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Evaluating Changes in Families with Members on Military Deployment

By

Jill S. Brink

A Thesis Submitted in Partial Fulfillment of the Requirement for the Degree of  
Master of the Arts In Clinical Psychology

Minnesota State University, Mankato,

Mankato, Minnesota

July, 2011

## Evaluating Changes in Families with Members on Military Deployment

Jill S. Brink

This thesis has been examined and approved by the following members of the thesis committee.

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## ACKNOWLEDGEMENTS

I would like to thank my advisor, Dr. Sarah K. Sifers, who so graciously permitted me to pursue the research in this thesis. I could not have completed this project without your support, expertise, and patience. I could not have asked for a better role model, mentor, and teacher. I am honored to have had you as an advisor.

To my family and friends, thank you for continuing support during my lengthy education. To my parents, who have supported and encouraged my learning my whole life. Thank you for being such shining examples for what military parents can be. To my grandparents, whose love and financial support helped to make this project possible. Thank you for being in my life.

To my cohort, whose companionship has been my strongest asset these past two years. I cannot imagine completing this degree without you and I will be hard pressed in the future to find such wonderful colleagues. My best wishes go with you as we depart to being new adventures.

Lastly, to the members of our nation's military, past and present, and their families. No one knows better that freedom is not free than our unsung heroes. I shall continue to do my best to serve you as faithfully as you have served our nation.

## ABSTRACT

With ongoing operations in the Middle East, military families face a large amount of stress surrounding deployment. While many studies have been conducted on soldier mental health, few have been published on the health of their families and even less on their children. The present case studies examine the mental health of military children, the change in family environment, and the social supports dependent spouses use during deployment. Two families are presented in this study. One family represents an Army Reserve family and the other an Air Force family. By comparing scores to standardized scores, it was shown that mental health and family environment was affected during deployment. However, extraneous variables confounded results, making it difficult to determine the exact cause of the changes.

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## CHAPTER I

### INTRODUCTION

With the War on Terrorism entering its ninth year, the nation is presented with a generation of children who have never known a time when America has not been engaged in combat in the Middle East. Perhaps those most aware of this fact are the family members of those who have been deployed to serve in Operations Iraqi Freedom and Enduring Freedom. As of 2010, nearly 2 million U.S. children currently have at least one parent in the U.S. military (Department of Defense, 2009). For these children, the possibility of parental deployment to combat zones is a real one. Researching the ways military families and their children react to deployment is a necessity for assisting mental health practitioners in working with this population.

#### **Modern Military Families**

The stress the modern military family faces is great. Modern warfare has created new strains on the military lifestyle and has created new types of military families. Traditional military families constitute of a “career” service member, or parent who has made the military his or her full-time job. The shape of the traditional military family has changed over the past few decades (Norwood, Fullerton, & Hagen, 1996). More and more families have parents who are both active duty. Others are single-parent families, with the only parent on active duty. Others include extended family, with grandparents or other kin assisting in child-rearing. All of these fall under the traditional military family type.

Non-traditional military families have also developed over the last decade. Non-traditional families are those with parents who are part of the military, but do not participate full-time, often having careers in the civilian sector. These typically include Reservists and Guardsman; occasionally, contractors are included in this group as well. For the purposes of this paper, a traditional military family will refer to any family unit with at least one parental figure who has made the military his or her full-time job and is on active duty. Non-traditional families will refer to any family unit with at least one parental figure who has been called to active duty from his or her otherwise civilian life.

The military lifestyle can be difficult on traditional families. Frequent changes of military station or base, long-term duty assignments abroad, and the threat of deployment to a war zone are only some of the challenges the family unit faces (Amen & Jellen, 1988; Hall, 2008). Since the 1980s, the Department of Defense (DoD) has made efforts to ease the strains of military life on the family, including providing low-cost housing, paying for moving expenses, offering support systems for members and their families, and flexibility in scheduling when possible to promote family activities (Hunter, 1982). The DoD makes these efforts because soldiers who are less anxious about their families can better concentrate on their duties (Di Nola, 2008; Palmer, 2008; Tsoi-Hoshmand & Hoshmand, 2007).

