martin et. al, 1999). Programs were also available through school and religious activities to military families, as the researchers learned when church groups asked to participate in the study, once they learned of the study in the community. Finally, the web-based counseling from Military OneSource was reviewed with the families by a handout. It is not known how many families accessed these resources.

The age-specific video facilitator's guides were not utilized by the investigators in the pilot study. They were sent home with the families for use before, during, and post-deployment to facilitate their discussion, sharing, and learning about the cycle of deployment stress and ways

to deal with it. Baseline clinic visits were not measured, therefore it is unknown if the VIT decreased the need for clinic visits.

Difficulties in Developing a Grassroots Screening Intervention Tool

Consideration for this project began in the second semester of the Army-Baylor Graduate Program in Healthcare and Business Administration in San Antonio, TX as an independent research study to examine the use of video and survey tools to conduct educational interventions and to answer efficacy research questions (Schoenwald & Hoagwood (2001). While a pilot puppet version of the elementary-age interventional video, "Mr. Poe and Friends Discuss Family Reunion After Deployment," was already complete, the Army Medical Command leadership wanted to know whether the video tool had been field tested and would be efficacious before placing substantial funds into reproducing it. This kind of support data is only possible with substantial resources of time and technology. This led to expansion of the initial project into an outline for a prospective quasi-experimental cohort study to look at long term effects of separation within family readiness groups (FRG) at Army installations first, and eventually with all Services and civilian communities with large numbers of deployed Reserve and National Guard troops. While the study methodology, involving children, passed the rigorous Institutional Review Board (IRB) process in July 2006 (see Appendix A- Investigation and Grant Application Summary Sheet), finding a research population to implement it with proved the most difficult. Research was to occur at Fort Hood, TX with the III Corps deployment in October 2006 but had to be delayed and re-set for February and March 2007 at Fort Stewart, GA with the 3rd ID planning deployment to Iraq in June 2007, which was moved up to March 2007 the same week in February that investigators arrived to conduct the study (See Appendix D. Impact

Statement). This unfortunate series of changes made it logistically impossible to conduct both the VIT development and a full cohort case study with statistical evaluation. Fortunately, the product did receive Army Medical Department support in upgrading of the videos before release to the military and public.

In the military population it is exceedingly difficult to follow the scientific research model, randomly selecting and assigning individuals to the video intervention treatment group while others carried on with what they had, as unit cohesion leads to sharing of any new tool with the promise of helping families get through the rigors of deployment separation to a combat zone. The initial prospective blind cohort case controlled study was declined by rear detachment commanders as they were sure that once researchers released the video to families, the spouse network would share the video with the controls as the need for a proactive tool of this kind was so welcome. A future study of this kind would more likely be successful with Medical Command (MEDCOM) research support. The pilot study used each participant as their own control pre and post intervention (viewing of the video) resulting in all participants receiving the perceived VIT benefit(s) from the first interaction. This methodology provided for a more expeditious conclusion and benefit to the families meant to use the tool, reducing the bureaucracy and barriers that exist in healthcare organizations to implementing findings once verified (Branko, 2006; Glasgow, Lichtenstein & Marcus, 2003; Davis, et al., 2003), but it weakened the strength of the study's final conclusions. It remains that our results and conclusions will not necessarily generalize to all deployed families, active duty, reserve and national guard.

In the social sciences it is exceedingly difficult to do a randomized case control study that will contribute to our knowledge of individual, group, organizational, social, political, and

related phenomena related to familial separation. Yet in one national survey (Yin, 2003), school administrators indicated that it "was feasible to investigate the efficacy of culturally-based educational interventions using quasi-experimental designs. Perhaps a quasi-experimental prospective case-controlled cohort study utilizing two different units due to deploy around the same time, with one getting the VIT and the other being the control, would be accepted, randomly selecting or assigning entire units to the VIT treatment group while the controls carry on with educational tools and screening processes already in place. We must remain cognizant of the fallacy that our results will not generalize necessarily to all deployed families, military and civilian, and their children. Also, sufficient power to make conclusions, especially in the area of behavioral health (Cohen, J., 1988), will require adequate sampling of the population complete with baseline data from families unable to attend the sessions who have not had exposure to the videos, now more rare with the availability of the VIT. Power analysis is important in determining sample size for any study. In future studies, to achieve a good measure of power (at least .80) with effect size judged to be small (.03) and alpha of 95% the sample size should be well above 400 children and teens (with an equal number of controls for a controlled study) along with their approximately 200 adults (parents/guardians) from a cross-section of military families preparing for deployment using the formula suggested by Isaac and Michael (1985).

While an attempt was made to get follow-up surveys on the pilot participants, it was not surprising that the at-home parent and child were very busy so it was difficult to get surveys returned. The primary researcher was not able to return to site and the ancillary researchers were overwhelmed with the deployment issues themselves. Therefore, only 6 out of 99 participants responded to a follow-up PSC evaluation request. One teen scored much worse on the repeat test (doubled to 30) for unknown reasons. The father was doing his third deployment, perhaps this

was a sign that the teen was tired and angry in general. The mother was aware and getting assistance. Four of the five returning elementary respondents improved over time, with one slightly worse. Interestingly, all four improved in "understanding people's feelings." 50% of the children were having less trouble sleeping and in fact were "less worried," and had "more interest in friends" than when they answered the survey before the deployment began. In the important area of "fear," half were "more" and half were "less afraid" after six months had passed. A repeat study with better return should be done to determine what factors were responsible for those who were "less afraid" and handling the deployment better. For future studies, the researcher recommends viewing the video and collecting PSC screens at 3 month intervals (see Appendix N). Future studies should also consider qualitativc analysis techniques such as focus groups or semi-structured interviews to complement quantitative results to determine the underlying issues or factors that influenced children's coping skills.

CONCLUSIONS

This pilot project achieved its objectives to delineate the scope of the problem related to deployment separation. We have been remiss in establishing the baseline condition of our children followed by a careful and deliberate methodology, standardized and utilized across the board to address the evaluation for and provision of first line mental health education, evaluation, and treatment services within the military health system (MHS). The age-specific (pre-school, elementary and adolescent) video interventional training materials are designed to educate (inform and reassure) children and their parent/guardians about the effects of deployment separation, generating successful coping mechanisms, highlighting available community support programs to help children and their families better deal with the stress of long military

deployments. The pilot VIT intervention resulted in the projected benefits as research participants demonstrated empowerment and an increased sense of identification with others who were also undergoing the deployment experience. The active duty family members evaluated demonstrated a great deal of resilience in stating their confidence and knowledge on ways to get help. This was evident before viewing the intervention videos, and increased by 15% afterwards as a short-term benefit. Resiliency in today's family members is high, bolstered by getting the word out to youth and their families regarding the emotional cycle of deployment (Pincus, et al, 2001; Logan, 1987) along with healthy ways to handle deployment stress with community resources available to them. The challenge now is to utilize the delivery methodology, adding website distribution with a local healthcare administrator to implement the program in conjunction with face-to-face offerings. The variety of employment options will increase the likelihood that we can increase access to services on multiple levels to address complex personal and familial mental health issues faced by children of deployed service members.

This intervention program potentially decreased early redeployment of a handful of troops at Fort Stewart whose children and their parent, on participation, were encouraged to speak up and seek out pre and post-deployment intervention. Anecdotal evidence that the VIT helped families deal with stressful issues is evident in the comments by parents on call-back. One mother stated that she had no idea her children were thinking about it so much until they saw the video, after which they began regular discussions about feelings and concerns. Even though her children scored 'normal' on the PSC, the benefit derived from the VIT is evident. In addition, all who were potentially at risk for deployment stress due to existing conditions received assistance, including referral to the healthcare evaluation system. A greater benefit accrued to all children who scored positive on the PSC where the parents initially were unaware

that their children were having issues with the impending deployment. Without the intervention, the parents would not have had early warning.

Results suggest that the video media format was at least as effective in reducing stress levels and promoting coping skills as preexisting materials given the responses of those who had already seen other materials, leading parents and their children to ask questions and seek out appropriate intervention. This study was preliminary in nature, piloting a new VIT and survey instrument. Conducting an evaluation with other deployment groups will be required to validate the AKDQ survey tool. As a new evaluation tool, a complete analysis and documentation of the reliability and validity of the AKDQ is required to be certain that this particular survey would be an important element in establishing baseline knowledge in future follow-up studies. A spin-off effort to identify possible community collaborative partners for this program, involving local civilian clinics and private practitioners, healthcare businesses, community public health service agencies, school boards, and hospitals, will validate the concept of community response inherent in the model. Future video-formatted resources targeted to specific age groups are expected to be a welcome adjunct to community youth-serving professionals providing meaningful support to military families doing the best they can to deal with their deployment experience, especially in those civilian areas without active duty military family support resources nearby (Stafford & Grady. 2003).

Any screening program, whether it is the HRA II for soldiers, or the AKDQ and PSC for family members, could potentially be harmful to the population it is intended to help (Rona, Hyams, & Wessely, 2005) if not effectively implemented with local community mental health resources available with reasonably easy accessibility. These services can be provided via direct

care in our MTFs, in the local TRICARE purchased care network, or at centers of excellence (COE) to be accessed with transportation provided to remote sites.

