

MONEY, MENTAL HEALTH, & RELATIONSHIP HEALTH: A DYADIC ANALYSIS OF
RESOURCES, PERCEPTIONS, & CONTEXTS OF STRESS IN MILITARY COUPLES

by

ALYCIA DEGRAFF

(Under the Direction of Jerry Gale)

ABSTRACT

Links between finances, mental health, and relationship health have been documented across many populations by social scientists from many disciplines. The present studies examine the relationships between financial difficulties, mental health, and relationship health that span both the individual and couple systems. Drawing on the Contextual Model of Family Stress (CMFS) and ABC-X framework and a sample of active duty military couples (N=221), dyadic structural equation models evaluate financial difficulties, use of resources, sense of community, perceptions of financial wellness, and mental health (manuscript 1) and relationship health (manuscript 2). Findings link increased financial difficulties to poorer perceptions of financial wellness with both actor and partner effects, and in turn, indirectly link financial difficulties to poorer mental and relationship health. Multigroup analyses suggest specific paths in the model differ for those with/without spouse employment, those living on/off a military installation, and for officer/enlisted active duty service members.

INDEX WORDS: family stress theory; financial wellness; mental health; anxiety; depression; relationship health; resources; perceptions; military; symbolic interaction; contextual model of family stress

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DEDICATION

This dissertation is dedicated to my father, **MSGT (Ret) Mark DeGraff**, and my mother, **Diana DeGraff**. Their service to the U.S. military exposed my brother and I to the vastness of this world, and all the possibilities within. Thank you for instilling in me perspective, grit, and service before self.

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CHAPTER I

Introduction

Financial health is an emerging topic of interest as the connections between finances, mental health, and relationship health become clearer. The ways in which finances, mental health, and relationship health interact are important for policymakers, social scientists, and clinicians to understand as money and mental health affect both societal and individual-level conditions—from economics, marriage, and divorce trends to individual challenges with mental health issues or paying bills. Financial difficulties have been linked to depression and anxiety (Starrin, Åslund, & Nilsson, 2009), substance abuse (Rudolf & Watts, 2002), intimate partner violence (Jewkes, 2002) and divorce (Dew, Britt, & Huston, 2012). This dissertation examines these relationships in a military population through two separate, but related analyses of financial difficulties, use of community resources, sense of community, and two distinct outcomes—mental health (manuscript 1) and relational health (manuscript 2).

The general study of family stress began with observations of the military family because of their overwhelming display of resilience in the face of significant life stressors that are inherent in the military experience (Hill, 1949). The unique military lifestyle, albeit challenging and stressful at times, is also rich in resources and community that provide support for increased coping and resilience (O’Neal, Mancini, & DeGraff, 2016). For example, in active duty military families, perceived family support from military colleagues was associated with both higher parental life satisfaction and more positive adolescent mental health, self-efficacy, and higher academic performance (DeGraff, O’Neal, & Mancini, 2016). Moreover, military parents with

stronger community connections have displayed stronger resilient coping in the face of adversity (O’Neal, Mallette, & Mancini, 2018).

The present studies examine mental health and relationship health through a family stress lens to gain an understanding of how families achieve resilience in the face of financial difficulties. The Contextual Model of Family Stress (CMFS), the theoretical model employed in these studies, focuses on how contextual factors influence coping and resilience through perceptions and resources. Stressor events are organized at the core of the CMFS via the ABC-X framework, with A, B, and C representing aspects of the stressor event, and X representing the experienced outcome (Boss 2002; Boss, Bryant & Mancini, 2017; Hill, 1949). The ABC-X framework asserts that stress is mediated through use of resources, as well as through perceptions of the stressor and resources; in turn, stress results in either resilience and coping, or in crisis. Coping, defined as maintenance of the status quo, is positioned as the precursor to resilience, a process of increased functioning (Boss, Bryant, & Mancini, 2017). The CMFS parallels the work of Froma Walsh (2002) and Michael Ungar (2012) to synthesize a key point of the CMFS theory that is, contextual factors (social, shared, and physical circumstances) greatly influence the processes of coping and resilience. The contexts and mechanisms that enable coping and resilience are the foci of this study on money, mental health, and relationship health. These elements are essential for scholars and clinicians to consider when aiming to increase systemic resilience and well-being.

The present studies will extend both the topics of military families and family stress theory through the examination of financial stress, mental health, and relationship health with a military population. Using a sample of 221 active duty military service members and military spouses, an analysis of the direct and indirect relationships between financial stress, mental

health, and relationship health through the use of community resources and sense of support and wellness. Dyadic data analyses of the direct and indirect effects of use of community resources and sense of support and wellness on the relationship between financial difficulties and individual mental health (manuscript 1) and relationship health (manuscript 2) provides evidence for the contextual associations within the military lifestyle, couple dynamics and effects, and an application of the Contextual Model of Family Stress.

CHAPTER II

Literature Review

Overview

Money is a challenging conversational subject, even under the best of circumstances, given its impact on relationships and mental health. Money has been one of the longest standing taboo topics for conversations with friends, co-workers, family, and especially intimate relationships (Vogler, Lyonette, & Wiggins, 2008). Money is one of the most frequent argument topics and conflict generators in marriages (Bryant, Taylor, Lincoln, Chatters, & Jackson, 2008; Stanley, Markman, & Whitton, 2002). Financial conflict can lower marital satisfaction (Bryant et. al., 2008) and significantly predict a desire for divorce (Terling-Watt, 2001). Financial issues that result in marital conflict often undermine individual mental health (Williams, Frech, & Carlson, 2010) and are a determinant of poor physical health (Robards, Evandrou, Falkingham, & Vlachantoni, 2012).

Literature suggests strong linkages between financial health, relational health, and mental health. Healthy marriages with high levels of support and effective problem-solving have been shown to have decreased levels of financial conflict and stress (Conger & Conger, 2002; Conger, Reuter, & Elder, 1999) and, couples that work together to make financial decisions experience increased relationship and life satisfaction (Vogler et al., 2008). Although money is sometimes an uncomfortable topic, it carries significant implications for individuals and relationships. It is

therefore important to situate financial health within a contextual and systemic lens to explore the mechanisms through which mental and relational resilience is a result of financial stress.

The study of money, mental health, and relationship health is broad and spans internal and external contexts (systems of which the family has much, or little control, respectively; Boss, Bryant, & Mancini, 2017) that are fundamentally multidimensional in nature, and which are defined and discussed at length in the theoretical orientation section of this chapter. There are both broad and nuanced matters of money related to societal and cultural circumstances, and in this particular study, the complexity of the military lifestyle (also to be defined and discussed in depth, later in this chapter). The following sections open this chapter with a review of the literature related to finances, mental health, and relationship health, and then reviews the literature on these topics as they are explicitly related to the military population. In turn, the chapter then presents the Contextual Model of Family Stress that is used to organize the studies of the contextual factors of the military population and the topics of money, mental health, and relationship health.

Money, Mental Health, and Relationships

Money and society. One aspect of society that affects individuals and families is the macroeconomy which includes the community, regional, national, and global systemic and economic forces (O’Sullivan, 2003, p. 57). Economic strain at any of these systemic levels often translates to economic pressure for couples and in turn affects marriage and work-family relations (Conger et al., 1999; Dew, 2016). On an individual level, economic pressure can result in depression, irritability, and hostility, and on a relational level, decreased relationship satisfaction and stability (Conger et al., 1990). The economic health of a society is a broad, external contextual factor that permeates communities, families, couples, and individuals.

Culture is another aspect of societal context that affects the individual and couple. “Emotions and conflicts about money are inevitably filtered through the lens of social class, culture, race, and gender.” (Shapiro, 2007, p. 280). The processes of meaning-making related to matters that are closely tied to finances (e.g., success, status, ability, safety, worthiness, etc.) are inherently different based on cultural differences and values. For example, in wealthier cultures (e.g. United States, Taiwan) financial altruism and materialism are uncorrelated, while in less wealthy cultures (e.g., Brazil, China, Tunisia), altruism and materialism do correlate; the cultural differences in the meaning of “giving back” to one’s community through material contributions alter the relationship between these two concepts through differences in values (Guo et. al., 2016).

Money as a mechanism of power is another societal contextual factor that animates multiple systems. It is used as a tool to exercise relational power dynamics (racial or gendered maintenance of abusive or exploitative control; parental hierarchy and maintenance of dependence), to teach and socialize children into cultural and class norms, and even establish and maintain boundaries and claims around values and commitments. The potential for various cultural interpretations of the symbolic meaning of money, including money as a symbol of power, is diverse across populations and cultures (Stanley & Einhorn, 2007).

Money and mental health. The relationship between finances and mental health is affected by societal and community contexts. Social determinants of financial health such as income inequality, socioeconomic status, social support networks, and social capital are strongly associated with individual mental health (Burns, 2015). For example, social capital influences mental health in that those with higher social involvement are likely to engage in healthier social behaviors because of their access to social resources, increased social trust and efficacy, and

community and political participation. In turn, social connectedness and social capital provide individual support, increased self-esteem, and collective appreciation (Kawachi & Berkman, 2001). In cultures with vast income inequalities, individuals may be keenly aware of their standing in the economic hierarchy; these perceptions of economic standing may result in community distrust and distress, linking those of lower standings to poorer mental health outcomes (Marmot, 2004; Marmot & Wilkinson, 2006; Wilkinson & Pickett, 2009). Finally, the social infrastructure in which the individual lives may impact both mental health and financial health due to the safety and security provided by laws, regulations, and access to resources (Layte, 2012).

The relationship between money and mental health is also affected by internal contextual factors (i.e., the factors that families have some control over; Boss et al., 2017). A reciprocal relationship exists in that those with mental health issues are more likely to have financial issues, and in turn, those with financial issues experience worsened mental health (Gathergood, 2012). For example, The Diagnostic and Statistical Manual of Mental Disorders (DSM 5; American Psychiatric Association, 2013) considers, for many mental health diagnoses, financial problems (such as bankruptcy, job loss, debts, etc.) to be a psychosocial indicator of a formal mental health diagnosis. Money and mental health problems beg the question, “which comes first?” as financial problems can be both the cause and effect of a larger mental health issue.

Mental health issues are more prevalent in individuals with financial problems (Cooke, Barkham, Audin, Bradley, & Davy, 2004). Financial problems, like debt, increase the risk of depression (Bridges & Disney, 2010; Stuhldreher, Stuhldreher, & Forrest, 2007) and are linked to suicidal ideation and suicide (Meltzer, Bebbington, Brugha, Jenkins, McManus, & Dennis, 2011; Wong, Chan, Conwell, Conner, & Yip, 2010). Financial stress also increases individuals’

risk for alcohol and drug use through increased drinking and drug use to cope (Peirce, Frone, Russell, & Cooper, 1994; Shaw, Agahi, & Krause, 2011) and worsens problematic alcohol and drug use (Nelson, Lust, Story, & Ehlinger, 2008; Stuhldreher et al, 2007). In a parallel and reciprocal relationship, like money and mental health, those with existing problematic alcohol and drug use are at a greater risk for financial problems (Staton, et al., 2001). Additionally, individuals with problematic alcohol and drug use that are engaged in rehabilitation resources experience greater employment and financial strain due to the difficulty in managing treatment and employment responsibilities; these circumstances, which may also apply to mental health treatment, exacerbate both financial and social stress (Staton, et al., 2001).

Money and relationships. Money difficulties have the potential to affect interpersonal and family well-being (Kim, Gale, Goetz, & Bermudez, 2011). The landscape of literature on money and relationships is primarily focused on the positive and negative marital and financial outcomes (i.e., marital/financial satisfaction, stress, stability). It is unclear whether pre-existing financial circumstances (i.e., the financial history that each partner brings to the relationship) influence participation in the institution of marriage, or if the institution of marriage affects financial circumstances (Dew, 2016). However, what is clear is that, as the modern couple displays trends of moving away from the traditional nuclear family, the nuances of changing family structure and dynamics (e.g., increasing same-sex or gender nonconforming couples, and increasing gender equality in earnings;) do appear to have effects on financial dynamics (Graf, Brown, & Patten, 2018; Pew Research Center, 2015).

The structure of relationships has been transitioning as people are waiting longer to get married or are deciding not to do so at all (Cherlin, 2010; Pew Research Center, 2015).

Unmarried cohabitating couples are a growing population and display significant differences in

marriage, divorce, and cohabitation trends, especially across race, education, and social class (Cherlin, 2010; Pew Research Center, 2015). Financial circumstances affect decisions to marry and cohabitate (Smock, Manning, and Porter, 2005), especially for couples of lower socioeconomic statuses (Sassler & Miller, 2011; Gibson-Davis, 2009). Couples that do decide to marry are often those with higher financial security (Denavas-Walt, Proctor, & Smith, 2013), more assets (Mauldin, Mimura, & Wilmarth, 2009), more wealth accumulation (Dew & Eggebeen, 2010), and a greater likelihood of retirement saving (Knoll, Tamborini, & Whitman, 2012). Furthermore, money has the potential to influence all relationship types as it influences employment and migration decisions (Abraham, Ausprug, & Hinz, 2009), attraction (Rick, Small, & Finkel, 2009), and relational behaviors (Papp, Cummings, & Goeke-Morey, 2009).

The literature specific to marriage relationships suggests that marital satisfaction has been predicted by financial satisfaction (Archuleta, Grable, & Britt, 2013), “good” financial management behaviors (Dew & Xiao, 2013), and minimal debt (Skogrand, Johnson, Horrocks, & DeFrain, 2011). The relationship between finances and marital stability (i.e., low probability of divorce) is less clear, as weak relationships exist between financial issues and marital stability (Andersen, 2005; Dew, 2009; Dew 2011). However, financial disagreements (even more so than disagreements about chores, sex, and quality time) appear to be strongly linked to problematic conflict tactics (Dew & Dakin, 2011) and remain a strong predictor of divorce (Dew, Britt, & Huston, 2012).

Conflict as a matter in money and relationships also has a strong base of literature. Britt, Huston, and Durband (2010) established the link between financial and relational conflict, while Jenkins, Stanley, Bailey, and Markman (2002) have suggested that financial conflict may be a result of deeper relational conflict. Financial conflict has been shown to be related to

commitment issues and lack of respect (Dew & Stewart, 2012), and some research suggests money-related conflict and conflict tactics are more intense, significant, and problematic than other topics of marital conflict (Papp, Cummings, & Goeke-Morey, 2009; Dew & Dakin, 2011).

Gender and power are also influential factors that affect relationship and financial conflict (Abraham, Auspurg, & Hinz, 2009; Britt, Huston, & Durband, 2010; Dew & Dakin, 2011). Given the unique role of gender in expressions of power and privilege, gender is a significant topic in relationships and finances. Women often have less power related to money, even when they have equal access to pooled finances (Kenney, 2006). Relationships with low socioeconomic status and unequal distributions of power that experience higher financial conflict are also at higher risk for intimate partner violence (Jewkes, 2002).

Money, mental health, and relationships in the military population. The military occupation is often associated with a challenging lifestyle due to frequent relocations, family separations, and a difficult work-family balance. The financial circumstances of the military population are often complicated by relocations and separations that impact military family finances (Drummet, Coleman & Cable, 2003) through difficulties related to buying and selling houses at times of transitions (Silva, 2011), challenges maintaining and achieving consistent and stable military-spouse employment (Harrell, Lim, Castaneda, & Golinelli, 2004), and variable childrearing and parenting dynamics (Lowe, Adams, Browne, & Hinkle, 2012). Despite the unique and challenging lifestyle of a military occupation, military families tend to be a strong and resilient population (e.g., Bowen, Martin, & Mancini, 2013) worthy of study to understand how families cope and grow in the face of challenge.