### **Need for Research**

While research on military families has been conducted on past generations, published studies focused on the current generation are few. Furthermore, studies on previous and current generations of military families focused on parents instead of children (Palmer, 2008). Studies that have produced data on children indicated that they



experience an array problems, including an increase in externalizing and internalizing behaviors (Amen & Jellen, 1988; Flake, Davis, Johnson, & Middleton, 2009; Jensen, Martin, & Watanabe, 1996; Kelley et al., 2001). It is likely that current military children, of both traditional and non-traditional service members, will experience similar difficulties.

Most research on military families has been based either on the active duty members or their spouse (Hall, 2008). To a lesser extent, their children have also been studied. Research efforts have been concentrated on the parents as the health and happiness of the parent, particularly the mother, can indicate a higher rate of happiness and well-being in children (Eisen & Schaefer, 2005; Isabella, 1993). Dependent, or non-military, spouses need to feel comfortable in their situation, especially during the deployment of the military spouse. Ensuring that dependent spouses receive the assistance they need while military spouses are deployed has become complicated with the activation of Reserve and National Guard units (Di Nola, 2008). Many of these families are unfamiliar with military protocol and the support services offered.

The effects of deployment-related stress on spouses can be very detrimental. A study by Gibbs, Martin, Kupper, and Johnson (2007) suggests that dependent spouse is more likely to maltreat his or her children when the military spouse is deployed to a combat zone. The likelihood of maltreatment increases with the amount of stress the spouse experiences. In addition, when the military parent returns from a war zone, the likelihood of psychological issues in that parent, such as Post Traumatic Stress Disorder, depression, anger issues, and substance abuse, is high (Cozza, Chun, & Polo, 2005), which in turn increases the prevalence of maltreatment of family members.

Because efforts have been primarily aimed at the adults of the family unit, relatively little research has been conducted on the children (Morris & Age, 2009). The military child belongs to a culture with its own unique profile, strengths, and weaknesses (Hall, 2008). Frequent change in schools, homes, and friends can take its toll and studies suggest that adjusting to these changes gets more difficult with age (Black, 1993) and frequency (Hall, 2008; Palmer, 2008). With the on-going conflict of Operations Enduring Freedom and Iraqi Freedom, contemporary military children must also live with the threat of a parent being deployed to a war zone (Cozza, Chun, & Polo, 2005; Di Nola, 2008). Fears of a parent's injury, capture, or death become serious stressors during these deployments.

The War on Terrorism has increased the amount of non-traditional military families in the nation. With most National Guard and Reserve units activated, individuals who once devoted a small amount of their time to military duties now find themselves being deployed on twelve-to-eighteen month tours of duty abroad. In addition, many Guardsmen and Reservists are older and have started families. These families typically live in civilian populations away from military communities. Whereas the threat of deployment is common and expected among regular military families, it is a new concept for many non-traditional military families.

These non-traditional military families represent a gap in the research. While little research has been conducted on the children of regular service members, even less has been conducted on non-traditional military children. Though these two groups have their own risk factors in developing psychological problems, it is likely both traditional

and non-traditional military children experience similar problems when a parent is deployed.

### **Issues in Children Dependents**

There are several behavioral problems among military children populations. Children tend to experience an increase in internalizing behaviors, most notably depression and anxiety (Amen, 1988; Hall, 2008). Depressed mood, as defined by behavioral assessment, among children and adolescents with deployed parents has been observed across all generations of traditional military children (Amen & Jellen, 1988; Jensen, Martin, & Watanabe, 1996). Depressive symptoms typically manifest during deployment, with non-deployed parents and caregivers noting depressive symptoms and general sadness in children after the deployed parent has left. While many children trend back toward their normal moods approximately one month after parental deployment, others' depressed mood persist for much longer. Symptoms can last up to or past the duration of deployment. Likewise, symptoms of stress and anxiety are also observed with one study finding an 18% increase in stress disorders among children with a deployed parent (Gorman, Eide, & Hisle-Gorman, 2010).

