



Published in final edited form as:

J Fam Psychol. 2011 August ; 25(4): 497–507. doi:10.1037/a0024534.

Military Youth and the Deployment Cycle: Emotional Health Consequences and Recommendations for Intervention

Christianne Esposito-Smythers,

Dept. of Psychology, George Mason University

Jennifer Wolff, and

Dept. of Psychiatry and Human Behavior, Warren Alpert Medical School of Brown University

Keith M. Lemmon

Dept. of Pediatrics, Madigan Army Medical Center

Mary Bodzy, Rebecca R. Swenson, and Anthony Spirito

Dept. of Psychiatry and Human Behavior, Warren Alpert Medical School of Brown University

Abstract

The United States military force includes over 2.2 million volunteer service members. Three out of five service members who are deployed or are preparing for deployment have spouses and/or children. Stressors associated with the deployment cycle can lead to depression, anxiety, and behavior problems in children, as well as psychological distress in the military spouse. Further, the emotional and behavioral health of family members can affect the psychological functioning of the military service member during the deployment and re-integration periods. Despite widespread acknowledgement of the need for emotional and behavioral health services for youth from military families, many professionals in a position to serve them struggle with how to best respond and select appropriate interventions. The purpose of this paper is to provide an empirically-based and theoretically informed review to guide service provision and the development of evidence based treatments for military youth in particular. This review includes an overview of stressors associated with the deployment cycle, emotional and behavioral health consequences of deployment on youth and their caretaking parent, and existing preventative and treatment services for youth from military families. It concludes with treatment recommendations for older children and adolescents experiencing emotional and behavioral health symptoms associated with the deployment cycle.

Keywords

deployment; military; child; adolescent; mental health

An ongoing issue in the lives of military families is managing the stress associated with the deployment cycle. More than 2.2 million service members make up our all volunteer military force (Department of Defense; DoD, 2011), with mobilization and deployment at their highest levels since World War II. Operation Enduring Freedom in Afghanistan and

Correspondence should be addressed to Christianne Esposito-Smythers, George Mason University, Department of Psychology, MSN 3F5, 4400 University Drive, Fairfax, VA, Phone: 703-993-2039, Fax: 703-993-1359, cesposi1@gmu.edu. .

Publisher's Disclaimer: The following manuscript is the final accepted manuscript. It has not been subjected to the final copyediting, fact-checking, and proofreading required for formal publication. It is not the definitive, publisher-authenticated version. The American Psychological Association and its Council of Editors disclaim any responsibility or liabilities for errors or omissions of this manuscript version, any version derived from this manuscript by NIH, or other third parties. The published version is available at www.apa.org/pubs/journals/fam

Operation Iraqi Freedom (OEF and OIF) have been uniquely characterized by deployments that are extended, repeated, and associated with relatively high rates of death and injury (Chandra et al., 2011; Lemmon & Chartrand, 2009; Mansfield et al., 2010). With the advent of improvised explosive devices and multiple insurgencies, all deployed service members face the potential of combat regardless of their service role (Chandra et al., 2011). Three out of five of service members have family responsibilities (i.e. spouse and/or children) (American Psychological Association; APA, 2007). Since the start of OEF and OIF, more than 2 million children of United States service members have been affected by wartime deployment, including 30,000 youth subject to parental death or injury (Chartrand, Frank, White & Shope, 2008; Lemmon & Chartrand, 2009).

Given the degree of family involvement among service members, a number of task forces have been assembled to examine the impact of the deployment cycle on the emotional and behavioral health of military families (APA, 2007; DoD, 2007). They concluded that children and families of military personnel are at risk for emotional and behavioral health consequences of war related stress and strongly advocated for the development and application of efficacious evidence-based prevention and treatment programs for these families. Moreover, the President of the United States has made the enhancement of the “well-being and psychological health of the military family” a top national security policy priority” (DoD, 2011). A recent report from Center for Military Health Policy Research (Chandra et al., 2011) offered the following recommendations in this regard: 1) provide support services for military families with children experiencing emotional difficulties and longer deployments; 2) offer resources for caregiver support, particularly for the National Guard and Reserve Components; 3) integrate family communication into support services; 4) implement programs across the deployment cycle; 5) screen for family emotional health; and 6) require rigorous and systematic research evaluation of services that are developed for military families.

Despite widespread acknowledgement of the need for emotional and behavioral health services for military families, many who are in a position to serve them struggle with how to best respond and select appropriate interventions. The purpose of this paper is to address this gap by providing an empirically-based and theoretically informed review to guide service provision and the development of evidence based treatments for military youth in particular. Specifically, this review includes an overview of the unique stressors and risks associated with the deployment cycle, emotional and behavioral consequences of deployment for the non-deployed spouse and child, the relation between parental and youth emotional health, and the current state of the field on services and interventions for youth from military families. This review concludes with treatment recommendations for older children and adolescents experiencing emotional and behavioral health symptoms associated with the deployment cycle. These recommendations are based on a synthesis of the aforementioned literatures, culturally sensitive considerations for serving military families, and evidence based treatment techniques designed to address stress, emotional, and behavioral problems among older children and adolescents.

Unique Stressors Associated With the Deployment Cycle

There are at least four distinct phases of deployment, including pre-deployment (period from notification to departure), deployment (departure period), reunion (period of preparation just prior to return), and post-deployment or re-unification (period after return) (APA, 2007). According to Pincus (2001), each phase of deployment is associated with unique stressors and emotions for families. For example, during the pre-deployment phase, families may experience stress and confusion. Feelings of shock and disbelief as well as worry around the pending departure and resulting life changes are common. During the deployment phase,

intense feelings about deployment may begin to fade and the emotional impact of the service members departure becomes salient. Families may struggle with feelings of loss, grief, and fear, while also taking on new duties and routines. The re-unification phase may initially be associated with feelings of extreme joy, but fades into mixed emotions for some families. Family members may have trouble re-connecting and adjusting to changes in roles, routines, and responsibilities.