Vulnerabilities inherent in the military lifestyle, such as deployment and reintegration, are often opportunities for growth and increased connections amongst military family members

(O’Neal, Lucier-Greer, Duncan, Mallette, Arnold, & Mancini, 2018). Military families exist within a community that provides support and resources that can increase coping and resilience. For example, O’Neal, Richardson, & Mancini (2018) found that couples’ military community connections, defined as the ease with which service members form connections with other service members (Bowen, Martin, Mancini, & Nelson, 2001), were related to coping with the demands of the military lifestyle, and in turn, related to individual mental health and family well-being. Connections to both military support and comprehensive community support are especially important for the non-military spouse in the couple (O’Neal, Mancini, & DeGraff, 2016). Furthermore, support from the military community has been shown to not only affect adult couples’ life satisfaction, but it can also affect the well-being of their children (DeGraff, O’Neal, & Mancini, 2016).

Research on the military population’s personal finances also permeates the individual and couple contexts. Financial literacy and education courses offered through the military are popular and have generally shown positive individual outcomes such as decreased debt, credit card balances, and increased savings (Skimmyhorn, 2016) which in turn, have positive effects on mental and relational health. However, individual military-related experiences of combat resulting in post-traumatic stress or traumatic brain injuries often result in decreased financial health (Elbogen, Johnson, Wagner, Newton, and Beckham, 2012; Hourani, Bender, Weimer, Peeler, Bradshaw, Lane, & Larson, 2012), which can negatively affect mental health and relationship health. Regarding the couple context, Ross, O’Neal, Arnold, & Mancini (2017) found that military couples with more financial management concerns engaged in more hostile interactions, as evidenced by behaviors including arguing over disagreements and criticizing; hostile relationship interactions are related to increased risk and danger, intimate partner

violence, and suicidal ideation (Tinney & Gerlock, 2014). Finally, military couples tend to marry younger which can result in exacerbated relational, financial, and individual stressors in addition to the challenges inherent in the military lifestyle and occupation (Gomulka, 2010).

Another significant factor that impacts military couples' finances and relationship health is that of spouse employment. Military spouse employment was found to be a top concern of active duty spouses, only following time away from family, in a recent study on the military lifestyle (Sonethavilay et al., 2019). The same study also found that pay and benefits was a top concern for active duty spouses, active duty service members, and veterans. Spouses of service members tend to be female (as most service members are male, and same sex partnerships are the minority; Febbraro & Gill, 2010; Hoobler, 2014) and therefore experience a host of challenges related to gendered relationship dynamics. Some of these particular challenges include gendered unequal pay and child-birthing employment penalties (Bertrand, Golden, & Katz, 2010), increased gendered perception of being a flight risk due to the transient military lifestyle (Lyness & Judiesch, 2001), higher likeliness of single parenting challenges due to the absence of the service member partner, and the perception of the military spouse being the primary career and employment being a secondary career (Hoobler, 2014). Overall, the military lifestyle has significant effects on spouse employment, especially across gender, race, and class differences (Cooney, De Angelis, & Segal, 2011). The financial consequences from the challenges that sometimes prevent military spouses from attaining meaningful and gainful employment, and that can prevent a military couple from reaping the benefits of a dual-income household, affect individual mental health and relationship health.

Additionally, many entities have vowed to help improve the overall well-being, and specifically the financial well-being of the military population (Sonethavilay et al., 2019). Efforts

from the Department of Defense (DoD; DoD Office of Financial Readiness, 2018), Blue Star Families (BSF) and the United Services Automobile Association (USAA; BSF, 2018), the Financial Industry Regulatory Authority (FINRA) and the Association for Financial Counseling and Planning Education (FINRA Foundation Military Spouse Fellowship, 2018) , and other government and non-profit agencies suggest that there is a specific need for financial wellness initiatives within the military population. These resources range from preventative education classes, relationship education and counseling, to financial assistance programs. In addition to the academic literature, these resources clearly present the need to address financial well-being, specifically with the military population.

Theoretical Orientation

The present studies are organized within a symbolic interaction theory of human development and a family stress framework. Symbolic interactionism (SI) is a systemic theory of human development that broadly orients the human experience within the social context. The contextual model of family stress (CMFS; Boss, 1987; Boss, Bryant, & Mancini, 2017), a more precise and detailed model, provides the specific framework of the internal and external contexts of the family system as entities that relate to stress, vulnerability, and resilience. Ruben Hill's (1949) ABC-X model of stress and coping is positioned within the CMFS and asserts that an event (A), is organized through resources (B), and assigned meanings and definitions (C), resulting in the outcome of the degree of stress experienced (X). The combination of the SI and CMFS frameworks are well suited to situate a study of family stress (Bowen, Martin, & Mancini, 2013), and therefore provides the basis of investigation for this study, orienting finances, mental health, and relationships for individuals in the military population.

To best organize the application of the SI and CMFS theories to understand the military lifestyle, and in turn financial, mental, and relational well-being of military members, a review of military contextual factors are discussed in detail. Afterward, an in-depth review of the SI and CMFS frameworks will be presented with emphasis on how they are used to organize military context. As the SI theorist Daly (2003) asserts, researchers can gain more accurate understanding of how families live when considering the contextual factors of culture (beliefs, values, intuitions, rituals, etc.), images (of social class, gender, age, occupation, etc.), and the location of the family in time and space. Therefore, the following section reviews the military system's culture and sociohistorical positioning to gain greater contextual understanding of the population of study.

Contextual framework of military culture. The study of family through the lens of the family stress theory as it is currently invoked, began mid-20th-century. Family scientists were brought together from the various fields of psychiatry, counseling, and human development and family science under the uniting belief that family and social context was key. The study of families and stress began with an observation of the military family due to their overwhelming display of resilience in the face of significant life stressors that are inherent in the military experience (Hill, 1949).

The military lifestyle. The military lifestyle is marked by continuous change and development in a dynamic sociopolitical climate. The military is a distinct structure within the United States, and is a group characterized by specific shared goals and values. Military families exist within the culture that values a warrior ethos, and that can be rigid, authoritarian, and somewhat insulated from the larger culture (Soeters, Winslow, & Weibull, 2006; Moore, 2011 Wertsch, 1991). Clear class systems exist (Redmond et al., 2015; Hall, 2011) that create a

hierarchical structure that passes directives from the top ranks down through to the junior ranks where missions are carried out (Huebner, 2019). Change and transition are inherent in the military lifestyle, as service members relocate or deploy to where ever the mission may be. Because of these characteristics, a unique military culture develops that emphasizes discipline, hierarchy, collectivism, camaraderie, and pride (Huebner, 2019). Spouses of service members are also inundated in the military culture and have their own unique experience of the military lifestyle (Harrell, 2001; Faber, Willerton, Clymer, & MacDermind, 2008). While every individual's culture is embossed by the spaces in which their professional, social, familial, economic, political, and other contextual boundaries meet, service members and their families are particularly immersed in the unique military culture where these boundaries may be less differentiated due to the encompassing military culture (Redmond et al., 2015).

Structure within the military culture. The structure of the military culture, including the framework and rules that organize military efforts, is unique and defining (Redmond et al., 2015). The military structure permeates service members' culture through specific trainings that aim to minimize individual differences and increase group mindset and commitment (Winslow, 2000). The hierarchical structure, called the chain of command, outlines a clear class of senior and subordinate, where the subordinate must follow directives of the senior or face incrimination (Redmond et al., 2015). The hierarchies are established by ranks of officers and enlisted personnel; within the officer and enlisted groups are additional ranking structures that organize the hierarchy. Ranks serve as concrete representations of varying social addresses; stripes and symbols are worn on uniforms to clearly mark the service member's social standing and address. The social addresses of these service members can dictate social power and responsibility, access to community resources (i.e., officers clubs), and influence social resources and networks (i.e.,

enlisted and officer ranks are not encouraged to be friends). Additionally, the chain of command establishes trust and confidence in good order, predictability, and obedience necessary for successful military operations.

Subcultures within the broad military culture. Although there are many broad defining contextual factors of the military, a simplistic description of the military culture would be inaccurate because there is much diversity within this population. Subcultures exist within the five branches of the U.S. military—the Army, Air Force, Coast Guard, Navy, and Marine Corps—as each serve a particular role and have a sense of unique identity and tribalism within the military whole (Mancini, O’Neal, Martin, & Bowen, 2018). The hierarchical ranking system is another dominate point of diversity within the whole, as enlisted members are thought of as the blue-collar class, warrant officers as experts and teachers, and commissioned officers as the management and white-collar class (Devries, Hughes, Watson, & Moore, 2012). Additional subcultures that exist within the larger system include those that have experienced combat and those that have not, and that of active duty personnel versus veteran or reserve personnel.

Gender within the military culture. The military has traditionally been viewed as a masculine entity, with a deeply gendered (masculine) structure and history (Silva, 2008). However, as women continue to make up a larger share of the total force with distinctively differing profiles from their male counterparts (Patten & Parker, 2011), the role of gender as a point of diversity has been reiterated. Military women often band together as evidenced by all-women special ops teams, women’s active duty and veterans’ organizations, and military spouse organizations. Furthermore, a dossier of political debates and recent legislation on rights of the LGBTQ population and expressions of gender, sex, and sexuality have allowed for ongoing and changing gender and cultural diversity within the population as well.

Although these subpopulations and subcultures are major points of diversity within the larger military system, the values, beliefs, and overall military mission unify the military culture. The culture uses rituals and symbols to communicate values, meanings, and purposes (Hsu, 2010; Huebner, 2019). These structures, rituals, and symbols are honored and practiced in the day to day life of service members, and therefore permeate the individual, family, and social contexts of service members.

The military community. The military community includes collectivistic and self-sustaining hospitals, shopping centers, restaurants, schools, law enforcement, and other community essentials comparable to a civilian community; the major difference being that the military community aims to support the service member, and in turn, the military operations at large. These military communities are bound by military laws, regulations, and chains of command. Furthermore, the collectivist and socialistic characteristics of the military community provides for valuable benefits such as collective health care for both active duty and veteran members and their families, educational benefits, retirement and pension benefits, and pay benefits for housing and living expenses. The emphasis on collectivism, the group mission, and operation are aspects of the structure within the military culture and community that provide for rich contextual factors of the military lifestyle.

A community of transitions. One of the flagships of the military lifestyle is that of transition and travel. Active duty service members receive orders to duty stations every few years, which means they pick up and move to where ever the military sends them. For a permanent change of station (PCS), family members typically join their service member in the relocation and establish their new homes at the new location. In other types of orders, such as temporary duty assignments (“TDYs”), and deployments, family members will stay home, and

the service member will go on duty for a period of time. Although military families move 2.4 times more frequently than non-military families (Clever & Segal, 2016), there is a substantial body of literature that suggests military families experience increased resilience related to transitions and military mobility. For example, literature suggests that families experience increased resilience when frequent communication and effective household management occur during deployment, which in turn the promotion of family functioning upon reintegration (O’Neal, Lucier-Greer, Duncan, Mallette, Arnold, & Mancini, 2018). Furthermore, although spouses of servicemembers typically experience negative employment consequences, Cooney, De Angelis, & Segal, (2011) found that enlisted spouses with more frequent moves are more likely to be employed; they suggest that these spouses may have, in a display of resilient coping, adapted their careers to a mobile lifestyle and increased their skill at gaining employment.

The military in time and space.

Sociopolitical positions. Just as the military institution influences individual, family, and social systems, it is also influenced by broader systems of policy, history, and the civilian worldview (Murray, 2000). The historical and sociopolitical positions of the military influence the military lifestyle and the “social, legal, political, economic, and technological conditions that inform military experiences.” (Mancini, O’Neal, Martin, & Bowen, 2018, p. 2). For example, in January of 2019 during the longest partial government shutdown in history, service members of the Coast Guard were required to work without pay due to political impasse on inland border security (e.g., Hess, 2019); this broad political issue that was indirectly related to the Coast Guard, directly affected the day-to-day lives of service members. Additional examples of how the current sociopolitical climate has potential to directly affect the military culture include the policy debates of allowing transgender individuals to serve, requiring women to register for the

selective service and be subject to a potential draft, and active efforts around de-stigmatizing mental health issues for military personnel.

Sociohistorical positions. The development of the military lifestyle has evolved through different military eras, and much of this historical context continues to pervade current issues. For example, Pols and Oak (2007) outline how the topic of mental health for the military population has developed drastically throughout history. Pre-World War I, mental health initiatives went as far as screening out the clinically insane and recruiting the mentally strong candidates; it was believed that mental health issues post-World War I were due to insufficiently stringent screening of recruits. Pre-World War II recruitment efforts became more stringent and focused on weeding out sexual minorities with the goal of maximizing psychological fitness; despite these efforts, mental health issues of combat troops worsened during World War II. By the onset of the Vietnam era, the psychological stress of war had come to be expected, however, the nature of combat was changing, and mental health professionals struggled to keep up with the evolving psychological costs of war. Since the Vietnam War, mental health initiatives have become a primary focus and mental health services to treat the psychological stressors of war have become more preventative (before troops are deployed), more active (mental health providers are on the grounds), less stigmatized, more valued, and better resourced. The debate of “psychological fitness” regarding sexual minorities continues, and the psychological consequences of war continue to be poorly defined in our current era.

Sociogeographical positions. The U.S. military is strategically positioned across the globe to tend to political initiatives. Peacekeeping efforts, defending of national security, and protecting the population domestically and internationally requires distribution of the military across the world, which take form through deployments, TDYs, or PCSs. However, increasingly,

families are choosing a route of geographic bachelorhood (“geobaching”), or co-locating, where family members choose to live in separate locations (Velding, 2017). Military families choose to geobach (live separately) for many reasons including health care, finances, community, and children’s schooling (Sonethavilay et. al., 2019). As servicemembers span the globe to achieve military goals, military family members span the globe alongside their service members to achieve military family goals.

Theory of family and human development

Symbolic Interactionism

Symbolic interactionism (SI) is a systemic theory that orients the human experience within the social context. At the core of symbolic interaction theory lies underpinnings of interpretivist, pragmatism, and critical epistemologies (Bengtson et. al., 2004). Broadly, SI asserts that people assign meanings to their experiences to make sense of their worlds; these meanings are both developed in social contexts, and influence social contexts (Turner & West, 2006). The theory speaks to individual-level social contexts as well as broad cultural and societal contexts. The symbolic interaction philosophy is historically embedded in pragmatism (Burr, Hill, Nye, & Reiss, 1979), resulting in a dynamic application as social norms and families change. Because of the pragmatic commitment to a reformist approach, symbolic interactionism has an inherent ability to continuously provide a framework for the changing military population, their contexts, and societal fluctuations (Boss, Doherty, LaRossa, Schumm, & Steinmetz, 1993).

Symbolic interactionists believe in the *symbolic* representations in the human experience, and that humans interact *with* each other, as opposed to towards each other (Denzin, 2016). Key assumptions in this statement include that of agency and action, where the two are not viewed as in opposition; rather, humans are social agents engaging in interactions that are situated within

the constraints of their contextual locations (Giddens, 1981). SI aims to answer questions about how people create meaning in their lives based on perspectives and experiences (Allen & Henderson, 2017), and suggests that this subjectivity occurs within the contextual systems of dialogical processes where autonomous individuals interact with others. In turn, the contextual system is both the “medium and outcome of social acts” (Giddens, 1981, p. 19; Denzin, 2016), and the source of meaning for objects (i.e., objects have no meaning outside of the social context; Allen & Henderson, 2017).

Symbolic interactionism asserts that the subjective meanings that individuals and families assign to stress mediate objective realities and are situated as the key to navigating stress (Boss, Bryant, & Mancini, 2017; Blumer, 1969; Daly, 2003). SI recognizes the dialectical tension and enmeshment between subjective and objective processes (Thomas, Znaniecki, & Strubing, 1984). For example, if a military spouse is unemployed (objective process) and that results in the assigned meaning that “I am not fairly contributing to the household income” (subjective process), then, within the relationship the partners act as if they are in an unfair relationship; this begets more “unfairness” (enmeshment of objective and subjective process), even though the partners want to be in a “fair” relationship (dialectical tension).