The children experiencing deployment for the first time may demonstrate a decrease in adaptive skills. In particular, they may be below average in adaptability, social skills, and leadership. Children who have not experienced the long-term absence of a parent may find it difficult to adjust to the new situation and struggle with the changes. For example, with one parent absent, family roles and household duties are shifted among family members (Amen, 1988).

Increased open family conflict or expression of anger is also a concern (Jensen, Martin, & Watanabe, 1996; Palmer, 2008). Increased stress is a risk factor in expressed anger, a factor in family conflict. Non-deployed parents often experience increased stress as they take on more parenting roles, adjust to new constraints on time, and continued dealings with preexisting stressors (Kelley et al., 2001; Kelley, Herzog-Simmer, & Harris, 1994; Palmer, 2008). As these stresses increase, unless adequate coping strategies are implemented, the likelihood of expressed anger or aggregating conflict also increases (Murray, 2002). A similar reaction has been seen in children. Military children have been shown to develop more externalizing behavioral problems just after the deployment of a parent (Hall, 2008). A common externalizing problem in military children is aggression (Hall, 2008; Hunter, 1982; Jensen, Martin, & Watanabe, 1996). This increased aggression will contribute to the amount of conflict in the home, as well as bring additional stress to the non-deployed parent.

Based on the present literature on military families and children, it is hypothesized that an increase in internalizing problems, particularly depressed mood and anxiety, will be observed over the course of deployment in children regardless of their status of traditional or non-traditional military family or the amount of times their parent has been deployed. Secondly, it is hypothesized that an increase in externalizing problems, particularly aggression, will be observed. Thirdly, it is hypothesized that children will experience a decrease in adaptive skills. Lastly, it is hypothesized that family conflict will increase during deployment regardless of the status of traditional or non-traditional family roles or the amount of deployments the service member has been on.

## CHAPTER II

### METHODS

#### **Participants**

Participants were parents or primary caregivers recruited from families of deployed military units. Military family members were deployed to the Middle East for 6 to 18 months. Families from both traditional and non-traditional military service were recruited. Only families with children between the ages of 2 and 21 were recruited. Participants were primary caregivers for the family's children during deployment.

Four families participated in Time 1 data collection. There were five children among the families, ranging in age from 3 to 12 years old. There were three girls and two boys. All reporting caregivers were female ranging in age from 27 to 70 years old. Two families did not respond to Time 2 survey packets. Results include only data from families that participated in both Time 1 and Time 2 data collection. These two families had three children between them, one boy and two girls, ranging in age from 4 to 12 years of age at Time 1. Due to the low number of participants, results were approached as case studies.

#### **Measures**

Participants were asked to complete a packet of questionnaires about the behaviors they observed in their family and the types of social support they used during the deployment of their family member. The following are the measures used in the packets.

**Behavior Assessment System for Children, Second Edition (BASC-2).** The BASC-2 (Reynolds & Kamphaus, 2004) is an assessment tool used in measuring clinically relevant behaviors in children and adolescents. The BASC-2 has multiple reporting methods, but only the Parent Rating Scales (PRS) were used in this study. The Parent Rating Scales are designed for three age groups; pre-school children from ages 2 to 5 years age (PRS-P), children from 6 to 11 years of age (PRS-C), and adolescents 12 to 21 years of age (PRS-A). The PRS show a high level of internal consistency with an  $\alpha = .95$ . The scores of individual reports are compared to a database of scores based on age and gender. Presence of problems is based on this comparison. Reports for the PRS include a confidence interval which determines the reliability of the reporter's answers. If scores are unreliable, due to over reporting or inconsistency, then scores from the PRS are unreliable.