The community coordination educational model this study suggests could serve as the template for future programs dealing with families preparing for or undergoing deployment, using facilitator's guides and first-line interventionists beginning with the parents and guardians of our children, backed up by primary care community counselors, as our country continues involvement in global peace initiatives. Improved prevention, detection, and proactive treatment of mental health reunion issues can be expected in any community implementing this type of program. This can only occur when parents are aware that their children are experiencing stress, leading to earlier intervention and more appropriate use of scarce interventional resources, especially mental health, within the community. The ADKQ results suggest that there is discordance between information the parents know and what their children are aware of. Providing the same program for use by the child and parent in the same setting will help provide for cross-informant correlation and situational specificity when looking at mental health prevention issues in children (Achenbach, T. M., McConaughy, S. H., Howell, C. T., 1987). "Standardization is the key. There must be community sharing of resources and a systematic approach at the post and unit level" (Amen, Jellen, Merves & Lee, 1988, p 445). The Army Medical Command Center and School (AC&S) and American Academy of Pediatrics (AAP) have placed the videos on their websites in the same manner as the pre-school video made available by Sesame Street on the Military OneSource website. An interactive resiliency stress evaluation tool has since been added to the teen video.

Future research is needed to show that a video-format intervention program dealing with redeployment family function issues is effective at increasing knowledge about deployment

issues while decreasing anxiety in military children. Analysis of this baseline data provides direction for future study and interventions. A follow-up study is planned with the Fort Stewart 3rd ID to identify if the VIT program decreased early redeployment of deployed active duty Service members (ADSM) and whether the reunion period was more successful with less family reintegration and post-deployment issues when compared to families who did not have access to the VIT.

The program is designed as a developmentally appropriate, age-specific video interventional toolkit (VIT) for community use in building resiliency and coping skills while preventing individual and familial dysfunction. Unfortunately, it cannot be assumed that each child has a local primary care manager (or team) assisting with continuity of care, referring to follow-up services available in the community. Deployment resources are not evenly distributed among our FRGs and within our school systems. FRGs throughout the military, in addition, are not uniform in make-up regarding level of knowledge and ability to assist in advocating for families in getting initial and follow-up community care.

A pilot web-based Internet site has been developed at the AC&S to implement the VIT program virtually on users home computers. The website will establish a centralized data base collection point that will operate in conjunction with on-site family readiness group (FRG) or unit leaders and their local medical providers to collect information about children in their care (see Appendix O). The secure research website will protect patient confidentiality while allowing pooling of all Services data. An administrative research pilot, the website is not published to the Internet as of the publishing of this paper. Readers interested in viewing or utilizing the website to start a screening program in their community should contact the author.

This study offers a standardized screening program that can be utilized to document baseline mental health status in conjunction with the DVD toolkit to follow the progress of families over time during a deployment, following medical symptoms (both mental health and physical) in children, recording subsequent changes during the deployment after repeated viewings of the video as they utilize healthcare resources during the deployment. In documenting mental health status of military children over time, trend data can then be used to identify children who are having negative outcomes as a result of the deployment and institute proactive interventions before the situation gets so severe that it results in an early re-deployment of the active duty deployed parent, potentially negatively effecting the mission of the unit. This preventive mental health support program has the potential to decrease the incidence of emotional abuse and family dysfunction that often occur after the reunion "honeymoon period" wears off.

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Appendix A

Statement of Ethical Conduct in Research

The author declares no conflict of interest or financial incentives in any product or service mentioned in this proposal. The confidentiality of individuals whose data may be used in this descriptive study will be protected at all times and under no circumstances will be discussed or released to outside agencies. The purpose of the information gathered is for publication and presentation to increase general knowledge and involves the collection of new and sensitive data that the Army Medical Command (MEDCOM) and Department of Defense (DoD) does not currently collect. This research requires, and has been granted, full approval initially by the Brooke Army Medical Center/Wilford Hall institutional review board (IRB) and then transfer to the Eisenhower IRB when the study group became the 3rd ID at Fort Stewart, since it involves recording of specific healthcare data linked directly through identifiers and survey responses to determine efficacy of the study materials and to provide for follow-up, as needed. The work involves no more than minimal risk to the human subjects and non-invasive procedures. The clinical research methodology uses personal identifiers, includes both adult and child human subjects, but does not cross command lines, as it occurs on specified Army installations. While it initially warranted a full IRB, survey control numbers from the Personnel Survey Office are not required for this pilot research study. Should the DoD decide to deploy this methodology to all Services deploying in the Global War On Terror (GWOT), then survey control numbers would be required.

Appendix B

Investigation and Grant Application Summary Sheet

PROJECT TITLE: Deployment Effects on Children and Adolescents:
Educational Video Program Effectiveness

ON-SITE PRINCIPAL INVESTIGATOR: LTC James Maurice Nold, MD, MHA, FACEP, CHE, Deputy Commander for Clinical Services, Winn Army Community Hospital, Fort Stewart, Georgia, james.nold@amedd.army.mil

OVERALL STUDY INVESTIGATOR: COL George D. Patrin, M.D., MC, CHE, USA AMEDD C&S/ Army-Baylor Masters Program, george.patrin@amedd.army.mil

ASSOCIATE INVESTIGATOR: MAJ Keith M. Lemmon, M.D., MC, USA, Adolescent Medicine Fellow, San Antonio Military Pediatric Center, keith.lemmon@amedd.army.mil

CONSULTANTS:
*COL Elisabeth M. Stafford, M.D., MC, USA, Program Director –Adolescent Medicine Fellowship, San Antonio Military Pediatric Center
*COL Karl Kerchief, M.D., MC, USA (statistician), Chief of Consultants, MEDCOM – Clinical Operations

FUNDING REQUIREMENTS: No funding requested.

FACILITIES TO BE USED: 3rd Infantry Division Family Readiness Groups (FRG)

SUMMARY: This prospective quasi-experimental ecological cohort observational study examines changes in knowledge and attitudes related to viewing an educational video intervention tool (VIT) targeted to children, adolescents, and their parent/guardians in households exposed to the stress of military deployment long-term separation. The intervention is being assessed for (1) effectiveness at increasing knowledge about deployment effects and support options in the community and for (2) general acceptance by viewers to use the VIT program to supplement currently available information. Additionally, (3) changes in mental health symptoms as determined by the Pediatric Symptom Checklist (PSC) for children and the Pediatric Symptom Checklist-Youth (PSC-Y) for teens will be measured before and after the intervention. Each participant will serve as their own control before viewing the video by assessing changes in knowledge level of deployment effects and community support options, measuring them both before and after viewing the video. An additional control group may be military children or teens and their parent/guardians who have not seen the videos. It is expected that participants will demonstrate increased knowledge about deployment, expanded coping skills, and less mental health stress symptoms than they did before viewing the video materials. It is also expected that they will feel the video is value-added and should be distributed to other families experiencing deployment.

Appendix C

Bosnia (2000) Soldier/Family Deployment Risk Assessment and Algorithm

This questionnaire is a tool to assist your unit in identifying areas we can better support you and/or your family's needs during deployment. By identifying risk areas BEFORE deployment, establishing a plan for dealing with personal and family needs, they will have the least effect on you and the mission once deployed. Answer each question with a "Yes" or "No". **For each "Yes" answer, provide a short explanation.**

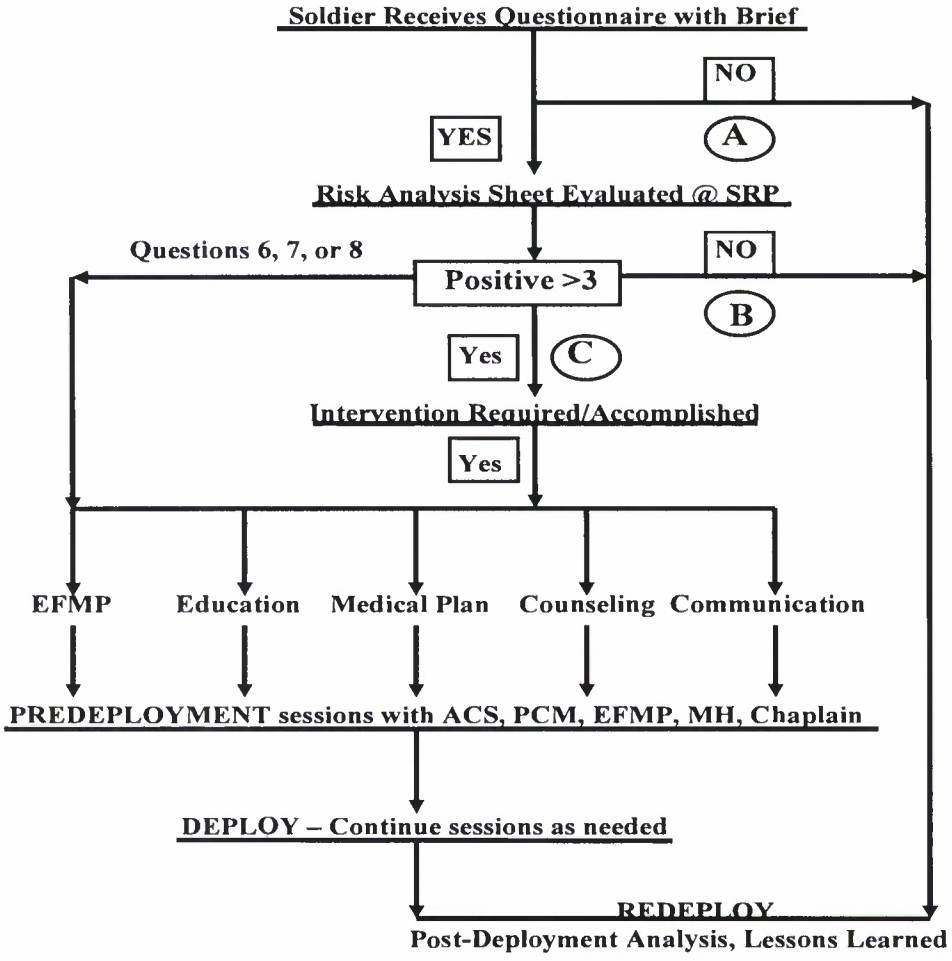
	YES	NO	NA
1. Are you married or have had a 'significant other' for at least four months?	___	___	___
2. Have you recently had a change of marital status?	___	___	___
3. Are you a single parent?	___	___	___
4. Have you recently (within six months) had a close friend or relative become seriously ill or die of illness?	___	___	___
5. Do you currently have financial problems or concerns that may affect this deployment?	___	___	___
6. Do you (or any dependents) have long-term medical conditions that require being seen more than three times a year for the same problem; or require being referred to a sub-specialist even once per year?	___	___	___
7. Do you (or any dependents) have any mental health concerns or needs (see a counselor, social worker, psychiatrist, psychologist, school counselor, learning disorder/special education teacher)?	___	___	___
8. Have you (or any dependents) been hospitalized within the past six months?	___	___	___
9. Will you be taking any prescribed medicines while deployed? If so, what medications? _____	___	___	___
10. Have you ever been told (or do you think) you have a drinking problem?	___	___	___
11. Are you on a profile? (If so, for what? _____)	___	___	___