Varied emotional responses expressed by children and their parents stem from a number of unique challenges associated with the deployment cycle. During deployment, the non-deployed spouse may have to take on sole responsibility for the household and childcare, which may include changing employment or assuming a new job to accommodate this role. The spouse may also face separation strain, loneliness, role overload, role shifts, financial concerns, and changes in marital roles and feelings for their deployed partner, all of which become more difficult with longer separation. Providing emotional support to their children and managing child misbehavior or academic decline can also pose challenges. Other stressors faced by the military spouse and children include the re-negotiation of boundaries and family roles (e.g., family schedules, responsibilities, rules), lack of understanding about deployment from community members, and less time for enjoyable activities, as well as regular media reports which often relay incomplete information and dwell on the negative aspects of deployment (Chandra et al., 2011; Huebner & Mancini, 2005).

Similar to deployment, there are also numerous stressors associated with re-integration. Among others these include: 1) conflict associated with role (e.g., childcare responsibilities) and boundary issues which require re-negotiation; 2) conflict over household management issues (e.g., state of household, loss of the spouse's new found independence, disagreement over new rules); 3) conflict over new relationships that developed during the deployment; 4) feelings of abandonment due to prolonged separation; 5) resurrection of old unresolved problems and the development of new adjustment related problems; 6) negotiating a balance between independence and attachment to support networks utilized during deployment; 7) youth rejection of, apathy toward, or anxiety around the returning parent; 8) youth display of loyalty to the parent left behind and lack of responsiveness to discipline from the returning parent; 9) worry about the emotional/physical health of the returning service member; and 10) worry about the next deployment (Chandra et al, 2010a; 2010b; 2011; Pincus et al., 2001).

In general, Lemmon and Chartrand (2009) suggest that the deployment cycle precipitates normative, tolerable, and toxic stressors, which differentially impact families. They suggest that normative stressors, which are mild-to-moderate in nature (e.g., brief and non-combat related deployments), are typically well adapted to by families. Tolerable stressors, which are moderate to severe in nature (e.g., longer and combat deployments, parental injury or death), are generally successfully adapted to when adequate support is in place. However, these tolerable stressors can become severe and toxic, and result in emotional and behavioral consequences for children and families, when they are chronic in nature and adequate support is unavailable.

There exists ample research to support Lemmon and Chartrand's (2009) theory. Longer deployments have been associated with greater separation and reintegration related difficulties (Chandra, Burns, Tanielan, Jaycox, & Scott, 2008; 2010b; 2011; Lester et al., 2010). Youth and caretakers who face greater deployment related stressors and less access to support, such as older youth and those from the National Guard and Reserve components, may also be at greater risk for negative health consequences. Specifically, older adolescents may have to assume significant household responsibilities (e.g., more chores, care for siblings), face increasing academic demands (e.g., homework, exams, college preparation),

provide emotional support to others, and can appreciate the danger of deployment. Indeed, there exists some preliminary evidence to suggest that older adolescents experience more deployment related difficulties than younger teens (Chandra et al., 2010b; Chandra et al., 2011).

With regard to differences in components, National Guard and Reserve families do not live on military bases, do not have access to the same level or quality of services offered on bases (e.g., free or low cost housing, medical and behavioral healthcare, support services, like-minded community), and most are geographically isolated from other military families (Mansfield et al., 2010). Moreover, given their dual civilian and military status, they do not receive the same level of pre-deployment preparation and training for combat. Further, despite potential legal ramifications for employers, service members from the National Guard and Reserve components often lose their civilian jobs prior to, during, or upon return from deployment. Therefore, it is not surprising that children and adolescents (ages 11-17) from these families have more difficulties associated with deployment and re-integration, and that non-deployed spouses report poorer emotional well-being, more household challenges, and more relationship issues with their spouse, relative to active duty families (Chandra et al., 2008; 2011).

Emotional Health Consequences of the Deployment Cycle on the Non-Deployed Spouse

As suggested above, stress associated with the deployment cycle can compromise the emotional health of the non-deployed spouse. In a sample of 180 spouses of deployed service members, some common emotional reactions to deployment reported included: loneliness (78%), worry (74%), sadness (65%), anxiety (56%), anger (37%), headaches (43%), eating problems (22%-44%), insomnia (48%), nervousness (47%), and concentration problems (38%) (Wexler & McGrath, 1991). In a sample of 250,626 Army wives, those with a deployed spouse reported higher rates of depressive (18-24%), anxiety (25-29%), sleep (21-40%), and acute stress reaction/adjustment (23-39%) disorders than those without a deployed spouse, with higher rates associated with longer deployments (greater than 11 months). Further, rates of mental health service use were 19% (1-11 month deployment) to 27% (11+ month deployment) higher among wives with a deployed spouse (Mansfield et al., 2010).

Research conducted with youth from military families and their teachers also suggests that non-deployed spouses may experience poor emotional functioning. In a focus group study conducted with adolescents who have a deployed father, consistent themes emerged when asked "Do you see changes in your at-home parent when the other is deployed?" Many teens reported that their mothers were more emotional, slept more often, had problems with concentration, and were more irritable. The majority of teens also reported that their mothers were stressed out due to increased responsibilities, worry about their spouse, and concerns over finances (Huebner & Mancini, 2005). In a second focus group study, adolescents reported strained relationships with the caretaking parent due to parental worry, somatic illness, and anger (Mmari, Roche, Sudhinaraset, & Blum, 2009). In a study conducted with school staff, a number of focus groups (42%) and interviewees (63%) perceived that many youth with a deployed parent had a depressed caretaking parent (Chandra, Martin, Hawkins, & Richardson, 2010a).

Emotional and Behavioral Health Consequences of the Deployment Cycle on Youth

Recent studies have found heightened emotional and behavioral difficulties around the deployment cycle for youth of all ages, across multiple informants (i.e., parent, youth, teachers), and using multiple methods (i.e., quantitative, qualitative). For example, Gorman, Eide, & Hisle-Gorman (2010) found that behavioral and stress disorders increased by 18% to 19% in children (ages 3-8) when a parent deployed, with a concurrent 11% increase in outpatient visits for youth emotional and behavioral health care. Similarly, Flake, Davis, Johnson, and Middleton (2009) found that 39% of children (ages 5-12) with a deployed parent were at significant risk for internalizing symptoms, 29% for externalizing symptoms, 56% had trouble sleeping, and 14% had school related problems.

Qualitative studies have yielded similar results. Huebner and Mancini (2005) conducted focus groups with 107 adolescents (ages 12-18) attending summer camps for military youth. Teens were asked to respond to the question “Has your behavior changed since your parent has been deployed?”. Emotionally, many teens reported a loss of interest in activities, social withdrawal, changes in sleeping and eating, sadness, crying, and worry about their deployed parent’s safety. Behaviorally, many teens reported increased irritability and disrespectful behavior at home and school. Academically, teens reported a decline in grades due to concentration problems, less time for homework, and less supervision.