The Externalizing Problems, Internalizing Problems, and Adaptive Skills composite scale from the PRS will be used in data analysis. The Externalizing Problems scale is comprised of Hyperactivity, Aggression, and Conduct Problems. The Internalizing Problems scale is comprised of Anxiety, Depression, and Somatization. In both the Externalizing and Internalizing Problems scales, a score of between 60 and 69 is considered "at risk" for the problem; a score of 70 or higher is considered "clinically significant" for the problem. The Adaptive Skills composite scale evaluates the child's ability to adapt to change and the typical reaction a child has to change. In preschoolers, the Adaptive Skills scale composed of the Adaptability, Social Skills, Activities of Daily Living, and Functional Communication scales. These same scales are used to compose the Adaptive Skills scale in children and adolescents with the addition of the Leadership

scale. In the Adaptive Skills scale, a score of between 31 and 40 is considered “at risk”; a score of 30 or lower is considered “clinically significant.”

**Family Environment Scale (FES).** The FES Real Form (FES-R; Moos & Moos, 2002) is an assessment tool for measuring the perceptions a person currently has on his or her conjugal and nuclear families. The FES-R can also be used to monitor change over time, observe how families adapt to life transitions, and understand the impact of family on children. The Conflict Subscale will be used in data analysis. Moos and Moos report an internal consistency of  $\alpha = .75$  in the Conflict Subscale. A test-retest reliability is  $r = .66$  on the Conflict Subscale over four months. While the Conflict Subscale will be used to test one of the hypotheses, all subscales were analyzed to better understand the changes each family underwent.

There are ten subscales in the FES-R and defined by Moos and Moos. Cohesion is defined as the degree of commitment and support family members provide for one another. Expressiveness is the degree to which members are encouraged to express their feelings directly. Conflict is the amount of openly expressed anger and conflict among family members. Independence is the extent to which members are assertive and self-sufficient. Achievement Orientation is the extent of which activities are cast in a competitive framework. Intellectual-Cultural Orientation is the level of interest in political, intellectual, and cultural activities. Active-Recreational Orientation is the amount of participation in social and recreational activities. Moral-Religious Emphasis is the emphasis on ethical and religious issues. Organization is the degree of importance of clear organization and structure in planning family activities and responsibilities. Control is how much set rules and procedures are used to run family life.

**Support Systems Questionnaire.** A questionnaire regarding the types of support dependent spouses use during deployment was created. This questionnaire was created to investigate the types of support systems used by military families and how much families rely on their systems. The questionnaire specifically asked about the spouse's use of common or existing support systems such as the Family Readiness Group (FRG), family, friends, or faith groups. Specific support groups were chosen according to common systems found in the literature (Hall, 2008; Hunter, 1982). These were groups that families regularly turned to for help during times of deployment. Participants were asked to provide any feedback on how their support groups could be improved. Both positive and negative feedback on support groups was requested. This would allow support groups to know what aspects of their program are most useful or important to members and which aspects need improvement. Feedback was requested so that official support groups, like the Family Readiness Group, could benefit from the study and better meet the needs of its members.

## **Procedures**

Participants were recruited from families that were soon to have a parent deployed to U.S. military action in the Middle East. Potential participants were contacted one of two ways. A recruiting booth was set up at a gathering for military families. Parents who were interested in completing the survey were given a packet and information on how to complete and return it. Consents were signed and collected at the booth. Due to a low response rate, advertisements were later posted in online newsletters for military families. Those interested in participating in the study were asked to contact researchers.



These potential participants received their packets in the mail and were asked to sign and returned their consent forms to researchers. Survey packets were completed and returned in a separate envelop to the primary investigator.

Survey packets consisted of a consent form, letter of explanation and instruction, the support systems questionnaire, one FES, and one age appropriate PRS BASC-2 for every child or adolescent in the household. Participants were asked to fill out these materials, which would take approximately 20 to 30 minutes, depending on the number of children in the home. Participants were also asked to create an identification code for each of their children and place it on designated materials. This identification code was used in lieu of names to protect the anonymity of participants and their families but still allow comparison over time. Completed survey packets were then mailed back to the primary investigator. These survey packets were designated Time 1 data collection.