If your answers suggest a need for a quality support intervention for you and/or your family, if applicable, someone will contact you from the risk assessment team. Thank you for helping us help you!

Name _____ Rank _____ Unit _____
SSN _____- ____ - _____ Phone: Home _____- _____ Work _____-_____

Each question answered "Yes" ask the soldier for a short written explanation. For all with >3 "Yes" answers query soldier for more information and review with PA or MD. If a reasonable plan to address possible stress or problems in that area is evident, write "OK" in the right margin and place in "No Risk" file. If apparent deterioration or lack of planning is evident, ask if they like to be referred, to who, mark questionnaire for follow-up, circle appropriate personnel and set in "Risk" file. Tell the soldier someone will call or direct soldier to call him/herself.

Risk Assessment Algorithm



EFMP = Exceptional Family Member Program (Marty Herron 6-7886 or Dr. Patrin 6-7990)
Education = Alert to ACS/TRICARE/EFMP programs available (Susan Moyer 6-4590)
Medical Plan = Contact PA/Primary Care Manager (PCM) (Establish?) (Head Nurse of clinic)
Counseling = Refer to Chaplain or Mental Health (via PCM) to establish acute individual/family therapy
Communication = Refer to unit admin and/or medical chain to establish information link

Patrin, 2000. From an unpublished deployment study of deployed soldiers to Bosnia.

Appendix D

Impact Statement

Project Title: Deployment Effects on Children and Adolescents: Video Program Effectiveness

Principal Investigator: COL George Patrin, MD, AMEDD C&S/ Army-Baylor HCA Program

Service/Department: 3rd ID and Winn ACH, Fort Stewart, GA

Assistance Requested: Provide appointments and follow-up for children who have participated in the Deployment Effects Video Intervention Program, as needed.

Total Number of Patients to be Studied: Approximately 300-500 children, teens, and controls (who do not participate in the video discussion) and 300 adults (parents, guardians) from a cross-section of Family Readiness Group (FRG) military families experiencing deployment.

Number of Patients per Month: Estimate 30 per month

Length of Study: Begin 26 February 2007; End 1 June 2007 (4 months)

__ Disapproved, cannot support activity

__ Approved, no comment

__ Approved, with comment

James Nold — LTC, MC — WACH, DCCS — James.Nold@AMEDD.ARMY.MIL

Christopher Warner — MAJ, MC — 3rd ID Psychatrist — Christopher.H.Warner@.AMEDD.ARMY.MIL

Appendix E

Deployment Effects on Children and Adolescents: Video Toolkit Effectiveness Flyer

Deployment Effects on Children and Adolescents: Video Toolkit Effectiveness

Please join us!

Would you be willing to participate in a program to study the effectiveness of video materials that help your family deal with the effects of deployment separation?

Come to your next Family Readiness Group (FRG) meeting!

You are the ideal family to help us look at deployment separation issues because you have a family member who will be deploying soon (or is already gone). We are interested in finding out more about what happens in families during times of military deployment.

If you choose to participate in this research study you will be asked to -

1. **Meet with the doctors as a group three times over the next six months,** ideally on scheduled FRG meeting nights, in September, November, and again in February.
2. **Review informational materials** at home on how your child and you may be feeling about deployment and ways to deal with it.
3. **Fill out a questionnaire** about who you are and what you know about deployment. Children six to eleven will be review the questions with their parent. Teens fill out their own survey.
4. **Fill out a "feelings and emotions" survey** called The Pediatric Symptom Checklist (PSC) indicating whether you see anxiety or other concerns in your child. Again, teens fill out their own.

NOTE: If answers on a checklist indicate a need for evaluation, you will be contacted immediately.

You will **benefit from participation** in this study in receiving the **deployment educational materials** to review. In addition, you will be **receiving assistance in dealing with the impact of deployment** on your family and individual lives, if needed. Ultimately, helping with this study will provide us information that will **help future families deal more effectively with deployments.**

We sincerely hope you will choose to participate in this important study helping military families!

Appendix F

FRG Leader Letter

Dear FRG Leader, Community Provider, Parent/Guardian –

Thank you for considering implementation of this family deployment reintegration interactive video program in your community with your support group children. Working together, we can get information out to our families that will enable them to build on the natural resiliency inherent in being a military family, while reminding them of the coping mechanisms and techniques used by those who have already experienced long deployment separation(s).

This packet includes everything you'll need to get this information into the hands of your military units, community providers (whether military, school, or clergy), and to conduct very valuable research on the efficacy of the materials so we can work to improve them over time. The research program includes:

- 2 copies of the CD/DVD with two videos and handouts, surveys, etc. on them
  Note that the DVD has marketing clips of the two videos you can use to brief commanders (who are short on time) on what we are trying to achieve together for their families. Look in the "Marketing Folder" in "Other Resources."
- Research leader instructions, including opening comments and steps to follow
- Survey packet -
  - *"Attitude, Demographics, & Knowledge Questionnaire"* for the adults and children viewing the videos (updated 29 Jan 07)

    NOTE! The survey has been updated since the DVDs were produced. Use the updated copy provided in this packet. (We can send the word document to you as well - email m.)

  - *"Pediatric Symptom Checklist"* to evaluate those children who the parents would like an idea on how they're handling the deployment over time
  - *Consent Form* (for adults and teens) and *Assent Form* for the children
  - Information on how to get the Sesame Street *"Talk, Listen, & Connect"* for the toddlers to view
- Sign in sheet (so we have contact information should any of the kids 'test' positive)
- FRG meeting announcement flyer

Once the session is over, you can send the forms to me, call in the results over the phone, or fax the signed consent forms and surveys to 210-221-7043. We will pay your expenses for mailing. It would be best to have a clinician in your community team up with you to implement this study program, to be 'on the ground' to address local questions. If you have such a partner, put them in touch with me and I can help facilitate the program with you. I really appreciate your taking the lead in helping your families. Thanks for all you do to support families who are serving their country through deployment! If you have any questions on how to use the videos or participate in the research can call me...anytime.

COL George Patrin, MD
Pediatrician
210-833-9152 (cell), 831-242-7552 (office)
george.patrin@amedd.army.mil

Family separations due to military deployments are longer than they have been in the past. Separations can lead to stress and anxiety, disrupting a child's daily routine and quality of life. Reactions of children to parent or guardian deployment often include anger, sadness, fear, confusion, and feelings of abandonment, loss, anxiety, and depression. These reactions, in turn, may result in school absenteeism, social isolation, family emotional abuse and violence, psychosomatic medical complaints, and depression. It is very important then, to get the word out to youth and their families about the emotional cycle of deployment, healthy ways to handle it, and what community resources are available to help if it isn't going well.

The videos included in this program serve to inform and reassure children and their parent/guardians affected by deployment cycle stress. The Adult and Child/Teen Questionnaires evaluate baseline knowledge and attitudes about deployment before and after viewing educational video intervention tools made specifically for children (6-11), adolescents (12-19), and their parent/guardians (any age) in households exposed to the stress of military deployment and long-term separation. By carrying out a study in your community you can determine the self-reported effectiveness of the age-specific video training materials at increasing knowledge about deployment effects and availability of local support options as well as collect comments on ways the products can be improved. The questionnaire also assesses for general acceptance by viewers to use the program to supplement currently available information in print and on websites. The screening survey, called the Pediatric Symptom Checklist (PSC) for children and PSC-Youth for teens, documents the baseline level of medical and emotional health in our children before deployment, followed by subsequent changes with repeated viewings of the video and re-administration of the survey during the deployment. It is important to get baseline measures BEFORE viewing the video, then each child can be followed with the PSC at intervals during the deployment if a local medical provider will agree to score the PSC and contact the parent and/or teen if their screen is positive. If this option is exercised, participants will need to sign the informed consent and assent forms included.