The theory suggests that humans create worlds of meanings in the context of each other; these schematic meanings inform behaviors, and in turn, behaviors inform how meanings are created (Doherty, Boss, LaRossa, Schumm, & Steinmetz, 2009). SI is systemic in that it conceptualizes families as social groups and focuses on the processes and interactions between the individuals and assigned meanings to objective and subjective realities. SI asserts that objective human behavior cannot be understood without contextual factors and interpretations assigned to behaviors and experiences (Doherty et al., 2009). It assumes that meanings motivate

behaviors, self-identity, and are influenced by cultural and societal processes (Boss, Bryant, & Mancini, 2017; Doherty et al., 2009).

With meaning situated as the key concept in human development, Boss et al., (1993) maintain seven core theoretical assumptions of SI. First, people act towards stressors based on the meanings they prescribe to them; the synthesis of meaning is a recursive and regenerative contextual process that happens as humans develop and change. Second, meaning arises within social interactions and in the forms of symbols and shared interpretations; these agreed-upon symbols are intersubjective and conclude what a normal or acceptable response to a particular situation might be (Mead, 1956). Third, meaning is synthesized, interpreted, and modified within the person and their social interactions, and fourth, so is the concept of self. The fifth assumption asserts that a self-concept motivates behavior and behavior validates self-concept. The sixth and seventh assumptions regarding society posit that the previous theoretical assumptions are influenced by the aggregate culture and context, and culture and society are worked out in the day-to-day interactions of individuals.

In the Contextual Model of Family Stress (CMFS, discussed next), perceptions and meanings of the stressor, as defined by the SI theory, are a key to understanding family stress. The symbolic representations and shared meanings of stress are the “perceptions” of stress in the CMFS model, and are influenced by community, society, and culture (Boss, Bryant, & Mancini, 2017). Boss et al. suggest that the meanings and perceptions determine family rules, which delegate how families “should” respond to stress; these family perceptions are reflective of the larger community and societal perceptions. In other words, there are symbolic contexts in the larger familial, community, and societal systems, as there are within individuals. Furthermore, while symbolic meaning making most obviously accounts for the interpretation of subjective

situations (i.e., conflict), individuals, families, and communities also assign symbolic meaning to objective realities (i.e., death).

Critiques

Allen & Henderson (2017) outline the main critiques of SI. First, because SI emphasizes human agency in meaning making, some argue that SI fails to acknowledge the objective systemic forces at play, such as power, conflict, and systemic discrimination. And second, the theory is sometimes seen as a vague or disjointed collection of concepts rather than a theory that cohesively explains human and family development. However, symbolic interactionists reply that these are non-issues. Rather, the SI agenda is to examine *how* concepts are developed locally, the experience and meaning behind these concepts, and the lived experience within these concepts. The SI agenda also does not find it possible or necessary to have an all-encompassing explanation of human development, as there are many issues within grand assumptions as well.

A SI purist may only partake in qualitative studies that methodologically employ interpretive and constructivist practices (Denzin, 2016), however, the adaptability of the theoretical orientation allows for creative applications in research. Due to the quantitative inquiry of this study and in response to the critiques previously presented, SI is necessarily combined with a supplemental theory (Doherty, et al., 2009), the CMFS. In this study of finances, mental health, and relationship health, the symbolic interaction theory informs the following application of the CMFS; perceptions of stress and health are key to this study and are theoretically informed by SI. Both the SI and CMFS models organize the broad inquiry as well as the conceptual model of analysis, which are discussed in depth in the following sections.

Contextual Model of Family Stress

The CMFS as presented by Boss, Bryant, and Mancini (2017) is not a direct extension of SI; rather, it provides a framework of more nuanced details of stress and coping to parse out the broad ideas of SI as they apply to these studies. The model asserts that families do not live in isolation but rather, they exist in a rich environment comprised of both internal and external contexts. The model addresses stress and vulnerability, coping and resilience, and the contextual factors that help to explain how families achieve well-being (Mancini, O’Neal, Martin, & Bowen, 2018). The contexts are understood as the surrounding circumstances that help to define, understand, and assess families.

Internal context. Elements that are mostly within an individual’s realm of control are considered internal contexts. Within the internal contextual factors is the structural context which is basically the family system. This includes who is considered part of the family, the roles of each family member in the family system, and the boundaries between them. For example, in military families, the family structure may include non-biological family members, like another military spouse that helps take care of and raise children in the absence of the active duty parent; this “family” member plays a significant role in the family system and structure. The internal context also includes psychological factors such as how family members think and feel. To build from the previous example, military spouses may feel grateful to have each other to rely on for childcare and rearing help, while other families may feel guilty or burdened by that structure. Last, the internal context includes philosophical factors that encompass the family values and beliefs. If the example family had beliefs and values that did not support collective child rearing, then they would likely not participate in sharing childcare responsibilities. The structural,

psychological, and philosophical contexts are all factors over which the family has some control and decision-making power.

External contexts. External contexts include parts of the environment that individuals and families have little to no control over. Within the external contexts are first the broad cultural influences. These include meta-rules defined by society and community norms and expectations. An example of cultural influences that military families are affected by is two-fold: first they exist within a broad individualistic and capitalistic culture with slightly constrained liberties, norms, and expectations (that of the United States); second, they exist within a collectivistic and structured hierarchical culture with specific rules, norms, and expectations (that of the military). Also within the external context is that of historical placement. For the U.S. military, the current historical placement is called the era of Operation Enduring Freedom/Operation Iraqi Freedom; previous historical placements include the Gulf War era (1990's), the Vietnam era (1960's-70's), and others dating back throughout the military's history. Economic factors, such as times of broad economic recessions or growth, are also external contextual factors. And last, hereditary and genetic factors are external in that a family or individual has little to no control over the biological circumstances that are passed down to them (at least not yet).

Family stress can only be understood through the contexts in which the stressors occur. Organizing contextual factors as internal and external helps to provide deeper understanding of stressors that families experience and how they get to resilient coping. Resilience, a process of and capacity to gain greater strength from adversity (Walsh, 2006; Boss, 2002; Nichols, 2013), is the outcome of interest in the CMFS, and is in opposition of stress and crisis.

The ABC-X framework. Deeper in and at the core of the CMFS lies the ABC-X framework, which outlines how a stressor (A) is impacted by resources (B) and perceptions (C),

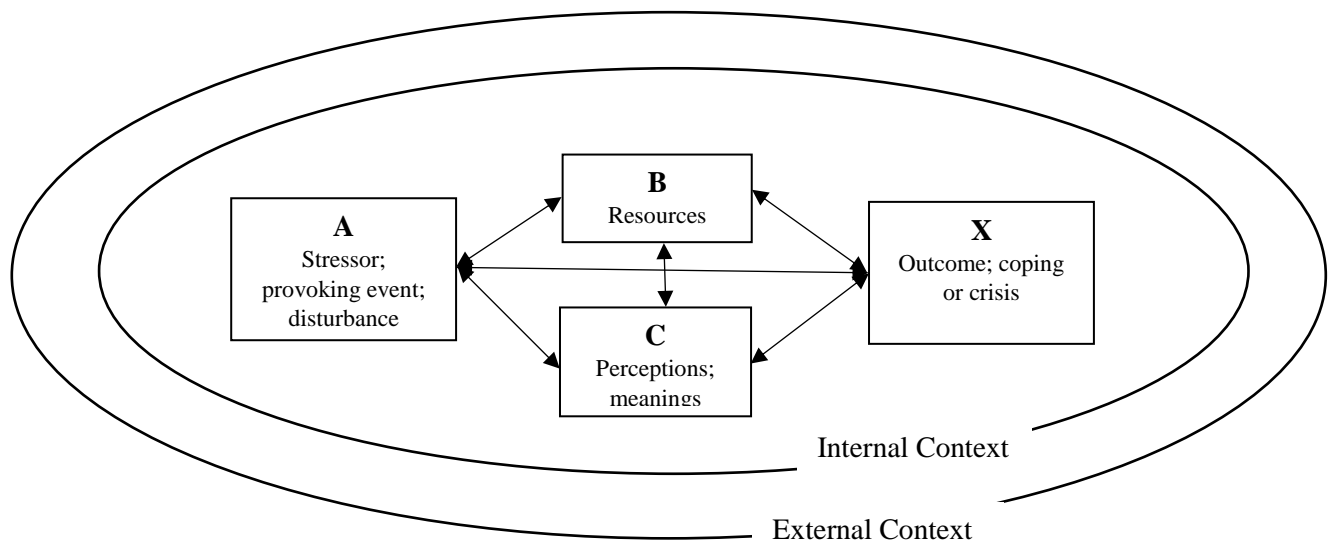


Figure 1. The ABC-X Model of Stress within the CMFS.

and in turn, results in an outcome that is resilient coping or crisis (X). Figure 1 displays the components of the ABC-X model and their relations to one another. The dimensions of the ABC-X figure that describe a process of stress and coping, are situated within the internal contextual factors, which are all situated within the broader external contextual factors. In other words, the ABC-X process happens within the contexts of the internal and external circumstances (Boss, Bryant, Mancini, 2017; Boss, 2002; Hill, 1958).

There have been many permutations of this basic approach first articulated by Hill (1958), as presented by William Nichols (2013). Burr (1973; 1982) contributed a set of propositions that situated family vulnerability, the regenerative power of families, changes, amount of crisis, and family structure power. McCubbin & Patterson (1982) developed the Double ABC-X model that added theorizing on what happens after the first ABC-X; in other words, after the crisis and through coping and social support, families often exhibited recovery and resilience. The Family Adjustment and Adaption Response (FAAR) Model (McCubbin & Patterson, 1983; Lavee, McCubbin, & Olson, 1987) added the three phases of adaption to stress:

resistance, restructuring, and consolidation. The FAAR model, through further development, established typologies of family adaption to stress and introduced vulnerability as factor, known as the T-Double ABC-X Model (McCubbin & McCubbin, 1989). Next came the Resiliency Model of Family Adjustment, another development by the McCubbins' research (1993, 1996) that added relational perspectives, established family patterns, included family problem-solving, coping, functioning, development, and community relationships.

The multiple permutations of the ABC-X model collectively highlighted many important facets of family resilience; namely, the concepts of family vulnerability, the regenerative nature of families, and the longitudinal trajectories of family stress. Because of the cross-sectional nature of the studies presented in this study, and the accounting of the contextual factors in the CMFS, Rueben Hill's original ABC-X model, Burr's and Boss et al.'s (2017) contributions are what inform this application of the ABC-X model. However, it is also true that the theories of family stress and current application of the ABC-X model are undoubtedly informed and shaped by the works of McCubbin and associates. The ABC-X framework within this application of the CMFS positions the type of stressor or disturbance (A) that a family experiences as effecting the degree of the outcome (X) through resources (B) and perceptions and meanings (C).

The event (A). The event in the ABC-X framework is defined as, "a life event impacting upon the family unity which produces, or has the potential of producing, change in the family social system." (McCubbin & Patterson, 1983, p. 7). Boss, Bryant, and Mancini (2017) outline the sources, types, durations, and density of events. Sources of events and stressors can be internal or external (e.g., from inside the family, as in family violence, or from outside the family, as in living through a hurricane). Types of events include normative and expected stressors (e.g. puberty), or situational, unexpected, and even catastrophic (e.g., a child goes

missing); events can be ambiguous (e.g., losing a loved one in war with minimal details of the events), or clear (where details, facts, and outcomes of the stressor are known); and finally, events can be volitional (e.g., a retirement and counted on pension), or nonvolitional (e.g., a layoff and no severance package). The duration of an event can be either chronic or acute, and the density is either cumulative (e.g., families that experience multiple ongoing stressors), or isolated (e.g., a one-time pinpointed event). As Boss, Bryant, & Mancini contend, these classifications are highly dependent on the family's internal and external contextual factors, and the family's definition and meaning of the event. Furthermore events, despite their classifications, can be positive, negative, or neutral, and are stressors that require adaption and coping. Each of these classifications of stressors is important as they impact the rest of the process (BC-X) significantly. The event and stressor in the context of this study is financial difficulty.

Resources (B). The B factor in the ABC-X model refers to the resources that the family has access to and may employ during a time of stress. Resources impact the family's ability to avert the development of a crisis (McCubbin & Pattern, 1982, 1983). Boss et al. (2017) define resources as "individual, familial, and community strengths and assets available to the family at the time of stress or crisis." (p.43). Resources can be internal, such as good health, positive attitudes, motivation, education, and skills; they can also be external such as friendships or networks, access to community supports, supportive policy, and local protections. In the context of these studies, resources are positioned as the use of community support programs and resources.

Perception and meaning (C). The perception or assigned meaning (C), is the subjective interpretation and definition of the event, and perhaps the largest determinant of the outcome.

Boss (2002) focuses on perception and meaning, elevating the importance of the C factor in the ABC-X framework. “If families are expected to act on their own behalf, to change or to transform, then honoring the sense they make of their experiences is the first step.” (Boss et al., 2017, p. 43). The C factor is most closely aligned with and informed by the Symbolic Interaction theory of human development, as understanding *how* meaning and being affect family stress is central in SI and central to the CMFS.

The development of the C factor originated from Burgess’ (1926) notion that situations defined as real *are* real, in that their consequences are real. Previously called the ‘definition of the event’ by Hill (1949/1971), Boss (1992) calls the C factor the ‘perception and meaning of the stressor.’ It has also been described as ‘the appraisal,’ (Antonovsky, 1979), and ‘levels of meaning,’ of the stressor (Patterson & Garwick, 1994). What each of these descriptions have in common is an underlying thread that illustrates the presumptions and symbolic meanings that the family makes of the stressor event. For example, a military spouse may assign meaning to their partner’s deployment as ‘they are being abandoned and left to do life on their own;’ these assigned meanings of deployment may leave the spouse isolated, depressed, and in crisis (the outcome of the stressor/deployment). On the other hand, the spouse may assign meanings of altruism, honor, and civic duty to the deployment, leaving them with pride, gratitude, and resilient coping as outcomes. While perceptions are positioned as key, they are not the sole mediator in the ABC-X model. Resources and support systems (B) play an important role in shaping perceptions, and vice-versa (perceptions play an important role in accessing resources). Boss et al. (2017) describe the feedback from resources as either validating of accurate assessments and perceptions, or as providing of different perspectives on incongruent or wry assessments and perceptions. Therefore, perceptions and attributions of meanings are positioned

as key, but resources are often an entity of feedback, shaping and developing perceptions. In this study, the C factor is positioned as both the perceptions of financial wellness and sense of community support.

The outcome (X). Stress does not always result in crisis. In fact, stress is in some ways, required for building and strengthening resilient families. Crisis, strain, or coping and resilience are the possible results of a stressor. Crisis is defined by Boss et al. (2017) as “a disturbance in the equilibrium that is so overwhelming; a pressure that is so severe; or a change that is so acute that the family system is blocked, immobilized, and incapacitated.” (p. 45-46). Only sometimes does a stressor result in crisis, where a family is momentarily unable to function and maintain boundaries and roles. Crisis is a sharp, acute, categorical state of being in which normal or usual functioning is inadequate, inappropriate, or disabled (Burr, 1982; Boss et al., 2017). At some point within the crisis period the family eventually hits bottom and begins to enter recovery, a period of change and reorganization that can be better than, equal to, or not as good as the period before the stressor began (Boss et al., 2017; Hill, 1949/1971).

