

Assessing Military Community Support: Relations among Perceived Military Community
Support, Child Psychosocial Adjustment, and Parent Psychosocial Adjustment—A
Mediation Model

by

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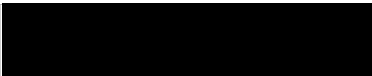
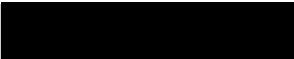
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DEDICATION

This dissertation is dedicated to my own wonderful and supportive military family—my husband, Anthony, and my sons, Andrew and Alexander.

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ABSTRACT

Title of Dissertation: Assessing Military Community Support: Relations Among Perceived Military Community Support, Child Psychosocial Adjustment, and Parent Psychosocial Adjustment—A Mediation Model

Allison M. Conforte, Ph.D. 2017

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The emotional, cognitive, and behavioral health of the nearly two million children of military families in the United States is vital as these children play an integral role to the operational readiness of the armed forces. For example, when a service member's child experiences psychosocial difficulties, these difficulties often impact the service member's personal well-being and ability to focus at work, impairing the service member's ability to focus on the mission (58). As such, the Department of Defense (DoD) has instituted a family readiness system in order to bolster resiliency within military families, for example, by linking families with support networks (31). While military service members and their families face many of the same stressors as their civilian counterparts, they may also face a variety of additional stressors related to being a military family, including frequent relocation, unpredictable schedule changes, long- and short-term

family separation, and threats to service members' safety (46). Psychosocial functioning and resilience in the face of stress may be influenced by a variety of factors, however one important factor that influences parent and family functioning is community support. Community support may be especially important for military families, due to the increased importance of social support during stress (e.g., deployment, geographic relocation, etc.) (25; 47). Research is promising regarding the protective effects of community support in the civilian population. However, there is a comparable dearth in the literature regarding military families. Due to the importance that military families have on operational readiness of service members and the significance that the DoD has placed on supporting military families, it is imperative to understand the impact of perceived military community support on military parents and their children. In order to elucidate this relationship, the present study used a newly-developed measure, the Conforte Assessment of Military Perceived Support (CAMPS) to examine the relationship between perceived community support and psychosocial difficulties in a sample of military parents with children between the ages of 2 and 18 years of age (n=157) using an online, anonymous survey. Results of this cross-sectional, correlational study indicated that perceived military support was associated with fewer child and parent psychosocial symptoms ($p<.01$) and that the relationship between perceived military support and child psychosocial well-being was mediated by parent well-being. Despite the study sample being primarily non-Hispanic, college-educated, women, perceived military community support may be a promising resiliency factor for military families. Results underscore that there may be a variety of approaches to increase perceived support, beyond increasing the number of services. Additionally, focus groups

provided support for the utility of informal support, which can be fostered by targeting individuals' abilities to enhance interpersonal relationships. Given its potential as a tool for both outcome research and program evaluation, future research should validate the CAMPS in a larger, more diverse sample. Longitudinal studies are also needed to determine mediation model directionality and causation, as well as to explore the potential effects of child developmental stage on this relationship

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CHAPTER 1: Introduction

PSYCHOSOCIAL FACTORS IN CHILDREN OF MILITARY FAMILIES

There are approximately two million children of military families in the United States (31). Children and families play an integral role in service members' operational readiness. Indeed, the Department of Defense (DoD) currently recognizes the importance of family life in the operational readiness of the United States military, and has established a family readiness system with several goals, one of which is to link families via support networks to bolster resiliency (31). It is vital to consider the impact of families in military planning and policy; however, research on the specific risk and resiliency factors relevant to military families is sparse (15; 45; 58).

A key example of the impact that family functioning has on operational readiness is when a service member's child experiences psychosocial difficulties. Such difficulties likely impact the service member's personal well-being and ability to focus at work (58). Despite the importance of studying military children, little is known about risk and resilience factors associated with psychosocial difficulties in children of service members (58). The literature to date has emphasized that military youth should be examined as a distinct population from the general public due to the unique stressors they often experience (6).

One possible factor that appears to protect against the development of psychosocial difficulties (i.e., resilience factor) for children and families is community support. Research in civilian populations reveals community support as a protective factor against psychosocial difficulties in children (22). However, there is a comparable dearth of research on community support in the military (14). The purpose of this

background section is to provide rationale for further exploration of the association between community support and psychosocial functioning among children from military families, including the need for an assessment tool to quantify this association. First, the concepts of stress, resilience, and community support in civilian populations will be defined, including a brief discussion of two conceptual models: the Model of Stress Buffering and the T-Double ABC-X model. Next, these concepts (e.g., conceptual models) will be applied to a military population. The use of the term “military” in this proposal refers to the armed forces (i.e., Army, Navy, Air Force, and Marines), with a focus on the active duty component. Finally, currently existing assessments of community support, both civilian and military, will be explored.

Stress

In order to understand the potential benefits of community support, it is important to define the term “stress” and consider how stress may impact children and families. Stress is a psychobiological process resulting from real or perceived imbalance between environmental demands required for survival (e.g., psychological, social, or physical demands) and an individual’s capacity to adapt to these demands (adapted from (39; 50)). Stressors may be either positive (i.e., eustress) or negative (e.g., distress) (39; 69). Stressors are also often defined by their duration, with acute stressors occurring briefly and chronic stressors occurring for longer periods of time (26).

There are both physiological and psychological effects of stress. The overall purpose of the stress response is to prepare an individual to fight or flee from the stressor (18). The physiological stress response works through activation of the sympathetic nervous system resulting in the release of catecholamines (e.g., epinephrine,

norepinephrine, & dopamine) from the adrenal medulla (26). Sympathetic nervous system arousal leads to increased blood flow to muscles involved in the fight or flight response (e.g., heart, skeletal muscle, brain) and decreased blood flow in areas that are not needed for the response (e.g., stomach, kidneys, fingers) (26). Additional physiological effects of the stress response include increased heart rate, blood pressure, respiratory rate, and blood glucose levels (i.e., increased energy), as well as pupil dilation (i.e., increased visual acuity to threatening stimuli) (26).

In addition to the adrenomedullary response, the body also responds to stress by releasing hormones through the hypothalamic-pituitary-adrenal axis. Stress hormones (e.g., cortisol) are slow acting and are often implicated in the deleterious effects of chronic stress, such as hormonal dysregulation that is commonly associated with physical sequelae such as obesity and type 2 diabetes (43). Other pathological effects of overexertion associated with repeated and sustained sympathetic nervous system arousal include chronic high blood pressure, weakened heart muscles, reduced kidney function, and immunosuppression (43). Due to the widespread physiological effects of the stress response, early exposure to chronic stress may have a pronounced effect on child physical development.

Along with the physiological responses to stress, psychological effects of stress include changes in behavior, cognitions, and motivation that may be adaptive (e.g., working harder on a task) or maladaptive (e.g., drug use). Psychological effects of chronic stress include anxiety, restlessness, worry, irritability, depression, anger, mood swings, lack of concentration, and forgetfulness. Behaviors associated with chronic stress vary among individuals and may include behaviors such as withdrawal, decreased

productivity, and depressive/anxious symptoms (e.g., crying spells) (4). Children and adolescents may exhibit cognitive and behavioral responses to stress that are similar to adults. However, additional symptoms in children and adolescents include: acting out, appearing overly fearful, complaining more frequently than is usual, and clinging to adult caretakers(3). In general, both children and adults exposed to chronic stress are also less likely to engage in healthy behaviors such as eating a balanced diet, maintaining an adequate sleep schedule, and participating in preventative health check ups (4).

While the physiological stress response is generally similar between individuals, a person's overall response to stress varies based on personal (e.g., past experiences, memories, bias, early childhood experiences) and environmental factors (32; 50). Therefore, a particular stimulus that one individual perceives to be stressful may not be perceived as stressful by another individual. Many factors, often termed *resilience factors*, may buffer the negative effects of stress and may decreased perceived level of stress. For example, one resilience factor that may influence an individual's perception of a stressor, perceived support, will be addressed in further detail below.

Resilience Factors in Youth

Resilience is defined by the American Psychological Association as “the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress” (5). In general, resilience includes factors found within the individual, within the family unit, and within the community environment (67). Although children can grow to be resilient even in the most difficult environments, there are a variety of factors that have been shown to promote resilience in children. Some of the intrinsic (i.e., within the child) factors that foster resilience include the abilities to communicate, problem solve,

manage feelings and impulses, and seek trusting relationships (38). Although these factors are characterized as intrinsic, they are influenced by external factors as well (e.g., parents and the community). Adults, particularly parents/guardians, can promote the development of these intrinsic resilience factors by providing high levels of warmth and appropriate levels of control as children develop (54). For example, authoritative parenting (i.e., high warmth and high control) has been shown to be one of strongest predictors of positive adaptation and resilience in U.S. children (55).

Additional extrinsic factors that support the development of resilience in children include having a relationship with at least one trusted adult, being encouraged to be autonomous, and having access to services in the community (e.g., health care, education, social services) (38). Support services in the community may help promote resiliency in children via two mechanisms: by providing direct services and support to children and by providing support to parents who are then able to parent more effectively. This conceptualization highlights the utility of examining the relationship between community factors (e.g., community support) as a resiliency factor that promotes positive child outcomes (e.g., psychosocial adjustment) either directly or through parent psychosocial adjustment. However, before examining this relationship, it is important to first define the elements of this relationship, such as community, sense of community, and community support.

Community Support as a Resilience Factor

Defining community

The term “community” has a variety of meanings and can refer to either a physical location or a community of interest (79). Generally, communities of interest are

those that are not defined by physical boundaries but rather comprise a group of individuals who share a sense of connection due to a common characteristic or goal (79). Said differently, communities are more than just physical locations -- they are also “psychological locations” (72), p. 162). Small and Supple (72) define community as “social relationships that individuals have based on group consensus, shared norms and values, common goals, and feelings of identification, belonging, and trust” (p. 162). This is consistent with several other definitions of community, including Myers and Diener (60) conceptualization of community as a “network of supportive relationships... pride in and feelings of belonging to a group” (79), p. 6). Communities are made up of individuals and community organizations, such as families, schools, community centers, and peer groups. In addition to social aspects, many communities are also defined by the community’s infrastructure (e.g., parks, location of resources) and public policy created and enforced within the community (see Figure 1). Communities have a large impact on the development and well-being of children and adolescents; however, the specific mechanism by which communities influence youths’ development has not been well defined in the literature (72).

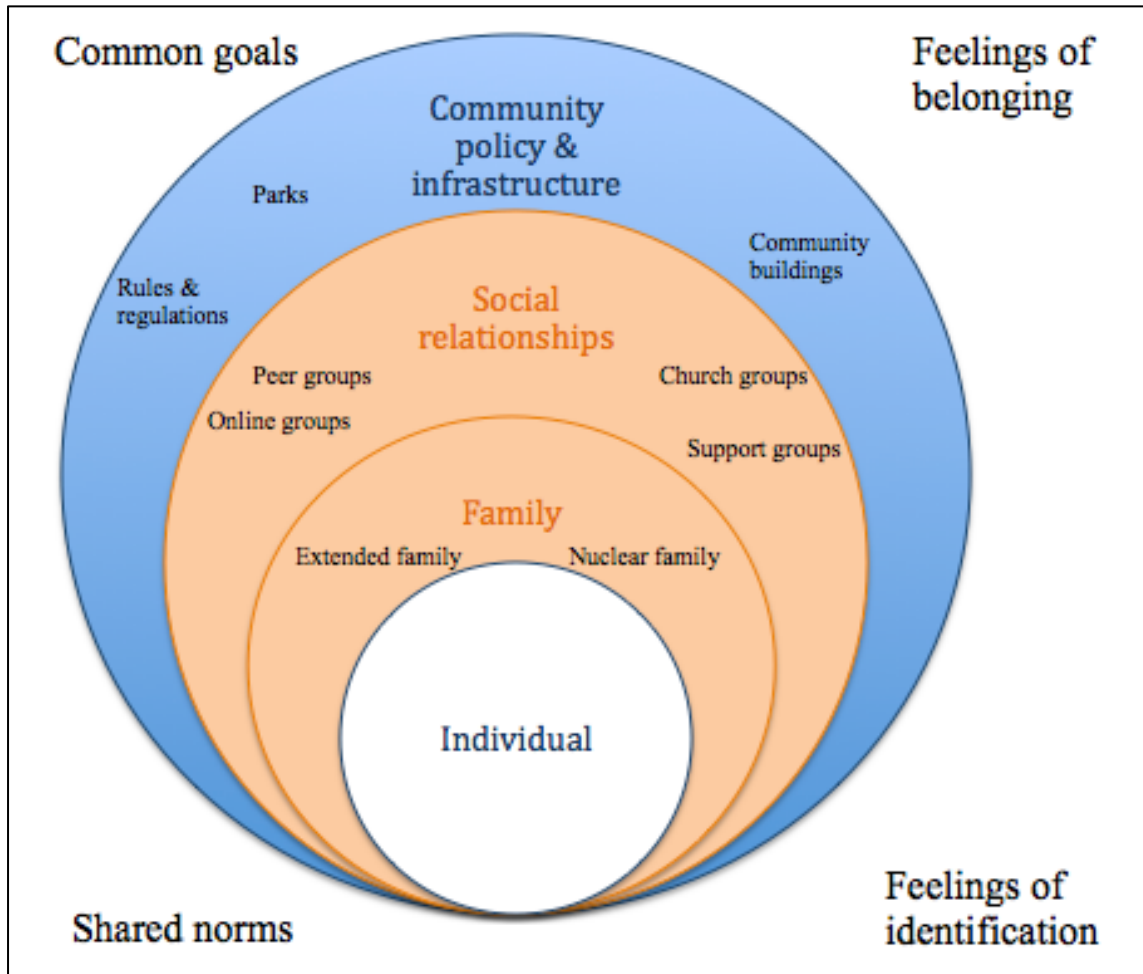


Figure 1. Elements of community.
Non-exclusive examples include social facets (e.g., social relationships and families) and community policy/infrastructure facets, within the context of the psychological construction of a community.

Defining sense of community

Community support is related to the degree to which an individual feels a part of his or her community, often referred to as “sense of community.” Sense of community, as defined by Bowen et al (14) includes three variables (see Figure 2). The first two variables are community connection (i.e., the ability to make connections at an individual level with individuals in the community) and community participation (i.e., the extent to which individuals participate in community events and community-sponsored activities)

(14). The level of community connection and community participation impacts the third part of sense of community, which is community capacity. Community capacity is the degree to which members in a community share a sense of responsibility for the welfare of the community and their ability to address community needs and confront situations that endanger the welfare of community members (13).

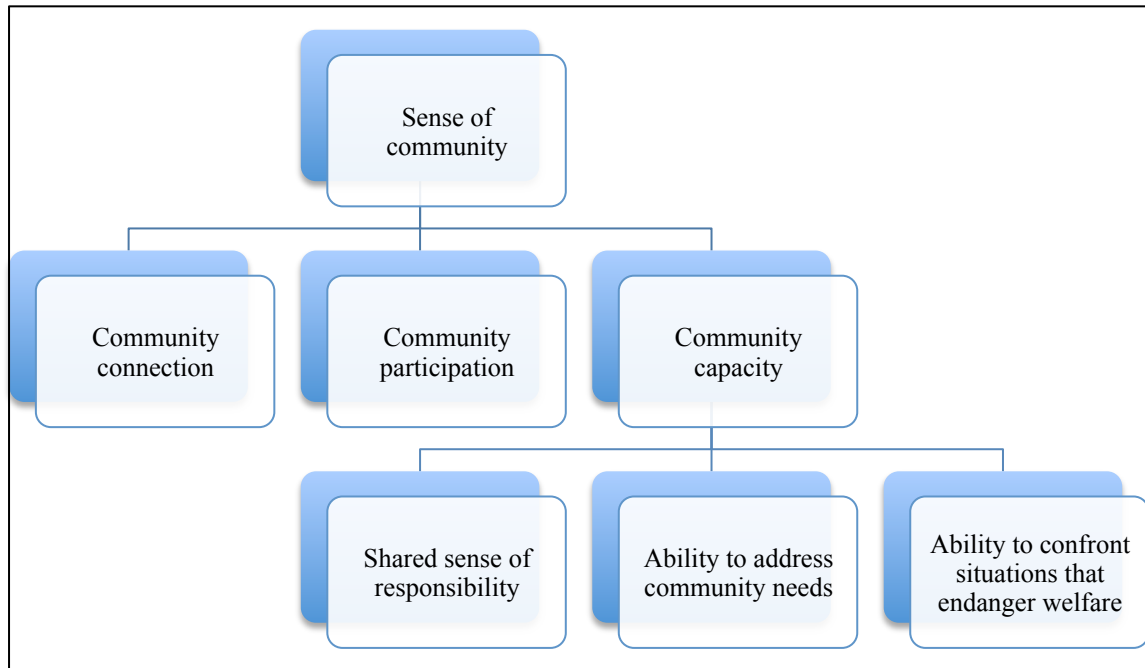


Figure 2. Elements of sense of community.

A greater sense of community has been linked to increased sense of well-being and quality of life (79). For example, sense of community has been shown to relate to an increased ability to problem-solve when faced with difficult life situations (7; 79). Individuals who have a higher sense of community are more likely to engage socially with their neighbors, and thus have increased opportunities for positive interactions and shared emotional connections (78). Sense of community has also been linked to

increased participation in community organizations, as well as increased satisfaction and feelings of control over one's environment (20).

Defining community support

As described above, sense of community has been linked to positive outcomes. Community *support* is a related construct, but a broader concept (14). Community support is influenced by elements similar to those that have been conceptualized within sense of community (i.e., connection, participation, and capacity) but focuses more on the supportive nature of these elements and others rather than solely on the degree to which individuals feel connected to the community (see Figure 3).