Adolescent reports are consistent with observations by school staff. Chandra et al. (2010a) conducted interviews and focus groups with 148 school staff from elementary, middle, and high schools who serve children from Army families. More than half of the focus groups/staff interviewed felt that parental deployments led to anger and sadness for many youth, which negatively impacted classroom performance and peer relationships. Further, in about one-third of the middle and high school focus groups, school staff expressed concern about students engaging in heightened risky behavior (e.g., cutting, promiscuous sexual behavior). Data from these studies correspond with findings from similar work (e.g., Chandra et al., 2008; Chartrand et al., 2008; Houston et al., 2009; Lester et al., 2010; Mmari et al., 2009).

Recent increases in the use of mental health services are also evident among youth facing the potential deployment and re-integration of a parent. Pentagon documents show that “since the 2003 invasion of Iraq, inpatient visits among military children have increased 50%. The total number of outpatient emotional and behavioral health visits for children of men and women on active duty doubled from 1 million in 2003 to 2 million in 2008. During the same period, the yearly bed days for military children 14 and under increased from 35,000 to 55,000. From 2007 to 2008, some 20% more children of active duty troops were hospitalized for emotional and behavioral health services” (www.msnbc.msn.com/id/31784856/ns/us_news-military)

Relation Between Parental and Youth Emotional and Behavioral Health

There exists ample evidence to suggest that parental functioning affects youth emotional and behavioral health (Chandra et al., 2011; Lester et al., 2010). Both attachment theory (Bowlby, 1969) and family systems theories (see Chabot, 2011 for a review) may be helpful in explaining why adequate parental emotional health and support during stressful experiences, such as the deployment and re-integration of a parent, is important to youth emotional well-being. According to attachment theory, children instinctively form a bond to their primary caregiver based on their need for survival and security. Children become securely attached to caregivers who provide consistent care and who are both sensitive and responsive to their child’s needs. Sensitive caregiver responses also further healthy internal

working models, or mental representations, of social relationships. In this manner, a secure attachment bond sets the stage for healthy socio-emotional development. Various stressors associated with the deployment cycle, such as repeated and prolonged parental absence, poor parental emotional health, fear of parental loss, and financial trouble, can negatively impact the attachment bond by interfering with the quality of parental care and threatening the child's sense of security. Over time, repeated disruptions in sensitive care-giving can negatively impact youth psychosocial adjustment and place them at increased risk for emotional and behavioral problems (Bretherton, 1992; Chandra et al., 2011; Mmari, Bradshaw, Sudhinaraset, & Blum, 2010; Morris & Age, 2009; Stroufe, 2005).

In support of attachment theory, research suggests that prolonged separation from a parent figure and poor parental emotional health can negatively affect youth adjustment to the deployment cycle and quality of parental care. As noted earlier, greater cumulative length of deployment has been associated with greater youth separation and re-integration related difficulties (Chandra, Burns, Tanielan, Jaycox, & Scott, 2008; 2010b; 2011). Moreover, parental emotional health problems, such as depression and post-traumatic stress disorder, have been shown to negatively affect parenting quality and parent-child relationships (Jordan et al., 1992; Gewirtz, Polusny, DeGarmo, Khaylis, & Erbes, 2010; Restifo & Bogels, 2009; Ruscio, Weathers, King, & King, 2002). For example, depressed mothers often display negative affect which can impede effective parent-child communication (Beardslee, Versage, & Gladstone, 1998), consistent with observations shared by adolescents in military focus group research (Huebner & Mancini, 2005; Mmari et al., 2009). Parental depression has also been perceived by school staff to negatively impact parental engagement in school related activities (e.g., attendance at activities, missed teacher meetings, homework monitoring) (Chandra et al., 2010a). Similarly, post-traumatic stress disorder symptoms of emotional numbing among returning service members may lead to decreased involvement in family activities, poor communication with children, and lower parenting satisfaction (Gewirtz et al., 2010; Ruscio et al., 2002; Sampler, Taft, King, & King, 2004), which may in turn compromise quality of parental care and the parent-child bond.

Numerous studies have also found a direct association between parental and youth emotional health. Chandra et al (2010b; 2011) found that poorer emotional health of the non-deployed caretaker was associated with greater youth emotional difficulties as well as poorer academic engagement and social (peer and family) functioning, during deployment and re-integration. Moreover, if caretaker emotional problems persisted or increased, youth difficulties remained higher. Kelley (1994) found maternal depressive symptoms and child internalizing behavior to be positively correlated at the mid-deployment and upon re-integration. Lester et al. (2010) found that poorer emotional health of the non-deployed caretaker (depression and anxiety symptoms) as well as the active-duty service member (depression and post-traumatic stress disorder symptoms) was associated with youth internalizing and/or externalizing symptoms, even after controlling for length of combat related deployments. Others studies with military families have yielded similar results (Medway, Davis, Cafferty, Chappel, & O'Hearn, 1995; Jordan et al., 1992; Kelley et al., 2001).

It is also important to note that the relation between parental and youth emotional health is likely reciprocal in nature. Consistent with family systems theories (see Chabot, 2011 for review), families function as a relational system. Though symptoms may present as residing within an individual, they often stem from problems within the family (e.g., organization, structure, boundaries, functional attachment, emotional processes, differentiation) which may negatively affect all individual members. Moreover, the emotions and behaviors of each family member effects other members, as well as the relational system as a whole.

Indeed, youth in poor emotional and behavioral health also precipitate stressful events and circumstances within the family system (Rudolph et al., 2000). This process can further dysfunctional family processes, particularly when a parent's ability to manage heightening parenting stress is compromised by poor emotional health. For example, Birmaher et al. (2004) found that mother-child interactions in families with a depressed youth relative to families with at-risk or symptom free children, were characterized by poorer quality and depth of communication, less warmth, and greater tension. Continued maladaptive social interactions between parent and child may also increase risk for physical violence, particularly when families are under significant stress. In a review of the literature, Campbell, Brown, and Okwara (2011), concluded that rates of child maltreatment may be more common during deployment and re-integration. Overall, these findings highlight the need for interventions tailored for military youth who experience emotional and behavioral health symptoms in response to the unique and complex stressors associated with the deployment cycle.