Crisis and stress are not the same thing. Whereas crisis is a categorical variable (i.e., a family is in crisis, or it is not), stress is a continuous variable (Boss et al., 2017) that “may never reach crisis proportions if the family is able to use existing resources and define the situation so as to resist change within the family system.” (McCubbin & Patterson, 1983b, p. 67). Boss et al. (2017) call this strain. Family strain is described as state of brittleness, where the family is vulnerable, but still maintaining. Stress can also be positive, tolerable, or toxic (Boss et al., 2017), depending on how a family perceives and acts around the stressor event. Positive stress is the short-lived, day-to-day stress experienced in normative adversities (e.g., negotiating parental duties) and can result in motivation and growth. Tolerable stress can also be short lived but has

greater intensity and potential to become developmentally significant (positively or negatively; e.g., receiving PCS orders). Toxic stress is chronic and usually unmanageable without the help of others (e.g., intimate partner violence or substance use dependency).

And, just as crisis and stress are different, so are coping and resilience. Coping describes maintenance of the status quo, perhaps in the state of brittleness and vulnerability. Resilience suggests achieving a better and improved state of being and an outcome that is above and beyond the state of being prior to the stressor or crisis. Coping and resilience can co-occur (Boss et al., 2017). In this study, the X-factor is a measure of mental health (in manuscript 1), and relationship health (manuscript 2).

Research Questions and Hypotheses

Two studies aim to examine the relationship between financial difficulties and individual mental health (manuscript 1), and financial difficulties and relational health (manuscript 2). With use of resources, sense of community, and perceptions of financial wellness as the key mechanisms through which coping, or “health” occurs in both studies, the broad study aims to expand the literature on the relationships between financial difficulties, mental health, and relational health. Utilizing couples’ dyadic data, an actor-partner interdependence model will be employed to examine the specific research questions.

- Manuscript 1 (Mental Health Outcomes Manuscript) Research Question: *What are the direct and indirect associations between military couples’ financial difficulties and mental health, through use of resources, sense of community, and perceptions of financial wellness?*
- Manuscript 2 (Relationship Health Outcomes Manuscript) Research Question: *What are the direct and indirect associations between military couples’ financial difficulties and*

relationship health through use of resources, sense of community, and perceptions of financial wellness? The key differences between the studies is that of the individual and couple systems outcome variables of individual mental health and relationship health.

- And in both studies, *are there model invariances (differences) in these relationships across military contextual factors of spouse employment, housing location, and rank? In other words, do these three contextual factors change the associations in the model?*

The studies utilize actor-partner interdependence analyses to examine the direct and indirect effects of use of community resources and sense of support and wellness on the relationship between financial difficulties and mental health, and financial difficulties and relational health.

The actor-partner interdependence model (APIM; Kenny, Kashy, & Cook, 2006) allows for examination of intra-and inter-individual effects, meaning that each partner's perceptions and reports are accurately reflected. The studies use the CMFS theory to position the internal and external contextual factors of the military lifestyle and resources. The ABC-X framework within the CMFS organizes the stressor (A, financial difficulties) as the independent variable, of the mediating variables of use of community resources (B) and sense of support and wellness (C), and outcome variables of coping (mental health for manuscript 1, and relational health for manuscript 2). These analyses consider the important military contextual factors including rank, number of deployments and total time deployed, number of transitions, and housing location (on or off a military installation/community). The follow hypotheses are set forth:

Mental Health Outcomes Manuscript:

1. Service members and spouses' financial difficulties will be negatively associated with their use of resources, sense of community, and perceptions of financial wellness, with both actor and partner effects.

2. Increased use of resources, greater sense of community, and greater perceptions of financial wellness will be positively associated with mental health outcomes, with both actor and partner effects.
3. Financial difficulties will be indirectly associated with mental health outcomes through use of resources and, sense of community, and perceptions of financial wellness, with both actor and partner effects.
4. Model invariance is expected based on key military contextual factors (spouse employment, housing location, and rank).

Relationship Health Outcomes Manuscript:

1. Service members and spouses' financial difficulties will be negatively associated with their use of resources, sense of community, and perceptions of financial wellness, with both actor and partner effects.
 2. Increased use of resources, greater sense of community, and greater perceptions of financial wellness will be positively associated with relationship health outcomes, with both actor and partner effects.
 3. Financial difficulties will be indirectly associated with relationship health outcomes through use of resources, sense of community, and perceptions of financial wellness, with both actor and partner effects.
- Model invariance is expected based on key military contextual factors (spouse employment, housing location, and rank).

The research questions and hypotheses presented above are represented in the conceptual models depicted in Figure 2 (for manuscript 1) and Figure 3 (for manuscript 2). This conceptual

model parallels the ABC-X framework presented in the CMFS theoretical orientation section.

Here, the hypothesized relationships are presented with the dyadic effects.

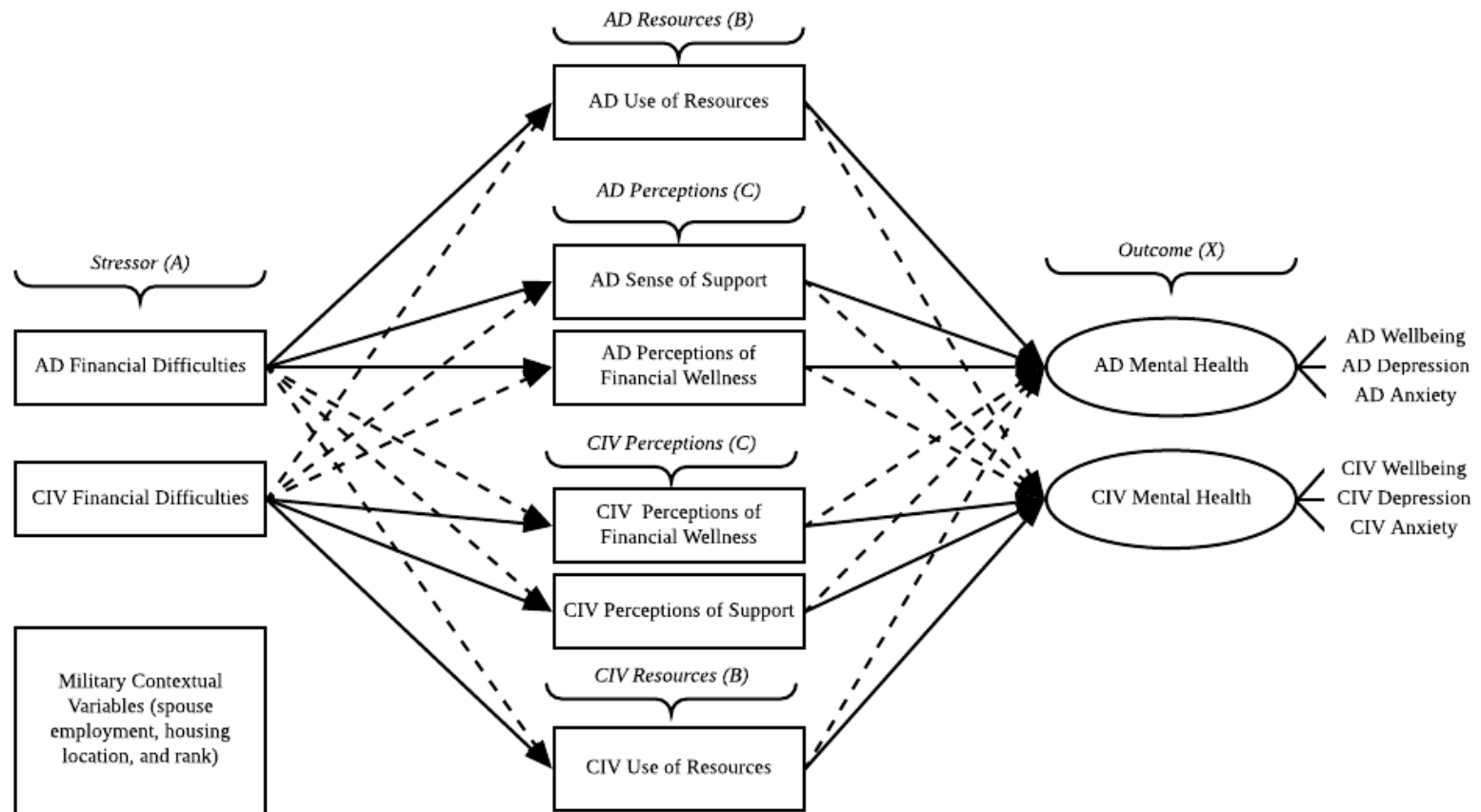


Figure 2. Manuscript 1: Mental Health Outcomes Conceptual Model. The ABC-X model depicting the dyadic examination (active duty (AD) and civilian partner (CIV) partners) of direct and indirect effects of use of resources and sense of support and wellness on the relationship between financial difficulties and mental health. Actor effects are drawn with a solid line and partner effects are drawn with a dashed line.

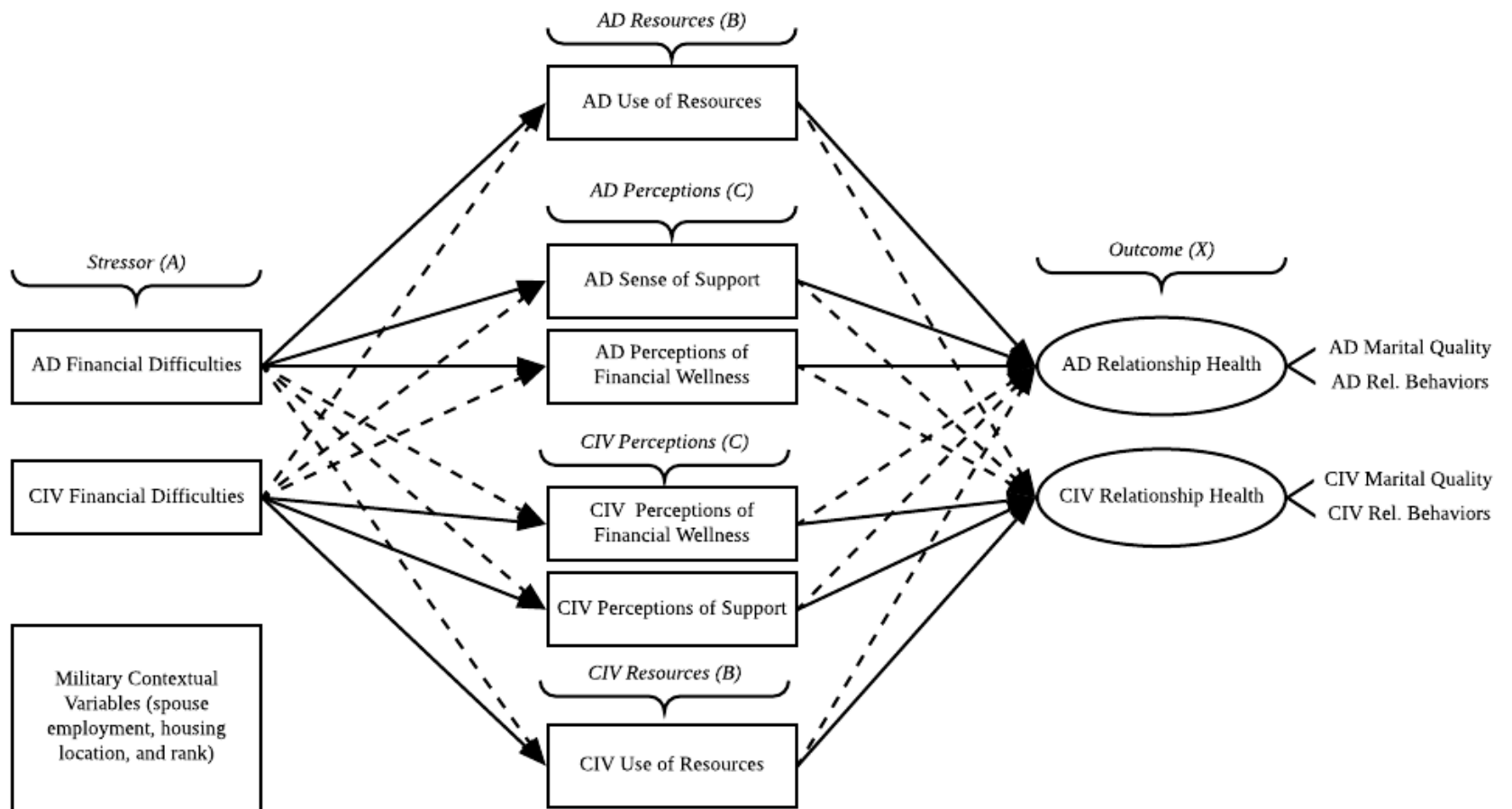


Figure 3. Manuscript 2: Relationship Health Outcomes Conceptual Model. The ABC-X model depicting the dyadic examination of direct and indirect effects of use of resources and sense of support and wellness on the relationship between financial difficulties and relationship health. Actor effects are drawn with a solid line and partner effects are drawn with a dashed line.

CHAPTER III

Methodology

Participants and Sampling Procedures

Data were collected from active duty (AD) service members, civilian (CIV) spouses, and their children located at an Army post in the United States. The original sample consisted of 273 families collected via a convenience sample. Due to the couple-focused purpose of this study, only the adult couples' data are included in analysis. Thirty-two responses were excluded from the analysis because they were single parent families. Twenty additional couples were excluded from the survey (7 dual-military couples and 13 couples with female active duty and male civilian spouse respondents) to minimize potential gender and contextual differences. The final analytic sample includes 221 couples.

Data were collected in a computer lab at a youth center on an active duty U.S. Army installation. Trained researchers alongside youth services personnel, who were familiar with the participating families, helped to collect the data. The couple data analyzed in this study were part of a larger family study that included child data. Research criterion included having at least one active duty service member in the family and all family members take the survey at the same time and place. Recruitment efforts included print advertising, radio advertising, signs at youth centers, and flyers in common areas (the post exchange, convenience stores, restaurants, etc.) to assemble the sample.

Male active duty (AD) service members and female civilian spouses (CIV) in the analytic sample had an average relationship length of 12.72 years ($SD=5.62$). Most respondents'

education level was between high school and some college (AD, 61.4%; CIV 57.0%), followed by associate's degree (19.0%, 18.6%), bachelor's degree (14.5%, 15.8%), and graduate degree or higher (4.5%, 8.6%). Fifteen percent of the respondents were of junior enlisted ranking (E1-E4) and 73.7% were senior enlisted; 9.5% were second lieutenant to major officers (O1-O4) or warrant officers (WO1-CW5), and 1.3% were lieutenant colonel to lieutenant general (O5-O9). Over half of respondents lived in on-post military housing (57.5%), and 8.1% lived in off-post military housing; 34% lived in off-post civilian housing. Most couples had experienced a deployment (91.4%), with 16.3% experiencing one deployment, 19.9% experiencing two, 29.9% experiencing three, 16.3% experiencing four, and 9.7% experiencing five or more; the average cumulative number of months deployed since 2001 was 30.2 (SD=15.3).

Measures

The six concepts that organize the studies are positioned within the CMFS and ABC-X conceptual model and include financial difficulties (A, the predictor variable), use of resources (B, a mediating variable), sense of community (C, a mediating variable), perceptions of financial wellness (C, a mediating variables), mental health (X, the outcome variable in manuscript 1), and relationship health (X, the outcome variable in manuscript 2). These concepts are measured by the constructs presented in Table 1; full scales are presented in APPENDIX A: MEASURES. An in-depth review of the concepts and their measures follow Table 1.