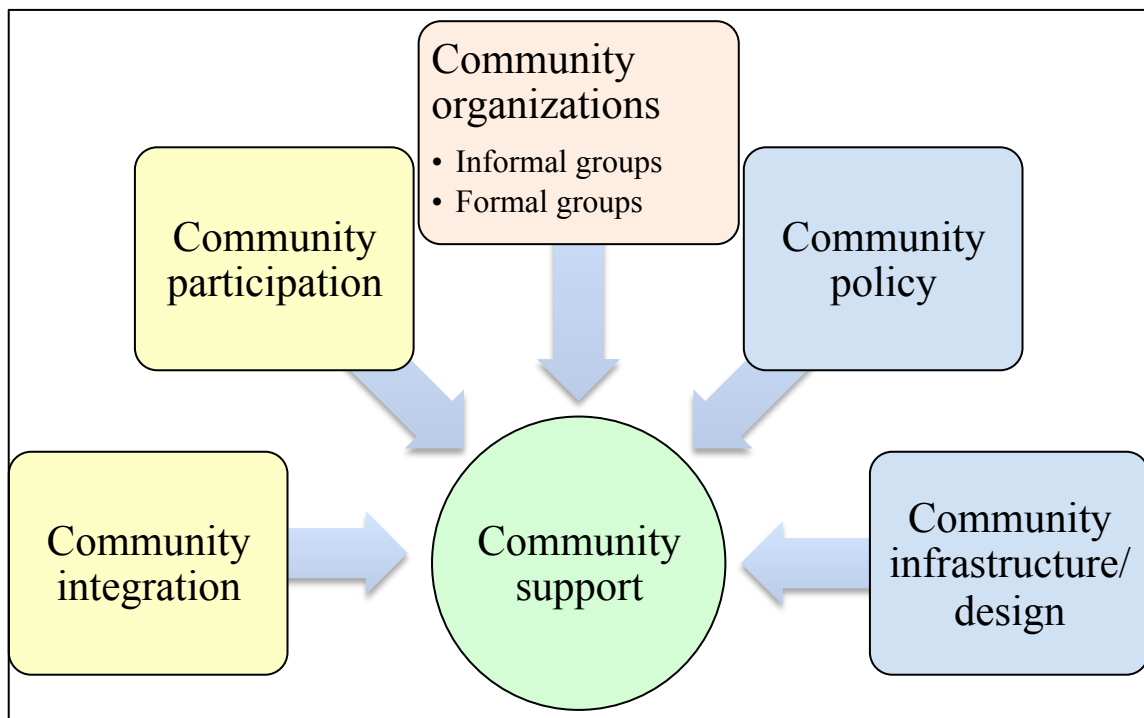


Figure 3. Elements of community support.
Coded for type of support: Yellow= sense of community; Orange= social support; Blue= supportive design of community

Similar to the multi-faceted concept of community (compare to Figure 1), community support consists of social support (i.e., informal and formal community

organizations) as well as support provided by the design of the community (see Figure 3). Additionally, community support is influenced by an individual's level of community integration and participation (e.g., similar to sense of community)¹. As a result, community support goes beyond social support. This particular feature of community support is particularly notable because most research to date has focused on social support, rather than community support.

The wide variability in both the quality and availability of community support at each level is worth noting. For example, the supportive nature of being involved in a community may be particularly powerful in larger, robust communities (e.g., the US military), where community membership provides the members with support at multiple levels (e.g., policy, infrastructure, formal support networks, and informal support networks) under one common mission.

As previously mentioned, community support may be provided in the form of either formal or informal support networks found within that community (13). Formal support networks are provided by human service organizations and agencies (e.g., a women's shelter). Informal networks operate outside of a formal agency and range from small groups of individuals (e.g., three new moms who provide support to each other) to larger groups (e.g., a youth sports league) (13). Informal and formal support networks

¹ This conceptualization of community support is informed by 40. Herrero J, Gracia E. 2007. Measuring perceived community support: Factorial structure, longitudinal invariance, and predictive validity of the PCSQ (perceived community support questionnaire). *Journal of Community Psychology* 35:197-217. The authors propose that community support is influenced by factors such as community integration (i.e., the degree to which a community member feels apart of his community), community participation (i.e. the degree to which a community member engages in community activities and with other community members), and the presence of community organizations.

influence each other. For example, formal networks can increase opportunities for community members to connect and form informal support networks. Likewise, informal support networks may help spread awareness of the availability of formal support agencies within a community (13).

Community Support and Positive Outcomes

Greater community support has been linked to positive psychological outcomes, such as psychosocial well-being. In a school-based study, students who perceived higher levels of community support and had a greater sense of community reported less drug use and displayed fewer behavior problems (9). Additionally, there are data suggesting that students who perceive a caring school community demonstrate higher academic achievement, higher motivation to learn, and pro-social behaviors (10). Due to the link between community support and positive psychosocial outcomes, agencies such as the Alliance of Children and Families have been focusing on community-level support initiatives to strengthen family functioning (13). In addition to psychosocial outcomes, community support has also been associated with positive health outcomes in a variety of populations. For example, in resource-limited rural Malawi, community support was found to be associated with lower death and better responsiveness to antiretroviral treatments (i.e., AIDS medication) (84).

In addition to the positive outcomes associated with community support as a whole, facets of community support, such as social support, are strongly supported in the literature (22). Research that suggests the positive effects of social support is robust and varied. For example, Cohen and Wills (25) provided evidence for the protective nature of social support in high stress situations. Similarly, Koenen et al (47) found that

heightened social support is protective against PTSD in veterans. Social support is also associated with improved health behaviors, such as adherence to diet, physical exercise, and medication regimens (36; 83). Intervention programs targeted at improving social support have been developed for a wide range of populations, including elderly individuals (25; 62), individuals grieving a death (25; 71), and mothers of infants (29).

Social support has also been strongly associated with positive health outcomes and the absence of support is related to negative outcomes. For example, low levels of social support have been associated with increased mortality in both men and women, even when controlling for other strongly associated factors, such as cigarette smoking (21; 42). Likewise, social support has been shown to be a strong protective factor in men and women at risk for cardiovascular-related mortality (30; 44). For example, non-married men and women (e.g., divorced, widowed, and never-married individuals) were significantly more likely to die of cardiovascular disease than their married peers with risk ratios ranging from 1.48 to 2.15 (47). Johnson and colleagues attribute this difference, in part to differences in social support between married and non-married individuals (47).

Social support is not the only facet of community support that has been examined in regard to positive outcomes. Other related elements of community support, such as strong support networks and community cohesion, have been linked with increased coping skills and a decrease in stress-related work difficulties (79). Participation in community activities has also been associated with a reduction in crime (35).

Online Community Support

Due to the rise in popularity of online communities over the past decade, it is increasingly important to consider community support that is delivered via the Internet as part of the overall conceptualization of community support. Online community support may involve a variety of features similar to traditional forms of community support, such as both formal and informal support networks (e.g., HIV organization's support group vs. a group of HIV positive individuals who communicate informally through Facebook) and supportive community design features (e.g., structure of websites, technological features that facilitate communication, web policies and procedures to protect community members). Some data have suggested that online community support is also associated with positive outcomes, such as improving overall perception of social support (8) and decreasing symptoms of depression and loneliness (11; 70). While much of the current data on online community support provides evidence for the use of both formal (8) and informal support networks (51), there are a variety of variables that may influence the supportive nature of online community support. For example, size of the online community and frequency of communication may impact the helpfulness of online support networks (17).

There are obvious advantages to using online community support. Online communities allow community members to interact with the community at any time and from any location, allowing greater and easier access than in-person support. This type of support may be particularly useful for those who are physically handicapped or geographically separated from their community (8). Many traditional communities take advantage of the benefits of online community support, adding online elements, both formal (e.g., community-sponsored support web sites) and informal (e.g., social media).

In addition to the many benefits of online support, users must remain cautious of potential negative consequences of using online support, including providing personal information to online predators, becoming a victim of cyberbullying, and receiving/engaging in excessive amounts of online interactions that begin to interfere with everyday life (64). Typically these negative consequences can be avoided by being educated about the potential risks and by being vigilant during online communication (64).

Summary

Stress, particularly when chronic, has deleterious effects on an individual's health and well-being. This effect may be particularly damaging in children and adolescents who are still developing physically, cognitively, and emotionally. Community support and specific facets of community support, including social support and online community support, have been associated with a variety of positive psychological and physical health outcomes. These forms of support may be important in protecting individuals, including children and families, from the harmful nature of stress.

POTENTIAL MECHANISMS OF THE PROTECTIVE NATURE OF COMMUNITY SUPPORT

Although the literature suggests a connection between community support and positive outcomes, there is less agreement on the mechanisms underlying this association. Conceptualization of this association is important due to the possibility of bolstering specific aspects of community support to foster youths' well-being. The Model of Stress Buffering (22) and the T-Double ABC-X Model (56) are two particularly noteworthy theories that aid this conceptualization. The Model of Stress-Buffering is discussed first,

as it provides a rationale for the supportive nature of social support and the foundation for the T-Double ABC-X, a theory more specific to a family's response to stressors.

Stress-Buffering Model of Social Support

The stress-buffering hypothesis proposes that psychological stress will have deleterious effects on the health and well-being of persons with little or no social support, while these effects will be lessened or eliminated in persons with stronger social support systems; outcomes for non-stressed individuals are relatively unaffected by level of social support (23). This theory focuses on the functional relationship between coping requirements of a situation and the resources provided by a person's support system (see Figure 5).

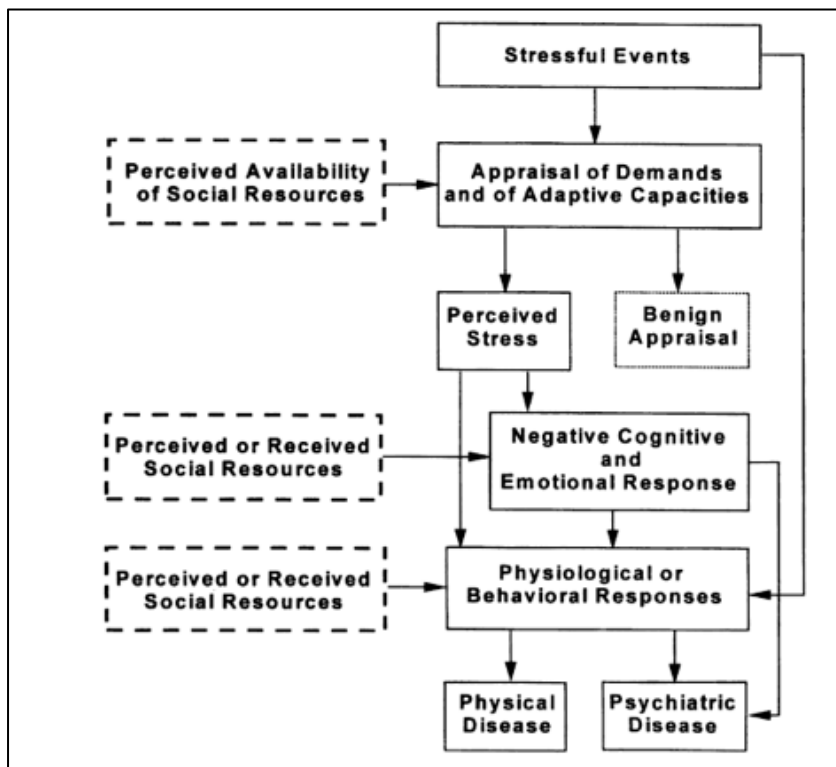


Figure 4. Stress-Buffering Model of Social Support (22)

The Model of Stress-Buffering is based on the hypothesis, originally conceptualized by Dr. Sidney Cobb in 1976, that social support is protective of stressful events that otherwise put an individual at risk for the deleterious health effects of stress (24). Research conducted by Cohen and colleagues has substantially supported the Model of Stress-Buffering (e.g., (21-23; 25). Based on this model, the social support facet of perceived community support lessens the impact of stressors via providing three forms of support: appraisal support, emotional support, and tangible support.

Appraisal support

The cognitive model of stressor appraisal posits that when a potentially stressful event occurs, the individual appraises the event as threatening or not (49). If threatening, the individual then appraises his/her ability to cope with the threat. If the individual believes that coping with the threat will be challenging or impossible, the stress response occurs. Appraisal support refers to support that assists a person in appraising or reappraising a stressor as benign and/or appraising or reappraising one's ability to cope with a stressor.

Appraisal of threat

One way that individuals appraise whether a situation is threatening or not is through social comparison (33). When a situation is arousing (i.e., stressful) and somewhat ambiguous, an individual will look to others for the appropriate emotional response (68). Therefore, individuals who are presented with a potentially stressful event (if the event causes initial physiologic arousal) will look to their social group to determine if the stressor is threatening or not. Social support may buffer against stress by helping an individual redefine a situation as less threatening. For example, if a newly

wed couple has an argument, this argument may seem very catastrophic. However, if the partners are exposed to other couples that are able to normalize the argument, the stress of an argument may be diminished. Support may also help to reduce the perceived importance of the problems and may be able to act as a distraction (22). Additionally, the perception that others will provide needed resources helps lift some of the burden from the family and lessens the family's perception of how threatening a stressor may be (22).

Appraisal of coping ability

Social support may also influence an individual's appraisal of his/her coping ability by providing alternative coping strategies based on experience, facilitating healthful behaviors that increase stress tolerance (e.g., exercise) through social pressure, or by refocusing attention away from the stressor and/or toward positive aspects of life (23).

Emotional support

Another proposed mechanism of the stress-buffering hypothesis is the provision of emotional support, such as empathy. Emotional support may reduce negative cognitive, emotional, physiological, and behavioral responses to stress in several different ways, such as by improving self-esteem, increasing one's perception of control over the stressful situation, and by assisting the individual to feel like s/he belongs (22). By assisting individuals to increase perceptions of control, in particular, emotional support has been shown to be protective of disease (48).

Tangible support

Stressful situations often create unique needs that must be met (e.g., financial needs, childcare needs, etc.). Therefore, in addition to emotional support and appraisal support, social support may buffer against stress by directly fulfilling needs created by the stressor. This type of support is known as tangible support. As an example, if an individual lost his job, tangible support would be provided if a wealthy relative gave him money for financial support. Although it appears quite simple, an additional noteworthy aspect is that tangible support is most helpful when it is viewed as appropriate by both the giver and the receiver, rather than when it is viewed as a loss of freedom, sign of inadequacy, or results in feelings of indebtedness (23). In the case of the previous example, if the individual who lost his job felt overwhelmingly indebted to his relative or ashamed for taking the financial gift, providing money may not reduce his stress. In addition to individuals providing tangible support, organizations and communities may provide tangible support through special programs and financial aid. Some commonly known examples of this include unemployment/disability financial assistance, childcare programs, and food stamps.

Stress-Buffering Model in Context of Community Support

The Stress-Buffering Model has been widely researched as a proposed mechanism for the protective nature of social support in stressful situations. However, this model is not specific to community support and does not explain the protective nature of other key elements of community support, such as community policy and community design/infrastructure. Additionally, the Stress-Buffering Model focuses primarily on an individual's response to stress, rather than the impact that stressors have on the family system. Due to the large impact that the family system has on child development and

resiliency, it is important to expand our understanding of the mechanisms of community support past the Stress-Buffering Model to a different model that focuses on family adaptation to stressors, the T-Double ABC-X Model.

T-Double ABC-X Model

The T-Double ABC-X model is one model of family adaptation that supports the link between psychosocial well-being and perceived community support (see Figure 4). This model proposes that adaptation is based on how the family perceives the number and intensity of stressors in addition to how they perceive the availability and supportiveness of resources in the community (56).

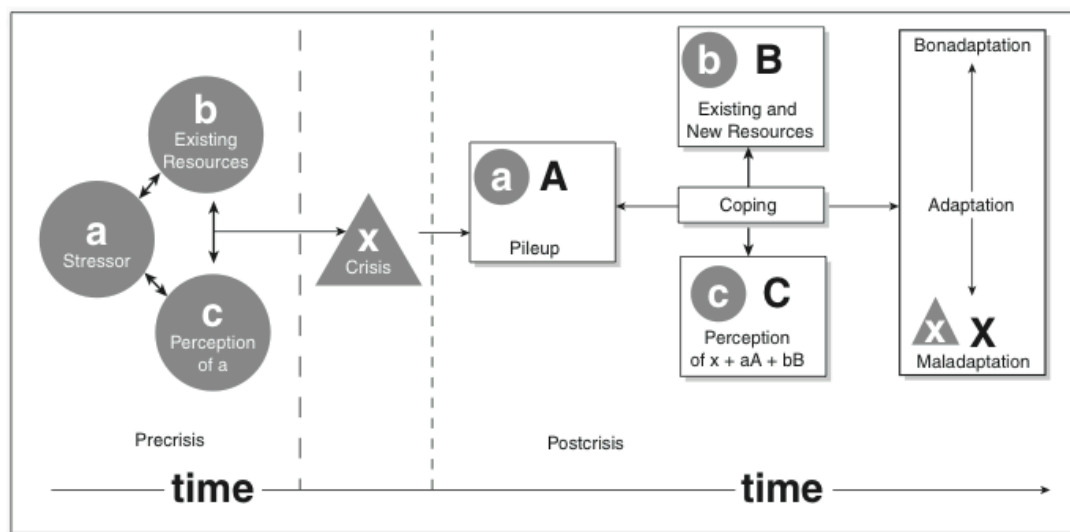


Figure 5. T-Double ABC-X Model (56)

In this model, a stressor (*a*) occurs, impacting the family's existing resources (*b*) and their perception of the stressor (*c*). Likewise, the family's existing resources (e.g., psychological, social/community, and family resources) and their perception of the stressor in turn impact the stressor itself. Unlike the Stress-Buffering Model of Social Support, resources in this context do not have to be social resources, but may also include

other resources provided by community, including the supportive nature of the community's public policies (e.g., policies allowing family members to be absent from work) and design/infrastructure (e.g., community centers). The interaction among the stressor, resources, and perception of the stressor, also known as the *pre-crisis factors*, leads to the family to change roles and behaviors, otherwise referred to as a crisis (x) (56). In addition to the original pre-crisis factors, the Double ABC-X includes post-crisis factors that eventually lead to either family adaptation or maladaptation. These post-crisis factors include: a pile-up of stressors that accumulate on top of the initial stressor, existing and new resources, the family's new perception of the situation, and family's coping ability (81).

Based off of Ruben Hill's popular 1958 ABC-X Formula, the T-Double ABC-X model has been widely applied to families that have a variety of stressors, including children with emotional and behavioral disorders (57) and autism spectrum disorders (61). The T-Double ABC-X model has also been applied in a military sample to account for family attachment differences during military deployments (63). Specifically, in a case study of two families with a deployed parent, deployment was characterized as a stressor that impacted the non-deployed parent's ability to attach with her child and adapt to the stress of the deployment (63).