Existing Services For Youth From Military Families

Over the past several years, there has been substantial growth in the number of services offered to support military families. There have also been Centers of Excellence funded to facilitate program development and the provision of technical assistance to military youth serving professionals of all disciplines (e.g., Child, Adolescent, and Family Behavioral Health Proponency). Below we review existing prevention and treatment services for youth from military families, including prevention (psychoeducation, outreach, peer based programs, family based programs) and treatment services, and conclude with a brief evaluation of services.

Prevention Oriented Psychoeducation

Numerous psychoeducational websites and materials exist to facilitate youth adjustment to the deployment cycle and prevent emotional and behavioral health consequences. Examples of online resources include Military HOMEFRONT (www.militaryhomefront.dod.mil), the Military Child Initiative (www.jhsph.edu/mci), Military One Source (www.militaryonesource.com), and the Military Child Educational Coalition (www.militarychild.org). Psychoeducational video series have also been developed to help youth cope with deployment. For example, Maj. (Dr.) Keith Lemmon, an active duty US Army Pediatrician and Adolescent Medicine Specialist, developed the Military Youth Deployment Support Video Program (www.aap.org/sections/uniformedservices/deployment/videos.html). This program was funded by the US Army Medical Command. It includes one video designed to help youth prepare for and cope with deployment (Military Youth Coping With Separation: When Family Members Deploy) and a second with re-integration (Mr. Poe and Friends Discuss Family Reunion After Deployment). Over 200,000 copies of each video have been distributed to professionals worldwide through MilitaryOneSource. These videos have been officially endorsed by the American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family. This program was designed to support the healthy emotional and behavioral development of military youth during potentially stressful times in their lives. It employs testimonials from youth in military families and cartoon portrayals to convey information designed to normalize common experiences and feelings surrounding deployment and re-integration, decrease feelings of stigma and isolation, correct misperceptions, and reduce anxiety and fear surrounding the deployment cycle. The program also conveys information about evidence based coping strategies, warning signs for significant emotional and behavioral health consequences, and how to access help from adults and professionals when needed.

Prevention Oriented Outreach Services For Youth

Operation: Military Kids is a collaborative outreach program between the U.S Army and community agencies (over 43 national, state, and local organizations) to support children and youth with a deployed parent from all branches of the service, both active duty and reservists. The goal of Operation: Military Kids is to connect military youth with local resources in an effort to facilitate a sense of community support and enhance their well-being. Through community partnerships (i.e., Boys and Girls Club of America, 4-H, Military Child and Youth Services), youth can participate in local recreational, social, and educational activities and programs (e.g., Hero Pack initiative, clubs, scholarship programs, sporting events). Another function is to educate school personnel and the community about the unique needs of military youth and the impact of deployment on families. Similarly, the Joint Family Support Assistance Program, whose mission is to coordinate or provide family readiness services and support to military families from all services and components, also connects youth coping with deployment and re-integration to community based activities and programs.

Prevention Programs for Youth – Peer Based

A number of peer-based prevention programs have been developed for school and summer camp settings. School based services typically include resiliency based support groups, facilitated by school counselors, open to youth with a deployed parent. They are provided on a school-by-school basis in areas with a heavy constituent of military youth (APA, 2007). Summer camps are offered by Operation: Military Kids and the National Military Family Association that are open to youth (ages 11-17) from military families of all ranks and service. They are designed to help youth from military families, facing all phases of the deployment cycle, to connect with one another and cope with the stress of war. Operation: Military Kids offers numerous themed camps focused on fun (e.g., fun and friendly boot camp, fishing) and resilience (e.g., life skills, deployment training) building activities. The National Military Family Association offers one general camp for youth (Operation Purple Camp). Satisfaction surveys completed by youth who participated in Operation Purple Camp and their parents were quite favorable (Chandra et al., 2008).

Prevention Programs for Youth –Family Based

The Families OverComing Under Stress (FOCUS) project (www.focusproject.org) is a family-centered resiliency training program for active duty families that is offered at 18 military installations across the United States. It is open to families coping with all phases of deployment. This program was developed by integrating evidence-based preventive interventions and adapting them to the needs of military families facing all phases of wartime deployments. The core intervention components include psychoeducation as well as emotional regulation, goal setting, problem-solving, traumatic stress reminder management, and family communication skills. This is a selective prevention program and thus is not designed to treat youth or family members with diagnosed mental health problems (Lester et al., 2011).

Family camps are available through Operation: Military Kids and the National Military Family Association that focus on adjustment to re-integration (e.g., Operation Purple Family Retreats) and the physical or emotional injury of a family member in war (e.g., Operation Purple Healing Adventures). Some camps integrate outdoor with evidence-based skill building activities. For example, the Operation Purple Family Retreat includes evidence-based family resilience activities developed by the FOCUS Program to facilitate family connections and closeness through communication activities.

MilitaryOneSource is a DoD sponsored program that offers short-term, non-medical counseling via on-line education, 24-hour phone consultation, and in-person sessions (up to 12) to service members from all components and their families. The Joint Family Support Assistance Program offers similar services including: information/referrals for community services and support; brief non-medical solution focused counseling and education to youth, adults, families, and groups; financial education and counseling; and support for deployment related events. The nature of the counseling services provided through both programs is time-limited prevention/early intervention focused and addresses stressors associated with deployment and re-integration.

Treatment Services for Youth

Youth experiencing longer-term emotional or behavioral health problems are typically referred to behavioral health providers within military treatment facilities or civilian providers who accept TriCare (military health system community based insurance carrier). TriCare providers are not comparably trained in military family behavioral health as providers in military treatment facilities, and their availability is often limited (APA, 2007).

Summary and Evaluation of Existing Services

Figure 1 includes a diagram that links potential youth emotional and behavioral consequences associated with each phase of the deployment cycle (Chandra et al., 2008; 2010; 2011; Pincus, 1991; Huebner & Mancini, 2005) to the aforementioned services designed to address them. The figure also depicts the degree of intervention (preventative vs. treatment) offered through each service and mention of whether the service has received any empirical evaluation (denoted by *). As is evident, though numerous services exist to help youth from military families cope with the deployment cycle, particularly the deployment and re-integration phases, the large majority focus on the prevention of clinically significant emotional and behavior symptoms among youth. To our knowledge, the only service available to youth with clinically significant emotional or behavioral health symptoms is psychotherapy offered in a traditional professional treatment setting. Moreover, though some services may include the use of evidence based skill building techniques (i.e., videos, school-based programs, camps, FOCUS project, psychotherapy via some individual providers), there has been no systematic or published empirical evaluation of the impact of these services on youth emotional or behavioral health outcomes, or their appropriateness for military families (APA, 2007; Chandra et al., 2011). Only Operation Purple Camp has been subject to any empirical investigation but it was limited to satisfaction surveys (APA, 2007; Chandra et al., 2008).