Table 1. *Measures, Constructs, and Locations of Variables*

Constructs	Measures Used	Location
Financial Difficulties	Financial Management Difficulties (10 items, PREPARE/ENRICH; Olson & Olson, 1999)	Stressor (A) – Predictor
Use of Resources	Programs Used (sum of programs/services used, out of 11 programs/services offered by the Army)	Resources (B) – Mediator
Perceptions of Community Support	Sense of Community Subscale (7 items; Community Connections Index; O’Neal O’Neal, Mallette, & Mancini, 2018)	Perceptions (C) - Mediator
Perceptions of Financial Wellness	Personal Financial Wellness (3 items; Prawitz et al., 2006a, 2006b)	Perceptions (C) – Mediator
Mental Health	Center for Epidemiologic Studies Depression Scale (7 items; Radloff, 1977) Zung Self-Rating Anxiety Scale (20 items; Zung, 1971) Personal Wellbeing Index (8 items; International Wellbeing Group, 2013)	Outcome (X), manuscript 1
Relationship Health	Quality Marriage Index (4 items; Norton, 1983) Adapted Authoritative Parenting/Relationship Behaviors (15 items; Conger et al., 1989)	Outcome (X), manuscript 2
Contextual factors	1. Rank 2. Spouse employment 3. Housing	Context- Control variables /moderators

Financial difficulties. Financial difficulties, the independent variable in both studies, is measured by Olson & Olson’s (1999) PREPARE/ENRICH, 10 item assessment of financial management (see Appendix A for full scale). The PREPARE/ENRICH assessment included items such as, “We had difficulty deciding how to handle our money,” “We had trouble saving money,” and, “I was concerned about how [my partner] handled money.” Responses include (1) strongly disagree, (2) disagree, (3) undecided, (4) agree, and (5) strongly agree; the measure has high internal consistency ($\alpha=0.84$ for active duty partners, and $\alpha=0.84$ for spouses). Responses were totaled, and higher scores indicate increased financial difficulties.

Use of resources. Accessing of resources is a measure of behavioral use of programs, services, and community engagement, measured by support programs. See Table 2 for the correlation matrix and Table 3 for univariate statistics of the following observed variables used to measure use of resources. This variable represents the total number of programs and services used by respondents from a list of 11 programs and services offered by the Army (see Appendix A for full scale). The list included programs and services such as career support, education support, couples and family therapy, and parenting support. This is not a continuous indicator of how many times a respondent used each particular service, but rather, a count variable for the number programs or services used. If a respondent indicates using 2 of the 11 services, the total score would be 2. Higher sum scores indicate increased use of programs and services, and in turn, increase accessing of resources.

Sense of community. Because the C factor “is defined as the family’s collective perception of a stressor event... it is how they think about or view what they are experiencing.” (Boss, Bryant, & Mancini, 2017, p. 43), a sense of community scale is used to measure the first C factor. Because this study focuses on the military family’s context in which they experience stress, the perceptions of support from the community context is examined. Also using The Community Connections Index (O’Neal, Mallette, & Mancini, 2018), the 7 item Sense of Community Subscale is used to measure perceptions of community (see Appendix A for full scale). Examples of the items on the Sense of Community Subscale include “In the past year how often have you... felt close to other people in your community?” “...spent time with people in your community when you needed a little company?” and, “...talked with people in your community about your problems or difficulties?” Responses were coded as (1) never, (2) sometimes, (3) often, and (4) always; higher scores indicate increased sense of community, and

in turn, a more positive perception of community support. The scale had high internal consistency ($\alpha=0.86$ for AD partners, and $\alpha=0.91$ for CIV partners).

Perceptions of financial wellness. The second aspect of the C factor is the conceptualization of perceptions of financial wellness. Because this study focuses on financial difficulties, it is necessary to examine the perceptions of the specific stressor event (Boss, Bryant, & Mancini, 2017). Three items from Prawitz et al's (2006a, 2006b) assessment of personal financial wellness were used to comprise the construct measuring respondents' perceptions of the stressor event (financial difficulties; see Appendix A for full scale). The items were: "What do you feel is the level of your financial stress today?" with responses coded as (1) overwhelming stress, (2) high stress, (3) low stress, (4) no stress at all. "How do you feel about your current financial condition?" with responses coded as (1) overwhelmed, (2) sometimes worried, (3) just okay, and (4) comfortable. And, "How often do you find yourself living paycheck to paycheck?" and responses included (1) always, (2) sometimes, (3) rarely, and (4) never; higher sum scores indicate increased financial wellness, and in turn, a more positive perception of financial wellness. The scale had good internal consistency ($\alpha=0.81$ for AD partners, and $\alpha=0.83$ for CIV partners).

Mental health. Mental health, the dependent variable in manuscript 1, is a latent construct consisting of three measures of depression, anxiety, and personal wellbeing as observed constructs; mental health utilizes personal wellbeing as the indicator variable, therefore depression and anxiety will be reverse scored to match the direction of personal well-being in the latent construct. See Table 5 for the correlation matrix of the following observed variables in mental health.

Personal wellbeing. The Personal Wellbeing Index (PWI; International Wellbeing Group, 2013) uses 8 items to measure personal well-being as an indicator of mental health (see Appendix A for full scale). Example items include, “I was satisfied with my life as a whole,” “I was satisfied with feeling part of my community,” and, “I was satisfied with what I was currently achieving in life.” Responses were collected on a 4-point scale as (1) strongly disagree, (2) disagree, (3) agree, and (4) strongly agree. The scale had high internal consistency ($\alpha=0.90$ for AD partners, and $\alpha=0.90$ for CIV partners). Personal well-being is utilized as the indicator variable in the latent construct for mental health; therefore, anxiety and depression indicators are reverse scored to match the direction of personal well-being.

Depression symptoms. The Center for Epidemiologic Studies Depression Scale (CESD7; Radloff, 1977) uses 7 items as an indicator of mental health (see Appendix A for full scale). Example items include “During the past week, I felt depressed,” “I had trouble keeping my mind of what I was doing,” and, “I felt that I could not shake off the blues even with help from my family or friends.” Responses were collected and coded on a 3-point scale as (1) none of the time, (2) some of the time, and (3) most of the time. Higher scores on the scale indicate increased depressive symptoms, and poorer mental health. The scale had high internal consistency ($\alpha=0.83$ for AD partners, and $\alpha=0.89$ for CIV partners), and has established discriminant validity (Andersen, Malmgren, Carter, & Patrick, 1994).

Anxiety symptoms. The Zung Self-Rating Anxiety Scale (SAS; Zung, 1971) uses 20 items to measure symptoms of anxiety as an indicator of mental health (see Appendix A for full scale). Example items include, “During the past week, I felt afraid for no reason at all,” “I got upset easily or felt panicky,” and, “I felt more nervous and anxious than usual.” Responses were collected on a 3-point scale as (1) none of the time, (2) some of the time, and (3) most of the

time. Higher scores on the scale indicate increased symptoms of anxiety, and poorer mental health. The scale had high internal consistency ($\alpha=0.84$ for AD partners, and $\alpha=0.83$ for CIV partners).

Relationship health. Relationship health, the dependent variable in manuscript 2, is a latent construct measured by marital quality and relationship behaviors as observed variables. See Table 6 for the correlation matrix of the following observed variables in relationship health.

Marital quality. The first indicator of marital quality was the Quality Marriage Index (Norton, 1983; see Appendix A for full scale). Four items, “I think we have a good relationship,” “I think our relationship is very stable,” “I feel like we are a team,” and “I am committed to making my relationship a success” coded (1) strongly disagree (2) disagree, (3) agree, and (4) strongly agree, were totaled. Higher scores indicate higher marital quality. This scale has high internal consistency ($\alpha=0.95$ for AD partners, and $\alpha=0.94$ for CIV partners).

Relationship behaviors. Measures of Authoritative Parenting (Conger et al., 1989) was adapted to assess relationship behaviors (warmth and hostility) with 15 items (see Appendix A for full scale). Example items include “During the past year, when you and your partner spent time talking or doing things together, how often did he or she... let you know that they really care about you?” “...listen carefully to your point of view?” and, “let you know that they appreciate you, your ideas, or the things you do?” Responses were coded as (1) never, (2) sometimes, (3) often, and (4) always, with higher scores indicating better relationship behaviors, and in turn, increased relationship health. The scale has high internal consistency ($\alpha=0.90$ for AD partners, and $\alpha=0.92$ for CIV partners).

Military contextual variables. To assess the ways in which the military context may affect the model, several binary indicators of context are examined as control variables in a

mediation model and as moderators in a multi-group analysis. These indicators include *spouse employment*, as employed ($n=73$, 33.0%) or not employed ($n=147$, 66.5%), *housing location*, as living on post ($n=127$, 57.5%), or living off-post ($n=93$, 42.1%), and *rank*, an indicator of status, pay grade, and social address (O’Neal, Mancini, & DeGraff, 2016) binarily categorized as enlisted personnel (E1-E9; $n=185$, 83.7%), and officer personnel (O1-O9/WO1-CW5; $n=36$, 16.3%). See Table 4 for binary cutoffs and group frequencies. While these indicators account for some aspects of community in the military lifestyle, other aspects like deployment and transitions are not included in this study. Because much of the current literature focuses specifically on transitions and deployments, the scope of this study was set to examine finances, mental health, and relationship health, and therefore focuses on the contexts more closely associated with finances.

Table 2. *Correlation matrix of all study variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. AD Fin. Difficulties	-													
2. CIV Fin. Difficulties	.35±	-												
3. AD Programs Used	.14*	.14*	-											
4. CIV Programs Used	.08	.14*	.22±	-										
5. AD Sense of Community	.13	.12	.12	.02	-									
6. CIV Sense of Community	.04	.01	-.08	.22+	.10	-								
7. AD Financial Wellness	-.51±	-.37±	-.08	.05	.02	.08	-							
8. CIV Financial Wellness	-.36±	-.57±	-.15*	-.03	-.07	.04	.49±	-						
9. AD Depression	.25±	.16*	.02	-.01	-.20+	-.10	-.37±	-.12	-					
10. CIV Depression	.19+	.33±	.05	-.02	.10	-.07	-.22±	-.42±	.21+	-				
11. AD Anxiety	.22±	.20+	.02	.01	-.07	-.09	-.29±	-.09	.77±	.18+	-			
12. CIV Anxiety	.25±	.33±	.06	-.04	.05	-.08	-.30±	-.39±	.31±	.76±	.30±	-		
13. AD Well-being	-.32±	-.19+	-.08	.03	.31±	.11	.37±	.11	-.54±	-.14*	-.53±	-.24±	-	
14. CIV Well-being	-.28±	-.37±	-.19+	.02	-.14*	.23±	.26±	.39±	-.14*	-.52±	-.10	-.54±	.19+	-
15. AD Marital Quality	-.34±	-.26±	-.03	-.05	.02	.00	.16*	.11	-.19+	-.22±	-.10	-.17+	.26±	.28±
16. CIV Marital Quality	-.22±	-.52±	-.13	-.09	-.08	.01	.09	.33±	-.09	-.36±	-.07	-.31±	.07	.43±
17. AD Relationship Behaviors	-.38±	-.27±	-.16*	-.06	.01	-.05	.19+	.10	-.28+	-.16*	-.27±	-.16*	.42±	.22±
18. CIV Relationship Behaviors	-.21+	-.52±	-.08	-.08	-.10	-.02	.12	.30±	-.01	-.35±	-.04	-.32±	.16*	.43±
19. Spouse employment	-.02	.05	.01	-.06	-.06	-.12	.18+	.09	-.01	-.06	-.01	-.08	.02	.02
20. Housing location	-.09	-.02	-.15*	-.19+	-.05	-.06	.20+	.07	.00	.03	.09	.01	.09	.03
21. Rank	.13	-.00	.05	.09	-.12	-.08	.02	.05	-.02	-.05	-.09	-.01	.18+	.02

* $p < .05$. + $p < .01$. ± $p < .001$ Active Duty Partner (AD). Civilian Partner (CIV).

(Table 2 continued)

	15	16	17	18	19	20	21
15. AD Marital Quality	-						
16. CIV Marital Quality	.52±	-					
17. AD Rel. Behaviors	.63±	.40±	-				
18. CIV Rel. Behaviors	.48±	.73±	.43±	-			
19. Spouse employment	-.09	-.11	-.08	-.08	-		
20. Housing	-.08	-.07	-.00	-.10	.24±	-	
21. Rank	-.09	-.08	-.10	-.07	.15*	.18	-

* $p < .05$. + $p < .01$. ± $p < .001$ Active Duty Partner (AD). Civilian Partner (CIV).

Table 3: *Univariate statistics for all study constructs*

Variable	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	Range	Alpha	Missing
1. AD Fin. Difficulties	2.44	0.83	0.36	-0.18	1.00-5.00	0.84	0.0%
2. CIV Fin. Difficulties	2.51	0.82	0.33	0.33	1.00-5.00	0.84	3.2%
3. AD Programs Used	1.40	1.94	1.19	0.53	0.00-9.00	-	0.0%
4. CIV Programs Used	1.17	1.85	1.34	0.55	0.00-7.00	-	0.0%
5. AD Sense of Comm.	2.00	0.58	0.31	-0.01	1.00-3.86	0.86	0.0%
6. CIV Sense of Comm.	2.26	0.66	0.49	0.18	1.00-4.00	0.91	0.5%
7. AD Fin. Wellness	2.48	0.71	0.16	-0.50	1.00-4.00	0.81	0.0%
8. CIV Fin. Wellness	2.37	0.78	0.13	-0.64	1.00-4.00	0.83	0.0%
9. AD Depression	1.55	0.45	0.71	-0.43	1.00-2.71	0.83	0.0%
10. CIV Depression	1.58	0.47	0.84	0.04	1.00-3.00	0.89	0.0%
11. AD Anxiety	1.49	0.30	0.99	0.86	1.00-3.00	0.84	0.0%
12. CIV Anxiety	1.47	0.29	0.83	0.43	1.00-3.00	0.83	0.0%
13. AD Well-being	3.05	0.59	-0.39	0.43	1.00-4.00	0.90	0.0%
14. CIV Well-being	3.08	0.58	-0.32	0.41	1.00-4.00	0.90	0.0%
15. AD Qual. Marriage	3.44	0.78	-1.90	3.37	1.00-4.00	0.95	0.0%
16. CIV Qual. Marriage	3.44	0.68	-1.64	3.12	1.00-4.00	0.94	0.9%
17. AD Marital Quality	3.49	0.48	-1.13	2.49	1.00-4.00	0.87	0.0%
18. CIV Marital Quality	3.36	0.55	-0.66	-0.50	1.50-4.00	0.90	0.9%
19. AD Rel. Behaviors	3.16	0.47	-0.51	0.10	1.60-4.00	0.90	0.0%
20. CIV Rel. Behaviors	3.23	0.49	-0.70	0.21	1.47-4.00	0.92	0.9%
21. Spouse employment	0.33	0.47	0.72	-1.50	0.00-1.00	-	0.5%
22. Housing	0.42	0.50	0.32	-1.92	0.00-1.00	-	0.5%
23. Rank	0.84	0.37	-1.84	1.39	0.00-1.00	-	0.0%

Notes: Active Duty Partner (AD). Civilian Partner (CIV).

Table 4: *Multi-group cut-offs and frequencies for military contextual indicators*

Military Context	n	%
Civilian Spouse Employment		
Employed	73	33.0%
Not Employed	128	57.9%
Housing Location		
On-post	127	57.5%
Off-post	93	42.0%
Rank		
Enlisted	196	88.7%
Officer	24	10.9%

Analytic Strategy

Both studies test a dyadic model of actor and partner effects of active duty husbands and civilian wives, and the impact of financial stress on mental health (manuscript 1) and relationship health (manuscript 2) outcomes. The theoretical framework of the CMFS orients a structural equation model (SEM) assessing the associations between partners' financial stress (the independent variable in both studies), mental health (the dependent variable in study 1), and relationship health (the dependent variable in study 2), and the indirect relationships of use of resources and perceptions (see Figures 4 and 5). The moderating role of military contextual factors is assessed by multi-group analyses to determine model invariance across these key contexts.