T-Double ABC-X in the Context of Attachment Theory

When combined with existing literature on attachment theory, the T-Double ABC-X model provides a plausible explanation for the link between family psychosocial functioning (i.e., referred to as *adaptation* within the T-Double ABC-X model) and community support. Attachment theory, as conceptualized by Ainsworth (2) and Bowlby

(16) proposes that human beings have a strong innate need for attachment to a maternal figure,² with this attachment occurring primarily during the critical period of 0 and 2 years of age. Attachment with a maternal figure is not only crucial to the survival of the infant, but also provides the basis for the child's development and adult personality, including the child's response to stressful stimuli (2; 16).

Secure attachment between a maternal figure and a child occurs when the maternal figure responds appropriately, consistently, and promptly to the child's needs. While attachment style is influenced by *both* parent and child factors, insecure attachment may be a result of inconsistent, neglectful, or abusive parenting and frequently results in maladaptive child behaviors (2; 75). Insecure attachment has been linked to behavioral and psychosocial difficulties in children when compared to children with secure attachment styles (37). Even beyond the critical period of attachment, the parent-child relationship continues to be important to child functioning through adolescence, with parent responsiveness continuing to predict child psychosocial outcomes (59; 73).

There are many other potential factors that influence the attachment between a child and her caretaker. One of these factors may be social support, as parents and children with low social support demonstrate more insecure attachment (52). Similarly, literature has supported the idea that community support can strongly influence the quality of parent-child attachment (16). Parents who perceive more community support may be better able to cope with stress, therefore having more time and energy to respond

²The term *maternal figure* is used based on the original theories; however, the key attachment figure does not necessarily have to be the child's mother.

to their child's needs appropriately, consistently, and promptly—resulting in a more secure attachment and fewer psychological and behavioral problems (see Figure 5).

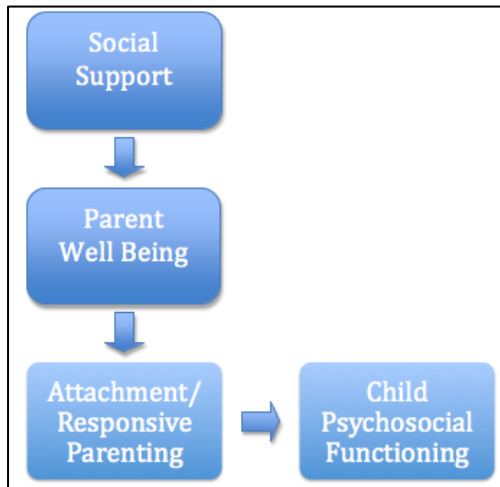


Figure 6. Impact of social support on child psychosocial functioning through attachment/parenting style.

Within the T-Double ABC-X Model, the provision of community support may bolster the family's resources (i.e., *b*) improve their perception of a stressor (i.e., *c*), and provide coping support after the initial crisis. In fact, previous research on child emotional and behavioral symptoms within military families supports this proposed mediating effect of parental support on child well-being, finding that perceived maternal support was significantly correlated with fewer emotional symptoms and conduct problems. The study also found that paternal support was also significantly correlated with improved concentration and attention (59). In summary, these findings and the relevance of attachment within the T-Double ABC-X Model highlight the importance of parent psychosocial functioning to child well-being.

MILITARY CONTEXT

Current military operating conditions and their impact on families

As previously described, stressors can have a large impact on both physical and psychological health. While military service members and their families face many of the same stressors as their civilian counterparts, they may also face a variety of additional stressors related to being a military family, including frequent relocation, unpredictable schedule changes, long- and short-term family separation, and threats to service members' safety (46). In addition, today's military service members and their families are experiencing even greater demands due to a higher operational tempo (14). Military downsizing, budget cuts, and increased military peacekeeping missions have led to military service members doing more with fewer resources (14). Specifically, service members are having to work longer hours, deploy more often, and consequently spend less time with their families, leading to potentially higher levels of stress and stress-related psychological and physical outcomes (14).

Partially as a result of the changing nature of military communities, the line between military and civilian community services has blurred (14). It is no longer the case that military community only exists within the walls of the military base or post (14). For example, many service members and their families now do not live in military housing; only one-third of USAF families live on base (13). Additionally, in recent years contracted agencies and service providers located in the civilian community are providing a growing percentage of military support services, such as medical and psychological care, to service members and their families (14).

Military family demographics

In addition to increasing demands, the demographic composition of U.S. military communities has also changed (14). Military communities are more diverse than ever

before, requiring a range of community services that will be relevant to all community members regardless of their race, ethnicity, sexual orientation, and family type (e.g., multigenerational and gay and lesbian families) (14). In order to understand the current demographic composition of the U.S. military, the 2011 DoD Demographics Report will be briefly reviewed (31).

The U.S. military force is made up of over 3.6 million individuals including Active Duty (Army, Navy, Marine Corps, Air Force), Reserve and Guard forces, Coast Guard, and DoD civilians. Within the total force, there are approximately 2.5 million members of the armed forces. The total force includes approximately 1.4 million Active Duty service members that comprise 38.2% of the force and approximately 1.1 million Ready Reserve service members that comprise 29.2% of the force.

Active Duty service members

Across Army, Navy, Marine Corps, and Air Force Active Duty (AD) service members, approximately 30% identify as a racial minority (Black, Asian, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, multi-racial, or not reported/unknown). Fifteen percent of all AD service members are female. Percentages of female members within the different service branches vary (e.g., USAF approximately 19% female and USMC approximately 6% female). AD forces are comprised of officers and enlisted personnel. For every one officer in the AD force, there are approximately five enlisted service members. The average age of enlisted service members (27.4 y) is younger than that of officers (34.7 y).

Active Duty families

Fifty-four percent of the approximately 1.4 million AD service members are married and forty-four percent have children. There are nearly two million family members, which includes spouses, children, and adult dependents. Forty-two percent of AD spouses report employment, while fifteen percent are actively seeking work. According to federal regulation (1), within the military health care system the term *children* refers to individuals from birth through age twenty-one (31). A majority of AD children are under the age of eleven (67.7%). On average, AD service members have two children. Approximately five percent of AD service members are single parents and approximately three percent of AD parents are in dual-military marriages.

Sex differences within the military

It is also important to consider psychosocial issues unique to women serving in the military. While the majority of service members are men, women make up a considerable portion (i.e., 15%) of the current military force (31). Women also comprise a considerable portion of new recruits, with approximately 20% of Naval recruits being female (46). Many of these female service members face specialized challenges of balancing their service with motherhood (46). In comparison to men, women have been shown to experience more distress and marital strain as a result of managing dual roles of parenthood and military service (46). Stress related to finding child-care and being separated from children was found to be particularly elevated in female service members compared to their male counterparts (46).

Summary of demographic trends impacting community support

The U.S. military and their families are a diverse population representing a variety of ethnicities, races, ages, and family types. A substantial percentage of military service

members are married and have children, creating a large number of military dependents within the military community. Another important demographic trend is the overall increase in the number of female service members, who may have specialized needs. For community support to be effective within military, it requires tailoring to a diverse group of individuals and families.

Special considerations of military youth

Military families deal with unique stressors that can lead to an increased risk of emotional and behavioral difficulties (19). For example, military families face frequent moves, deployment, and occupational hazards, all of which can have a negative impact on psychosocial functioning and adjustment (55). Post-move adjustment, lost friendships, and making new friends are struggles faced by military children even in peacetime (45). Several studies have found that children of military families experience greater psychosocial difficulties around and during deployments (e.g., (19; 55; 65)). Children with a deployed parent tend to report higher levels of psychosocial difficulties, based on both parent and child report (6; 53). Children also display higher levels of academic and behavioral difficulties when a parent is deployed, according to parent and teacher report (65). In contrast, during times of non-deployment these children report fewer psychosocial difficulties, such as depression and anxiety, than civilian children (6). There are also secondary factors that influence a child's adjustment to military family stressors; for example the number of geographic relocations may not be as important as the frequency in which they occur (80).

Although military children should not be stereotyped as either more resilient or more prone to difficulties than their civilian peers, they have been found to display

different types of psychopathology than other children under certain circumstances (28).

For example, a military child may adapt well to frequent relocation, whereas a civilian child may experience more difficulties during a similar transition. Additionally, military children face stressors that are unique to the military population, as described above.

These unique challenges support the notion that military children are a unique population that requires additional research.

Military Community Support

In civilian populations, as previously discussed, community support has been shown to be a protective factor against psychosocial difficulties in children (22).

However, research on military community support is limited (14). The U.S. Air Force (USAF), has responded to the need for this type of research by surveying U.S. airmen and their families through a service-wide Community Assessment Survey since 1989 (77).

The USAF Air Mobility Command has also trained individuals in base-wide community building and family support strategies (13). Unfortunately, research addressing community support in the other service branches of the U.S. military is lacking. This paucity of information may be due to the perception that poor family outcomes (e.g., abuse and psychosocial difficulties) are likely due to intrinsic characteristics of the service member and his/her family as opposed to a lack of resources within the community (13). However, as knowledge on community support continues to grow, focus on community support as a factor in military family functioning becomes increasingly relevant (13). In other words, as the importance of community support is better understood, policy makers are better able to capitalize on community support to bolster military family functioning.

Defining community in the military

Due to the lack of distinct boundaries in today's military community, it is difficult to determine where the military community ends and the civilian community begins. The USAF has offered one definition of military community, which is the physical settings in which service members live and work, including the military installation in addition to the local civilian community surrounding it (12). Of note, the USAF also includes deployed service members as a part of the overall military community. This definition underscores the idea that military communities exist beyond the gates of the military installation. As a result, military communities are an excellent example of how a closely-knit community may be geographically dispersed.

Sense of community in the military

In 1999, the Office of the Secretary of Defense sponsored a report on sense of community in the military, resulting in the RAND report, *Increasing a sense of community in the military: The role of personnel support programs* (79). In the report, Van Laar defines sense of community as social support and identification with a community that arises as a product of three sources:

An attachment to people, developed through social interactions and supportive relationships; an attachment to a workgroup, fostered through involvement in similar tasks; and an attachment to an organization, created as an individual identifies with the values of an organization (p.xii).

Sense of community is influenced by a variety of factors including community characteristics and individual service member and family characteristics (79). While the focus of the RAND report is how programs and services can improve sense of

community, the report also addresses the importance of sense of community in the military. Specifically, the authors highlight links between sense of community and positive outcomes in the military, including increased mission readiness, retention, improved quality of life, and coping capacity (see Figure 6) (79). This may be due to fact that individuals' subjective sense of community in the military is related to community support in the military.

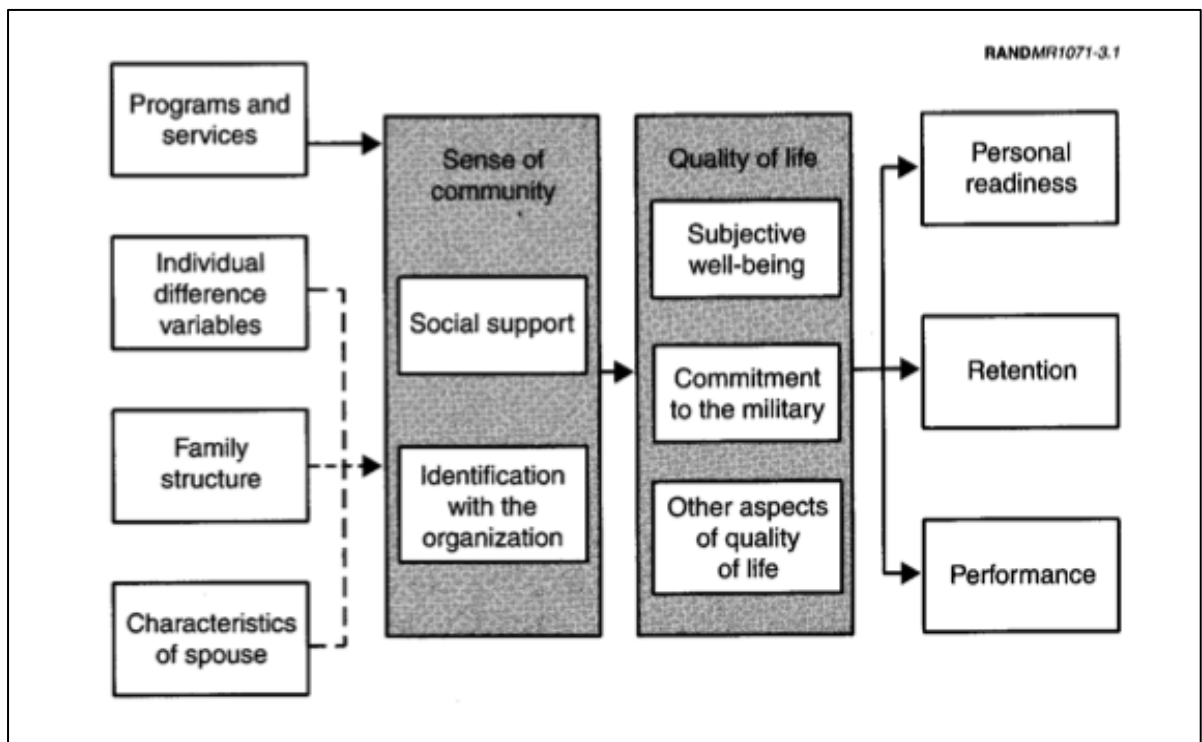


Figure 7. The relationship between sense of community and positive outcomes in the military (79).

A link between community support and sense of community is supported by Bowen and colleagues who found that service members, specifically USAF members, experience a greater sense of responsibility and collective competence (e.g. sense of community) when they are active in the community and connect with others in their community – both of which are integral aspects of community support (14). Being active

in the community and being able to connect with others are likely facilitated by both formal (e.g., unit leadership and human services) and informal support (e.g., connections with other military families) networks (14).

Community support and psychosocial adjustment in the military

Military community support refers to the special resources provided to service members based on their affiliation with the military, both across and within their specific branch of service (i.e., formal support networks). Military community support also includes support provided by other military families (i.e., informal support networks) (12). Additionally, military community support includes policies that govern the military community (e.g., DoD policies) as well as the infrastructure and design of the communities (e.g., design of military bases). Perceived community support refers to the level of support that community members identify as available within their community. Perceived support is thought to be indicative of overall level of community support because for an individual to utilize resources for support they likely need to know the support exists (i.e., perceive). In other words, measuring perceived community support may also indirectly measure actual existence of support resources.

The few studies examining military community support and psychosocial adjustment have shown promising results. Rosen and colleagues found that military wives who perceived increased support from other unit wives reported less stress during periods when their husbands were away on duty (66). Military community support has also been shown to be predictive of positive psychosocial adjustment in children, even when other forms of family support were not (34). In children, fewer psychosocial difficulties were associated with higher parental utilization of community support

resources (34). These data provide preliminary evidence for a link between perceived community support and both parent and child psychosocial well-being, although further research is needed in this area to bolster these findings, to include policy and design/infrastructure support, and to elucidate possible mechanisms of action.

Online Community Support in the Military

In addition to traditional community support, online community support may be particularly useful within the military community due to the transient nature of military service members, the potentially long geographical distance between community members, and irregular work hours that could interfere with obtaining traditional community support. Internet resources, such as Military OneSource, Operation Homefront, and the Military Spouse Career Center website, are also particularly helpful for family members of deployed service members, who may feel isolated when their loved one deploys (76). Online community support within the military may also aid in reducing barriers to care. As one study found that service members were more likely to use online support services than traditional in-person support services (82). However, research comparing computer-delivered support to face-to-face support reveals mixed findings. For example, one study found that although both computer-delivered and face-to-face support lowered distress in military service members following a negative life event, the effect was larger in the face-to-face support sample (51). In sum, the current variety of online community support resources available to military families may play a particularly useful role for military service members and their families who may otherwise be isolated from support services. However, it is possible that optimal support

consists of a combination of online and face-to-face support for those who have access to both.

EXISTING ASSESSMENTS OF COMMUNITY SUPPORT

Perceived Community Support Questionnaire

At present, there are only a few standardized measures of perceived community support. One of these measures is the Perceived Community Support Questionnaire (PCSQ) (40). The PCSQ is based on the theory that community support is comprised of three dimensions: community integration, community participation, and community organizations. Each area of community support is assessed using Likert-type ratings of five items (ranging from *strongly disagree* to *strongly agree*). The PCSQ subscales each show appropriate levels of internal consistency. Cronbach's alpha for community organization (alpha: 0.87), community integration (alpha: 0.76), and community participation (alpha: 0.84) are all in the adequate range (40). The PCSQ also showed adequate convergent validity as high levels of perceived community support on the PCSQ correlated with lower levels of depression (40).

Even though Herrero and Gracia (40) were able to demonstrate that the PCSQ had adequate validity in their sample, the PCSQ is not an adequate measure to assess community support in the military. Due to the differences between military and civilian community support, it is likely that the measure would need to be adapted and validated in a military population. For example, the PCSQ does not take into consideration specialized military community support elements (e.g., military specific organizations, the focus on the overall mission within the military community, etc.) in its assessment of perceived community support. Additionally, the PCSQ was not developed or normed in

the U.S. It was originally developed in Spain and administered in Spanish. Subsequently the measure was translated to English by Herrero and Gracia, but it was never standardized for a U.S. population. There is also no reported validity for the English version available in the literature.

USAF Community Assessment Survey

One assessment of community support that has been developed specifically for the military community is the USAF Community Assessment Survey. Beginning in 1989, the USAF has been administering the AF Community Assessment Survey, which includes 31 scales targeted at addressing community capacity, psychological sense of connection, and effective collaboration among community agencies within the AF (77). The overall measure separates well-being into six domains, including physical health, strong social bonds, finding meaning in work, psychological health, access to vibrant communities, and financial health. Within the area of strong social bonds (e.g., the scale most closely related to community capacity), the measure is further broken down into scales such as community satisfaction, support from formal agencies, community safety, community unity, support from neighbors, peer stigma, institutional stigma, and effectiveness of services (77). These scales were developed by content area experts, including Drs. James Martin and Gary Bowen, as part of a later iteration of the survey. Overall, the measure appears to have adequate psychometric properties, including face validity, content validity, factorial validity, and construct validity (77). Although this measure addresses a wide range of community-related constructs (e.g., community capacity and sense of community), the overall construct of community support is not

measured. Based on the scale's content, it is likely that future researchers may draw on this measure to inform a more specific measure of community support.