Recommendations for Treatment With Youth From Military Families

As suggested above, programs delivered within the military community tend to focus on prevention and early intervention, and have not been rigorously and systematically evaluated (APA, 2007; Chandra et al., 2011). Empirically-supported treatment programs have not been developed and evaluated for youth with clinically significant emotional and behavioral health difficulties associated with the military deployment cycle. Below we offer recommendations for the development and delivery of evidence based treatments for youth experiencing emotional or behavioral consequences of the deployment and re-integration of a parent.

According to the cognitive theory of stress and coping (Lazarus & Folkman, 1984), cognitive appraisals of a stressor mediate the effects of stress and influence choice of coping strategies. If youth lack confidence in their ability to cope with stress and perceive parental support to be unsatisfactory, stressors such as those associated with the deployment cycle

may be appraised as harmful to their well-being, and emotional and behavioral health problems may result. Therefore, efficacious interventions will need to include the youth and their non-deployed parent to foster perceptions of support as well as adaptive coping skills and parenting skills.

Based on the cognitive theory of stress and coping, the first recommendation is to consider the use of an evidence based treatment approach that incorporates skill building techniques. Along these lines, cognitive-behavioral therapy (CBT) may offer a particularly promising approach for youth experiencing emotional and behavioral health problems associated with deployment related distress. CBT has been shown to be efficacious in facilitating youth adjustment to stressors that involve parental separation (e.g., divorce) (Stathakos & Roehrle, 2003) as well as addressing symptoms of depression, anxiety, and disruptive behavior (see David-Ferdon & Kaslow, 2008; Eyeberg, Nelson, & Boggs, 2008; Silverman, Pina, & Viswesvaran, 2008 for reviews). CBT is designed to alter cognitive distortions and poor coping skills often found to underlie emotional and behavioral health problems (Crick & Dodge, 1996; Bogels & Zigterman, 2000; Garber, Weiss, & Stanley, 1993; Joffe, Dobson, Fine, Marriage, & Haley, 1990). Further, CBT delivered in individual, parent training, and group formats has demonstrated efficacy with youth (see David-Ferdon & Kaslow, 2008; Eyeberg et al., 2008; Silverman et al., 2008 for reviews).

The second recommendation is to provide skills training to help youth better cope with the deployment *and* re-integration of a parent, and the many associated changes in their lifestyle. In this regard, youth sessions may comprise of psychoeducation around the deployment cycle to help normalize feelings, identification of deployment cycle related triggers for emotional and behavioral health symptoms (i.e., depression, anxiety, anger), and the introduction and practice of skills (e.g., problem-solving, cognitive restructuring, affect regulation, relaxation, building social support, communication training) to help youths better manage the identified stressors. Communication skills should be practiced with peers in session as well as with parents. According to attachment and family systems theories, family communication work may be particularly important to help strengthen family relationships and improve perceptions of caregiver support and security. Moreover, given that emotional and behavioral health problems place youth at risk for substance abuse, it may also be useful to devote time to substance abuse prevention work.

The third recommendation is to include skills training for the non-deployed parent in the intervention. Parent training will likely be needed to assist the non-deployed military spouse in providing optimal monitoring, guidance, and support to his/her children. During parent sessions, an ongoing emphasis on ways in which parents can enhance their child's adjustment to the deployment cycle using psychoeducation around the effects of the deployment cycle on youth functioning, and skills training (e.g., problem-solving on how to approach youth difficulties, cognitive restructuring around irrational parenting beliefs, affect regulation around parenting, attending to youth positive behaviors, monitoring for youth negative behavior, behavioral contracting, parent-child communication skills), may be most helpful. It may also be useful to incorporate psychoeducation and training around how parents can help prevent youth substance abuse. As many youth dealing with deployment related stressors experience a decline in grades, instruction in how to best communicate with school staff and obtain educational resources (e.g., 504 plan, individualized education plan, special education law) may also be needed. It will also be helpful to provide parents with guidance on how to help themselves and their teens cope with the potential injury or loss of the family member.

The fourth recommendation is to provide parents with basic instruction in stress management techniques as well as clinical referrals as needed. During parent sessions, it

may be helpful to discuss how to identify and address problems with their own emotional and physical health. Time devoted to personal stress management skills and self-care skills may be needed as well as referrals for individual treatment if indicated. This work may help improve their parenting ability and decrease youth worry and concern over parental health and support.

The fifth recommendation is to help the non-deployed parent prepare for and/or adjust to the re-integration of the service member. Psycho-education and skill building around adjustment to re-integration of the service member may prove useful. The caretaking parent should be provided with psychoeducation around possible emotional, behavioral, and medical consequences of deployment on service members (e.g., communication and social difficulties, anger, post-traumatic stress disorder, substance abuse, suicide, traumatic brain injury) as well as skills to help their family cope with these changes. This information may help facilitate a healthy transition for all family members and ease potential relationship concerns. Information on when and how to access individual behavioral health and medical services for the service member should also be provided. Family work that includes the service member upon return home may also be indicated for some families. This need may be most prominent when the service member participated in combat during war and/or developed post-traumatic stress disorder, given that these factors have been associated with more behavior problems in youth as well as poorer parenting skills, family adjustment/functioning, and marital/relationship problems (Gewirtz, Polusny, DeGarmo, Khaylis, & Erbes, 2010; Jordan et al., 1992; MacDonald, Chamberlain, & Long, & Flett, 1999).

The sixth recommendation is to consider a group based delivery format when possible. Research suggests that military teens feel most comfortable sharing with other military peers who understand these unique stressors as well as military culture (Houston et al., 2009; Mmari et al., 2009). A group format also allows opportunities for observation, learning, modeling, and the sharing of skills and experiences. It may also help reduce feelings of isolation and improve perceptions of peer support. Peer support is particularly important given that youth from military families may face peer ridicule, rejection, bullying, and attack by antiwar individuals (Mmari et al., 2009). Optimally youth and parent sessions can be held concurrently to decrease burden on families. This format will also allow the youth and parent groups to merge so that each youth and parent can practice skills they have learned with one another (e.g., communication training).