Participants were asked to complete the survey again in five months time. They received their packets in the mail and were asked to follow the same procedure. These data packets were designated Time 2 data collection. Time 1 and Time 2 data packets were used in evaluating changes in the family during deployment.

## CHAPTER III

### RESULTS AND DISCUSSION

#### **Family A**

**Demographics.** Demographic information was taken from the Support Systems Questionnaire. Family A consisted of three adults and two children. The father was the deployed parent and the mother cared for the children during deployment. This was the father's second deployment. The parents of the children were recently divorced with frustrations over re-enlistment and deployment cited as a primary reason for the divorce. The third adult, the paternal grandmother, was the reporter for both Time 1 and Time 2 and assisted the mother with childcare during deployment. The children were an 8 year-old girl (Child 1) and 12-year-old boy (Child 2) at Time 1.

The divorce was finalized approximately six months before the deployment. Time 1 data were collected a few weeks before the father's deployment. During deployment, the children lived primarily with their mother. The paternal grandmother assisted in caregiving during deployment. A Time 2 packet was sent five months after Time 1, but was never returned. Another Time 2 packet was mailed to the participant and returned fourteen months after Time 1 data were collected. The father had been back from the Middle East for four months at Time 2.

**FES Results.** From Time 1 to Time 2, FES scores increased in the Cohesion, Expressiveness, Independence, Achievement Orientation, Intellectual-Cultural Orientation, Moral-Religious Emphasis, and Organization subscales. The Conflict, Active-Recreational Orientation, and Control subscales experienced no change. See

Table 1. The observed increases were viewed as positive changes as they increased desirable attributes in the family, such as greater support, more communication among members, and more structure in day-to-day living. The lack of change in the Active-Recreational Orientation was acceptable as the score was already high which was favorable for this subscale. The lack of change in Conflict and Control were viewed as negative, as both had high scores, which was not favorable on their respective subscales.

All FES Time 1 scores were consistent with families that have a distressed environment except for Active-Recreational Orientation, which was well within normal standards. At Time 2, Cohesion, Expressiveness, Independence, Achievement Orientation, Intellectual-Cultural Orientation, Active-Recreational Orientation, and Organization subscale scores were consistent with families with a normal environment. Conflict, Moral-Religious Emphasis, and Control were still representative of a distressed family.

Time 1 scores at distressed levels and Time 2 scores moving towards normal levels was predicted for this family. Time 1 data was collected during a difficult transition period and only weeks before deployment. Time 2 data was taken four months after the father's return, giving the family time to adjust to his return and establish new routines. This return to stability was reflected in the scores of the FES.

It is likely that Conflict did not change to a more normal level at Time 2 because Family A had pre-existing stress. The paternal grandmother reported that the family had already experience one deployment. When the father decided to re-enlist, the couple divorced as the mother disagreed strongly with his decision. The continuing stress from

the divorce paired with continued military involvement likely contributed to the level of conflict reported.

Moral-Religious Emphasis also did not see a change from Time 1 to Time 2. This subscale scored very low and was consistent with families in high levels of distress. It is possible that Family A did not place an emphasis on religious or ethical morals as recognized by the FES. The answers given indicate that the while family members have a general sense of faith and ethics, they did not attend religious services.

The unchanging scores in Control were high and showed signs of a distressed family. Answers indicated that rules are strictly enforced in the family. It is possible Family A uses an authoritarian approach to parenting. This would be consistent with typical military families, which require a strict adherence to rules and high levels of compliance (Hall, 2008). These expectations are a reflection of the expectations applied to their parents in a military setting.

**BASC-2 Results.** The BASC-2 scores for Child 1 at Time 1 showed five areas of clinical significance. These were Somatization, Withdrawal, Adaptability, Social Skills, and Functional Communication. She was also clinically significant on the Adaptive Skills composite scale. Anxiety and Depression were in the normal range. All other scores were in the at-risk range. At Time 2, most scores gravitated towards normalcy, with only Hyperactivity, Aggression, Attention Problems, and Social Skills hovering in the at-risk zone. No subscales were clinically significant at Time 2. See Table 2. The confidence interval on reliable reporting was at acceptable levels, with a raw score of  $F = 2$  at Time 1 and  $F = 0$  at Time 2.