PURPOSE AND SIGNIFICANCE

The DoD has recognized the importance of family life on service member readiness, but research specific to military community support and its impact on psychosocial difficulties is lacking. There are limited data specific to military children (19). Predictors and correlates of resilience in military children are still largely unknown (67). There is a paucity of information regarding how military community support impacts the prevalence of psychosocial difficulties in children (45). Kelley and colleagues (45) have suggested similar research to determine the importance of children's environment in psychosocial functioning. Similarly, Hoshmand and colleagues (41) have suggested that future studies should look at service members' sense of belonging within the military community and the impact on family functioning, such as psychosocial well-being. They also recommended that further research be conducted in regard to military families and community support (41).

Research determining the relationship between military community support and psychosocial functioning in children is vital to our nation's security and to the well-being of our military families. Therefore, the proposed study will explore whether or not community support acts as a resilience factor in military children. If community support is found to be a resilience factor, future research could be used to design and implement specific interventions to bolster resilience and decrease psychosocial difficulties in children of military families. To this end, characteristics of supportive military communities need to be identified so that they may be capitalized on most effectively.

Once the specific role of community support is identified within the military community, military policy makers can use this information to adapt existing policy on how to maximally foster U.S. military family readiness.

Due to the lack of appropriate measures of military community support, the development and standardization of a self-report measure assessing military community support in a sample of U.S. service members are warranted. The PCSQ and the USAF Community Assessment Survey will inform the development of a measure of community support within the military. A novel, comprehensive measure of military community support will be developed to determine the association between community support in a myriad of positive outcomes (e.g., youths' psychosocial well-being). This assessment tool may be used in the future to inform interventions and programs aimed at increasing the beneficial effects of strong community support systems in military communities.

SUMMARY

The entire military family plays a vital role in the operational readiness of the U.S. military. A key aspect of military family functioning is the psychosocial adjustment of military children. Unfortunately, to date, little research has been conducted in this specific area. However, based on data from civilian families, children's psychosocial functioning appears to be positively associated with community support. Thus, it appears plausible that a similar pattern would be observed among youth from military families.

The link between community support and psychosocial functioning may be explained using two widely supported models of adaptation: the Model of Stress Buffering and the T-Double ABC-X model. In order to examine the relationship between community support and psychosocial functioning in a military population, a measure of

community support that is appropriate for the military population first must be developed. Examination of the association between community support and family psychosocial functioning will be vital in informing future DoD initiatives targeted at increasing mission readiness by focusing on improving military families' psychosocial functioning through community support.

CHAPTER 2: Methods

SPECIFIC AIMS & HYPOTHESES

Study Overview

The present study examined the impact of parental perceived military community support on child psychosocial functioning using an original measure of perceived military community support, the Conforte Assessment of Military Perceived Support (CAMPS). This original measure was used along with parent report of child psychosocial functioning and parent self-report of psychosocial functioning to determine if perceived military community support and child psychosocial functioning are related; and to determine if this relation is mediated by parent psychosocial functioning. Participants included active-duty service members across the four U.S. service branches (i.e., Army, Navy, Air Force, and Marines) with at least one child between the ages of 6 and 18 years of age or individuals considered as primary caregivers within the families (e.g., spouses or partners of service members, etc.). Parents provided information about both themselves and their child, including demographic information (e.g., sex, race/ethnicity) and psychosocial functioning (e.g., current symptoms of depression, anxiety, etc.) in addition to level of parent perceived military community support as measured by the CAMPS. These variables were then be compared with level of child psychosocial functioning and level of parent psychosocial functioning. To enhance study validity,

further indicators of parent and child psychosocial functioning were also gathered. The study aims were as follows:

Aim 1: To develop and examine the psychometric properties of a measure of perceived military community support, the CAMPS.

Hypothesis 1a. The CAMPS will demonstrate adequate content validity such that a qualitative review by content area experts will confirm the content of the measure as appropriate.

Hypothesis 1b. The CAMPS will demonstrate adequate internal consistency for each of the subscales and the measure as a whole, as indicated by factor analysis and Cronbach alpha values $\geq .70$ for each of the subscales as well as the total measure.

Hypothesis 1c. The CAMPS will demonstrate adequate construct validity in that it will be associated with another measure of community support, the PCSQ.

Aim 2: To examine the relationship between perceived military community support (as reported on the CAMPS) and child psychosocial functioning and parent psychosocial functioning.

Hypothesis 2a. Higher levels of parent perceived military community support will be significantly associated with healthier child psychosocial functioning as reported on the Pediatric Symptom Checklist (PSC)

Hypothesis 2b. Higher levels of parent perceived military community support will be associated with healthier parent psychosocial functioning as reported on the Brief Symptom Inventory (BSI).

Aim 3: To explore the relationships among perceived military community support, child psychosocial functioning, and parent psychosocial functioning.

Hypothesis 3. Parent psychopathology will partially mediate the relationship between community support and child functioning. Specifically, it is expected that higher levels of parental perceived military community support will be associated with more optimal parent psychosocial functioning and that healthier parent psychosocial functioning will be associated with more positive child psychosocial functioning.

RESEARCH DESIGN & METHODOLOGY

Participants

Participants were active-duty service members (or other primary caregiver within the military family) with at least one child between the ages of 6 and 18 years old living at home at least 10 months out of the year. Due to study design, participants had to be able to read English and be able to access the online survey.

Table 1. Participant inclusion and exclusion criteria

Inclusion Criteria
Active-duty service member (USA, USN, USMC, USAF) or other primary caregiver within the military family
Have at least one child between the ages of 2 and 18 years of age living at home at least 10 months out of the year
English-speaking
Internet access

Exclusion Criteria
Inability to access or comprehend online survey

Recruitment

Participants were recruited at two different military medical facilities and through flyers on local community bulletin boards. Additionally, participants were recruited online through social networking sites (e.g., Facebook and Twitter) as well as flyers emailed to military service members. Participants were invited to share the study link with friends and family who may also be eligible. Individuals who were interested in participating in the study were provided with the study uniform resource locator (URL).

PROCEDURES

Preliminary Scale Development

As part of this study, the CAMPS was developed as an online assessment of perceived military community support within the military population. As noted above, the CAMPS items were informed by the USAF Community Assessment Survey as well as by the PCSQ (44). In developing the CAMPS, specific questions on these measures were reviewed based on face validity and applicability to the construct of perceived military community support. After initial question review, the questions were evaluated, revised, adapted, and consolidated in order to be applicable to all service branches, with consideration of the Stress-Buffering and T-Double ABC-X Models.

Scale development occurred in several phases. Prior to launching the online survey, a series of preliminary scale development phases were conducted in order to enhance the content validity of the CAMPS, including an informal focus group, peer content feedback, and piloting of the online survey. No quantitative data (i.e., survey item responses) collected during preliminary scale development was used as part of the final data analysis.

Next, an informal focus group consisting of students and professors within the Medical and Clinical Psychology Department at the Uniformed Service University of the Health Sciences was held to discuss military community support that is currently available and used by service members. Potential questions and content were discussed in an open format session of military service members representing each of the four branches of the U.S. armed forces (i.e., Army, Navy, Air Force, Marine Corps) who may or may not have children. Members who were not able to attend the open session also provided feedback via email. The purpose of this session was to get a general understanding of military culture and community support across the different service branches and to help refine the wording of questions to be more specific to each service branch.

Experts in the area of cultural diversity were also consulted in an effort to reduce bias. Experts included members of the Health Disparities Research Lab at the Uniformed Services University of the Health Sciences led by Dr. Tracy Sbrocco, the USUHS cultural diversity assistant professor, Dr. Jeanette Witter, and American University professor and researcher in the field of community-based stress in under-served populations, Dr. Noemi Enchautequi de Jesus. Potential questions and content were discussed in an open format session as well as through email.

Once the CAMPS was developed, peer feedback on the content of the CAMPS was obtained by administering the CAMPS in hardcopy format to six to eight service members/spouses within the Medical and Clinical Psychology Department at the Uniformed Service University of the Health Sciences, including individuals with children as well as individuals who do not have children but who are likely to be familiar with

support that is available within the military community. In addition to the CAMPS, other measures that were created specifically for this study (e.g., a demographic questionnaire and treatment history questionnaire) were administered in pen-and-paper format. Individuals were asked to complete the paper questionnaires and provide written feedback on the content and wording of the questions, with a focus on feedback rather than responses. Survey responses were not formally analyzed during this phase of scale development. Rather, the focus of this phase was on the qualitative feedback in regard to the process of taking the assessments.

The final phase of preliminary scale development was an online piloting of the assessment battery. To pilot the final survey, primary caretakers of a child in an active duty military family who have children within the age range of the study were provided with a link to the survey and asked to volunteer to complete it as if they were enrolled in the study. Feedback was informally solicited (i.e., via discussion with the study author AC) regarding average length of time needed to complete the survey, the ease of using the website, and technical problems accessing or using the survey that may require troubleshooting (e.g., ability to save answers and return at a later time). Additionally, data retrieval and ability to transfer data to a data analysis program (IBM Statistical Package for the Social Sciences [SPSS]) was tested.

Final scale administration

Interested individuals were provided with either a direct link to the online survey or written instructions for accessing the online survey. Upon accessing the website, participants were provided with a basic description of the study, including the purpose, procedures, risks, benefits, time commitment and voluntary nature of the study. If the

individual agreed to participate, s/he consented to be a part of the research study by clicking a box on the website beside the statement “Yes, I agree to participate in this study.” Potential participants were also asked to confirm their status as a primary caretaker of a child in an active duty military family by clicking a box on the main website. Individuals who do not electronically agree to participate in the survey and those who are not a primary caretaker of a child in an active duty military family were redirected to a different webpage that thanks them for their time and consideration. Participants were then be directed to the online survey, and informed of the estimated time required to complete the survey, which was based on the pilot participants’ experiences as noted above. Participants who had more than one child were asked to choose only one child to base their responses on and to identify the demographic information specific to that child. After completing the survey, participants were provided with the contact information of the researcher in case of questions or concerns. A list of military community resources were provided on the last page (e.g., link to Military OneSource free online counseling services). No compensation was provided for participating in the study.

MEASURES

The online survey described above consisted of the following assessments:

Conforte Assessment of Military Perceived Support (CAMPS)

There is no concise, validated assessment tool that can be used to specifically measure perceived military community support. Therefore, the CAMPS was designed and validated for the present study to measure perceived level of community support in active duty service members and other primary caregivers within military families (e.g.,

spouses). As part of validating the CAMPS, subject matter experts established content validity through a review of the items. Construct validity was established through a comparison with civilian measures of perceived community support (i.e., PCSQ).

Pediatric Symptom Checklist (PSC)

The PSC is a 35-item parent-report questionnaire that asks parents to rate the presence and frequency of a wide range of child problems (48). Average time of completion of the PSC is 5 minutes (48). The PSC is widely accepted as a valid and reliable measurement of internalizing and externalizing symptoms, as well as symptoms of attention (48). For this study, the PSC total score was used as a global measure of child psychosocial adjustment. The PSC has been found to have similar specificity and sensitivity compared to a longer measure of child psychosocial adjustment, the Child Behavior Checklist and has been used with children ages 2 through 18 (73).

Brief Symptom Inventory (BSI)

The BSI is a 53-item self-report of adult psychopathology that asks individuals to rate symptoms on a 5-point Likert-type rating scale (i.e., scale zero to four) (33). Results are communicated as a global severity index that is based on number and intensity of symptoms reported (33). For this study, BSI global severity index was used as a current measure of parent psychopathology at a specific point in time. The BSI has demonstrated good validity and reliability (33). The measure takes approximately 10 minutes to complete and was administered within the broader online assessment battery. Questions asking about suicidal ideation were removed due to the inability of study staff to communicate with and evaluate the needs of individuals who may indicate suicidal

ideation, due to the anonymous online survey format. Removal of the suicidal ideation items was not predicted to impact overall measure validity, as it is common practice to remove suicide items from self-report questionnaires for study purposes (72).

Perceived Community Support Questionnaire (PCSQ)

As previously described, the PCSQ is a 14-item self-report measure of perceived community support that requires respondents to indicate their level of agreement on a Likert-type scale (i.e., rating one through five). The PCSQ consists of three subscales (i.e., community integration, community participation, and community organizations) that make up the total score of perceived community support. The measure is considered to be a reliable ($\alpha \geq 0.86$) and valid assessment of perceived community support (44). The PCSQ takes approximately ten minutes to complete and was administered as part of the online survey in order to establish construct validity of the CAMPS.

Demographic Survey

A demographic survey was created for the purposes of this study to help account for variability related to demographic features. The demographic survey asks parents to report the following information:

Parent(s) and child sex
Parent(s) and child race
Parent(s) and child ethnicity
Parent marital status
Parent perception of self as primary, secondary, or equal caregiver
Parent(s) and child age

Parents dual military status
Parent(s) number of years in military
Parent(s) military occupational specialty (MOS)
Current base type (e.g., small, medium, large)
Current family housing status (i.e., living on base or off base)
Number of years at current duty station
Current parent(s) deployment status
Deployment history over past 12 months
Parent(s) rank
Parent(s) branch of service

Psychosocial Treatment History

To provide additional evidence of child and parent psychopathology, a psychosocial treatment history was administered asking parents to report on both parent and child psychosocial treatment history, including history of mental health diagnoses, history of being treated by a licensed mental health professional (e.g., psychologist, psychiatrist, social worker, counselor), and history of prescribed medication for a mental health condition. Additionally, parents were asked to report whether they have thought that they or their child needed to see a mental health professional.

CHAPTER 3: Statistical Analyses

Statistical analyses were performed using IBM SPSS Statistics version 24 (2014).

AIM ONE

Aim One Analysis

In order to examine the psychometric properties of the CAMPS, a factor analysis was used to evaluate subscales within the full measure. Factor analysis was used rather than a component analysis in order to avoid inflating the variance accounted for (28). Additionally, a maximum likelihood factor extraction method was used based on a normal distribution of the variables. The Scree test was used to determine factors retained. Direct oblimin rotation was used based on expected correlation among factors. Internal consistency was determined by calculating Cronbach's alpha for each of the subscales, as well as for the measure as a whole. To evaluate construct validity, a Pearson's r was calculated to determine correlation between the CAMPS and another measure of community support, the PCSQ. Content validity was established qualitatively through subject matter experts and focus groups during the development of the CAMPS.

Expected Results

It was expected that Cronbach's alpha would be $\geq .70$ for each of the subscales as well as the total measure, indicating adequate internal consistency. In regard to construct validity, it was expected that the CAMPS and PCSQ will be somewhat correlated because they both are designed to measure perceived community support; however, a strong correlation was not expected because the CAMPS is designed specifically for the military population and includes a more comprehensive assessment of community assessment

(e.g., more items, inclusion of policy and infrastructure facets of community support, etc.). Therefore, a Pearson's r of approximately .5 was expected (i.e., a large effect size). This expected Pearson's r of .5 is supported in the literature, as other studies validating similar measures found correlations between measures of social support to range from .44 to .79 (89).

PRELIMINARY ANALYSES FOR AIMS 2 & 3

In order to inform the analysis of aims 2 and 3, descriptive statistics were used to characterize the sample using data provided by the demographic questionnaire. Additionally, demographic data were examined for possible associations with the dependent variable using correlations for continuous variables (e.g., age, number of years in the military and number of years at current duty station) and analysis of variance (ANOVAs) for categorical variables (e.g., sex, race/ethnicity, marital status, housing status, deployment status, rank, and branch of service). Statistically significant demographic variables were considered for inclusion in the models for Aim 2 and Aim 3 as covariates. (See Figure 8.)

Furthermore, the validity of dependent variable self-report measures (e.g., PSC and BSI) was assessed using t-tests for both parent and child psychosocial adjustment. Parents who indicated a positive psychosocial treatment history for themselves (e.g., answering "yes" to any of the parent psychosocial history questions) were included in the positive psychosocial history group, whereas those who screen negative for a treatment history (e.g., answering "no" to all of the parent psychosocial history questions) were included in the negative psychosocial history group. Children were similarly grouped

into positive and negative psychosocial history groups based on parent report on the child psychosocial history questions.

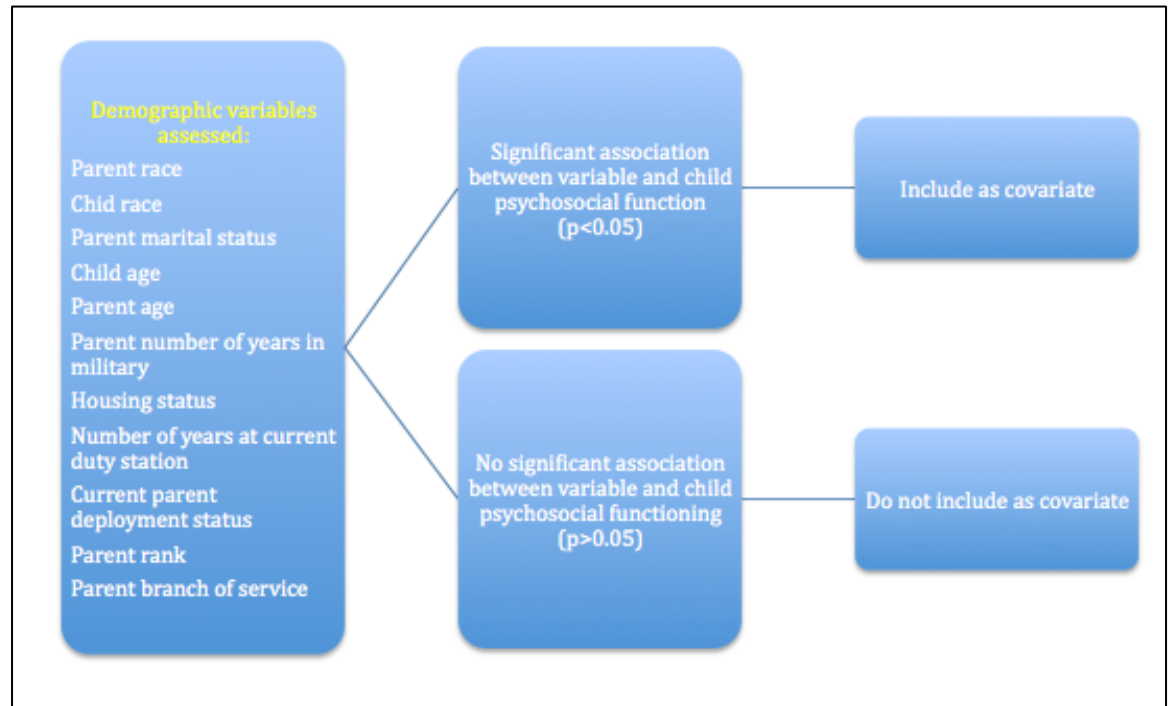


Figure 8. Decision tree for inclusion of variables as covariates in analysis of Aim 2.