The seventh recommendation is to ensure that the intervention is sensitive to the military culture. Providers should be well versed in military culture (e.g., history, core values, mission, organizational structure, service branches, operations, services, components) and language. The intervention approach should take into account how various aspects of the military culture, including unique stressors and resources, impact family behaviors and perspectives. Military families may also prefer treatments that offer structure and an authoritarian style, such as the structured and directive approach employed in CBT (Campbell et al., 2011). Concerns about confidentiality (e.g., fears of stigma and negative career impact; Campbell et al., 2011) must also be addressed. If a group intervention is employed, it will be very important to introduce strict rules around confidentiality and address concerns up front. Guidance for delivering culturally sensitive intervention is available through readings (e.g., Lemmon & Chartrand, 2009; Whaley & Davis, 2007) as well as consultation and training with professionals and organizations with expertise in treating military families (e.g., Uniformed Services Chapters of the American Academy of Pediatrics and the DoD sponsored Center for Deployment Psychology).

The eighth recommendation is to employ evidence based techniques that can address the multiple types of emotional and behavioral problems that accompany deployment related

stress among youth. Use of separate protocols or techniques for the treatment of depressive, anxiety, and disruptive behavior symptoms can be costly, confusing, require significant training, decrease the chance that youth will receive treatment for all co-occurring conditions, and may decrease the likelihood of dissemination (Moses & Barlow, 2006). A unified treatment approach for emotional disorders has been espoused by Barlow and colleagues (Moses & Barlow, 2006). Such an approach goes beyond a specific symptom focus to address broad based problems with common underlying antecedents, such as the cognitive distortions and poor coping skills that may underlie poor adjustment to deployment related stressors. As suggested above, CBT in particular, is designed to target core cognitions and skill deficits that underlie emotional and behavioral health problems among youth.

The last recommendation is to consider the sustainability and accessibility of developed services. For sustainability, services must be accessible and reimbursable. They will need to be endorsed by the military and offered at military treatment facilities. Moreover, to reach those families who live in civilian settings, TriCare providers will need to be incentivized to receive training and supervision in these evidence based services as well as reimbursed for them. Offering evidence based treatment programs in camp and school settings may also increase accessibility. Engaging primary care providers in the referral and treatment development process may also be helpful. Given the unprecedented rates of injury among service members deployed during OEF and OIF, primary care providers are in a unique position to identify and refer “at risk” military families for intervention services. Last, accessibility must be balanced with the need to maintain confidentiality as military families access these services.

Conclusions

Military youth are generally resilient and are able to successfully adjust to and cope with deployment related stressors. However, when stressors become chronic and adequate support is unavailable, stressors associated with the deployment cycle can lead to youth emotional and behavioral problems. The majority of programs and services in place to help youth facing the deployment cycle are prevention or early-intervention focused. Though some employ evidence-based techniques, few have received any empirical evaluation and those that have are limited to satisfaction surveys. To our knowledge, no evidence based treatment programs have been developed and evaluated for youth from military families experiencing diagnosable emotional or behavioral health problems associated with deployment related stress. Therefore, rigorous and systematic evaluation of current programs is needed as well as the development of treatment programs targeted for youth with clinical levels of emotional and behavioral difficulties (APA, 2007; Chandra et al., 2011). Youth who face longer deployments and those from National Guard and Reserve families may be in greatest need of intervention services. Given the difficulty that civilians often face obtaining approval to work with military families, treatment evaluation and development may be facilitated through collaboration between civilian and military personnel with expertise in treatment development, delivery, and dissemination work with youth and their families, similar to the FOCUS project (Lester et al., 2011).

CBT may offer a particularly effective treatment approach for youth experiencing clinical symptoms associated with deployment related stress. Substantial empirical support exists for the use of CBT in treating emotional and behavioral health problems associated with other stressors involving parental separation (e.g., divorce) as well as youth depressive, anxiety, and disruptive behavior disorders. It can also be delivered successfully across individual, parent training, and group formats. A CBT protocol that is sensitive to the culture of the military, addresses the full range of youth internalizing and externalizing symptoms as they

relate to the unique stressors associated with the deployment cycle, and includes both the youth and his/her non-deployed parent may offer a promising approach for youth coping with all phases of the deployment cycle.

Efficacious evidence-based prevention and treatment programs may not only reduce distress experienced by the child and military spouse during the deployment and reintegration phases, but also the service member. Many children and spouses have frequent but inconsistent contact via e-mail or phone with their deployed family member (Huebner & Mancini, 2005; Sheppard, Weil, Maltras, & Israel, 2010). Thus, deployed service members are often aware of the condition of their family back home. Soldiers' family problems have been associated with poorer duty and combat performance, greater risk of going AWOL, and retention difficulties (see Jensen et al., 1986 for a review). Moreover, the service members' perception of family cohesion and support upon return from deployment has been associated with future development of post-traumatic stress disorder symptoms (Benotsch et al., 2000; King, Foy, Keane, & Fairbank, 1999). Therefore, treatments targeted for youth with deployment related emotional and behavioral problems hold the potential to improve the service members' performance and safety during deployment, and emotional and behavioral health upon re-integration, as well as improve military retention rates.

Acknowledgments

This research was supported by a grant from the National Institute of Mental Health (R34MH082164) awarded to the first and sixth authors.