As with the FES scores, the pattern of subscales moving towards the normal range was expected. When Time 1 data was recorded, the family was under a great deal of stress. The residual stress from the divorce in addition to deployment of the father to a combat zone likely contributed to these elevated levels. As children often experience or describe intense emotions as physical symptoms, somatization such as headaches or stomachaches would not be unusual. The clinically high level of withdrawal could also be linked with the clinically low levels of adaptability, social skills, and communication. Child 1 may have become withdrawn because of the stressors in her life, if she was not already a naturally a shy individual. This withdrawal in turn affected her Adaptive Skills.

Social Skills' change from clinically significant to at risk was a favorable improvement, as was the improvement of all of Child 1's Adaptive Skills scores. Since all of Child's Adaptive Skills were clinically significant or at risk at Time 1, it is not surprising that her Time 2 scores would be slow to return to comparatively normal levels. Without baseline data, it is difficult to determine whether her deficiencies in Adaptive Skills and Social Skills are preexisting or deployment or divorce related. Aggression and Attention Problems also remained in the at risk area. Aggression changed very little which may indicate that Child 1 naturally expresses higher amounts of aggression. Attention Problems saw a great increase, from the low end of the at risk area to nearly significant. This may indicate an emerging trouble in paying attention.

The BASC-2 scores for Child 2 at Time 1 showed one area of clinical significance with Somatization. Depression, Social Skills and Functional Communication were at at-risk levels. Internalizing Problems and Adaptive Skills were in the at-risk range. All other subscales and indexes were within normal levels. At Time 2, Social Skills was

clinically significant. Anxiety, Depression, Somatization, Withdrawal, Adaptability, Leadership, and Functional Communication were in the at risk range. Internalizing Problems and Adaptive Skills were approaching significance. See Table 2. The confidence interval on reliable reporting was at acceptable levels, with a raw score of  $F = 0$  at both Time 1 and Time 2.

Child 2's results were somewhat inconsistent with expectations. While most of his Externalizing lowered to normal levels, his Internalizing scores remained fairly constant from Time 1 to Time 2 and his Adaptive Skills gravitated towards or became clinically significant. Given the stages of deployment during which data was taken, this change in score is unusual. Decreased adaptability would be expected in the time leading up to the deployment and one to two month after the start of deployment. However, it has been observed in late-childhood to adolescence boys experience a difficulty in adjusting to the return of a male parent (Hall, 2008; Jensen, Martin, & Watanabe, 1996). This is especially true if the boy took on more duties in the household that his father would normally complete. It is possible Child 2 was still adjusting to his father's return when data was collected.

**Support System Questionnaire.** The participant indicated that her primary sources of support were family, friends, and a faith group. She utilized these sources 5 to 12 times a year. She relied on family and her faith group more than on friends. She indicated that she relied on an online community heavily, using social networking more than once a week. Supplementary information indicated that this was a primary means of communicating with the deployed father. The participant also indicated that she utilized the FRG more than once a week before and just after deployment began, but found it

difficult to attend events as they were far from her home. Her branch of the FRG shut down shortly after the soldiers were deployed. She expressed much disappointment in how little communication was used when the FRG was operational.

The participant suggested that the FRG increased the amount of gatherings to create more opportunities to meet with fellow families. She also suggested improving the FRG website to make it easier to stay in touch with deployed family members and to connect with other military families.

## **Family B**

**Demographics.** Demographic information was taken from the Support Systems Questionnaire. Family B consisted of two adults and one child. The father was enlisted in the Air Force and was deployed for a one year tour of duty in Iraq. The mother was a stay at home mother. The mother was the reporter for the survey. The child (Child 3) was a girl and four years-old at Time 1. No significant changes in the family or stressors, other than the deployment, were reported at Time 1. This was the father's third long-term deployment, or deployment of twelve months or more. He had also left on several short-term deployments to non-combat zones during his military career.