It is expected that participants will demonstrate increased knowledge about deployment, expanded coping skills, and less mental health stress symptoms than they did before viewing the video materials, and will actually require less support from community providers than families who do not view the videos. It is also expected that families will feel the video is value-added and should be distributed to others experiencing deployment.

The benefits of conducting a study are:

1. Children, adolescents, parents, and community providers will demonstrate an increased level of understanding of and ways to cope with deployment stress issues.
2. Children will better understand which deployment responses are normal and when they should consider talking to a parent or community support provider.
3. Viewers will help developers improve the videos for future updates.

If you should decide to conduct a study with your family or group, please contact the investigators with questions and to arrange for collection of survey and questionnaire results.

PRINCIPAL INVESTIGATOR POC: COL George D. Patrin, M.D., MC, USA
AMEDD C&S/ Army-Baylor Masters Program
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ASSOCIATE INVESTIGATOR POC: MAJ Keith M. Lemmon, M.D., MC, USA
Adolescent Medicine Fellow, San Antonio Military Pediatric Center
keith.lemmon@us.army.mil

Appendix G

Informed Consent (ICD Template Version 4, Jul 02)

Deployment Effects on Children and Adolescents: Educational Video Program Effectiveness

PRINCIPAL INVESTIGATOR: COL George Patrin, MC

If you choose not to participate in this research study, your decision will not affect your eligibility for care or any other benefits to which you are entitled.

DESCRIPTION/PURPOSE OF RESEARCH:

You are being asked to consider participation in a research study because you have a family member who will be deploying soon, or is already gone, and we are interested in finding out more about what happens in families during times of military deployment. The purpose of this study is to see how effective an educational video is on a family's understanding and knowledge about military deployment. It is also designed to see if the educational video has any effect on our children's emotional responses to having a family member deployed. During your participation in this study, you will be asked to interact three times with your local Family Readiness Group (FRG) point of contact (POC) and/or the study investigators.

PROCEDURES:

If you choose to participate, you will be expected to participate in the following procedures, which vary depending on your age (if a child 3-11 or a teen 12-19).

1. If you are a **child from six to ten years of age**, your parent/guardian will help you fill out a questionnaire about who you are and what you know about deployment issues and another one about how you are feeling right now called The Pediatric Symptom Checklist (PSC). Then you will see a video that was made for your age group about things that commonly happen before, during, and after a deployment. Once you have seen the video, you will be asked to answer a few more questions to let us know if any of your ideas about deployment have changed at all. We will also ask you if you feel the video should be seen by other kids. You will take the video home with you and are encouraged to review it as often as you like, but for sure at about 2 months and 6 months, when your parent will once again fill out the paper on how you are feeling and talk to the investigator or FRG person on the phone.

2. If you are a **teen from eleven to eighteen years old**, you and your parent/guardian will be asked to fill out a survey-questionnaire about who you are and what you know about deployment issues and community resources available to you to deal with deployment. As a teen participant, you will be asked to fill out a quick feelings and emotions survey called the Youth Report Pediatric Symptom Checklist (PSC-Y). After watching a video made for teens about coping with deployments, you will be asked to finish the questionnaire and let us know if any of your ideas or

knowledge about deployment have changed at all. You will take the video home with you and will be asked to review it one week before two more follow-up sessions, either with your Family Readiness Group or talking to the investigator on the phone, in 2 months and 6 months when you will once again fill out the PSC-Y.

3. If you are a **parent/guardian of a child** participating in the study you will be asked to view an age-appropriate video for your child's age group after first filling out a questionnaire about who you are and knowledge you have about deployment issues and community resources available to you and your child to deal with them. You will also assist your child age 6-10 in filling out a quick feeling and emotions tool called The Pediatric Symptom Checklist (PSC) indicating whether you see anxiety or other concerns in your child. If your child is a teenager, they will fill out their own symptoms questionnaire, as mentioned above. You and your child will take the video home with you and will be reminded to review it one week before the follow-up sessions at 2 and 6 months, when you'll fill out the PSC-Y for your child again.

RISKS OR DISCOMFORTS:

There may also be unforeseen risks associated with this study that we won't know about until you participate in it. A participating child may feel sad or upset after viewing the video. If a child does react negatively to reviewing the materials, or if the standardized symptom checklist indicates a need for further evaluation, you will be contacted immediately and advised to make an appointment with the local provider of your choice, perhaps with the Child and Adolescent Psychology Evaluation Service (CAPES).

BENEFITS:

The benefit of your participation in this study is in receiving educational materials included with the video. If needed, you will also receive assistance in dealing with the impact of deployment in your family and individual life. There is no guarantee that you will receive any specific personal benefit from this study other than knowing that the things we learn about families and deployment may help future kids and their families.

PAYMENT (COMPENSATION):

You will not receive any compensation (payment) for participating in this study.

ALTERNATIVES TO PARTICIPATION:

Choosing not to participate in this study is your option. The materials already on post will still be there and available to you, as they are for all families.

CONFIDENTIALITY OF RECORDS OF STUDY PARTICIPATION:

Records of your participation in this study may only be disclosed in accordance with federal law, including the Federal Privacy Act, 5 U.S.C.552a, and its implementing regulations. DD Form

2005, Privacy Act Statement - Military Health Records, contains the Privacy Act Statement for the records.

By signing this consent document, you give your permission for information gained from your participation in this study to be published in medical literature, discussed for educational purposes, and used generally to further medical science. You will not be personally identified; all information will be presented as anonymous data.

Your records may be reviewed by the U.S. Food & Drug Administration (FDA), other U.S. government agencies, and the BAMC Institutional Review Board.

Complete confidentiality cannot be promised, particularly for military personnel, because information regarding your health may be required to be reported to appropriate medical or command authorities.

ENTITLEMENT TO CARE:

In the event of injury resulting from this study, the extent of medical care provided is limited to be within the scope authorized for Department of Defense (DoD) health care beneficiaries. Your entitlement to medical and dental care and/or compensation in the event of injury is governed by federal laws and regulations. If you have questions about your rights as a research subject or if you believe you have received a research-related injury, you may contact the Brooke Army Medical Center Protocol Coordinators, (210) 916-2598 or BAMC Judge Advocate General, (210) 916-2031.

VOLUNTARY PARTICIPATION:

The decision to participate in this study is completely voluntary on your part. No one has coerced or intimidated you into participating in this project. You are participating because you want to. The Principal Investigator or one of his/her associates has adequately answered any and all questions you have about this study, your participation, and the procedures involved. If significant new findings develop during the course of this study that may relate to your decision to continue participating, you will be informed immediately.

You may withdraw this consent at any time and discontinue further participation in this study without affecting your eligibility for care or any other benefits to which you are entitled. Should you choose to withdraw, you must contact COL George Patrin, MC at (210) 833-9152 or MAJ Keith Lemmon, MC at (210) 916-0669 and inform one of them that you no longer wish to participate. Also, the investigator of this study may terminate your participation in this study at any time if he/she feels this to be in your best interest.

CONTACT INFORMATION:

Principal Investigator (PI)
COL George Patrin, MC
Phone: (210) 833-9152

Associate Investigator (AI):
MAJ Keith Lemmon, MC
Phone: (210) 916-0669

Your consent to participate in this study is given on a voluntary basis. All oral and written information and discussions about this study have been in English, a language in which you are fluent. A signed and dated copy of this form has been given to you.

Volunteer's Signature **Volunteer's SSN** **Phone Number** **Date**

Volunteer's Printed Name **FMP** **Sponsor's SSN** **Date of Birth**

Volunteer's Address (street, city, state & zip code)

Advising Investigator's Signature **Phone Number** **Date**

Advising Investigator's Printed Name

Witness' Signature **Date**

Witness' Printed Name

Parent's or Guardian's Name (Print)

Parent's or Guardian's Signature **Date**

(Generally, the parent/guardian signs the consent for a minor. However, if, in the opinion of the attending investigator, the minor can understand the nature and consequences of participation in the study, the minor should also sign above. If the minor is unable to sign, the advising investigator will indicate oral assent to participate by placing the investigator's initials here: _____)

(If the legal representative/guardian has a copy of a power of attorney or court appointment, attach it to this consent document and sign below).

Legal Representative's Name (Print) **Legal Representative's Signature** **Date**

Appendix H

Assent Document

BAMC Institutional Review Board Assent Document for Research Study

PI: COL George Patrin Version Date: 29 August 2006

Title of Study: Deployment Effects on Children and Adolescents: Educational Program Effectiveness

Institution/Hospital: _____

Name of Participant: _____ **Age:** _____

Below are some sentences. If you agree with the sentence, please place your initials next to the sentence. If you have any questions about what is written below or have any other questions about the research study, please ask. You will be given a copy of this form.

The following has been explained to me:

___ 1. What a research study is, the reason for this research and why I was asked to be part of the study.

___ 2. How long I will be involved and why I will be good as a participant in this research study.

___ 3. Who will be told about my involvement in the research study.

___ 4. How this research may help me and how it may help others.

___ 5. How this research study may hurt me.

___ 6. That I do not have to be in this research study if I do not want to be.

___ 7. That I can quit being a part of this research study any time I want.

___ 8. That I can do something else instead of this research study.

___ 9. Whom I talk to if I have questions about this research study.

___ 10. My parents (guardians) said I could be a part of this study.

All of my questions about this research study have been answered. I want to be a part of this study.