AIM TWO

Proposed Analysis

In order to examine the relationship between perceived military community support and child psychosocial functioning, a multiple linear regression was used to determine the correlation between mean score on the CAMPS and mean score on the PSC, accounting for relevant covariates. Prior to interpreting the results of the correlation test, the data was examined to determine if assumptions of the simple linear regression are met. Data was visually inspected using a histogram and scatter plot to assess normality of the distribution, verify a linear relationship, and confirm the absence of outliers.

Expected Results

It was expected that the assumptions of a linear regression will be met and that perceived military community support and child psychosocial functioning will be correlated at a statistically significant level of $p < .05$.

AIM THREE

Proposed Analysis

Bootstrapping was used to test for the presence and significance of a mediation effect (e.g., to test the hypothesis that parent psychosocial functioning partially mediates the relationship between perceived community support and child psychosocial functioning) through the use of SPSS macros as described by Preacher, 2004 (70). Bootstrapping is based on the Baron and Kenny (8) method of testing for a mediation effect. A mediating relationship is one in which some variable intervenes between the other two variables. First, the relationship between the independent variable (i.e., perceived community support) and the mediator (i.e., parent psychosocial adjustment) was examined using a regression to determine if perceived community support is a significant predictor of parent psychosocial functioning (*A* path). Next, the relationship between the mediator (i.e., parent psychosocial adjustment) and the dependent variable (i.e., child psychosocial adjustment) was examined using a regression to determine if parent psychosocial functioning is a significant predictor of child psychosocial functioning, while covarying for the independent variable (*B* path). Next the relationship between perceived community support and child psychosocial functioning (*C* path) was examined using a regression to determine if perceived community support is a significant predictor of child psychosocial functioning. Finally, since all three paths are significant, a multiple regression was used to determine if the significance between perceived

community support and child psychosocial functioning is greatly reduced or nonsignificant when parent psychosocial functioning and perceived community support are used simultaneously to predict child psychosocial functioning (C' path) (see Figure 9).

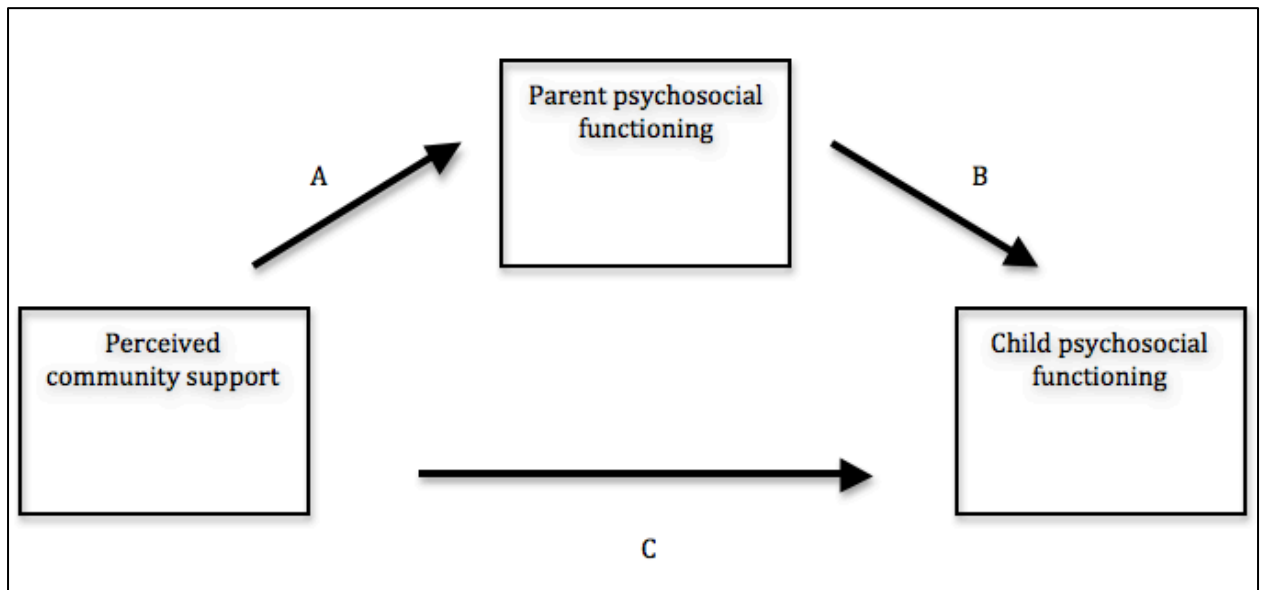


Figure 9. Aim 3 mediation model

Unlike, the traditional Baron and Kenny method, bootstrapping allows for the calculation of confidence intervals by repeatedly re-sampling the data thousands of times through sampling with replacement (70). Using this bootstrapping method, the direct effect of perceived community support on child psychosocial functioning was able to be quantified when controlling for parent psychosocial functioning. Further, this method allowed for the A path, B path, and C path to be quantified.

Expected Results

It was expected that the *A*, *B*, and *C* paths would be all be statistically significant using the bootstrapping method for assessing the mediation model. Additionally, it was expected that parent psychosocial functioning would partially mediate the relationship between perceived community support and child psychosocial functioning.

STATISTICAL CONSIDERATIONS

The proposed study used cross-sectional data to study a hypothesized longitudinal process (i.e., based on the proposed relationship, community support influences parent well-being, which effects child well-being). There are several limitations inherent in using a mediation model to analyze cross-sectional data, particularly that causation and directionality of the relationships cannot be known for sure (61). While the current study is based on literature that suggests that parent functioning influences child functioning, it is possible that the relationship exists in the reverse (e.g., child functioning precedes parent functioning). The clearest way to test this longitudinal relationship would be through a longitudinal design. However, for preliminary studies it is also plausible to get some information on the directionality of the relationship by interchanging the mediator and the outcome variables in the calculation of the mediation model (8). This method was utilized in the current study to provide more evidence that the relationships exist in the direction theorized. While the current study provides a basis for understanding the relationships among perceived community support, child psychosocial functioning, and parent psychosocial functioning, future longitudinal studies confirming the existence of the hypothesized relationship will be needed as some statistical methodologists argue that using a cross-sectional design to study a longitudinal process will result in overstated results (61).

CHAPTER 4: Results

SURVEY COMPLETION

Three hundred and eighteen individuals began the survey, of whom 120 stopped before providing consent to participate. Fifty-three of these 120 individuals were excluded because they were not active duty or did not have a child with an active duty service member. Three individuals were excluded because the child did not live with them at least ten months out of the year. Three additional individuals clicked “no” when asked to provide consent and 61 discontinued the survey without providing a reason. An additional 38 participants stopped after the demographic questions. A total of 157 participants completed the CAMPS, 143 completed the PSC, and 131 completed the BSI. (See Figure 10.)

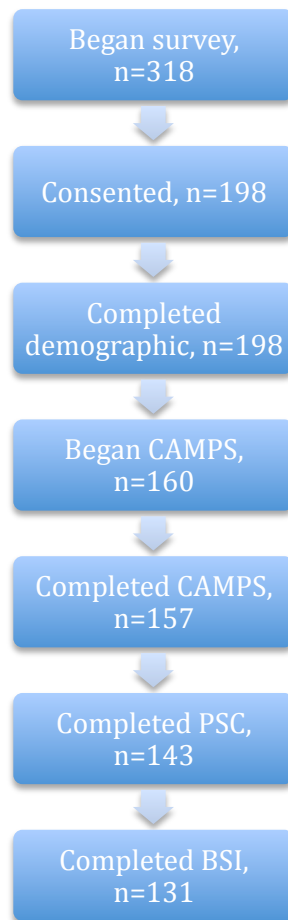


Figure 10: CAMPS Completion Flowchart

DEMOGRAPHICS

The sample was comprised of primarily married (94.3%), college educated (68.8%), Non-Hispanic white (85.7%), females (81.5%) who considered themselves to be either the child's primary caregiver (41.4%) or an equal caregiver with the child's other parent (49.0%) and who had a mean of 2.22 children ($SD=.99$). The mean age of respondents was 34.06 years ($SD=6.18$). Forty-six and a half percent of target children were female and 76.4 percent were Non-Hispanic White. The mean age of the target child was 6.08 years ($SD=4.60$). Individuals who provided demographic information, but discontinued the survey before completing the CAMPS (i.e., "Discontinuers"; $n=38$) did not differ significantly in regard to any demographic variable collected compared to

individuals who completed the demographic information and the CAMPS (i.e., “Continuers”).

Table 2: Demographic Composition of Participants

	<i>Continuers</i>		<i>Discontinuers</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
n=198				
Age (y)	34.06	6.18	33.29	7.30
Sex (% female)	81.5		73.5	
Race (% Non-Hispanic White)	85.7		73.5	
Child age (y)	6.08	4.60	6.27	4.64
Child sex (% female)	46.5		50.0	
Child race (% Non-Hispanic White)	76.4		77.0	
Marital status (% married)	94.3		94.1	
Marital status (% separated)	2.5		2.9	
Marital status (% divorced)	2.5		0	
Marital status (% never married)	0.6		2.9	
Education level (% Bachelors or higher)	68.8		55.6	
Household Income (% Less than 25,000)	1.3		3.8	
Household Income (% 25k-34.9k)	11.5		15.4	
Household Income (% 35k-49.9k)	11.5		19.2	
Household Income (% 50k-74.9k)	19.9		15.4	
Household Income (% 75k-99.99k)	17.3		15.4	
Household Income (% 100k-149.9k)	23.1		19.2	
Household Income (% 150k or more)	15.4		11.5	
Parenting Role (% single parent)	1.9		7.4	
Parenting Role (% primary caregiver)	41.4		40.7	

Parenting Role (% secondary caregiver)	7.0		18.5	
Parenting Role (% equal caregiver)	49.0		33.3	
Total number of children	2.22	.99	2.12	.82
Household members (% living with extended family)	5.7		7.7	

MILITARY DEMOGRAPHICS

Forty-six and a half percent of the respondents were active duty. A majority of the families were officers (59.9%) who were stationed in the contiguous United States of America (CONUS) (86.9%) at a large duty station (44.6%) and lived outside of base or post (77.1%). The average total number of years that the family had been in the military (i.e., either the respondent, if active duty, or the child's other parent) was 12.75 ($SD=6.11$). Army (36.3%), Navy (29.3%), Air Force (24.2%), and Marine (9.6%) families were all represented in the sample. Approximately one-fourth of the sample had been deployed in the past 12 months, with 6.4% currently deployed. Of those who had been deployed in the past 12 months, they were deployed a mean of 4.88 months ($SD=2.67$).

Table 3: Military Demographics (n=198)

Military status (% active duty)	46.5	
Total years in military	12.75	6.11
Branch of service (% Army)	36.3	
Branch of service (%Navy)	29.3	
Branch of service (% Air Force)	24.2	
Branch of service (% Marine Corps)	9.6	
Rank (% enlisted)	40.1	
Deployment status in past 12 months (% deployed)	25.5	
Of those deployed, months deployed in past 12 months	4.88	2.67
Current deployment status (% currently deployed)	6.4	
Home location (% off-base)	77.1	
Base location (%CONUS)	86.9	
Base size (% small)	29.9	
Base size (% medium)	19.7	
Base size (% large)	44.6	
Years at current duty station	2.63	1.00

Child Characteristics

PSC total scores (n=143) ranged from 35-84 ($M=51.06$, $SD=10.30$). CSQ total scores (n=149) ranged from 4-9 ($M=7.52$, $SD=1.17$). A majority of the children of interest screened positive (i.e., endorsing one or more statements out of four) for psychosocial difficulties (93%). Children of interest who screened positive on the CSQ also had significantly higher PSC scores ($M = 61.15$, $SD = 11.16$) compared to those who screened negative on the questionnaire [$(M=48.04$, $SD=7.84)$; $t(41) = -.6.30$, $p<.001$].

Table 4. Child Characteristics

n=143	<i>M</i>	<i>SD</i>
Pediatric Symptom Checklist	51.06	10.30
Children Screening Positive (%)	93	
Child Screening Questionnaire-Positive Group	1.74	0.31
Child Screening Questionnaire- Negative Group	1.38	0.24

Parent Characteristics

BSI total scores (n=131) ranged from 50-203 ($M=75.71$, $SD=30.59$). A majority of the respondents screened positive (i.e., endorsing one or more statements out of four) for psychosocial difficulties (79.6%). PSQ total scores (n=148) ranged from 4-9 ($M=6.50$, $SD=1.67$). Respondents who screened positive on the PSQ also had significantly higher BSI scores ($M=85.93$, $SD=35.25$) compared to those who screened negative on the questionnaire [$M=63.24$, $SD=16.98$; $t(106)=-22.69$, $p<.001$].

Table 5. Parent Characteristics

n=131	<i>M</i>	<i>SD</i>
Brief Symptom Inventory	75.71	30.59
Parents Screening Positive (%)	79.6	
Parent Screening Questionnaire-Positive Group	1.70	0.69
Parent Screening Questionnaire- Negative Group	1.25	0.33

COMMUNITY SUPPORT MEASURES

CAMPS mean scores ranged from 1.60-4.92 ($M=3.41$, $SD=.69$). Mean CAMPS scores were non-normally distributed, with skewness of -0.53 ($SE=.194$) and kurtosis of -0.12 ($SE=.39$) (Komogorov-Smirnov statistic .106, $p<.01$). PCSQ total scores ranged

from 18-68 ($M=46.72$, $SD=9.69$). Although there are no clinical cut-offs for this measure, these results are consistent with levels of perceived community support using the PCSQ in a civilian sample ($M=42.92$, SD -not reported) (44).

HYPOTHESIS TESTING

Aim 1

To develop and examine the psychometric properties of a measure of perceived military community support, the CAMPS.

Hypothesis 1a.

It was hypothesized that the CAMPS would demonstrate adequate content validity such that a qualitative review by content area experts would confirm the content of the measure as appropriate.

Results of Hypothesis 1a.

Prior to data collection, eight content area experts within the four military branches, including both parents and non-parents, provided initial feedback about the construct of military community support in a focus group format. When asked to share what they initially think of when they hear the term military community support, focus group members primarily responded with the names of formal support agencies and programs within their service (e.g., Army Community Services; Family Readiness Groups; Morale, Welfare, and Recreation events; Garrison support; Installation Command; Airman and Family Readiness Centers; Information, Tickets, and Travel.) Specific roles within the military, such as Chaplains and First Sergeants were also named as being associated with military community support.

When queried about the formal routes of obtaining individual, family, or couples support within the specific service branch, individuals again listed the formal agencies described in question one. They also included Military Family Life Counseling, Army OneSource, Military OneSource, Installation Mental Health Facilities, Better Opportunities for Single Soldiers (BOSS) Program, American Red Cross, Flight Support Center, Family Advocacy Center, Health and Wellness Center, Force Support Squadron, and the Child Development Center. Focus group members were asked to share any other important considerations in accessing/receiving support services within their branch of service. Responses may be found in Table 4. Generally, focus group members shared that in some cases service members must access support services by going through members of their command, particularly in the Army. After the questions were created, six military service members who had children reviewed CAMPS items for applicability within the military community and agreed that it had face validity.

Table 6. Focus group responses in response to “Is there anything important to note about accessing/receiving support services within your branch of service?”

“Sometimes, not always, soldiers must access support through their commands...in particular, the Army Emergency Relief. Funds must be signed off by a commander for Soldiers to receive financial assistance in this way. It's usually a requirement to in- and out-process with ACS at each permanent change of station move, partly to ensure soldiers are aware of this as an option. Additionally, the Lending Closet or temporary housing kits, including pots/pans, cots, cutlery, dishes, coffee pots, etc., are available to borrow from ACS when you arrive to a new base and don't have household goods yet. I would never have known if not having to in-process at ACS. It was a life-saver!” –Soldier
“In the Army, each installation has a senior combatant commander who is in charge of everyone on the post. She or he is responsible for everything that happens or does not happen. Typically, this individual will be a Corps (i.e., ~34,000 personnel) or Division (i.e., 10-15,000 personnel) commander (i.e., 2 or 3-star General Officer).”— Soldier
“Often, the senior commander has a component called the garrison commander. The garrison commander is in charge of making the post run (e.g., like a mayor). Although he is not the legal commander, he is in charge of all of the installation services (including community-based services). The garrison commander is part of a component called INCOM. He is responsible to the combatant commander who is his "rater" in the chain of command (although the scope of their missions are often very different). Ultimately the senior combatant commander is responsible for everything on the post, regardless of unit or agency. The Army has this split to allow the combatant commander to focus on unit readiness, warfighting, and combat missions. Each unit (combat or INCOM) has indigenous support including mental health officers (typically an early career psychiatrist or clinical psychologist), Family Readiness Groups, MFLC, a Chaplain, the BOSS program, and a full-time Family Readiness Support Assistant (FRSA). So- when you consider community support, you have to ask yourself "is this support agency part of the installation, the unit, or a stand-alone unit (like a Military Treatment Facility)?" Often one can tell by asking, "who is in charge of this support agency?" and "what kind of unit is this?"— Soldier
“The financial assistance the AFRCs provides comes from the Air Force Aid Society, which is available to Airmen and their eligible family members to meet immediate needs in an emergency situation (e.g. emergency travel, vehicle expenses, funeral expenses, child care, etc.) via interest free loans and grants.” –Airman

“Family has now been defined by specific aspects...not just spouses. A couple examples include cohabiting for a certain amount of time and having a child together even if the two people are not married. Many services will recognize that and give services to all members of the "family" while others will only give services to those that are related by birth or law.” –Airman
“I haven't referred anyone, or know anyone who has used these services, but it may be that you can contact the individual groups, such as FAP, but you could also go to the ACS and they direct them to where they need to go.” —Soldier
“Raters are now required to include a "blurb" /reference about mental health in Soldiers' initial counseling. I don't know the exact wording.” —Soldier
“When I thought of military community I thought of all my buddies and their dependents - having social events with them, at their homes, etc (more unofficial unit support) Then again, I also thought about unit support - more official type of unit support - having family days pre and post deployment on base, with just the unit members and their families.” –Sailor

Experts in the area of cultural diversity were also consulted in an effort to reduce bias. Experts included members of the Health Disparities Research Lab at the Uniformed Services University of the Health Sciences led by Dr. Tracy Sbrocco, the USUHS cultural diversity assistant professor, Dr. Jeanette Witter, and American University professor and researcher in the field of community-based stress in under-served populations, Dr. Noemi Enchautequi de Jesus. Experts were asked what they think of when they think of community support within minority communities. Results are summarized in Table 7.