Time 1 data were collected near the end of the father's year-long term. One month after Time 1 collection, the father returned from the Middle East and the family moved from a small air base in the Midwest to a large base, also in the Midwest. Time 2 data were collected five months after Time 1.

**FES Results.** From Time 1 to Time 2, scores increased in Conflict, Intellectual-Cultural Orientation, Active-Recreational Orientation, and Organization. Scores

decreased in Expressiveness and Moral-Religious Emphasis. Scores remained constant in Cohesion, Independence, and Control. See Table 1. The increase in Conflict was not large and both Time 1 and Time 2 scores were very low, lying well within normal range. The increases in Intellectual-Cultural orientation, Active-Recreational Orientation, and Organization were also small but favorable, keeping scores consistent with normally functioning families. The decreases in Expressiveness and Moral-Religious Emphasis are not favorable on those scales. Expressiveness fell to an area between normal and distressed. Moral-Religious Emphasis dropped into distressed levels. The lack of change in Cohesion was acceptable as the score was quite high and within normalcy.

At Time 1 all subscale scores reflected those of a family within normal limits except for Independence and Control which were at distressed levels. This was the same at Time 2 with the exception of Moral-Religious Emphasis, which had decreased just into distressed levels. Time 1 scores for Moral-Religious Emphasis were on the cusp between normal and distressed; the decrease in score was not large. Control levels were also consistent with military families, where an emphasis on compliance is applied on children. Their military parent is expected to follow rules, and this expectation is passed on to the children. In addition, children are expected to follow rules in order to decrease interference with military operations (Hall, 2008). As Family B lived on a military base during data collection high Control levels were expected.

**BASC-2 Results.** Child 3 had very few issues in regards to her BASC-2 results. At Time 1, Child 3 was at risk for Hyperactivity on the BASC-2. All other scores were within normal range. At Time 2, she continued to have at risk levels for Hyperactivity as



well as Depression. See Table 2. The confidence interval on reliable reporting was at acceptable levels, with a raw score of  $F = 0$  at Time 1 and  $F = 1$  at Time 2.

Child 3's hyperactivity could have been pre-existing, though it is possible the deployment and return of her father as well as the move exacerbated the condition. The increase in her Depression score was large and her Time 2 score was close to the clinically significant range. It is possible the change in base affected Child 3's mood.

**Support System Questionnaire.** The participant indicated that she relied primarily on friends as a social support. She utilized friends more than once a week. She rarely relied on other supports, such as family, faith group, and online communities, using them less than four times a year. The participant suggested that passing on helpful information within military communities would greatly assist in moving or changing bases. Such information could include trusted auto repair shops, businesses that extend military discounts, or recreational areas for children. Keeping such information in a central, easy-to-access area, like a website, would help new members to the community to adapt quicker.

### **Limitations**

This study was severely limited in the amount of participants who responded. Two families replied from a local Army Reserve unit and two families from an Air Force base in the Midwest. Attrition of participants was also an issue. Of these initial four families, only two completed and returned survey packets at Time 2. With such low numbers it is difficult to generalize any results to the general military population.

Times of data collection were inconsistent. Attempts were made to gather Time 1 data before the soldier deployed, but delay in IRB approval and time constraints on participants lead to Family A completing their Time 1 packet only a week before deployment and Family B in the middle of deployment. The time between Time 1 and Time 2 data collection was not consistent. The period between collections was scheduled to be five months. Family A either did not receive or failed to respond to the initial Time 2 packet mailed to them. Family A returned the second packet mailed to their home after several weeks. The result was a nearly fourteen month gap between data collections. Family B completed their Time 2 packet at the designated five month mark. The combination of different collection times during the deployment stages and the length of time between collections made it difficult to compare Family A and Family B.

The differences in family history also made it difficult to compare the two families. Both had additional extraneous variables which brought additional stress to the families. Family A had recently experienced a divorce before the deployment. Family B moved from one military base to another between Time 1 and Time 2. These stressors likely contributed to family stress and behavioral issues along with deployment. Family B had a higher level of experience of deployment, both long and short term. Family B also had better access to assistance or services as they would be readily available and easier to locate. Family A had less experience with both deployment and the military system. These factors potentially confounded results.