References

- American Psychological Association (APA). Presidential Task Force on Military Deployment Services for Youth, Families, and Service Members. The Psychological Needs of U.S. Military Service Members and Their Families: A Preliminary Report. 2007. Retrieved from <http://www.apa.org/releases/MilitaryDeploymentTaskForceReport.pdf>
- Beardslee WR, Versage EM, Gladstone TRG. Children of affectively ill parents: A review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry*. 1998; 37:1134–1141. [PubMed: 9808924]
- Benotsch E, Brailey K, Vasterling JJ, Uddo M, Constans JI, Sutker PB. War zone stress, personal and environmental resources, and PTSD symptoms in Gulf War Veterans: A longitudinal perspective. *Journal of Abnormal Psychology*. 2000; 109:205–213. [PubMed: 10895558]
- Birmaher B, Bridge JA, Williamson D, Brent D, Dahl R, Axelson D, Ryan N. Psychosocial functioning in youths at high risk to develop major depressive disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2004; 43:839–846. [PubMed: 15213585]
- Bogels SM, Zigterman D. Dysfunctional cognitions in children with social phobia, separation anxiety disorder, and generalized anxiety disorder. *Journal of Abnormal Child Psychology*. 2000; 28(2): 205–211. [PubMed: 10834771]
- Bowlby, J. *Attachment and Loss*. 2nd edition. Basic Books; New York: 1969. Attachment.
- Bretherton I. The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology*. 1992; 28:759–775.
- Campbell C, Brown E, Okwara L. Addressing sequelae of trauma and interpersonal violence in military children: A review of the literature and case illustration. *Cognitive and Behavioral Practice*. 2011; 18:131–143.
- Chabot, DR. Family systems theories of psychotherapy. In: Norcross, JC.; VandenBos, GR.; Freedheim, DK., editors. *History of Psychotherapy: Continuity and Change*. (2nd edition). American Psychological Association; Washington, D.C.: 2011. p. 173-202.
- Chandra, A.; Burns, RM.; Tanielian, T.; Jaycox, LH.; Scott, MM. *Understanding the impact of deployment on children and families: Findings from a pilot study of Operation Purple Camp Participants*. RAND Corporation; Santa Monica, CA: 2008.

- Chandra A, Martin LT, Hawkins SA, Richardson A. The impact of parental deployment on child social and emotional functioning: Perspectives of school staff. *Journal of Adolescent Health*. 2010a; 46:218–223. [PubMed: 20159497]
- Chandra A, Lara-Cinisomo S, Jaycox LH, Tanielian T, Burns RM, Ruder T, Han B. Children on the homefront: The experience of children from military families. *Pediatrics*. 2010b; 125:16–25. [PubMed: 19969612]
- Chandra, A.; Lara-Cinisomo, S.; Jaycox, LH.; Tanielian, T.; Han, B.; Burns, RM.; Ruder, T. Views from the homefront: The experiences of youth and spouses from military families. RAND Corporation; Santa Monica, CA: 2011.
- Chartrand MM, Frank DA, White LF, Shope TR. Effects of parents' wartime deployment on the behavior of young children in military families. *Archives of Pediatric and Adolescent Medicine*. 2008; 162:1009–1014.
- Crick NR, Dodge KA. Social information processing mechanisms in reactive and proactive aggression. *Child Development*. 1996; 67:993–1002. [PubMed: 8706540]
- David-Ferdon C, Kaslow NJ. Evidence-based psychosocial treatments for child and adolescent depression. *Journal of Clinical Child & Adolescent Psychology*. 2008; 37:62–104. [PubMed: 18444054]
- Department of Defense. Strengthening our military families: Meeting America's commitment. 2011. Retrieved from http://www.defense.gov/home/features/2011/0111_initiative/Strengthening_our_Military_January_2011.pdf
- Department of Defense. Task Force on Mental Health. An Achievable Vision: Report of the Department of Defense Task Force on Mental Health. Defense Health Board; Falls Church, VA: 2007.
- Eyberg SM, Nelson MM, Boggs SR. Evidence-based psychosocial treatments for children and adolescents with disruptive behavior. *Journal of Clinical Child and Adolescent Psychology*. 2008; 37:215–237. [PubMed: 18444059]
- Flake EM, Davis BE, Johnson PL, Middleton LS. The psychosocial effects of deployment on military children. *Journal of Developmental and Behavioral Pediatrics*. 2009; 30:271–278. [PubMed: 19606059]
- Garber J, Weiss B, Shanley N. Cognitions, depressive symptoms, and development in adolescents. *Journal of Abnormal Psychology*. 1993; 102:47–57. [PubMed: 8436699]
- Gewirtz AH, Polusny MA, DeGarmo DS, Khaylis A, Erbes CR. Post-traumatic stress symptoms among national guard soldiers deployed to Iraq: Associations with parenting behavior and couple adjustment. *Journal of Consulting and Clinical Psychology*. 2010; 78:599–610. [PubMed: 20873896]
- Gorman GH, Eide M, Hisle-Gorman E. Wartime military deployment and increased pediatric mental and behavioral health complaints. *Pediatrics*. 2010; 126:1058–1066. [PubMed: 21059715]
- Houston JB, Pfefferbaum B, Sherman MD, Melson AG, Jeon-Slaughter H, Brand MW, Jarman Y. Children of deployed national guard troops: Perceptions of parental deployment to Operation Iraqi Freedom. *Psychiatric Annals*. 2009; 39:805–811.
- Huebner, AJ.; Mancini, JA. Adjustments among adolescents in military families when a parent is deployed. Final Report to the Military Family Research Institute and Department of Defense Quality of Life Office. 2005. http://www.cfs.purdue.edu/mfri/pages/research/Adjustments_in_adolescents.pdf
- Jensen MPS, Lewis RL, Xenakis SN. The military family in review: Context, risk, and prevention. *Journal of the American Academy of Child and Adolescent Psychiatry*. 1986; 25:225–234.
- Joffe RD, Dobson KS, Fine S, Marriage K, Haley G. Social problem-solving in depressed, conduct disordered, and normal adolescents. *Journal of Abnormal Child Psychology*. 1990; 18:565–575. [PubMed: 2266226]
- Jordan BK, Marmar CR, Fairbank JA, Schlenger WE, Kulka RA, Hough RL, Weiss DS. Problems in families of male Vietnam veterans with post-traumatic stress disorder. *Journal of Consulting and Clinical Psychology*. 1992; 60:916–926. [PubMed: 1460153]