_____	_____	_____
Date	Printed Name of Subject	Signature of Subject
_____	_____	_____
Date	Printed Name of Parent	Signature of Parent
_____	_____	_____
Date	Printed Name of Witness	Signature of Witness

Appendix I

References – Websites for Family Support Programs and Publications

EPSTD Care for Kids Newsletter Website
http://www.medicine.uiowa.edu/EPSDT/win97/resources.asp

Families in the Military
www.aacap.org/page.ww?section=Facts%20for%20Familiesandname=Families%20In%20The%20Military

Helping Children Cope During Deployment
http://www.usuhs.mil/psy/CTChildrenCopeDuringDeployment.pdf

Helping Kids Cope
www.sofarusa.org/downloads/sofar_children_pamphlet.pdf

Coping when a family member has been called to war
www.ncptsd.va.gov/war/familycoping.htm

Advancing the Health of the Family left Behind
http://www.usuhs.mil/psy/CTCHealthFamilyLeftBehind.pdf

Coping With the Stress of Ongoing Military Operations
http://www.mentalhealthamerica.net/reunions/infoOngoingOperations.cfm

Helping Our Children Deal With War
http://www.mentalhealthamerica.net/reunions/infoWarChild.cfm

Homecoming - Veterans and Families
www.veteransandfamilies.org

How to Get Back to Normal
http://www.mentalhealthamerica.net/reunions/infoBacktoNormal.cfm

When the Letdown Doesn't Let Up
http://www.mentalhealthamerica.net/reunions/infoLetdown.cfm

Being a Couple Again
http://www.mentalhealthamerica.net/reunions/infoCouple.cfm

Reconnecting With Your Children
http://www.mentalhealthamerica.net/reunions/infoChildren.cfm

Returning from the War Zone: A Guide for Military Families

www.ncptsd.va.gov/war/guide/GuideforFamilies.pdf

Courage to Care: Becoming a Couple Again
http://www.usuhs.mil/psy/RFSMC.pdf

Welcome Home: A guide to a healthy family reunion
www.redcross.org/pubs/afpubs/welcome.pdf

Army Reserve Family Programs
www.arfp.org

National Guard Family Programs
www.guardfamily.org

National Federation of Families for Children's Mental Health
www.guardfamily.org/Youth/

Appendix Ja

Adult ADKQ Deployment Questionnaire

Adult Questionnaire Subject # ___ - ___ -___ - 00 - 00 - 00 , Date _____

Please answer the following questions before seeing the video...

Were you aware that there are website, video, and other materials for children to use to help them with deployment issues **before today**? *(check all that apply)*
__ Website __ Printed Material __Video __ Was not aware of any

Do you currently have materials available to you concerning deployment and its effect on children? *(check all that apply)*
__ Website __ Printed Material __Video __ Do not have any

If you are viewing the video along with a child today, please state your relationship to the child and other children (I.e. father, mother, guardian, teacher, etc.). *(check all that apply)*
__ Parent or __ Guardian (relationship to child _____)
__ Military Unit Personnel (state position - CDR, 1SG, FSG leader _____)
__ Medical/Health Professional (state profession - MD, nurse, medic, etc. _____)
__ School Teacher
__ Clergy/ Sunday School Personnel
__ Other (Please specify _____)

What is the status of the person connected with military deployments in your family? *(check all that apply)*
__ Active Duty __ Retired __ Civilian (GS) __ Civilian Contractor
RANK____ __ Male __ Female
__ I am the Service Member who is, has, or may be, deploying
__ Other (Please specify _____)

What is your relationship to the military? *(check all that apply)*
__ Army __ Air Force __ Navy __ Marines __ Coast Guard __ Reserves __ National Guard __ Civilian Employee __ Other (Please specify_____)

Is your family member currently deployed? ___ yes ___ no
How many times has your family member been deployed? *(check one)*
___ Never ___ This will be the 1st time ___ 1 ___ 2 ___ 3 ___ 4 ___ more than 4

For the following questions, please let us know if you strongly agree (1), agree (2), uncertain (3), disagree (4), strongly disagree (5)

Children and adolescents in military families are likely to experience mental health issues like depression, anxiety, anger and changes in school performance when a family member deploys.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

Children and adolescents are aware of the problems associated with family military deployment and how their lives may be changed as a result of it.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

Children and adolescents know where to go to seek out the support they need when experiencing problems during family military deployment.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

I know where to go in my community to seek out support when I, or my family, are experiencing problems during family military deployment.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

I am comfortable discussing effects of family military deployment with children.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagrce
☐	☐	☐	☐	☐

I view myself as a competent resource to assist children and adolescents with deployment issues.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

After viewing the video, answer the following questions...

Which video program did you see today? *(check one)*

__ Toddler __ Child __ Teen __ Didn't see one

I know where to go in my community to seek out support when I, or my family, are experiencing problems during family military deployment.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

I am comfortable discussing effects of family military deployment with children.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagrce
☐	☐	☐	☐	☐

I view myself as a competent resource to assist children with deployment issues.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

Should the video program be made available to all people (children, parents, and community leaders) dealing with deployment?

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

18. Will you use this video and facilitator's guide again in the future?

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

19. Do you have anything else you want to tell us about the video or about having a family member gone for the war? ___ Yes ___ No

What?

_____

_____

_____

Thank you for helping us help kids and families!

Appendix Jb

ADKQ Child/Teen Deployment Questionnaire

We would appreciate your answers on the following questions…
(Please read questions to children under 12 years of age and record their answers.)

How old are you? ___ *(age in years)*

What grade are you in? *(check one)*
__ Kindergarten __ Grade 1-6 __ Grade 7-9 __ Grade 10-12 __ Graduated HS

Did you know **before today** that there is a website, video, and other things for kids to look at that talk about how to make the separation from mom or dad go easier? *(check all that apply)*
__ Website __ Pamphlets/ Coloring Books __Video __ Didn't know of any

Do you have any of the things mentioned above already? *(check all that apply)*
__ Website __ Printed Material __Video __ No, don't have any

If you watched a video program today, which one did you see? *(check one)*
__ Child (Mr. Po) __ Teen Interviews __ Didn't see one

Who, in your family, will be leaving, is gone, or has come back from war?
(check all that apply)
__ Parent (Dad) __ Parent (Mom)
__ Brother __ Sister
__ Uncle __ Aunt
__ Grandfather __ Grandmother
__ Other (Who? _____)

Which military service is your deployed family member in? *(check one)*
__ Army __ Air Force __ Navy __ Marines
__ Coast Guard __ Reserves __ National Guard
__ Active Duty __ Retired __ Not in any of the services
__ Other (Please specify _____) __ Don't know

Is this the first time your family member has been deployed? *(check one)* ___YES ___ NO

For the following questions, please let us know if you agree a lot (1), agree some (2), don't know how you feel (3), don't agree some (4), don't agree at all (5).

Kids in military families have problems at home or school when someone in the family goes away for a long time (for instance, to war).

Agree A lot	Agree Some	Don't Know How I Think	Don't Agree Some	Don't Agree At All
☐	☐	☐	☐	☐

Kids know all about what's happening to them and how their life is different when their mom or dad goes away for awhile without someone having to help them.

Agree A lot	Agree Some	Don't Know How I Think	Don't Agree Some	Don't Agree At All
☐	☐	☐	☐	☐

For the following questions (cont), please let us know if you agree a lot (1), agree some (2), don't know how you feel (3), don't agree some (4), don't agree at all (5)

Kids know where to get help if they're having problems with their family or in school when their mom or dad goes away for a long time.

Agree A lot	Agree Some	Don't Know How I Think	Don't Agree Some	Don't Agree At All
☐	☐	☐	☐	☐

It's easy to talk about how you are feeling with your mom or dad gone away.

Agree A lot	Agree Some	Don't Know How I Think	Don't Agree Some	Don't Agree At All
☐	☐	☐	☐	☐

I know of at least one other kid who is having problems at home or school because their mom or dad is gone.

Agree A lot	Agree Some	Don't Know How I Think	Don't Agree Some	Don't Agree At All
☐	☐	☐	☐	☐

If you saw a video program today, do you feel it was good and should be shown to other kids and their families?

Yes Definitely	Yes Maybe	Don't Know How I Think	Don't Think So	No, Not At All
☐	☐	☐	☐	☐

15. Do you have anything else you want to tell us about having a mom or dad (or other family member) gone for the war? ___ Yes ___ No

What? _____

_____

_____

Thank you for helping us help kids!

Appendix Ka

Pediatric Symptom Checklist (PSC)

Date: _____

Emotional and physical health go together in children. Because parents are often the first to notice a problem with their child's behavior, emotions or learning, you may help your child get the best care possible by answering these questions. Please indicate which statement best describes your child.