Rates of missing data are minimal, averaging less than 1% for most variables. Full information maximum likelihood (FIML) is used to account for missing data; FIML is preferable to other methods because it allows all available data to be used when estimating model parameters and standard errors (Enders, 2001). A range of fit statistics is used to assess goodness-of-fit, including chi-square statistics (degrees of freedom ratio), comparative fit indices (CFI), and root mean squared error of approximations (RMSEA); these tests are used to evaluate the SEM models since they are not related to sample size. A χ^2/df ratio below 3.0 (Carmines & McIver, 1981), CFI values greater than 0.95, and RMSEA values less than 0.08 are indicative of acceptable model fit (Browne & Cudek, 1993; Hu & Bentler, 1999). Sobel's test is used to estimate statistical significance of indirect effects. Group comparison is used to estimate any significant model invariance of the moderating effects of military contexts. Mplus, Version 7 (Muthen & Muthen 2005) was used to obtain estimates for the structural equation models (SEM), and AMOS 21.0 was used to obtain multi-group analyses estimates.

Both studies minimize bias through the use of unstandardized coefficients, as existing literature has shown that standardized coefficients may be biased in dyadic analyses accounting for actor and partner effects simultaneously (Kenny Kashy, & Cook, 2006). In dyadic analyses with standardized coefficients, variances can be biased due to sampling error and non-normal distributions in the underlying variables, affecting the standard errors of the test statistics and biasing tests of statistical significance, including their associated p values and degrees of freedom.

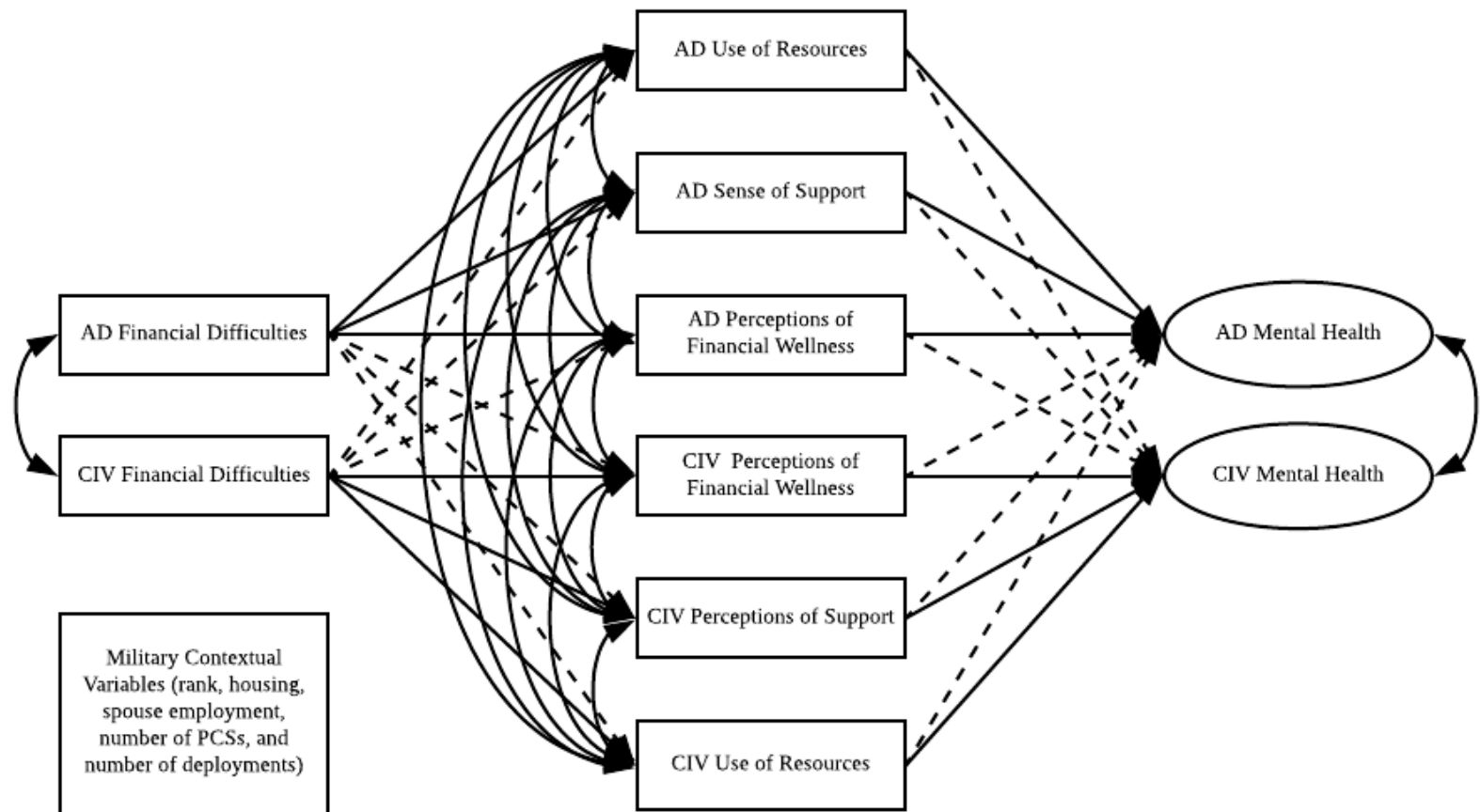


Figure 4. Analytic model: all paths to be tested in Manuscript #1. Note: Solid lines indicate actor effects and dotted paths indicate partner effects

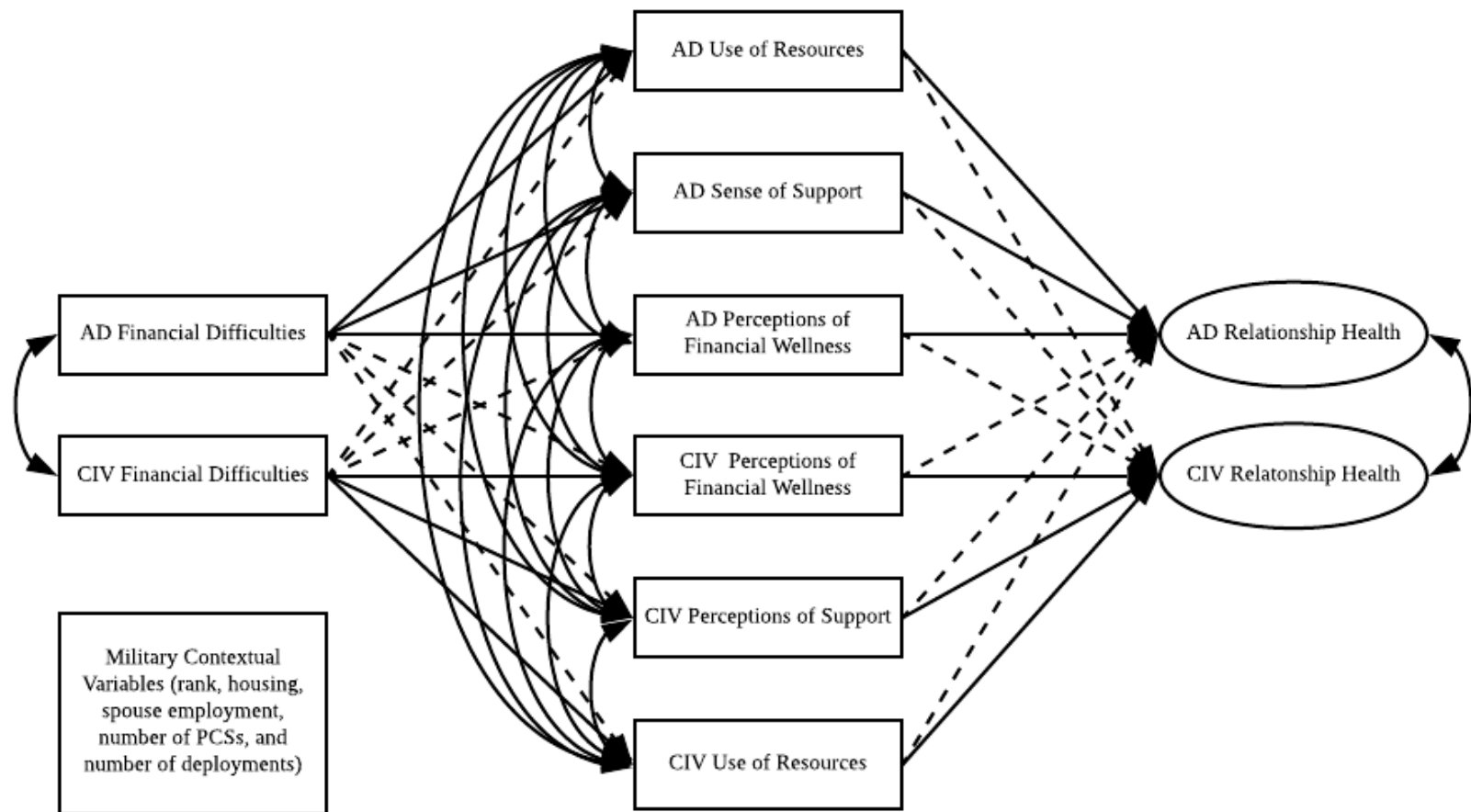


Figure 5. Analytic model: all paths to be tested in Manuscript #2. Note: Solid lines indicate actor effects and dotted lines indicate partner effects

CHAPTER IV

**FINANCES & MENTAL HEALTH: RESOURCES, PERCEPTIONS, & CONTEXTS OF
FAMILY STRESS IN MILITARY COUPLES¹**

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Abstract

The association between money and mental health has been documented across many populations by social scientists from numerous disciplines. This study examines the relationship between financial stress and mental health in both the military individual and couple systems. Drawing on the Contextual Model of Family Stress (CMFS) and the ABC-X framework, this study employs a sample of military couples (N=221) and dyadic modeling to examine the mediating relationships between financial difficulties and mental health through the use of resources, perceptions of community, and perceptions of financial wellness. Further, this study examines the moderating role of military contextual variables, including spouse employment, housing location, and rank. Findings provide support for recent iterations of the CMFS stating that perceptions of stress significantly mediate the relationship between financial difficulties and mental health, more so than use of resources and community support. Additional findings indicate moderating effects from spouse employment, housing location, and rank. Implications for future research, clinical practice, and policymakers are discussed.

Keywords: Family stress theory, finances, mental health, military couples, symbolic interaction

Military couples tend to be a strong and resilient population, worthy of study to understand how families cope and grow in the face of challenges (Bowen, Martin, & Mancini, 2013). One factor that affects intimate partners' well-being is money and finances, often wielding stress that affects mental, relational, and physical health. The ability to cope with inherent financial difficulties and sustain health (and in turn, military readiness) involves dynamic mechanisms of both utilizing resources and developing a healthy perspective (Boss, 1987; Boss, Bryant, & Mancini, 2017). Research focused on successful coping and resilience (as opposed to stress and dysfunction), aims to advance the literature that supports clinicians', program developers', and other interdisciplinary stakeholders' efforts to enhance well-being.

The primary goal of this study was to examine the processes through which families cope with adversity (financial difficulties, specifically) and in turn, result in positive mental health outcomes among active duty military couples. To achieve this goal, the mechanisms through which stress results in coping were identified based on Boss et al.'s (2017) Contextual Model of Family Stress (CMFS), which considers contextual factors, resources used, and perceptions of the stressor. Second, a mediation model of the relationship between financial difficulties and mental health through use of resources, perceptions of community support, and perceptions of financial wellness while accounting for specific military family contextual factors (spouse employment, housing location, and rank) was tested. Finally, a multi-group moderation analyses was tested to determine if the model differed across the key military family contextual variables. Using an actor-partner interdependence model (APIM; Kenny, Kashy, & Cook, 2006), couple data were employed to assess intra- and inter- partner direct and indirect effects.

Background

Money is a challenging subject in American culture given the stigma and taboo nature of the topic (Vogler, Lyonette, & Wiggins, 2008). The ways in which finances and mental health intersect has become an emerging topic of interest as clinicians, program developers, and military community providers begin to understand the tightknit relationship between the two. The link between finances and mental health has long been established (e.g., Starrin, Åslund, & Nilsson, 2009; Rudolf & Watts, 2002); however, the mechanisms through which this relationship functions, and in turn the development of solutions, is still largely debated amongst interdisciplinary stakeholders.

This study draws on the Contextual Model of Family Stress (CMFS) theoretical framework (Boss et al., 2017). The framework, oriented within the Symbolic Interaction (SI) theory of human development (e.g., Blumer, 1969; Denzin, 2016), organizes the contexts and processes through which family stress results in either coping or crisis. SI is a systemic theory that orients the human experience within the social context and asserts that people assign meanings to their experiences to make sense of their worlds; these meanings are both developed in social contexts, and influence social contexts (Turner & West, 2006). Particularly for the military population, perceptions of circumstances and the process of meaning making has been linked to coping with the unique circumstances of the military lifestyle (Schok, Kleber, Elands, & Weerts, 2008). The SI philosophy is historically embedded in pragmatism (Burr, Hill, Nye, & Reiss, 1979), resulting in a dynamic application as social norms and families change, as military families often do. Because of the pragmatic commitment to a reformist approach, SI has an inherent ability to continuously provide a framework for the changing military population, their contexts, and societal fluctuations (Boss, Doherty, LaRossa, Schumm, & Steinmetz, 1993).

The CMFS is an extension of SI and provides a framework to identify the processes that support mental health, given the inherent financial difficulties that exist in the unique military lifestyle. Identifying the specific processes that have the biggest impact on mental health enables clinicians, policymakers, and family scientists to promote military family health and readiness. In SI and the CMFS, perceptions and meanings of the stressor developed within the family context are key to understanding family stress (Boss, 1987; Boss et al., 2017). The CMFS model addresses stress and vulnerability, coping and resilience, and the contextual factors that help to explain how families achieve wellbeing (Mancini, O’Neal, Martin, & Bowen, 2018). The contexts are understood as the surrounding circumstances that help to define, understand, and assess families. The CMFS is two-fold in that it accounts for contextual factors, as well as provides a process through which family stress results in coping or crisis (ABC-X model; Hill, 1949).

As implied by the CMFS framework, families exist in rich environments and systems comprised of both internal and external contexts. The internal context includes the family system and structure (e.g., who is part of the system, family roles, and the boundaries between them), psychological factors (e.g., feelings, thoughts, and meanings), and philosophical factors (e.g., values, schemas, and beliefs). External contexts consist of elements that are outside of the family such as broad cultural influences, meta-rules defined by societal norms and expectations, historical placement, economic influences, and hereditary/genetic factors. Family stress can only be understood through these contexts in which the stressors occur. Organizing contextual factors into internal and external domains helps to provide deeper understanding of stressors that families experience and how they get to resilient coping. Resilience—the process through which

individuals gain or show the capacity to gain greater strength from adversity (Walsh, 2006; Boss, 2002; Nichols, 2013)—is the outcome of interest in the CMFS.

The military family exists within unique internal and external contexts that affect family well-being (DeGraff, O’Neal, & Mancini, 2016). The external contexts of the military lifestyle include a hierarchical structure and a culture unique to each branch (i.e., Army/Air Force/Navy/Marines/Coast Guard; active duty/reserve; active duty/veteran; etc.), and collectivistic and transient norms and expectations (e.g., Langston, Gould, & Greenberg, 2007). Internal contexts that affect well-being include non-biological ‘family members’ comprised of other military colleagues and families (O’Neal, Mancini, & DeGraff, 2016) and the unique boundaries between the military career of the service member and the commitment of the whole military family (O’Neal, Lucier-Greer, Mancini, Ferraro, & Ross, 2016; O’Neal, Mallette, & Mancini, 2018).