- Kelley ML. Military induced separation in relation to maternal adjustment and children's behaviors. *Military Psychology*. 1994; 6:163–176.
- Kelley ML, Hock E, Smith KM, Jarvis MS, Bonney JF, Gaffney MA. Internalizing and externalizing behavior of children with enlisted navy mothers experiencing military-induced separation. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2001; 40:464–471. [PubMed: 11314573]
- King DW, King LA, Foy DW, Keane TM, Fairbank JA. Post-Traumatic stress disorder in a national sample of female and male Vietnam veterans: Risk factors, war-zone stressors, and resilience-recovery variables. *Journal of Abnormal Psychology*. 1999; 108:164–170. [PubMed: 10067002]
- Lazarus, RS.; Folkman, S. *Stress, appraisal, and coping*. Springer; New York, NY: 1984.
- Lemmon KL, Chartrand MM. Caring for America's children: Military youth in time of war. *Pediatrics Review*. 2009; 30:e42–e48.
- Lester P, Peterson K, Reeves J, Knauss L, Glover D, Mogil C, Beardslee W. The long war and parental combat deployment: effects on military children and at-home spouses. *Journal of American Academy of Child & Adolescent Psychiatry*. 2010; 49:310–320.
- Lester P, Mogil C, Saltzman W, Woodward K, Nash W, Leskin G, Beardslee W. Families overcoming under stress: Implementing family-centered prevention for military families facing wartime deployments and combat operational stress. *Military Medicine*. 2011; 176:19–25. [PubMed: 21305955]
- MacDonald C, Chamberlain K, Long N, Flett R. Posttraumatic stress disorder and interpersonal functioning in Vietnam War veterans: A mediational model. *Journal of Traumatic Stress*. 1999; 12:701–707. [PubMed: 10646188]
- Mansfield AJ, Kaufman JS, Marshal I S.W. Gaynes BN, Morrissey JP, Engel CC. Deployment and the use of mental health services among U.S. Army wives. *New England Journal of Medicine*. 2010; 362:101–109. [PubMed: 20071699]
- Medway FJ, Davis KE, Cafferty TP, Chappel K, O'Hearn R. Family disruption and adult attachment correlates of spouse and child reactions to separation and reunion due to operation desert storm. *Journal of Social and Clinical Psychology*. 1995; 14:97–118.
- Mmari KN, Bradshaw CP, Sudhinaraset M, Blum R. Exploring the role of social connectedness among military youth: Perceptions from youth, parents, and school personnel. *Child Youth Care Forum*. 2010; 39:351–366.
- Mmari K, Roche KM, Sudhinaraset M, Blum R. Exploring the issues faced by adolescents and their families. *Youth & Society*. 2009; 40:455–475.
- Morris AS, Age TR. Adjustment among youth in military families: The protective roles of effortful control and maternal social support. *Journal of Applied Developmental Psychology*. 2009; 30:695–707.
- Moses EB, Barlow DH. A new unified treatment approach for emotional disorders based on emotion science. *Current Directions in Psychological Science*. 2006; 15:146–150.
- Pincus, SH.; House, R.; Christenson, J.; Adler, L. *The Emotional Cycle of Deployment: A Military Family Perspective*. 2001. Retrieved from <http://www.hooah4health.com/deployment/familymatters/emotionalcycle2.htm>
- Rudolph KD, Hammen C, Burge D, Lindberg N, Herzberg D, Daley S. Toward an interpersonal life-stress model of depression: The developmental context of stress generation. *Developmental Psychopathology*. 2000; 12:215–234.
- Restifo K, Bogels S. Family processes in the development of youth depression: Translating the evidence to treatment. *Clinical Psychology Review*. 2009; 29:294–316. [PubMed: 19356833]
- Ruscio AM, Weathers FW, King LA, King DW. Male war-zone veterans' perceived relationships with their children: The importance of emotional numbing. *Journal of Traumatic Stress*. 2002; 15:351–357. [PubMed: 12392222]
- Sheppard SC, Malatras J. Weil, Israel AC. The impact of deployment on US military families. *American Psychologist*. 2010; 65:599–609. [PubMed: 20822199]
- Silverman WK, Pina AA, Viswesvaran C. Evidence-based psychosocial treatments for phobic and anxiety disorders in children and adolescents. *Journal of Clinical Child & Adolescent Psychology*. 2008; 37:105–130. [PubMed: 18444055]

- Stathakos P, Roehrl B. The effectiveness of intervention programs for children of divorce – a meta-analysis. *International Journal of Mental Health Promotion*. 2003; 5:31–37.
- Stroufe LA. Attachment and development: A prospective longitudinal study from birth to adulthood. *Attachment and Human Development*. 2005; 7:349–367. [PubMed: 16332580]
- Wexler HK, McGrath E. Family member stress reactions to military involvement separation. *Psychotherapy: Theory, Research, Practice, Training*. 1991; 28:515–519.
- Whaley AL, Davis KE. Cultural competence and evidence based-practice in mental health services. *American Psychologist*. 2007; 62:563–574. [PubMed: 17874897]

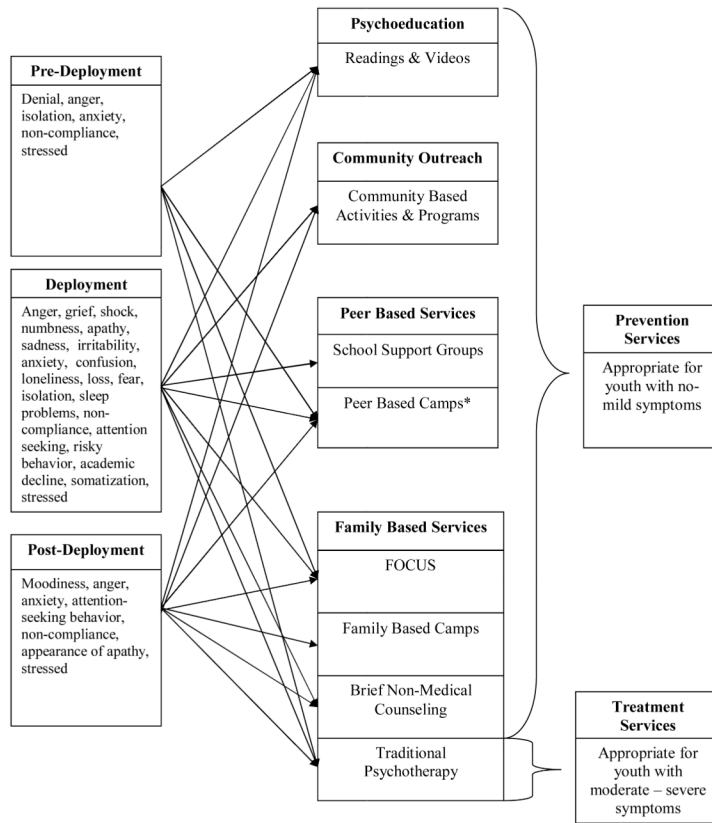


Figure 1. Potential Youth Emotional/Behavioral Health Symptoms and Associated Services