Based on responses by the experts, question wording was adapted and two questions were added (i.e., opportunities, facilities, and services are equally accessible in

the military community; someone like me cannot make a positive difference in the lives of others.) Experts in the area of cultural diversity also suggested collecting information regarding the participant's experience of minority stressors, including stressors related to immigration, English as a second language, legal, and financial matters. As such, these items were added to the demographic information collected as part of the study.

Table 7. Themes expressed by experts to the question, "When you think of community support within minority communities, what are some issues that come to mind?"

Need to consider common stressors to minority groups that impact needs of minority communities.
Consider when support is relevant to minority cultural groups (e.g., preventative vs. after a stressor has occurred).
Who individuals go to for support may differ for individuals within a cultural minority group (e.g., family members, church leaders vs. professional mental health providers or physicians) may differ.
Cultural minority groups may have different expectations of support and expectations of what is considered helpful
There are barriers to care including SES, language, etc. that may get in the way of minority individuals accessing and benefitting from support programs.

Hypothesis 1b.

It was hypothesized that the CAMPS would demonstrate adequate internal consistency for each of the subscales and the measure as a whole, as indicated by factor analysis and Cronbach alpha values $\geq .70$ for each of the subscales as well as the total measure.

Results of Hypothesis 1b.

The CAMPS originally contained 28 items. Three items did not load onto the measure based on factor loadings of less than .40(27). Based on qualitative analysis, three items were measuring a construct separate from perceived military community support, and rather measured involvement in the community (I am active in military-sponsored community events and activities; I never take part in social events in the military community; I respond to calls for support in the military community), and were thus removed. Factor analysis using the maximum likelihood factor extraction method with direct oblimin rotation and examination of the scree plot (See Figure 11) for the remaining 25 items indicated a one-factor structure that explained 40% of the variance (See Table 8). Overall the CAMPS demonstrated excellent internal consistency. Cronbach's alpha for the total scale was .943.

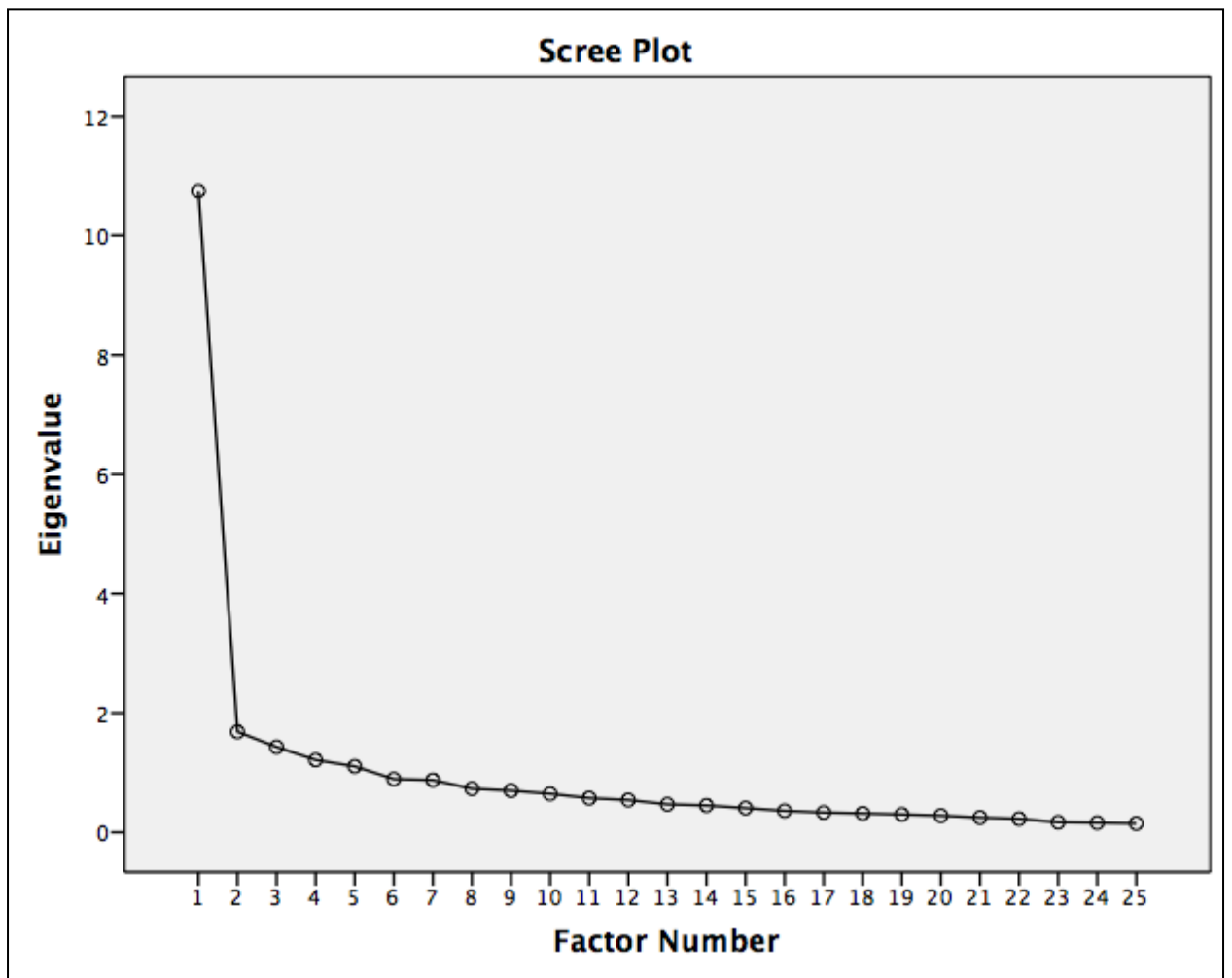


Figure 11. Scree plot used to determine number of factors retained in the measure

Table 8. Factor loadings and communalities based on a factor analysis with direct oblimin rotation for 25 item Conforte Assessment of Military Support (CAMPS) (N=157)

Items	Factor Loadings	Communalities
There is NO ONE within the military community who would take care of my child(ren) in an emergency.	.756	.421
I feel like the military community is my own.	.743	.472
There is NO ONE within the military community that would provide transportation if I needed it.	.735	.432
My opinions are NOT valued in the military community.	.734	.274
There is NO ONE within the military community that would listen to me and/or help me feel better when I feel down.	.732	.305
Military family support agencies are effective in addressing the needs of military families. Some examples of these agencies include: USA Army Community Service, USAF Airman & Family Readiness Center, USN Fleet & Family Support Center, USA Family Readiness	.722	.304
I feel respected within the military community.	.722	.444
I feel a collective sense of community with others in the military community.	.687	.539
I am DISSATISFIED with the military community as an environment for raising children.	.667	.552
There are people within the military community that would lend me household tools or equipment if I needed it.	.659	.435
I DO NOT feel connected to other military families.	.657	.540
Staff from military agencies know and understand the needs of military families.	.651	.344
I feel a sense of common mission and purpose with others in the military community.	.649	.572
Military mental/behavioral health professionals are effective in addressing the needs of military families.	.608	.521
I am DISSATISFIED with the availability of activities for children and youth in the military community.	.607	.368
Chaplains are effective in addressing the needs of military families.	.599	.423
There are people within the military community that would give me valuable information about community agencies and resources if I needed it.	.586	.359

Opportunities, facilities, and services are equally accessible in the military community.	.581	.369
Military online sources (e.g., Military One-Source) are effective in addressing the needs of military families.	.571	.326
I am DISSATISFIED with the availability of mental health care for military families.	.557	.521
Someone like me CANNOT make a positive difference in the lives of others within the military community.	.552	.310
I am satisfied with the military as a way of life.	.552	.202
Members of the military community take advantage of opportunities to support the needs of other service members and families within the military community.	.524	.263
I am DISSATISFIED with the quality of preparation that military families get to deal with personal and family problems before a deployment.	.513	.535
I am satisfied with the quality of mental health care for military families.	.450	.338

Hypothesis 1c.

It was hypothesized that the CAMPS would demonstrate adequate construct validity in that it would be associated with another measure of community support, the PCSQ.

Results of Hypothesis 1c.

As hypothesized, there was a significant positive correlation between the two measures, $r(156) = .64, p < .001$, indicating adequate construct validity. (See Figure 11.)

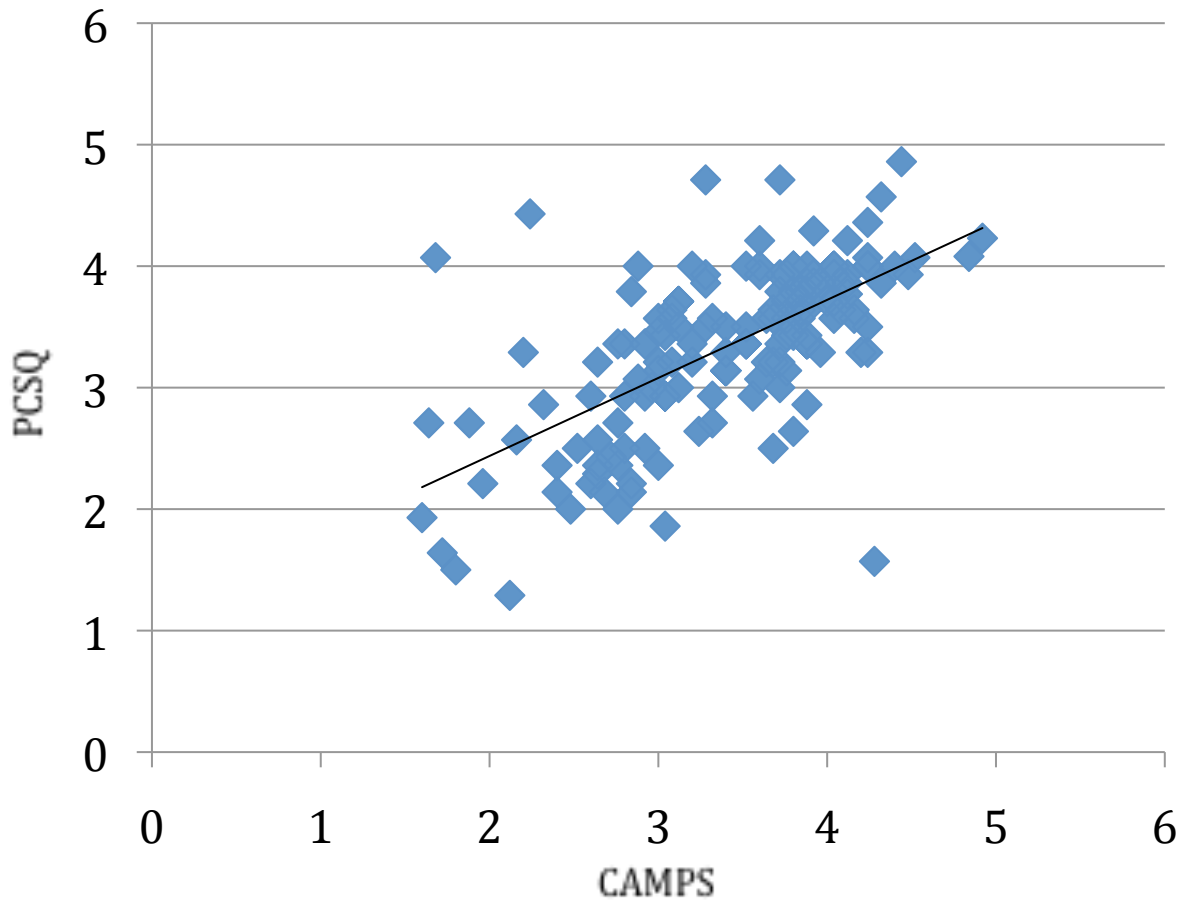


Figure 12. Correlation between CAMPS and PCSQ, $r(156)=.64$, $p<.001$

AIM 2

To examine the relationship between perceived military community support (as reported on the CAMPS) and child psychosocial functioning and parent psychosocial functioning. For Aims 2 and 3, the following demographic variables were assessed in regard to correlation with the outcome variables: parent and child race and ethnicities, parent and child ages, parent and child sexes, parent marital status, education level, income level, number of children in the family, parenting role, personal military status, number of years in the military, military status of parent's spouse, branch of service, rank, size of base, deployment status, deployment history over past 12 months, number of months deployed over last 12 months, location of base, living on or off base/post, number

of years stationed at current duty station, persons living with the parent and child, and the existence of stressors (i.e., language barriers, difficulty finding gainful employment, immigration difficulties, financial difficulties, geobachelor status). As appropriate below, the significantly correlated variables were controlled for during analysis. Two variables: including, dichotomized income (i.e., making at least \$75,000 a year vs. making less than \$75,000 a year) and parent sex (i.e., male or female) were found to be significantly correlated with PSC scores. Seven variables: including, dichotomized education level (i.e., holding a Bachelors degree or higher vs. less than a Bachelors degree), dichotomized income level (i.e., making at least \$75,000 a year vs. making less than \$75,000 a year), parent age, parent sex, personal military status (i.e., active duty or non-active duty), enlisted status (i.e., enlisted vs. officer), years in the military were found to be significantly correlated to BSI scores.

Hypothesis 2a.

It was hypothesized that higher levels of parent perceived military community support would be significantly associated with healthier child psychosocial functioning as reported on the Pediatric Symptom Checklist (PSC).

Results of Hypothesis 2a.

After adjusting for relevant covariates, CAMPS score was significantly associated with PSC score, $\beta = -.43$, $t(141) = -5.80$, $p < .01$.

Hypothesis 2b.

It was hypothesized that higher levels of parent perceived military community support would be associated with healthier parent psychosocial functioning as reported on the Brief Symptom Inventory (BSI).

Results of Hypothesis 2b.

After adjusting covariates, CAMPS score was significantly associated with BSI score, $\beta = -.33$, $t(124) = -5.25$, $p < .01$.

AIM 3

To explore the relationships among perceived military community support, child psychosocial functioning, and parent psychosocial functioning.

Hypothesis 3.

It was hypothesized that parent psychopathology will partially mediate the relationship between community support and child functioning. Specifically, it was expected that higher levels of parental perceived military community support would be associated with more optimal parent psychosocial functioning and that healthier parent psychosocial functioning would be associated with more positive child psychosocial functioning.

Results of Hypothesis 3.

The relationship between level of perceived community support and child psychosocial functioning was partially mediated by parent psychosocial functioning. No covariates were included in the model, as none significantly correlated with the outcome

variables. The model, as hypothesized, was supported. (See Figure 12.) The relationship between level of perceived community support and parent psychosocial functioning (a path) was statistically significant, $\beta = -.45$, $t(130) = -6.79$, $p < .01$. The relationship between level of parent psychosocial functioning and child psychosocial functioning (b path) was statistically significant, $\beta = .13$, $t(130) = 3.15$, $p < .01$. The total effect of perceived level of community support on child psychosocial functioning (c path) was also statistically significant, $\beta = -.20$, $t(130) = 6.03$, $p < .01$. The direct effect of perceived level of community support, adjusting for parent psychopathology (c' path) was statistically significant, $\beta = -.15$, $t(130) = -3.85$, $p < .01$. Using bias-corrected bootstrapping with 5,000, bootstrap samples, the indirect effect of the parent psychosocial functioning on the relationship between perceived community support and child psychosocial functioning was also found to be significant, $p < .01$. Together, parent psychosocial functioning and perceived military community support explained 24% of the variance in child psychosocial functioning, $F(2,42) = 24.24$, $p < .01$. In order to evaluate the directionality of the model, child psychosocial functioning was also considered as a potential mediator in the relationship (Figure 13). However, results of the directionality evaluation were inconclusive and did not significantly differ from the proposed model.