Please mark under the heading that best describes your child:

	NEVER	SOMETIMES	OFTEN
1. Complains of aches and pains			
2. Spends more time alone			
3. Tires easily, has little energy			
4. Fidgety, unable to sit still			
5. Has trouble with teacher			
6. Less interested in school			
7. Acts as if driven by a motor			
8. Daydreams too much			
9. Distracted easily			
10. Is afraid of new situations			
11. Feels sad, unhappy			
12. Is irritable, angry			
13. Feels hopeless			
14. Has trouble concentrating			
15. Less interested in friends			
16. Fights with other children			
17. Absent from school			
18. School grades dropping			
19. Is down on him or herself			
20. Visits the doctor with doctor finding nothing wrong			
21. Has trouble sleeping			
22. Worries a lot			
23. Wants to be with you more than before			
24. Feels he or she is bad			
25. Takes unnecessary risks			
26. Gets hurt frequently			
27. Seems to be having less fun			
28. Acts younger than children his or her age			
29. Does not listen to rules			
30. Does not show feelings			
31. Does not understand other people's feelings			
32. Teases others			
33. Blames others for his or her troubles			
34. Takes things that do not belong to him or her			
35. Refuses to share			
Total Score			

Does your child have any emotional or behavioral problems for which she/he needs help? ( ) N ( ) Y
Are there any services that you would like your child to receive for these problems? ( ) N ( ) Y
If yes, what services? _____

Appendix Kb

Pediatric Symptom Checklist - Youth Report (PSC-Y)

Please mark under the heading that best fits you:	*Never*	*Sometimes*	*Often*
1. Complain of aches or pains	___	___	___
2. Spend more time alone	___	___	___
3. Tire easily, little energy	___	___	___
4. Fidgety, unable to sit still	___	___	___
5. Have trouble with teacher	___	___	___
6. Less interested in school	___	___	___
7. Act as if driven by motor	___	___	___
8. Daydream too much	___	___	___
9. Distract easily	___	___	___
10. Are afraid of new situations	___	___	___
11. Feel sad, unhappy	___	___	___
12. Are irritable, angry	___	___	___
13. Feel hopeless	___	___	___
14. Have trouble concentrating	___	___	___
15. Less interested in friends	___	___	___
16. Fight with other children	___	___	___
17. Absent from school	___	___	___
18. School grades dropping	___	___	___
19. Down on yourself	___	___	___
20. Visit doctor with doctor finding nothing wrong	___	___	___
21. Have trouble sleeping	___	___	___
22. Worry a lot	___	___	___
23. Want to be with parent more than before	___	___	___
24. Feel that you are bad	___	___	___
25. Take unnecessary risks	___	___	___
26. Get hurt frequently	___	___	___
27. Seem to be having less fun	___	___	___
28. Act younger than children your age	___	___	___
29. Do not listen to rules	___	___	___
30. Do not show feelings	___	___	___
31. Do not understand other people's feelings	___	___	___
32. Tease others	___	___	___
33. Blame others for your troubles	___	___	___
34. Take things that do not belong to you	___	___	___
35. Refuse to share	___	___	___

Do you feel you have any emotional or behavioral problems for which you need help? ( ) N ( ) Y

Are there any services that you would like to receive for these problems? ( ) N ( ) Y

If yes, what services? _____

_____

Appendix Kc

Scoring and Interpreting the PSC

How to Interpret the PSC: A positive score on the PSC suggests the need for further evaluation by a qualified health (M.D., R.N.) or mental health (Ph.D, LICSW) professional. Both false positives and false negatives occur, and only an experienced clinician should interpret a positive PSC score as anything other than a suggestion that further evaluation may be helpful. Data from past studies using the PSC indicate that 2 out of 3 children who screen positive on the PSC will be correctly identified as having moderate to serious impairment in psychosocial functioning. The one child "incorrectly" identified usually has at least mild impairment, although a small percentage of children turn out to have very little actually wrong with them (e.g., an adequately functioning child of an overly anxious parent). Data on PSC-negative screens indicate 95% accuracy, which, although statistically adequate, still means that 1 out of 20 children rated as functioning adequately may actually be impaired. The inevitability of both false-positive and false-negative screens underscores the importance of experienced clinical judgment in interpreting PSC scores. Therefore, it is especially important for parents or other lay people who administer the form to consult with a licensed professional if their child receives a PSC-positive score.

Validity: Using a Receiver Operating Characteristic Curve, Jellinek, Murphy, Robinson, et al (1988) found that a PSC cutoff score of 28 has a specificity of 0.68 and a sensitivity of 0.95 when compared to clinicians' ratings of children's psychosocial dysfunction. In other words, 68% of the children identified as PSC-positive will also be identified as impaired by an experienced clinician, and, conversely, 95% of the children identified as PSC-negative will be identified as unimpaired.

Reliability: Test-re-test reliability of the PSC ranges from $r = .84 - .91$. Over time, case/not case classification ranges from 83% - 87% (Jellinek & Murphy, 1988; Murphy et al, 1992).

Inter-item Analysis: Studies (Murphy & Jellinek, 1985; Murphy, Ichinose, Hicks, et al, 1996) indicate strong (Cronbach alpha = .91) internal consistency of the PSC items and highly significant ($p < 0.0001$) correlations between individual PSC items and positive PSC screening scores.

Qualifications for Use of the PSC: The training required may differ according to the ways in which the data are to be used. Professional school (e.g., medicine or nursing) or graduate training in psychology of at least the Master's degree level would ordinarily be expected. However, no amount of prior training can substitute for professional maturity, a thorough knowledge of clinical research methodology, and supervised training in working with parents and children. There are no special qualifications for scoring.

Appendix L

Research Procedures/ Instructions

At an initial FRG or community meeting, have everyone sign in on an attendance roster that includes printed name, address, and phone number(s), and then read the following study purpose statement, participation requirements, and potential benefits to all attendees…

"Military doctors (We) are interested in finding out what families already know about what happens to them during a military deployment and how the children are feeling during this time. They (we) are also interested in finding out if a new video gives each of us any new information we didn't have before and if, after watching it, you feel it should be shared with other families.

If you choose to participate in this study you will be asked to fill out a consent form if you are a parent of a child younger than 11 or if you are a teenager 12 or older. Parents will help their younger children sign an assent form. Then, you will be asked to fill out two surveys that tell who you are, what you know about what happens during a deployment, and how you are feeling today. Again, parents will help their children up to 11 years old answer the questions. Then, we'll all watch the video that is right for each of us. Children 3 to 5 years of age will see "Talk, Listen, Connect," those age 6 to 11 years old will see "Mr Po and Friends Discuss Family Reunion After Deployment," and teens 12 to 19 will watch "Youth Coping with Military Deployment: Promoting Resilience in Your Family." After the video, you will be asked to fill out some questions from the first questionnaire again, letting us know if seeing the video causes you to change any of your answers. It will also give you a chance to tell us how we might be able to make the video better in any way. It is important to know that all of your answers will be kept confidential by the investigators.

You will take the video home, or view it on the Internet, and are invited to watch it again as often as you like. The video also has a guide with questions (in your packet) that you can discuss together as a family. In about two months, the investigators will call you (or meet with you again at an FRG meeting like this, if possible) and ask you to review the video again and then fill out the survey called the Pediatric Symptom Checklist again, asking how you're doing. As before, parents will fill it out for the younger kids, and teens will fill out their own. Your answers can be relayed over the phone or mailed back to the investigators. The last time for filling out this checklist will be in six (6) months, when investigators will ask you to answer the checklist for a third time. This is done three times to see how kids stay the same or change during a military deployment.

You should know that if the answers on the pediatric symptom checklist indicate a need for further evaluation, you will be contacted immediately and suggested to schedule a visit with the appropriate community provider of your choice. Everyone will benefit from participation in this study by receiving the video and the parent facilitator's guide to take home and review as often as you like. In addition, your child will receive ongoing evaluation and follow-up assistance in dealing with the impact of this deployment on them, if needed. Ultimately, helping with this study will provide information that will help future families deal more effectively with deployments. **We hope you will choose to participate in this study, but if you choose not to, you are still welcome to watch the video with us. (Participants get a packet for each child.)**

Appendix M

Participant Numbering System.

Mark the packet with the study number.

_____	- 0000	- 0000	- 00	- 00	- 00
Unit	FRG #	Family #	Child # (3-5 yo)	Child # (6-11 yo)	Teen # (12-19 yo)

Example:
3rd ID – 0101 – 0005 – 00 - 04 – 00 is the 4th child 6-11 yo in family 5 in the 101st FRG of the 3rd ID
1st CAV – 0101 – 0005 – 00 – 00 – 00 is the parent of a child in family 5 in the 101st FRG of the 1st CAV
172nd – 0012 – 0068 – 00 – 00 – 02 is the 2nd teen in family 68 in the 12th FRG of the 172nd.

C. Have all participants read and sign the informed consent (adult and teens) and assent statements (adult for their child 3-11 years old). Collect them. Make sure the study number is on them.

D. Prior to viewing the appropriate video –

1. Have each participant fill out the 1st part of the attitude, knowledge, and demographics questionnaire (AKDQ) with the parent/guardian assisting their child age 3-11 years old in answering the questions.

2. Have each parent or guardian fill out the Pediatric Symptom Checklist (PSC) for all children 3-11 years old. Each teen 11-18 years old fills out The Pediatric Symptom Checklist – Youth Report (PSC-Y).

View the appropriate video.

After viewing the video, have each participant finish filling out the AKDQ, with the parent/guardian assisting their child age 3-11 years old in answering the questions.

Remind the participants to watch the video again approximately one week before each of the two follow-up sessions (at 2 and 6 month) when the PSC and PSC-Y will be re-administered.

Remind the participants that the PSC scores will be tabulated immediately following each session. The parent-guardian of any child demonstrating a PSC or PSC-Y positive score will be contacted and advised to access the community services available to them. All answers will be kept confidential.

Ensure their subject number is on all forms when you collect them.

Thank them for participating.