The ABC-X model of stress and coping (Hill, 1949) is at the core of the CMFS and outlines specifically how a stressor (A) is impacted by resources (B) and perceptions (C), and in turn, results in an outcome that is resilient coping or crisis (X). The dimensions of the ABC-X model are situated within the internal and external contextual factors described in the CMFS. In other words, the ABC-X process occurs within the contexts of internal and external circumstances. This study examines financial difficulties (the stressor, A), use of resources (B), perceptions of financial wellness (C) and mental health (the outcome, X) while accounting for key contextual factors unique to the military family and community (spouse employment, housing location, and rank). Using an actor-partner interdependence model (APIM; Kenny, Kashy, & Cook, 2006), the analysis examines direct and indirect effects of resources used,

perceptions of the stressor, and perceptions of the community on the relationship between financial difficulties and mental health,

Finances, mental health, and the military population

While the relationship between finances and mental health exists within specific contextual factors that are discussed further in this section, the relationship is clearly recursive and causally indeterminate. Individuals with mental health issues are more likely to have financial issues, and in turn, those with financial issues experience worsened mental health (Cooke, Barkham, Audin, Bradley, & Davy, 2004; Gathergood, 2012). The Diagnostic and Statistical Manual of Mental Disorders (DSM 5; American Psychiatric Association, 2013) considers, for many mental health diagnoses, financial problems (such as bankruptcy, job loss, debts, etc.) to be a psychosocial indicator of a formal mental health diagnosis. As financial problems can be both the cause and effect of larger mental health issues, it is important to understand the influences of specific contextual factors.

Financial problems in the general population, like debt, increase the risk of depression (Bridges & Disney, 2010; Stuhldreher, Stuhldreher, & Forrest, 2007), are linked to suicidal ideation and suicide completion (Meltzer, Bebbington, Brugha, Jenkins, McManus, & Dennis, 2011; Wong, Chan, Conwell, Conner, & Yip, 2010), and are a determinant of poor physical health (Robards, Evandrou, Falkingham, & Vlachantoni, 2012). Financial stress also affects mental health as it increases individuals' risk for alcohol and drug problems (Peirce, Frone, Russell, & Cooper, 1994; Shaw, Agahi, & Krause, 2011; Nelson, Lust, Story, & Ehlinger, 2008). Many of these links between mental health and financial health also exist within specific contexts of the military lifestyle. Military couples' financial problems have been linked to marital quality, aggression, intimate partner violence, depression, substance abuse, and suicide, though these links may not be causal (Ross, O'Neal, Arnold, & Mancini, 2017; Elbogen et al.,

2012; Kline, Ciccone, Falca-Dodson, Black, & Losonczy, 2011; Mahon, Tobin, Cusak, Kelleher, & Malone, 2005; Slep, Foran, Heyman, & Snarr, 2010). Furthermore, studies of military combat and trauma resulting in post-traumatic stress or traumatic brain injuries indicate both decreased mental and financial health (Elbogen, Johnson, Wagner, Newton, & Beckham, 2012; Hourani, Bender, Weimer, Peeler, Bradshaw, Lane, & Larson, 2012).

Military family finances are a worthy topic of study since both service members and their leaders report finances as a top stressor that affects overall mission readiness, more so than any other quality of life issue, including deployments and personal relationships (Office of the Assistant Secretary of Defense, 2012; U.S. Government Accountability Office (GAO), 2005; Luther, Garman, Leech, Griffitt, & Gilroy, 1997). Military couples' finances are often complicated by the unique aspects and demands of the military lifestyle, including challenges maintaining consistent and stable military-spouse employment (Harrell, Lim, Castaneda, & Golinelli, 2004), relocations and separations (Drummet, Coleman & Cable, 2003), and difficulties related to buying and selling houses at times of transitions (Silva, 2011). With regard to internal and external contexts, there are internal financial aspects of the military lifestyle (i.e., boundaries, feelings, meanings, and values behind money), as well as external financial aspects (i.e., broad economic circumstances, deployment and transitions, and military/warrior ethos expectations). The key contextual factors examined in this study include spouse employment, housing location, and rank. While deployments and transitions are another key aspect of the military lifestyle, the scope of this study is focused on factors that persistently and directly influence finances.

Spouse employment. Military spouse employment is a top concern of active duty spouses, following only time away from family in a recent study on the military lifestyle (Sonethavilay et

al., 2019). The same study also found that pay and benefits was one of the top 5 concerns for active duty spouses, active duty service members, and veterans. Spouses of service members tend to be female (as most service members are male, and same sex partnerships are the minority; Febbraro & Gill, 2010; Hoobler, 2014) and experience a host of challenges related to gendered relationship dynamics. Some of these challenges include gendered pay disparities and child-birthing employment penalties (Bertrand, Golden, & Katz, 2010); a heightened perception of being an employment flight risk due to the transient military lifestyle (Lyness & Judiesch, 2001); higher probability of single parenting challenges due to the absence of the service member partner, and the perception that the civilian spouse's career is secondary to their active duty partner's career (Hoobler, 2014). The challenges of the military lifestyle may exacerbate already existing disparities across gender, race, and class differences (Cooney, De Angelis, & Segal, 2011), and hinder military spouses from attaining meaningful and gainful employment. Challenges around spouse employment can prevent a military couple from reaping the benefits of a dual-income household (Carlson, Nelson, & Skimmyhorn, 2016) and in turn, affect individual mental health.

Housing location. Military couples are allowed regular, untaxed housing allowances based on years of service and rank. Housing allowances are supplemental pay and vary based on cost of living in the community in which the military installation is located. For example, housing allowances to cover off-installation cost of living in Anchorage, Alaska (Elmendorf Air Force Base) are more than allowances in Columbus, Georgia (Fort Benning Army Base), because the cost of living in Anchorage is higher than in Columbus. While housing allowances are calculated to offset the cost of living, military couples with a single earner and couples with an enlisted service member were still found to experience financial difficulties when they lived

in off-installation housing (Hosek & Wadsworth, 2013). Over time, service members and their families have become more dispersed in civilian communities which has come with both opportunities for diverse experiences, as well as greater financial challenges and an increased risk of isolation from the military community (National Academies of Science, Engineering, and Medicine, 2019). While housing allowances allow for off-installation opportunities and increased quality of life, housing location along with spouse employment and rank, appear linked to financial wellness.

Rank. The hierarchical organization of service members through rank establishes status, pay grade, and social address (O’Neal, Mancini, & DeGraff, 2016). A service member’s social address can dictate social power and responsibility, access to community resources (e.g., officers clubs), and influence social resources and networks (e.g., enlisted and officer ranks are not encouraged to be friends). Social connectedness and social capital provide individual support, increased self-esteem, and collective appreciation (Kawachi & Berkman, 2001), in turn linking those of lower social standings to poorer mental health outcomes (Marmot, 2004; Marmot & Wilkinson, 2006; Wilkinson & Pickett, 2009). Rank has also been linked to financial health, with lower ranks related to higher credit card debt (FINRA IEF, 2010). A separate study found that, compared to their civilian peers, enlisted ranks have poorer credit card outcomes and a higher likelihood of financial problems, but better solvency and savings outcomes (Skimmyhorn, 2014; Tiemeyer, Wardynski, & Buddin, 1999). Studies specific to service members’ mental and financial health have also linked lower rank to increased mental health issues (Cohen, Gima, Bertenthal, Kim, Marmar, & Seal, 2009) and financial stress (Hosek & Wadsworth, 2013). Social determinants of financial health such as income inequality, socioeconomic status, social

support networks, and social capital—all themes intimately tied to differences in military rank—are also strongly associated with individual mental health (Burns, 2015).

Sense of community. While these aspects of the military lifestyle are sometimes viewed as inherent vulnerabilities, they can also become opportunities for growth and increased connection amongst military family members (O’Neal, Lucier-Greer, Duncan, Mallette, Arnold, & Mancini, 2018). Military family communities provide support and resources that can increase coping and resilience. For example, O’Neal, Richardson, & Mancini (2018) found that couples’ military community connections, defined as the ease with which service members form connections with other service members (Bowen, Martin, Mancini, & Nelson, 2001), were related to coping with the demands of the military lifestyle, and in turn, related to individual mental health and family well-being. Connections to both military support and comprehensive community support are especially important for the non-military spouse in the couple (O’Neal, Mancini, & DeGraff, 2016).

Use of resources. The present study examines not only use of financial resources, but rather, use of general community resources (i.e., couples’ therapy, education support, etc.), as financial health has been linked to wellness domains outside of the immediate financial landscape (as previously discussed—domains such as mental health, relational health, social determinates of health, and social status). While the unique military lifestyle has its challenges—both broadly, and with regard to finances specifically—community and contextual resources provide general support for coping and resilience.

Perceptions of financial wellness. Both the SI theory and CMFS assert the notion that situations defined as real *are* real, in that their consequences are real (Burgess, 1926). Previously called the ‘definition of the event’ by Hill (1949), Boss (1992) calls the C factor the ‘perception

and meaning of the stressor,’ but it has also been described as ‘the appraisal,’ (Antonovsky, 1979), and ‘levels of meaning’ of the stressor (Patterson & Garwick, 1994). What each of these descriptions have in common is an underlying thread that illustrates the presumptions and symbolic meanings that the couples make of the stressor event. Perceptions of financial wellness are the appraisals and meanings that couples assigned to their financial difficulties (defined in the next section).

Many entities have vowed to help improve the overall well-being of the military population, including the financial wellbeing of its members (Sonethavilay et al., 2019). Efforts from the Department of Defense (DoD; DoD Office of Financial Readiness, 2018), Blue Star Families (BSF) and the United Services Automobile Association (USAA; BSF, 2018), the Financial Industry Regulatory Authority (FINRA) and the Association for Financial Counseling and Planning Education (FINRA Foundation Military Spouse Fellowship, 2018) , as well as other government and non-profit agencies, suggest that there is a specific need for financial wellness initiatives within the military population. These resources range from relationship education and counseling to preventative education classes and financial assistance programs. Financial literacy and education courses offered through the military to individual service members have generally shown positive individual outcomes, such as decreased debt and credit card balances, and increased savings (Skimmyhorn, 2016), which in turn have positive effects on mental health. Together with the academic literature, efforts to provide resources and strengthen military family policy reflect a clear need and opportunity to address military family financial wellness.

Methods

Participants

This study draws on data collected from active duty (AD) service members and their civilian (CIV) spouses located at an Army post in the United States. The original sample consists of 273 families collected via convenience sample. Thirty-two responses were excluded from the analysis because they were single-parent families. Twenty additional couples were excluded to minimize potential gender and contextual differences, including 7 dual-military couples and 13 couples with female active duty and male civilian spouse respondents. The final analytic sample includes 221 couples. Data were collected in computer labs at youth centers on active duty U.S. Army installations. The couple data analyzed in this study were part of a larger family study that included child data.

Male active duty (AD) service members and female civilian spouses (CIV) in the analytic sample had an average relationship length of 12.72 years ($SD=5.62$). Most respondents' education level was between high school and some college (AD, 61.4%; CIV 57.0%), followed by associate degree (19.0%, 18.6%), bachelor's degree (14.5%, 15.8%), and graduate degree or higher (4.5%, 8.6%). Fifteen percent of the respondents were of junior enlisted ranking (E1-E4) and 73.7% were senior enlisted; 9.5% were second lieutenant to major officers (O1-O4) or warrant officers (WO1-CW5), and 1.3% were lieutenant colonel to lieutenant general (O5-O9). More than half of respondents lived in on-post military housing (57.5%), and 8.1% lived in off-post military housing; 34% lived in off-post civilian housing.

Measures

The five concepts that organize this study are positioned within the ABC-X conceptual model and include financial difficulties (A, the predictor variable), use of resources (B, a mediating variable), sense of community (C, a mediating variable), perceptions of financial

wellness (C, a mediating variable), and mental health (X, the outcome variable). All univariate statistics are presented in Table 5. These concepts are measured by the following constructs:

Financial difficulties. This independent variable is measured by Olson & Olson's (1999) PREPARE/ENRICH assessment. The 10-item assessment of financial management includes items such as, "We had difficulty deciding how to handle our money," "We had trouble saving money," and "I was concerned about how [my partner] handled money." Responses were coded (1) strongly agree, (2) disagree, (3) undecided, (4) agree, and (5) strongly agree; the measure has high internal consistency ($\alpha=0.84$ for both AD and CIV spouses). Responses were totaled, with higher scores indicating increased financial difficulties.

Use of resources. Accessing resources is a measure of behavioral use of programs, services, and community engagement. Measured by a sum score of support programs used, this variable represents the total number of programs and services used by respondents from a list of 11 programs and services offered by the Army. The list included programs and services such as career support, education support, couples and family therapy, and parenting support. The variable does not address frequency of program use, but rather how many programs or services were used. Higher sum scores indicate increased use of programs and services, and in turn, increased accessing of resources.

Sense of community. The C factor "is defined as the family's collective perception of a stressor event" (Boss, Bryant, & Mancini, 2017, p. 43) and is measured by a sense of community scale. Because this study focuses on the context in which the military family experiences stress, perceptions of support from the community context are examined. The Community Connections Index (O'Neal, Mallette, & Mancini, 2018), a 7-item Sense of Community Subscale, is used to measure perceptions of community. Examples of items on the Sense of Community Subscale

include “In the past year how often have you... felt close to other people in your community?” “...spent time with people in your community when you needed a little company?” and, “...talked with people in your community about your problems or difficulties?” Responses were coded as (1) never, (2) sometimes, (3) often, and (4) always; higher scores indicate increased sense of community, and in turn, more positive perceptions of community support. The scale had high internal consistency ($\alpha=0.86$ AD, $\alpha=0.91$ CIV).

Perceptions of financial wellness. The second aspect of the C factor is the conceptualization of perceptions of financial wellness. Because this study focuses on financial difficulties, it is necessary to examine the perceptions of the specific stressor event (Boss, Bryant, & Mancini, 2017). Three items from Prawitz et al.’s (2006a, 2006b) assessment of personal financial wellness comprise the construct measuring respondents’ perceptions of the stressor event (financial difficulties). The items were: “What do you feel is the level of your financial stress today?” with responses coded as (1) overwhelming stress, (2) high stress, (3) low stress, (4) no stress at all; “How do you feel about your current financial condition?” with responses coded as (1) overwhelmed, (2) sometimes worried, (3) just okay, and (4) comfortable; and, “How often do you find yourself living paycheck to paycheck?” with responses coded (1) always, (2) sometimes, (3) rarely, and (4) never. Higher sum scores indicate increased financial wellness, and in turn, more positive perceptions of financial wellness. The scale had good internal consistency ($\alpha=0.81$ AD, $\alpha=0.83$ CIV).

Mental health. A latent construct, mental health consists of three measures of depression, anxiety, and personal wellbeing as observed constructs. The latent construct utilizes personal wellbeing as the indicator variable, with depression and anxiety reverse scored to match the direction of personal wellbeing in the latent construct.

The Personal Wellbeing Index (PWI; International Wellbeing Group, 2013) uses 8 items to measure personal wellbeing as an indicator of mental health (see Appendix A for full scale). Example items include, “I was satisfied with my life as a whole,” “I was satisfied with feeling part of my community,” and “I was satisfied with what I was currently achieving in life.” Responses were collected on a 4-point scale as (1) strongly disagree, (2) disagree, (3) agree, and (4) strongly agree. The scale had high internal consistency ($\alpha=0.90$ AD, $\alpha=0.90$ CIV).