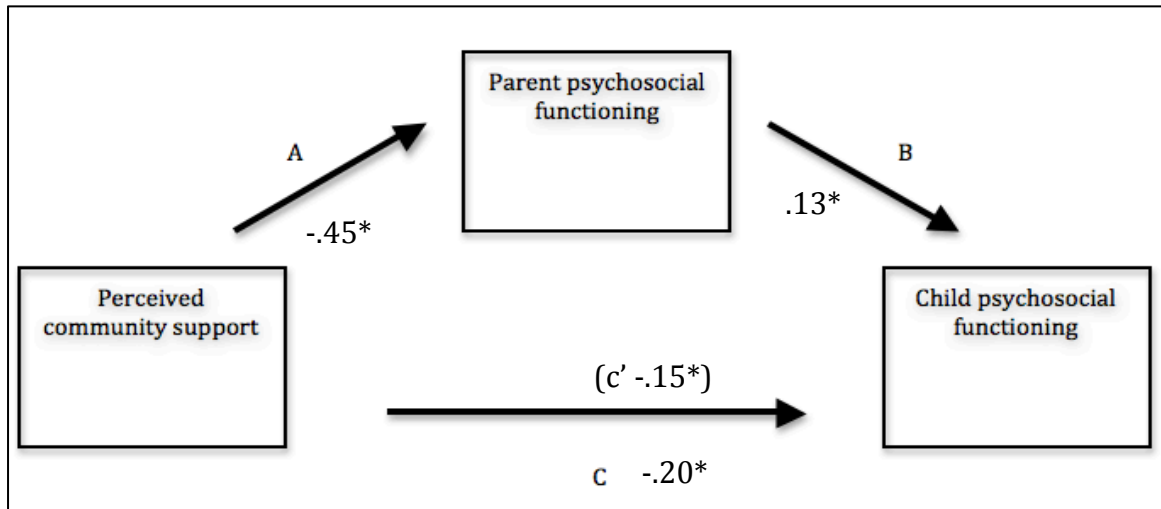


Figure 13: Mediation Model (n=131)

Standardized regression coefficients for the relationship between perceived community support and child psychosocial functioning as mediated by parent psychosocial functioning. The standardized regression coefficient between perceived community support and child psychosocial functioning after controlling for parent psychosocial functioning is in parentheses. $*p < .01$

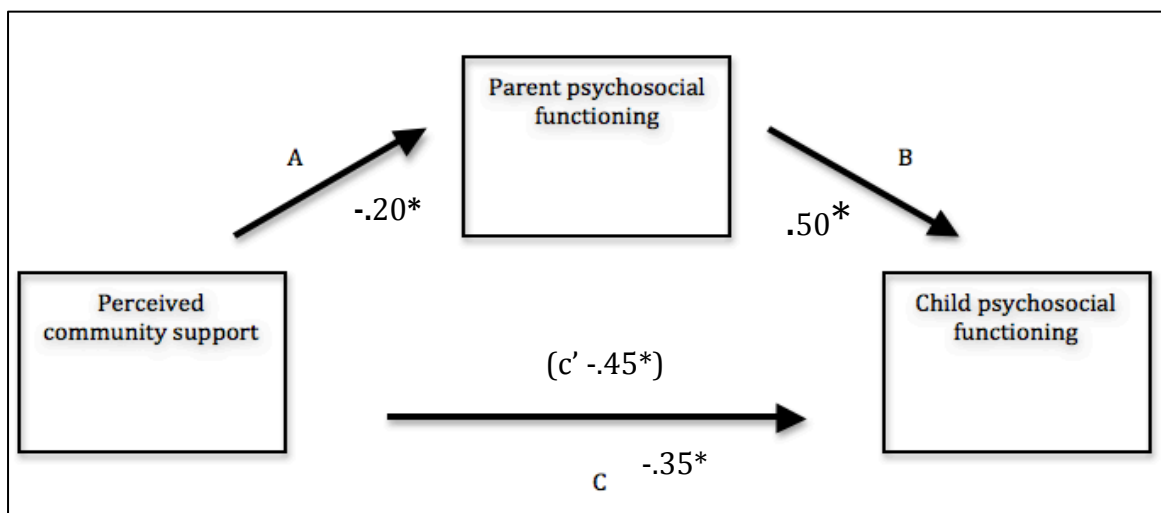


Figure 14: Mediation Model Directionality Evaluation (n=131)

Standardized regression coefficients for the relationship between perceived community support and parent psychosocial functioning as mediated by child psychosocial functioning. The standardized regression coefficient between perceived community support and child psychosocial functioning after adjusting for child psychosocial functioning is in parentheses. $*p < .01$

CHAPTER 5: Discussion

Given the importance of the emotional, cognitive, and behavioral health of the nearly two million military families in the United States, the present study examined how one potential protective factor, perceived military community support, related to child and parent psychosocial functioning. As previously discussed, military families are faced with distinct stressors that can lead to an increased risk of psychosocial difficulties (19), particularly during times of deployment (19; 55; 65). While the literature highlights various factors that appear to negatively influence military child adjustment, including number of relocations and total time a parent spends away from home (80), there has been less research published regarding factors that may positively influence adjustment. One protective factor of interest, that of military community support, is particularly compelling due to strong findings in the civilian literature that suggest that community support and components of community support are associated with better child and adult psychosocial outcomes (10; 25; 37; 49; 84). While there is a paucity of research regarding the impact of community support within the military, initial studies support this notion (36). The present study aimed to fill this research gap, by creating and validating a much-needed measure of perceived military community support, the CAMPS. Additionally, given research within the military community that suggests the importance of parent psychosocial adjustment to child psychosocial adjustment (19; 36; 53), the present study also explored a potential mediation model; specifically that parent psychosocial functioning would partially mediate the influence of perceived community support on child psychosocial functioning.

DISCUSSION OF AIM 1 RESULTS

Focus Group

A primary aim of this study was to develop a measure of perceived military community support. Overall both military and diversity experts found the measure to be acceptable and face valid. However, more importantly, there were several key themes expressed by members of the focus groups that helped inform the development of the CAMPS. First, focus group members shared that both formal and informal support were relevant. While many focus group members shared information on the formal services of which they were aware, they also shared the importance of support provided by fellow service members and family members. The distinction between formal and informal support is important, as each appears to play an important, and potentially different role. This finding is consistent with research suggesting that formal and informal services are different, but related to one another (29). Specifically, research suggests that formal support services provide a range of organized services as well as provide an avenue for individuals to make and strengthen informal social connections. Similarly, informal support services provide a means for sharing information and connections to formal organizations (29). Based on this finding, it was important for the CAMPS to include questions designed to capture aspects of both formal and informal support. Based on face value and expert feedback, the CAMPS may be a promising tool for collecting such data.

Another important theme that was generated from the focus group was the various ways in which individuals become aware of and access community support services. Focus group members shared that there were support services that they were unaware existed until later in their military career, not merely because the services did not exist, but because they had not known about them. Often service members learned of these

services as they in-processed to a new command. Similarly, focus group members shared that they were aware of services that they did not know how to access. Variability in means to access the services, another prominent theme, may have contributed to this confusion. As the focus group members shared how to access services, it became clear that there are many different routes to access community support services, even within the same service branch. It appears that some of the services require service members to access them through their command, such as when requesting financial aid, while the service member him/herself can initiate other services.

Factor Analysis

Results of the factor analysis suggested a one-factor model of perceived military community support, which is in contrast to the three-factor model of perceived community support developed in a civilian sample (42). Specifically, on a civilian measure of perceived community support, the PCSQ, Herrero & Gracia observed three distinct subscales (i.e., community integration, community participation, and community organizations) (42). It is not entirely surprising that CAMPS displayed a different factor structure, despite being informed, in part, by the PCSQ. There are several potential reasons why this factor analysis produced only one factor, rather than three factors. First, the CAMPS may have a unique factor structure. It is possible that traditional elements of community support are less relevant in the military community. In fact, three of the items dropped due to low factor loadings, appear to fall within Herrero and Gracia's community participation subscale (i.e., I am active in military-sponsored community events and activities; I never take part in social events in the military community; and I respond to calls for support in the military community), suggesting that within the

military community, it is possible that participation is not as relevant to overall level of perceived support. One reason that participation may not be as relevant to perceived support in the military may be due to the obligatory nature of many military-related activities. In other words, individuals who are required to participate in community activities may not perceive their participation in these activities to be particularly supportive, or at least superfluous to the support received from mandatory activities. Additionally, community integration and community organization appear not to be distinct constructs within our military sample. Within the military community, there is a strong formal effort for service members to integrate into the military community through training and other exercises. It may also be true for families and children that formal integration into the military community may go hand in hand with the availability of community organizations, thus making them indistinguishable from one another.

Another possible reason for the one-factor structure is that our less-than-desirable subject-to-item ratio led to error in measurement of the factor structure. Ideally, we would have liked to have a subject-to-item ratio of 10:1. However, it was not possible within the time frame of our study. While not ideal, having subject-to-item ratio that is less than 10:1 is common in the literature. In one examination of the current methods in factor analysis, Costello and Osborne found that 63.2% of published factor analyses have a subject to item ratio that is less than 10:1 (28). Our study had a subject-to-item ratio slightly above 5:1 when including all 28 of the original items. In Herrero and Gracia's initial factor analysis there was a subject-to-item ratio of 72:1. The difference in the number of factors retained in our study may be related to the discrepancy between CAMPS and PCSQ study subject-to-item ratios. Therefore, future replication of this

study in a larger sample will be important to determine whether or not differences in factor structure can be attributed to true differences between military and civilian samples.

Convergent Validity

Despite the different factor structure, the CAMPS was moderately, but not perfectly, correlated with the PCSQ. The two measures were correlated to the degree to which two measures that measure similar constructs would be expected to correlate. This correlation supports our understanding that military community support is related to, but also uniquely different from civilian community support (e.g., (19; 58; 70)). For example, compared to most civilian communities, the military community is a close-knit group despite geographic diversity. Additionally, the military community experiences unique stressors that are uncommon in civilian communities in the United States, such as combat exposure, deployments, and frequent relocation. This moderate but imperfect correlation also supports our understanding that more research specific to military community support is warranted using assessment measures validated in a military sample, rather than assuming that research conducted using civilian measures of perceived community support is completely generalizable to this unique population.

DISCUSSION OF AIM 2 RESULTS

In addition to creating and validating the CAMPS, another main aim of the study was to examine the relationships between perceived military community support and child and parent psychosocial functioning. Results of our analysis confirmed our hypothesis that higher perceived military community support would be related to better child psychosocial functioning, as indicated by fewer reported psychosocial symptoms on a validated parent-report measure as well as on parent-reported treatment history.

Similarly, as hypothesized, higher perceived military community support was related to better parent psychosocial functioning, as indicated by fewer reported psychosocial symptoms on a validated self-report measure as well as on self-reported treatment history. These results were consistent with literature in the civilian community that has associated greater community support with a variety of positive outcomes in both children (e.g., less drug use and behavioral problems, higher academic achievement) and adults (e.g., more positive health outcomes and decreased stress) (9; 10; 89). Similarly, our results are consistent with the smaller literature involving military samples that provided evidence that community support was associated with decreased stress, more positive child psychosocial adjustment, and fewer child behavioral problems during deployment (36; 71).

DISCUSSION OF AIM 3 RESULTS

Finally, the last aim of this study was to explore the relationships among perceived military community support, child psychosocial functioning, and parent psychosocial functioning. Data supported the hypothesis that the relationship between perceived military community support and child psychosocial functioning would be partially mediated by parent psychosocial functioning. The finding of parent psychosocial adjustment as a mediator is theoretically consistent with several different models and theories, including the T-Double ABC-X model, attachment theory and emotion regulation theory. Within the T-Double ABC-X model the provision of community support is seen to bolster the family's overall resources, including the ability of the parent to cope with and respond to stressors to promote positive adaptation in the face of stress (59). Similarly, parent psychosocial adjustment as a mediator is congruous with

attachment theory which posits that parents who perceive support may be better able to cope with stress, therefore having more time and energy to respond to their child's needs appropriately, consistently, and promptly—resulting in a more secure attachment and fewer psychological and behavioral problems (2). Parent psychosocial adjustment as the mediator is also compatible with emotion regulation theory that suggests that children learn emotion regulation initially from their parents through observational learning, modeling, and social reinforcement (63). Specifically, longitudinal studies within emotional theory have found parent emotion regulation, particularly in regard to anger, to be predictive of child externalizing behavior in school (64).

Despite strong evidence that parent psychosocial well-being impacts child psychosocial well-being, it is likely that this relationship is not one-directional and is far more complex. While study findings supported a mediated relationship and cross-sectional hypotheses, the true direction of the relationship is unclear in the absence of longitudinal data. The hypothesized direction of the relationship (i.e., that parent psychosocial functioning would partially mediate the relationship between perceived community support and child psychosocial functioning) was supported by the study results and is consistent with theory as well as a previous longitudinal study in a military population that found that non-deployed parent well-being predicted child's adjustment to deployment (62). However, data in civilian samples has also supported the notion that child psychosocial well-being and child behaviors also impact parents (78). The bi-directional nature of parent-child relationships is supported by attachment theory, in which child temperament and personality impact the way that the parent interacts with the child (2). Similarly, where longitudinal research in the field of emotion regulation has

found evidence suggesting a causal relationship between parent emotional regulation and child emotional regulation, researchers also note that difficult temperaments can become bi-directional, in that the child's behavioral response begins to elicit negative emotions from the parent, leading to a spiraling of ineffective and negative parent-child interactions (63).

Therefore, while there is strong theoretical support for parent psychosocial adjustment as the mediator, the unclear direction seen in the present study's results could be evidence of the complex relationship that exists between the two variables. It is likely that parent and child psychosocial adjustment exist in some degree of a bidirectional relationship, with parent psychosocial adjustment more strongly influencing child adjustment in earlier years with a more balanced bi-directional relationship as the child ages. Developmental literature has consistently shown that younger children are highly influenced by their parents, an effect that seems to wane as children age (78). Within the present sample, parent psychosocial adjustment may have been particularly important to the adjustment of the children, as the mean child age was six years old. Given that forty-seven percent of children within military families are five-years-old or younger and only eleven percent are fifteen-years-old or older, it is plausible that our study findings in this regard generalize well to the overall military population (21).

IMPLICATIONS

Findings from the present study suggest that community support within the military remains a promising protective factor for military families, particularly for the study's sample of parents who were primarily college-education, non-Hispanic white, females who considered themselves primary or equal caregivers of their child(ren).

Replication in a diverse sample is particularly important based on research suggesting that several minority racial and ethnic groups highly value family and extended family support, potentially over and above community support (74). Therefore it is unclear whether the same relative importance of perceived community support would be replicated or even relevant in a sample that was not primarily non-Hispanic white. While replication of the current study in a more diverse sample and future longitudinal studies are needed, it is likely that military community support remains an important area to target in order to improve the well-being of service members and their families. It will be important for the DoD and other providers of community support services to evaluate if their programs are effective in actually improving military community support, based on the current lack of outcome data. Future research is required to determine whether the CAMPS will be a useful tool in ongoing program evaluation.

CLINICAL IMPLICATIONS

Based on preliminary evidence suggesting a connection between perceived military community support and child and parent psychosocial well-being, perceived community support remains a promising protective factor for military service members and their families. However, it is important to note that there are many potential approaches to increase perceived military community support beyond increasing support services. Currently DoD and other efforts to increase military community support focus on bolstering the number of community support services. However, based on the results of this study's focus group, it appears as though there are many support services already available. It is unknown the extent to which service members and spouses become overwhelmed or confused in regard to how to access the services or which services with

best meet their needs. Given the various means to access services, it may be more important to provide information to service members and their families in regard to what services are available, how to access the services, and what they can expect to gain from the services. Helping service members and their families navigate and access support services is important in light of our findings that this process is often overwhelming and confusing. Well-organized advertisement campaigns could provide this information in a streamline manner to service members service-wide. Additionally, based on the importance of informal support to focus group members, future research is necessary to provide more information in regard to the importance of helping service members and their families strengthen their informal social connections, rather than focusing solely on increasing formal, structured services.

If future research identifies a clear causal relationship between perceived military community support and psychosocial well-being, it may also be important to target perceived military community support as a preventative measure in at-risk populations. Interventions that target cognitions to increase the individual's perception of community support given the large amount of support services available may be important. Similarly, interventions that increase the individual's ability to ask for support in an adaptive manner in the face of stress, including communication skills education and practice, may also prove to promote an individual's perception of a supportive military community.

STRENGTHS

A main strength of this study is the development of the CAMPS as a novel, validated means to measure perceived military community support. In the absence of such a measure, the development of the CAMPS was an important preliminary step to

better understand military community support. While further research is required, the CAMPS may prove to be an important tool in the future to measure program outcomes and inform policy within the DoD. Importantly, the CAMPS also displayed strong psychometric properties and was informed by service members in all four military branches and was examined by experts in the field of cultural diversity for cultural sensitivity, despite the study's non-diverse sample.

Based on the development of the CAMPS, the study was able to examine the relationship between perceived military support and parent and child well-being, which has not previously been analyzed within a military sample. Results of the study generally support previous research in the civilian population, but may provide a more nuanced understanding of perceived community support in the military. Specifically, this study illustrated that a measure of military perceived community support was related to, but not identical to a measure of perceived civilian support. Additionally, the factor analysis, although limited by a less than ideal subject to item ratio, indicated that not all factors germane to civilian community support may be relevant for the military. Finally, it was important to clarify the relationship between military community support and psychosocial wellbeing for several reasons, including the importance of military families to operational readiness and the amount of money and programs that currently aim to increase community support without any way to measure outcomes.

LIMITATIONS

The study also had several limitations. The sample size for the factor analysis was less than recommended and may have led to some error in identifying the precise number of factors that the CAMPS captures. Examination of the individual CAMPS items also

suggested slightly non-normal distribution of the items. Additionally, the sample was made up of primarily college-educated, Non-Hispanic white, females, which is not fully representative of the demographic make up of military parents. Validation of the CAMPS using a larger, more diverse sample size is needed to provide more information on important factors of perceived military community support.

Another limitation was the cross-sectional nature of the study. Longitudinal studies are needed to provide more information on the directionality and potential causality of the relationship between parent and child well-being. Similarly, this study is limited by the self-report of psychosocial symptoms. The study attempted to control for potential confounds of response style by also including a more objective measure of psychosocial symptoms (i.e., treatment history screen) and by using well-validated self and parent-report measures. However, structured clinical interviews of both parent and child conducted by a trained mental health provider would have likely been a more valid measure of psychosocial symptoms. It is possible that the parent's current psychosocial symptoms could impact the parent's perception of the child's current functioning, such that a depressed or stressed parent would view their child's current behavior as more negative. As a result, further research making use of interview methods is warranted.

FUTURE DIRECTIONS

It will be important for future studies to validate the CAMPS within a larger, more diverse sample. Ideally, such efforts will involve enough participants to thoroughly analyze the factor structure of the CAMPS with a more ideal 10:1 subject-to-item ration. Similarly, while our factor analysis did not parse the existence of more than one distinct factor of perceived community support within the CAMPS measure, it is possible that

future research could elucidate differences in subcomponents of community support. Identification of subcomponents of military community support could be useful in determining which specific aspects are most influential on child and parent wellbeing. Ideally, future studies would also include more objective measures of parent and child psychosocial well-being, such as a structured clinical interview of both the parent and child, rather than relying on the ability of the parent to report on both his/her own symptoms as well as the symptoms of the child. Additionally, longitudinal studies will provide more information on the directionality of the relationship between parent and child well-being. These studies may wish to compare the influence of parent well-being on child well-being across the developmental age ranges of children to determine if this relationship changes as the child ages.

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APPENDICES

APPENDIX A: RECRUITMENT LETTER



Uniformed Services University of the Health Sciences
4301 Jones Bridge Road
Bethesda, Maryland 20814-4712

POMC—Community Support Study
Department of Medical & Clinical Psychology
Tel: 240-600-1220
E-mail: community-support-ggg@usuhs.edu

Date: 01 January 2016

Dear Sir or Madam:

As you may have experienced yourself, community support can be very powerful. We believe that it may be especially important for military families, due to the increased importance of social support during stress (e.g., deployment, geographic relocation, etc.). Research is promising regarding the protective effects of community support in the civilian population. However, limited research has been conducted regarding military families and community support. Due to the importance that military families have on operational readiness and the significance that the DoD has placed on supporting military families, our study team believes that it is imperative to understand the impact of military community support on military parents and their children.