Appendix Na

Future Studies - Confounders/ Bias

Confounding and bias is important when evaluating future toolkit efficacy and validity as they complicate analysis of cause and effect. Sampling or selection bias occurs if selecting children from only one location. Soldiers from one post may not be representative of all soldiers and their children unless they are a good mix of all Corps and Services to allow for generalization of the results. Non-response bias is unavoidable if investigators cannot return and get repeated measurements from all participants on-site. Instrumentation bias can be held constant by using the standardized PSC for health status but this same consideration cannot be applied to the AKDQ as it is not standardized. Recall bias is a factor affecting effectiveness of any intervention measured by self-report of knowledge, notable with prior deployments. Researcher bias exists when parents are used to collect ADKQ and PSC data from children if training of parents of 3-11 year olds isn't done on how to administer or interpret AKDQ or PSC answers given by three to eight year olds. Seeking approval from adults, children are not always truthful when answering the parent directly. If the child misunderstands the question, conclusions from the data would also be suspect. A confounder is present if participants have seen other videos on deployment stress similar to the VITs. Information bias can be kept to a minimum if all FRGs at the site have the same materials on hand, but most families have Internet available to them with ever-increasing web sites for information about deployment issues. Most military families will have viewed other materials. Lastly, in repeating the same PSC survey over time, test bias may occur, but it will occur the same in both future control and test subjects.

Appendix Nb

Future Studies - Data/ Statistical Analysis

Statistical techniques make a connection between predispositions for appropriate medical care-seeking behavior and screening instruments that identify those most likely to require those services. As such, the research question, "Can an educational video made specifically for children and teens be effective in providing the first level of therapy to develop coping skills in dealing with the separation anxiety incumbent in deployed families?" is answered by appropriate attitudes, knowledge, and demographic questions, collected before the video intervention, measuring baseline mental health status, followed by a post- intervention re-evaluation(s) over a specified period of time.

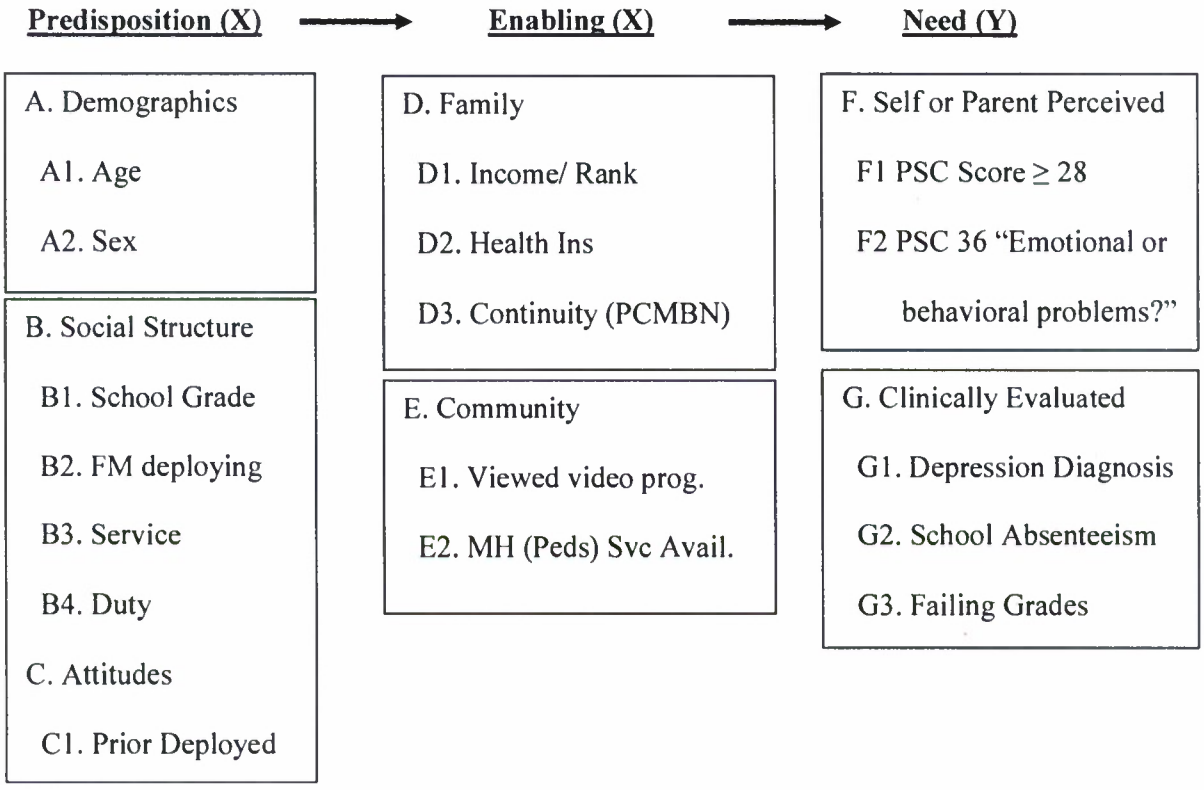
Demographic data and survey results were not placed in Excel and SPSS for this project as numbers participating did not lend themselves to validity of manipulations. However, future data should be evaluated for parametric normality, skewness and kurtosis, as well as measures of central tendency, standard deviation. Of interest will be Pearson's correlation coefficients run for metric variables (non-dichotomous) looking for correlations above .80 suggesting co-linearity, especially between children and their parents on the various questionnaire items, noting direction of correlation. Factor analysis of the inter-relationship among variables will be the ultimate evaluation to discern underlying relationships, especially given there are many more than five dependent variables to consider.

Direct outcomes could not be pursued for each test subject with this pilot, unfortunately, but preliminary data analysis of military health system (MHS) population-based database queries for these issues needs to be done to characterize community stress in response to deployment. Possible community data to be pulled in ad hoc reports are (1) level of school behavior problems

in the community by elementary age, teens, mental health admissions, outpatient encounters, and TRICARE referrals by TriCare paid claims. Additionally, the frequency of base-line associated diagnoses by age category for depression, anti-social personality disorder, and school truancy within the community should be done and compared to presence of deployment resiliency and coping skills in those with and without the DVD toolkit. Basic indicators of community stress need to be determined, especially for increase or decrease in use of mental health resources in communities supporting Reserve and National Guard soldier families. Trends from 2001 to the present in terms of visits per year and cost in dollars per year for mental health issues for children will be instrumental to graphically demonstrate the effect of extended military deployments on the community, if reasonable comparative data are available.

Appendix Nc

Andersen Behavioral Model Applied to Utilization of Community Services to be Utilized in Future Studies



Andersen Behavior Model Measures to Explain Need for Health Care Services

Dependent (Y) Variables are those signs or symptoms, elicited by survey questionnaire or clinical evaluations that suggest dysfunctional behavioral reaction(s) to separation (psychosocial impairment). Independent (X) Variables are those that may predict the likely of the Y variables occurring.

The regression equation: "Y_n is a function of X" applies to questionnaire and survey instruments.

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + e$$

Y the dependent variable (I.e. $F1_b$ PSC Composite Score ≥ 28, see Table 4)
b_0 the regression constant, or Y intercept, if all independent variables means are 0
X_n the independent variables (predictors) (i.e., Gender; Age, view video, see Table 5)
b_n the partial regression coefficient, or slope, associated with each X_n

Appendix Nd

Future Studies - Hypotheses Statements for Future Studies Utilizing Appropriate Screening Tools

The following hypotheses statements could be used in conjunction with the age-specific, culturally-matched, developmentally-appropriate educational videos and AKDQ and PSC to further validate the tools efficacy.

$H_{o\ (Null)}$: Viewing an age-specific video will reveal no significant post-viewing difference in deployment knowledge or comfort level.

H_{a1}: Viewing an age-specific video program (E_1 Q5) will result in a PSC score <28 ($F1_{a,b}$ PSC) on later evaluations

H_{a2}: Viewing an age-specific video program (E_1 Q5) will result in less behavioral or emotional problems in children with deployed parents (F2)

H_{a3}: Children whose parents have deployed before (C_1Q8) will have a PSC score <28 ($F1_{a,b}$ PSC)

H_{a4}: Children whose parents have deployed before (C_1Q8) will result in less behavioral or emotional problems than will children with a parent deploying the first time (F2)

H_{a5}: Being female (A2Q1b) will be predictive of a PSC score <28 ($F1_{a,b}$ PSC)

H_{a6}: Children in grades 1-6 (B1Q2) will have higher PSC scores ($F1_{a,b}$ PSC) than those in other grades

H_{a7}: Having a mother deployed (B2Q6) is predictive of having "worries" (F2jPSC22)

H_{a8}: Having a father deployed (B2Q6) is predictive of "school failure" (F2hPSC18)

H_{a9}: Viewing an age-specific video program (E_1 Q5) will reveal that children did not know that such a tool is available to them (Q3a)

H_{a10}: Viewing an age-specific video program (E_1 Q5) will reveal that the child knows where to get help during a deployment (Q11)

H_{a11}: Viewing an age-specific video program (E_1 Q5) will result in children who are more comfortable talking about deployment issues (Q12)

Appendix Ne
Future Studies Variables

Dependent (Y) Variables Indicating Possible Deployment Separation Dysfunction/Need for HC Services