These limitations make it difficult to come to any conclusions regarding the hypotheses. The limited number of participants made it difficult to find any patterns in

behavior. The additional stressors made it difficult to attribute any changes solely to deployment. Instead results were treated as case studies.

### **Implications**

The first two hypotheses set forth had inconclusive results. Internalizing and Externalizing Problems did not have a clear pattern across participants. Scores were also confounded by additional stressors in the environment.

Hypothesis 3, decrease in Adaptive Skills, also had inconclusive results, confounded by additional stressors and inconsistent data collection times. However, it was observed that children from Family A, the Reservist family, had lower adaptability scores than Family B's. Family A's children had adaptability scores in both the at risk and clinically significant ranges, showing improvement in most areas by Time 2. Family B's child was well within normal range at Time 1. At Time 2 Family B's child did experience a decrease in adaptive skills, but her scores remained well within normal range. This may indicate that Family B was better able to adapt to the difficulties of deployment. It is likely that Family B's greater experience with deployment and better access to military resources helped the family during deployment.

Hypothesis 4 regarding family conflict was highly confounded by additional stressors, particularly the divorce that occurred in Family A. Family A showed very high levels of conflict on their FES scores at both collection times, which were consistent with families in distress. Family B had normal levels of conflict at both data collections. Overall FES scores indicated that Family B had mostly normal-level scores while Family

A had mostly distressed scores. This indicates that Family B was better equipped to handle deployment.

While the number of participants makes it difficult to draw conclusions, a few notable observations were recognized. On FES scores, both families typically gravitated towards normalcy and away from distress from Time 1 to Time 2. This would imply that while the stress of deployment can negatively affect families, they have the ability to return to normal levels. This could be better observed in future studies in several ways. Data could be collected several months before deployment, ideally before families are informed of deployment. This data collection would be in addition to data taken at the time of deployment, during deployment, and post-deployment. This would allow researchers to capture the different effects of the stages of deployment have on a family.

Future studies could collect data directly from children instead of indirectly through caregivers. Data could not be directly taken from children in this study as initially they were not available to complete the packets. In addition, approximately half of initial respondents had children too young to complete self-report scales for the BASC-2. Collecting self-reported data when possible would include the point of view of military children and adolescents.

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Table 1

*FES Subscale Scores*

Subscale	Family A		Family B	
	Time 1	Time 2	Time 1	Time 2
Cohesion	45	52	65	65
Expressiveness	34*	53	59	47
Conflict	60*	60*	33	39
Independence	45*	61	45*	45*
Achievement Orientation	47*	59	53	59
Intellectual-Cultural Orientation	41*	52	52	58
Active-Recreational Orientation	53*	53	53	59
Moral-Religious Emphasis	36*	41*	51	46*
Organization	48*	53	53	58
Control	54*	54*	59*	59*

\*Denotes distressed levels



Table 2

*BASC-2 Subscale Scores*

Scale	Child 1		Child 2		Child 3	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
Externalizing Problems	64*	62*	58	43	58	59
Hyperactivity	63*	63*	58	48	67*	66*
Aggression	60*	62*	58	39	47	50
Conduct Problems	65*	57	57	45	N/A	N/A
Internalizing Problems	64*	47	68*	65*	51	54
Anxiety	56	42	57	61*	55	52
Depression	56	51	61*	61*	51	68*
Somatization	72**	50	76**	64*	46	40
Adaptive Skills	26**	40	38*	34*	68	61
Adaptability	29**	45	43	30**	67	60
Social Skills	27**	33*	37*	27**	72	66
Leadership	33*	43	42	39*	N/A	N/A
Activities of Daily Living	37*	43	40	52	59	61
Functional Communication	18**	42	35*	32*	59	47

\*Denotes an at risk score

\*\* Denotes a clinically significant score