As an active duty military service member and/or family member with a child between the ages of 2 and 18 years of age, we would like to invite you to participate in a voluntary, online research survey to help us better understand military community support and parent/child psychological well-being. The survey will take approximately 20 minutes to complete. All information you provide on the survey is anonymous and cannot be traced back to you. Please visit the survey website to find out more:

<https://www.surveymonkey.com/r/milsupport>

Thank you for your service to our country and for considering taking part in this survey.

If you have any questions or concerns, please contact the study's principal investigator at (240)-600-1220 or community-support-ggg@usuhs.edu. Also, feel free to share the study link with other military families that you may know.

Very Respectfully,

Allison Conforte, MEd, EdS
Principal Investigator, Doctoral Student
Medical & Clinical Psychology
240-600-1220

F. Edward Hebert School of Medicine - "America's Medical School"
Uniformed Services University of Health Sciences
4301 Jones Bridge Road
Bethesda, Maryland 20814

Preventing Obesity in Military Communities—Community Support Study
TO-72-1542
Submission: 2014-2015, Volume Number: 1

APPENDIX B: RECRUITMENT FLYER



Attention Active Duty Members & Military Families:
Are you a parent with a child between the ages of 2 and 18 yrs?...

We want to know how supportive your military community is!

You are invited to participate in a voluntary, online survey to help us better understand military community support and parent/child psychological well-being.

Please visit the study site to find out more: <https://www.surveymonkey.com/s/milsupport>

APPENDIX C: ONLINE CONSENT FORM

Consent Form

CONSENT FOR VOLUNTARY PARTICIPATION IN A RESEARCH STUDY

1. INTRODUCTION:

You are being asked to be in a research study entitled, "Preventing Obesity in Military Communities – Community Support Study", being conducted at the Uniformed Services University of the Health Sciences (USUHS), Bethesda, Maryland. You have been asked to take part in this study because you are a parent in a U.S. military family with a child between the ages of 2 and 18. Your participation is voluntary. Refusal to participate will not result in any punishment or loss of benefits to which you are otherwise entitled. Please read the information below, and ask questions about anything you do not understand before deciding whether to participate.

2. THE PURPOSE OF THE STUDY:

This study's purpose is to better understand the connection between military community support, child psychological well-being, and parent psychological well-being. Specifically, we are interested in developing a method of measuring perceived military community support and using this measure to determine how perceived community support in the military relates to child and parent psychological well-being. We intend to use our findings to inform efforts to optimize the psychological well-being of military family members. Between 260 and 400 parents will complete this study.

3. THE PROCEDURES TO BE FOLLOWED:

If you agree to participate in this study, you will complete a series of anonymous online questionnaires. The questions will include basic demographic information, basic military service history, your experience with the supportiveness of the military community, your mood and behavioral patterns, and the mood and behavioral patterns of one of your children.

4. DURATION OF THE STUDY:

The online study is expected to take approximately 20-30 minutes to complete.

5. POSSIBLE BENEFITS TO YOU THAT MAY BE REASONABLY EXPECTED ARE:

This study is being conducted solely for the purpose of research and there will be no direct benefit to you by participating in this study. The goal of this research is to help other U.S. service members by expanding our understanding of the community support and its impact on the well-being of military families. However, you may gain a better understanding of how community support is connected to you and your child's well-being.

6. DISCOMFORTS AND/OR RISKS THAT CAN BE REASONABLY EXPECTED ARE:

The risks associated with this study are minor. You may find that some questions make you uncomfortable. Specifically, some questions will inquire about mood and behavioral concerns that you or your child may have experienced. You may skip any questions that you do not wish to answer. Also, you may decline to participate at any time and/or withdraw your participation at any time. If you decide to stop taking part in this study, you in no way risk losing benefits to which you are otherwise entitled.

7. PRIVACY AND CONFIDENTIALITY:

All information you provide as part of this study will be anonymous and confidential and will be protected to the fullest extent provided by law. Your computer IP address will not be collected as part of the study. Information that you provide and other records related to this study will be accessible to those persons directly involved in conducting this study and members of the USUHS Institutional Review Board (IRB), which provides oversight for protection of human research volunteers.

All study data will not have identifying information and will be kept in a restricted access, password protected computer.

8. COMPENSATION:

In order to preserve the anonymous format of the study, direct compensation will not be offered.

9. **RECOURSE IN THE EVENT OF INJURY:** This study should not entail any physical or mental risk beyond those described above. It is believed that complications arising from participation should not occur. If, for any reason, you feel that continuing this study would constitute a hardship for you, you may end your participation in the study at any time.

If at any time you believe you have suffered an injury or illness as a result of participating in this research project, contact the Director of Human Subjects Protection Program at USUHS, Bethesda, Maryland 20814-4799 at (301) 295-9534. This office can review the matter with you. They can provide information about your rights as a research volunteer. They may also be able to identify resources available to you.

10. **CONTACT FOR QUESTIONS OR PROBLEMS:**

If you have questions about this research, you should contact Allison M. Conforte, M.Ed., Ed.S., the study Principal Investigator.

The study phone number at USUHS is: (240) 600-1220.

The study email address is: allison.conforte@usuhs.edu.

Even in the evening or on weekends, you can leave a message at that number. If you have questions about your rights as a research subject, you should call the Director of Human Research Protections Programs at USUHS at (301) 295-9534. (S)he is your representative and has no connection to the researcher conducting this study.

STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS RESEARCH PROJECT:

I have read this consent form and I understand the procedures to be used in this study and the possible risks, inconveniences, and/or discomforts that may be involved. All of my questions have been answered. I freely and voluntarily choose to participate. I understand that I may withdraw at any time.

*** 1. BY CLICKING ON THE "YES..." BUTTON, YOU ARE AGREEING THAT YOU HAVE READ THE CONSENT FORM AND UNDERSTAND THE PROCEDURES TO BE USED IN THIS STUDY. YOU ALSO AGREE THAT YOU FREELY AND VOLUNTARILY CHOOSE TO PARTICIPATE AND UNDERSTAND THAT YOU MAY WITHDRAW AT ANYTIME. IF YOU WISH YOU MAY PRINT OUT A COPY OF THIS FORM FOR YOUR RECORDS.**

☐ Yes, I consent to participate

☐ No, I do not consent to participate

APPENDIX D: ONLINE SURVEY MEASURES

Demographic Questionnaire

Before beginning, tell us a bit about yourself & your family.

1. What is your age?

2. What is your sex?

☐ Male

☐ Female

3. What is your race?

☐ Caucasian/White

☐ African American/Black

☐ Asian

☐ American Indian or Alaska Native

☐ Native Hawaiian or Other Pacific Islander

☐ Multi-racial

☐ Other

4. What is your ethnicity?

☐ Hispanic

☐ Non-Hispanic

5. What is your marital status?

☐ Never married

☐ Married

☐ Divorced

☐ Separated

☐ Widowed

Tell us a bit about yourself & your family.

1. I am married to...

- ☐ a civilian
- ☐ a reservist
- ☐ an active duty service member

2. What is the highest degree or level of school you have completed? (If currently enrolled, mark the previous grade or highest degree received.)

- ☐ Less than High School Diploma or GED
- ☐ High School Diploma or GED
- ☐ Some college credit, but no degree
- ☐ Associate's Degree (for example: AA, AS)
- ☐ Bachelor's Degree (for example: BA, AB, BS)
- ☐ Master's Degree (for example: MA, MS, MEng, MEd, MSW, MBA)
- ☐ Advanced or Professional Degree (for example: MD, DDS, JD, PhD, EdD)

3. What was your total household income before taxes during the last past 12 months?

- ☐ Less than \$25,000
- ☐ \$25,000 to \$34,999
- ☐ \$35,000 to \$49,999
- ☐ \$50,000 to \$74,999
- ☐ \$75,000 to \$99,999
- ☐ \$100,000 to \$149,999
- ☐ \$150,000 or more

4. Which of the following most accurately describes your parenting role with the child of interest?

- ☐ Single parent
- ☐ Primary caregiver within dual parenting relationship
- ☐ Secondary caregiver within dual parenting relationship
- ☐ Equal caregiver with other parent

5. How many total children do you have (including the child of interest)?

6. Who else currently lives in your household?

- ☐ Child of interest's siblings
- ☐ Additional sons/daughters
- ☐ Spouse or partner
- ☐ Grandparents/ great-grandparents
- ☐ Aunts/uncles
- ☐ Nieces/nephews
- ☐ Live-in-nanny or other caretaker
- ☐ Only the child of interest and myself live in our home

Other (please specify)

7. What is your personal military status?

- ☐ Active duty
- ☐ Reservist
- ☐ Civilian

Tell us a bit about yourself & your family.

1. How many years have you been in the military?

Tell us a bit about yourself & your family.

1. How many years has the child of interest's other parent been in the military?

Tell us a bit about yourself & your family.

1. What is your military branch of service?

- ☐ Army
- ☐ Navy
- ☐ Air Force
- ☐ Marine Corps

Tell us a bit about yourself & your family.

1. In what branch of service is the child of interest's other parent?

- ☐ Army
- ☐ Navy
- ☐ Air Force
- ☐ Marine Corps

Tell us a bit about yourself & your family.

1. What is your rank?

- ☐ E1-E3
- ☐ E4-E6
- ☐ E7-E9
- ☐ W1-W5
- ☐ O1-O3
- ☐ O4-O6
- ☐ O7-O10

Tell us a bit about yourself & your family.

1. What is the rank of the child of interest's other parent?

- ☐ E1-E3
- ☐ E4-E6
- ☐ E7-E9
- ☐ W1-W5
- ☐ O1-O3
- ☐ O4-O6
- ☐ O7-O10

Tell us a bit about yourself & your family.

1. Has the child of interest's other parent been deployed at any time over the past 12 months?

☐ Yes

☐ No

Tell us a bit about yourself & your family.

1. How many months out of the last 12 months has the child of interest's other parent been deployed?

2. Is the child of interest's other parent currently deployed?

☐ Yes

☐ No

Tell us a bit about yourself & your family.

1. Have you been deployed at any time **over the past 12 months?**

☐ Yes

☐ No

Tell us a bit about yourself & your family.

1. How many months out of the last 12 months have you been deployed?

Tell us a bit about yourself & your family.

1. What is the military occupational specialty (MOS) of child of interest's other parent (e.g., rate)?

(If not applicable, enter "NA" and press "next." If you do not know, press "next")

Tell us a bit about yourself & your family.

1. What is your military occupational specialty (MOS) (e.g., rate)?

Tell us a little about your current military community.

1. My family currently lives on base.

☐ Yes

☐ No

2. The size of the base that my family is currently assigned is...

(Please note the example list is not exhaustive.)

☐ Small (for example: NSA Bethesda, Walter Reed Forest Glen Annex, Fort Monroe, Fort Meyer)

☐ Medium (for example: Fort Detrick, NAS Oceana)

☐ Large (for example: Andrews AFB, NAS Pensacola, Fort Benning, NS Norfolk, Fort Lewis, McChord AFB, Fort Meade, Fort Belvoir)

3. The location of the base that my family is currently assigned is:

☐ CONUS

☐ OCONUS

4. How many years has your family been assigned to your current duty station?

5. Some people experience the following stressors while in the military. Please indicate if you or someone who lives in your household has experienced any of the following stressors within the past year. *(Check all that apply.)*

☐ Legal troubles

☐ Financial troubles

☐ Geo bachelor status

☐ Immigration difficulties

☐ Language barriers

☐ Difficulty finding gainful employment

Tell us a little about your child.

Please complete the following items in regard to your child of interest (i.e., the oldest child between the ages of 2 and 18 years of age that lives with you at least 10 months out of the year).

1. What is your child's current age?

2. What is your child's sex?

☐ Female

☐ Male

3. What is your child's race?

☐ Caucasian/White

☐ African American/Black

☐ Asian

☐ American Indian or Alaska Native

☐ Native Hawaiian or Other Pacific Islander

☐ Multi-racial

☐ Other

4. What is your child's ethnicity?

☐ Hispanic

☐ Non-Hispanic

Psychosocial Screeners: Parent and Child

Parent: History

Please answer the rest of the survey items in regard to yourself.

1. Have you ever been diagnosed with a mental health disorder by a mental health (e.g., Psychologist, Psychiatrist, Social Worker, Licensed Professional Counselor) or health care provider (e.g., Physician, Nurse Practitioner)?

Some examples of mental health disorders are: Major Depressive Disorder, Generalized Anxiety, Bipolar Disorder, Substance Use Disorder, Eating Disorder, Psychotic Disorder, and Attention-deficit Hyperactivity Disorder.

- ☐ Yes
☐ No
☐ Unsure

2. Have you ever been treated by a licensed mental health professional (e.g., Psychologist, Psychiatrist, Social Worker, Licensed Professional Counselor) for mental health concerns?

- ☐ Yes
☐ No
☐ Unsure

3. Have you ever been prescribed medication for a mental health condition?

Some examples of some types of medications include: Anti-depressants (e.g., Zoloft, Wellbutrin, Prozac, Effexor), Anti-anxiety medications (e.g., Xanax, Klonopin, Restoril), ADHD medications (Ritalin, Adderall, Vyvanse, Concerta), and others (Abilify, Depakote, Risperdal, Seroquel, Haldol, Thorazine).

- ☐ Yes
☐ No
☐ Unsure

4. Have you ever thought you that you had a mental health condition or needed to see a mental health professional?

- ☐ Yes
☐ No
☐ Unsure

Child of Interest: History

Reminder: If you have more than one child between the ages of 2-18 that live with you at least 10 months out of the year, please refer to the oldest child within this age range (referred to as "child of interest") when answering the survey questions.

For example, if you have a 3 year old and a 7 year old child you would answer the questions based on the 7 year old child.

1. Has your child of interest ever been diagnosed with a mental health disorder by a mental health (e.g., Psychologist, Psychiatrist, Social Worker, Licensed Professional Counselor) or health care provider (e.g., Physician, Nurse Practitioner)?

Some examples of mental health disorders are: Major Depressive Disorder, Generalized Anxiety, Bipolar Disorder, Substance Use Disorder, Eating Disorder, Psychotic Disorder, and Attention-deficit Hyperactivity Disorder.

- ☐ Yes
☐ No
☐ Unsure

2. Has your child of interest ever been treated by a licensed mental health professional (e.g., Psychologist, Psychiatrist, Social Worker, Licensed Professional Counselor) for mental health concerns?

- ☐ Yes
☐ No
☐ Unsure

3. Has your child of interest ever been prescribed medication for a mental health condition?

Some examples of some types of medications include: Anti-depressants (e.g., Zoloft, Wellbutrin, Prozac, Effexor), Anti-anxiety medications (e.g., Xanax, Klonopin, Restoril), ADHD medications (Ritalin, Adderall, Vyvanse, Concerta), and others (Abilify, Depakote, Risperdal, Seroquel, Haldol, Thorazine).

- ☐ Yes
☐ No
☐ Unsure

The Conforte Assessment of Military Perceived Support

Please indicate how much you disagree or agree with the following statements. If you feel that an item does not apply to you or your family, or if you are unsure of how to answer an item, you may wish to select "neither disagree nor agree."

For the purpose of this study, **Military Community** refers to the groups, people, and settings, in which service members live and work, including the military installation and the local civilian community surrounding it. It also includes the deployed setting and the military community as it exists online.

		Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
Community Integration						
In the past month:						
1	I feel a sense of common mission and purpose with others in the military community.					
2	I feel a collective sense of community with others in the military community.					
3	I DO NOT feel connected to other military families. Members of the military community take advantage of					
4	opportunities to support the needs of other service members and families within the military community.					
5	Someone like me CANNOT make a positive difference in the lives of others within the military community.					
6	I am satisfied with the military as a way of life.					
7	I am NOT satisfied with the military community as an environment for raising children.					
8	My opinions are NOT valued in the military community.					
9	I feel like the military community is my own.					
10	There are people within the military community that would lend me household tools or equipment if I needed it.					
11	There are NOT people within the military community that would provide transportation if I needed it.					

12	There are people within the military community that would give me valuable information about community agencies and resources if I needed it.					
13	There are NOT people within the military community who would take care of my child(ren) in an emergency.					
14	I feel respected within the military community.					

Community Participation

Please indicate how much you disagree or agree with the following statements. If you feel that an item does not apply to you or your family, or if you are unsure of how to answer an item, you may wish to select "neither disagree nor agree."

For the purpose of this study, **Military Community** refers to the groups, people, and settings, in which service members live and work, including the military installation and the local civilian community surrounding it. It also includes the deployed setting and the military community as it exists online.

		Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
In the past month:						
15	I am active in military-sponsored community events and activities.					
16	I DO NOT take part in social events in the military community.					
17	I respond to calls for support in the military community.					

Community Organizations

Please indicate how much you disagree or agree with the following statements. If you feel that an item does not apply to you or your family, or if you are unsure of how to answer an item, you may wish to select "neither disagree nor agree."

For the purpose of this study, **Military Community** refers to the groups, people, and settings, in which service members live and work, including the military installation and the local civilian community surrounding it. It also includes the deployed setting and the military community as it exists online.

		Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
	In the past month:					
18	I am NOT satisfied with availability of activities for children and youth in the military community.					
19	Staff from military agencies know and understand the needs of military families. Some examples of these agencies include: USA Army Community Service, USAF Airman & Family Readiness Center, USN Fleet & Family Support Center, USA Family Readiness Group, Moral Welfare & Recreation.					
20	Chaplains are effective in addressing the needs of military families.					
21	Military Mental Health Professionals are effective in addressing the needs of military families.					
22	Military online sources (e.g., Military One-Source) are effective in addressing the needs of military families.					
23	Military family support agencies are effective in addressing the needs of military families. Some examples of these agencies include: USA Army Community Service, USAF Airman & Family Readiness Center, USN Fleet & Family Support Center, USA Family Readiness Group, Moral Welfare & Recreation.					
24	I am NOT satisfied with the availability of mental health care for military families.					
25	I am satisfied with the quality of mental health care for military families.					
26	I am NOT satisfied with the quality of preparation that military families get to deal with personal and family problems before a deployment.					
27	There is NOT someone within the military community that would listen to me and/or help me feel better when I feel down.					
28	Opportunities, facilities, and services are equally accessible in my military community.					