Item #	Description	Type of Data	SPSS Scoring
*Generic PSC** Items*			
Y1-F1a PSC	Raw Score	Continuous	0.0 to 70.0 (with 28 positive cut-off)
Y2-F1b PSC	Composite Score ≥ 28 (out of 35)**	Dichotomous	<28 = 0.0, ≥ 28 = 1.0
Y3-F2p PSC 36	"Behavioral problems?" (Child)	Dichotomous	No 0.0, Yes 1.0
Y4-F2t PSC 36	"Behavioral problems?" (Teen)	Dichotomous	No 0.0, Yes 1.0
Specific PSC Items*			
Y5-F2a PSC 05	Trouble with teacher	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0
Y6-F2b PSC 06	Less interested in school	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0
Y7-F2c PSC 11	Sad, unhappy	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0
Y8-F2d PSC 12	Irritable, angry	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0
Y9-F2e PSC 13	Hopeless	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0
Y10-F2f PSC 16	Fights with other children	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0
Y11-F2g PSC 17	Absent from school	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0
Y12-F2h PSC 18	School failure (grades dropping)	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0
Y13-F2i PSC 21	Trouble sleeping	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0
Y14-F2j PSC 22	Worries	Ordinal	Never 0.0, Sometimes 1.0, Often 2.0

Source: *PSC – Pediatric Symptom Checklist** (for scoring details see methods section and Appendix J)

Independent (X) Variables (Contextual Factors) Possibly Contributing to Need to Utilize HC Services

Item #	Description	Type of Data	SPSS Scoring
X1-A1 Q1a	Age	categorical or continuous	3-5 = 0.0, 6-12 yo = 1.0, 13-18 yo = 2.0; 3.0 to 18.0
X2 - A2 Q1b	Gender	categorical	Female 0.0, Male 1.0
X3- B1 Q2	School Grade	categorical	KGN = 1.0, Grade 1-6 = 2.0, 7-9 = 3.0,10-12 = 4.0, Graduated HS = 5.0
X4- B2 Q6	FM deploying/deployed	categorical	(Step)Dad = 1.0, (Step)Mom = 2.0, Brother = 3.0, Sister = 4.0, Other = 5.0
X5 - B3 Q7a	Military Service Component	categorical	Army 1.0, AF 2.0, Navy 3.0, Marine 4.0, Coast Guard = 5.0
X6 - B4 Q7b	Duty	categorical	AD 1.0, Reserves 2.0, NG 3.0, CIV 4.0, Other (Specify) 5.0, Don't Know 7.0
X7- C1 Q8	Deployed Before	dichotomous	No 0.0, Yes 1.0
X8- E1 Q5	Viewed video program	categorical	Child 1.0, Teen 2.0, None 3.0

Source: *AKDQ – Attitudes, Knowledge, Demographics Questionnaire - see Appendix I

Appendix Nf

Future Studies Variables:
Educational Knowledge Questions – Additional Dependent (Y) Variables

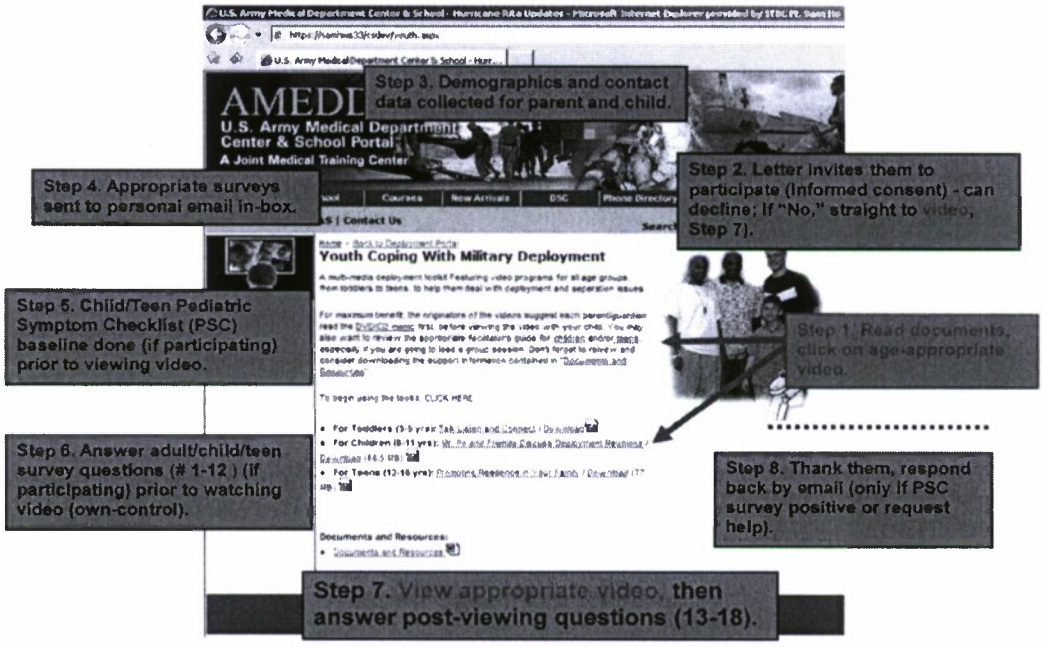
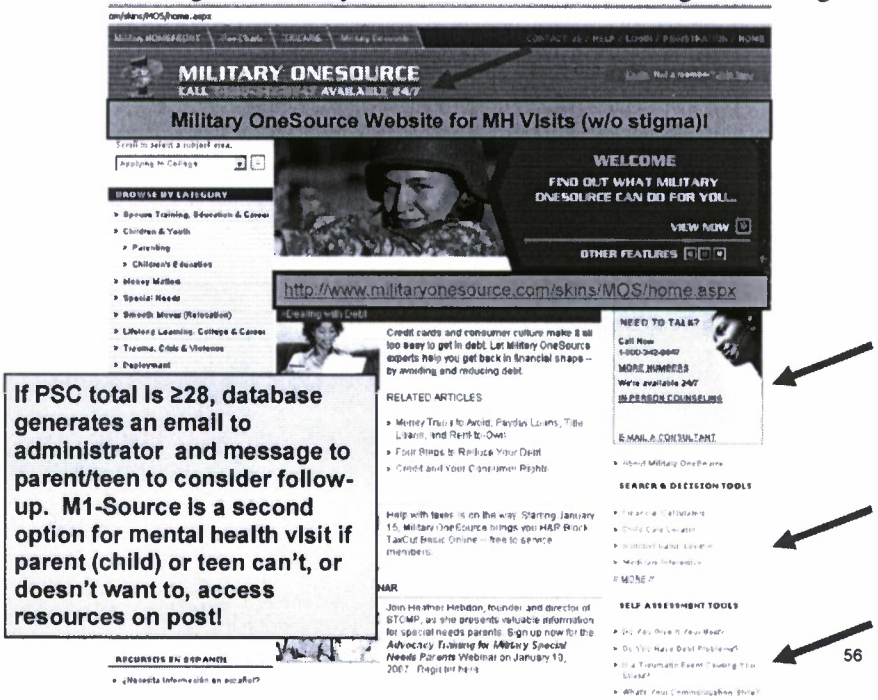
Item	Question	Type of Data	SPSS Scoring
Q3a	Did you know **before today** that there is a website, video, and other things to look at that talk about how to make the separation from mom or dad go easier?	dichotomous	No 0.0, Yes 1.0
Q3b	Which of the following things did you know of, **before today** that people are working on for kids to look at that talk about how to make the separation from mom or dad go easier?	Ordinal	Website = 1.0, Pamphlets/Coloring Books = 2.0, Video = 3.0, Didn't know of any = 4.0
Q4	Have you seen any of the things mentioned above already? (check all that apply)	Ordinal	Website = 1.0, Printed Material = 2.0, Video = 3.0, No, don't have any = 4.0
Q9	Kids in military families have problems at home or school when someone in the family goes away for a long time (for instance, to war).	Ordinal	Likert scale - Agree A Lot = 1.0, Agree Some = 2.0, Don't Know How I Think = 3.0, Don't Agree Some = 4.0, Don't Agree At All = 5.0
Q10	Kids know all about what's happening to them and how their life is different when their mom or dad goes away for awhile without anyone helping or telling them.	Ordinal	Likert scale - Agree A Lot = 1.0, Agree Some = 2.0, Don't Know How I Think = 3.0, Don't Agree Some = 4.0, Don't Agree At All = 5.0

Q11	It's easy to talk about how I'm feeling when my mom or dad (or other family member) goes away.	Ordinal	Likert scale - Agree A Lot = 1.0, Agree Some = 2.0, Don't Know How I Think = 3.0, Don't Agree Some = 4.0, Don't Agree At All = 5.0
Q12	I know where to get help if I am having problems at home or school when my mom or dad goes away for a long time. Answering the following after viewing video	Ordinal	Likert scale - Agree A Lot = 1.0, Agree Some = 2.0, Don't Know How I Think = 3.0, Don't Agree Some = 4.0, Don't Agree At All = 5.0
Q14	It's easy to talk about how I'm feeling when mom or dad goes away.	Ordinal	Likert scale - Agree A Lot = 1.0, Agree Some = 2.0, Don't Know How I Think = 3.0, Don't Agree Some = 4.0, Don't Agree At All = 5.0
Q15	I know where to get help if I am having problems at home or school.	Ordinal	Likert scale - Agree A Lot = 1.0, Agree Some = 2.0, Don't Know How I Think = 3.0, Don't Agree Some = 4.0, Don't Agree At All = 5.0
Q16	Should the video program be shown to other kids and their families?	dichotomous	Likert scale - Agree A Lot = 1.0, Agree Some = 2.0, Don't Know How I Think = 3.0, Don't Agree Some = 4.0, Don't Agree At All = 5.0

Source: *Deployment Questionnaire - Appendix Ia

Appendix O

Deployment Screening Website Screen Shots With Research Steps Outlined



Screenshot showing the MilitaryOneSource website offering counseling sessions.