Depression is measured by The Center for Epidemiologic Studies Depression Scale (CESD7; Radloff, 1977) 7-item assessment. Example items include “During the past week, I felt depressed,” “I had trouble keeping my mind of what I was doing,” and “I felt that I could not shake off the blues even with help from my family or friends.” Responses were collected and coded on a 3-point scale as (1) none of the time, (2) some of the time, and (3) most of the time. Higher scores on the scale indicate increased depressive symptoms and poorer mental health. The scale had high internal consistency ($\alpha=0.83$ for AD partners, and $\alpha=0.89$ for CIV partners).

The Zung Self-Rating Anxiety Scale (SAS; Zung, 1971) uses 20 items to measure symptoms of anxiety as an indicator of mental health (see Appendix A for full scale). Example items include, “During the past week, I felt afraid for no reason at all,” “I got upset easily or felt panicky,” and “I felt more nervous and anxious than usual.” Responses were collected on a 3-point scale as (1) none of the time, (2) some of the time, and (3) most of the time. Higher scores on the scale indicate increased symptoms of anxiety and poorer mental health. The scale had high internal consistency ($\alpha=0.84$ for AD partners, and $\alpha=0.83$ for CIV partners).

Military contextual variables. To assess the impact of military context on the model, several binary indicators of context are examined as control variables in a mediation model, and as moderators in a multi-group analysis. Indicators include spouse employment, as employed

(n=73 couples, 33.0%) or not employed (n=147 couples, 66.5%); housing location, as living on post (n=127 couples, 57.5%), or living off-post (n=93 couples, 42.1%); and rank, an indicator of status, pay grade, and social address (O’Neal, Mancini, & DeGraff, 2016) dichotomized as enlisted personnel (E1-E9; n=185 couples, 83.7%), and officer personnel (O1-O9/WO1-CW5; n=36 couples, 16.3%). These indicators account for some aspects of community in the military lifestyle.

Data Analyses

A structural equation model (SEM) was fit to assess the relationship between financial difficulties and mental health outcomes, while accounting for the mediating roles of use of resources, perceptions of the context (sense of community support), and perceptions of the stressor (perceptions of financial wellness). A moderation analysis of military contextual variables represented by spouse employment, housing location, and rank was conducted using multi-group analyses to determine model invariance. Preacher and Hayes (2008) bootstrapping (with 5,000 draws) resampling strategy that avoids the assumption of multivariate normality was employed to examine the indirect mediating effects of use of resources, sense of community, and perceptions of financial wellness on the relationship between partners’ financial difficulties and mental health.

Rates of missing data were minimal, averaging less than one percent for most variables. Full information maximum likelihood (FIML) was used to account for missing data; FIML is preferable to other methods because it allows all available data to be used when estimating model parameters and standard errors (Enders, 2001). A range of fit statistics were applied to assess goodness-of-fit, including chi-square statistics (degrees of freedom ratio), comparative fit indices (CFI), and root mean squared error of approximations (RMSEA); these tests were used to

evaluate the SEM models since they are not related to sample size. A χ^2/df ratio below 3.0 (Carmines & McIver, 1981), CFI values greater than 0.95, and RMSEA values less than 0.08 are indicative of acceptable model fit (Browne & Cudek, 1993; Hu & Bentler, 1999). Sobel's test was used to estimate statistical significance of indirect effects. Group comparison was used to estimate any significant model invariance of the moderating effects of military contexts. Mplus, Version 7 (Muthen & Muthen 2005) was used to obtain estimates for the structural equation models (SEM), and AMOS 21.0 was used to obtain estimates for multi-group analyses. Descriptive statistics are presented in Table 5.

Table 5. *Univariate statistics for all study constructs*

Variable	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	Range	Alpha	Missing
<i>Financial difficulties</i>							
AD Fin. Difficulties	2.44	0.83	0.36	-0.18	1.00-5.00	0.84	0.0%
CIV Fin. Difficulties	2.51	0.82	0.33	0.33	1.00-5.00	0.84	3.2%
<i>Mediators</i>							
AD Programs Used	1.40	1.94	1.19	0.53	0.00-9.00	-	0.0%
CIV Programs Used	1.17	1.85	1.34	0.55	0.00-7.00	-	0.0%
AD Sense of Comm.	2.00	0.58	0.31	-0.01	1.00-3.86	0.86	0.0%
CIV Sense of Comm.	2.26	0.66	0.49	0.18	1.00-4.00	0.91	0.5%
AD Fin. Wellness	2.48	0.71	0.16	-0.50	1.00-4.00	0.81	0.0%
CIV Fin. Wellness	2.37	0.78	0.13	-0.64	1.00-4.00	0.83	0.0%
<i>Mental health outcomes</i>							
AD Depression	1.55	0.45	0.71	-0.43	1.00-2.71	0.83	0.0%
CIV Depression	1.58	0.47	0.84	0.04	1.00-3.00	0.89	0.0%
AD Anxiety	1.49	0.30	0.99	0.86	1.00-3.00	0.84	0.0%
CIV Anxiety	1.47	0.29	0.83	0.43	1.00-3.00	0.83	0.0%
AD Well-being	3.05	0.59	-0.39	0.43	1.00-4.00	0.90	0.0%
CIV Well-being	3.08	0.58	-0.32	0.41	1.00-4.00	0.90	0.0%
<i>Military contextual variables</i>							
Spouse employment	0.33	0.47	0.72	-1.50	0.00-1.00	-	0.5%
Housing	0.42	0.50	0.32	-1.92	0.00-1.00	-	0.5%
Rank	0.84	0.37	-1.84	1.39	0.00-1.00	-	0.0%

Notes: Active Duty Partner (AD). Civilian Partner (CIV).

This study minimizes bias through the use of unstandardized coefficients, as existing literature has shown that standardized coefficients may be biased in dyadic analyses accounting

for actor and partner effects simultaneously (Kenny Kashy, & Cook, 2006). In dyadic analyses with standardized coefficients, variances can be biased due to sampling error and non-normal distributions in the underlying variables, affecting the standard errors of the test statistics and biasing tests of statistical significance, including their associated p-values and degrees of freedom.

Results

A dyadic structural equation model (SEM) analyzing variables positioned within the ABC-X model was specified using financial difficulties (A, the stressor), use of resources (B, mediator), sense of community (C, mediator), perceptions of financial wellness (C, mediator), mental health (X, the outcome), and specific military contextual indicators, including spouse employment, housing location, and rank. Descriptive statistics for all study variables are presented in Table 5 and results from the SEM are presented in

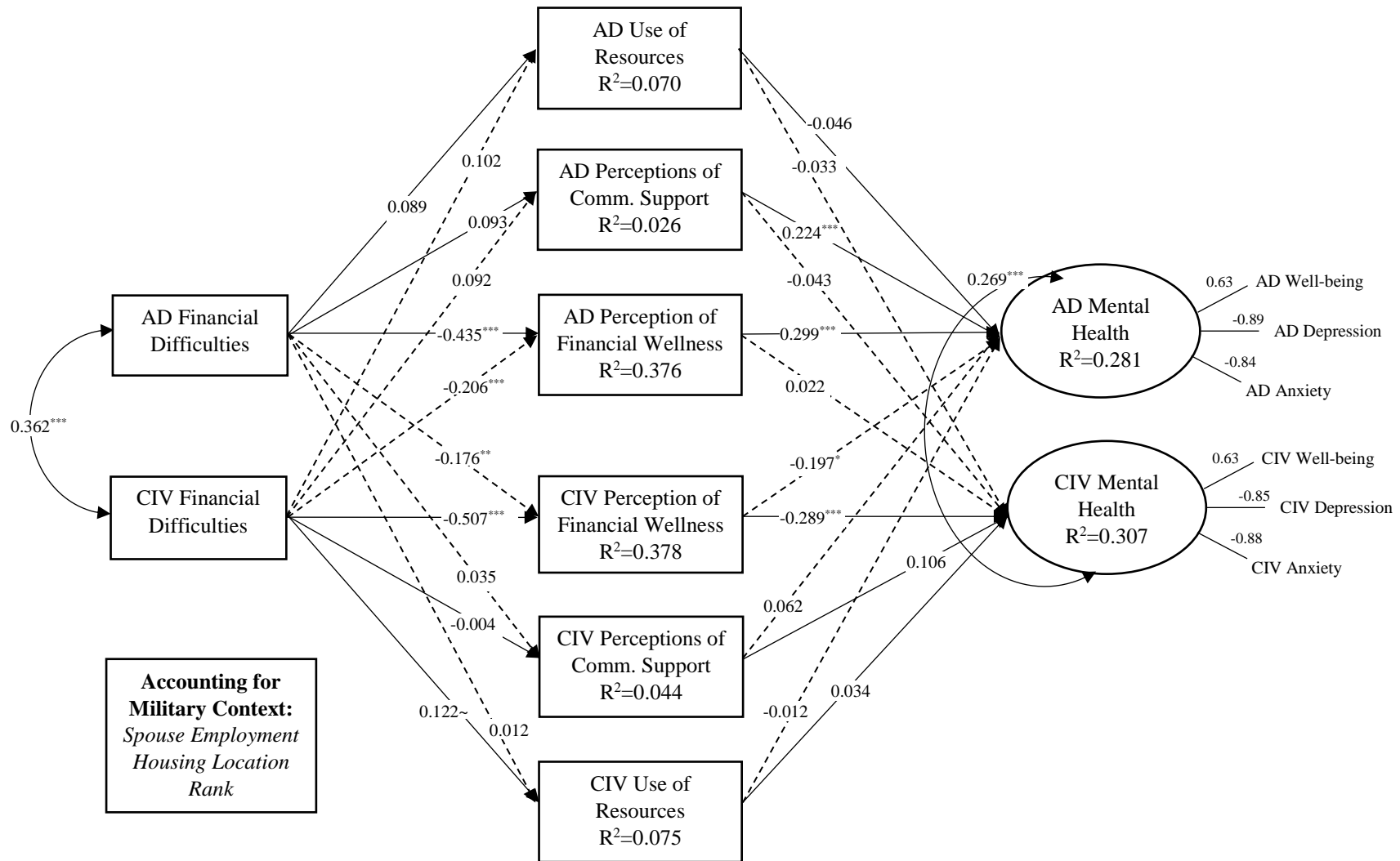


Figure 7. Results from a SEM assessing the associations among military contexts, partners' financial difficulties, resources used, perceptions, and mental health (standardized coefficients). $\chi^2 / df = 2.211$, CFI = 0.936, RMSEA = 0.074. ~ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Results for financial difficulties will be presented sequentially as they relate to resources used, sense of community, and perceptions of financial wellness. A marginally significant relationship between CIV financial difficulties and CIV use of resources suggests that CIV spouses with more financial difficulties generally used more programs compared to those with less financial difficulties ($\beta = 0.122$, $SE = 0.070$, $z = 1.745$, $B = 0.276$). There were no significant actor or partner paths between financial difficulties and sense of community for either partner. For the relationships between financial difficulties and perceptions of financial wellness, all actor and partner tests resulted in statistically significant relationships. Specifically, actor effects showed that for both AD and CIV partners with more financial difficulties, each partner perceived lower financial wellness ($\beta = -0.435$, $SE = 0.054$, $z = -8.092$, $B = -0.374$ for AD partners, and $\beta = -0.507$, $SE = 0.051$, $z = -9.852$, $B = -0.484$ for civilian partners). Partner effects were also significant in that, when CIV spouses experienced more financial difficulties, their AD partners typically perceived lower financial wellness ($\beta = -0.206$, $SE = 0.057$, $z = -3.595$, $B = -0.180$); and when AD partners experienced more financial difficulties, their CIV partners typically perceived lower financial wellness ($\beta = -0.176$, $SE = 0.057$, $z = -3.079$, $B = -0.166$).

Next, results linking model mediators (programs used, sense of community, and perceptions of financial wellness) to mental health outcomes are presented. There were no significant partner or actor effects between programs used and mental health. One actor effect emerged between AD sense of community and AD mental health ($\beta = 0.224$, $SE = 0.064$, $z = 3.506$, $B = 0.145$), suggesting that AD partners with increased sense of community reported better mental health than those with decreased sense of community. Both actor and partner effects were significant for CIV partners' perceptions of financial wellness in that CIV partners with a greater perception of financial wellness experienced better mental health (actor effect; $\beta =$

0.289, $SE = 0.081$, $z = 3.549$, $B = 0.134$), however, their AD partners experienced poorer mental health ($\beta = -0.197$, $SE = 0.082$, $z = -2.389$, $B = -0.095$). AD partners' perceptions of financial wellness only showed actor effects ($\beta = 0.299$, $SE = 0.082$, $z = 3.638$, $B = 0.157$), suggesting that AD partners with a greater perception of their own financial wellness experienced better mental health.

Within the model there were also several statistically significant direct effects from financial difficulties to mental health (not pictured in Figure 6). Both actor and partner significant effects occurred for AD partners' mental health and financial difficulties. Specifically, AD partners experienced poorer mental health when they reported more financial difficulties ($\beta = -0.180$, $SE = 0.077$, $z = -2.350$, $B = -0.081$), and when their CIV partners reported more financial difficulties ($\beta = -0.169$, $SE = 0.081$, $z = -2.100$, $B = -0.078$). CIV partners experienced poorer mental health when they themselves reported more financial difficulties ($\beta = -0.210$, $SE = 0.076$, $z = -2.623$, $B = -0.093$), but there was no statistically significant partner effect for CIV mental health and AD financial difficulties. See table X for direct and indirect effects.

All paths between military contextual variables (spouse employment, housing location, and rank) and endogenous variables were tested. Spouse employment was coded (1) for not employed and (0) for employed; housing location was coded as (1) for off-post housing, and (0) for on-post housing; and rank was coded as (1) for enlisted, an (0) for officer. Statistically significant effects were found for each of the control variables, as detailed below.

Spouse Employment. Both actor and partner relationships were found between spouse employment and use of resources; in couples with an employed CIV spouse, both AD partners ($\beta = 0.151$, $SE = 0.065$, $z = 2.322$, $B = 0.534$) and CIV partners ($\beta = 0.141$, $SE = 0.065$, $z = 2.176$,

B = 0.478) used fewer programs, on average. Additionally, both actor and partner effects were found between spouse employment and perceptions of financial wellness; in couples with an employed CIV spouse, both AD partners and CIV partners generally perceived less financial wellness ($\beta = 0.169$, $SE = 0.054$, $z = 3.156$, $B = 0.220$, for AD partners and, $\beta = 0.092$, $SE = 0.054$, $z = 1.721$, $B = 0.132$, a marginal effect for CIV partners). Spouse employment was significantly related to AD partners' mental health such that in couples with CIV spouse employment, AD partners generally reported worsened mental health ($\beta = 0.186$, $SE = 0.066$, $z = 2.816$, $B = 0.127$). Finally, employed CIV partners generally experienced a weaker sense of community ($\beta = 0.172$, $SE = 0.054$, $z = 3.156$, $B = 0.207$), a significant actor effect.

Housing Location. Housing location, either on-post or off-post housing of couples, demonstrated multiple significant actor and partner relationships. In couples that lived off-post, both AD partners ($\beta = -0.165$, $SE = 0.067$, $z = -2.458$, $B = -0.645$) and CIV partners ($\beta = -0.223$, $SE = 0.066$, $z = -3.360$, $B = -0.833$) generally used fewer resources than partners that lived on-post. The model also showed an actor only, marginally statistically significant relationship between off-post housing location and financial wellness, as AD partners generally perceived lower financial wellness ($\beta = 0.098$, $SE = 0.056$, $z = 1.771$, $B = 0.142$).

Rank. A number of statistically significant relationships surfaced between rank, a binary indicator of enlisted and officer AD participants, and other study variables. A partner effect between rank and CIV partner mental health shows that, in couples with enlisted AD partners, CIV partners generally experienced poorer mental health ($\beta = -0.145$, $SE = 0.065$, $z = -2.223$, $B = -0.110$). Rank also exhibited both an actor and partner relationship to financial wellness; in couples with an enlisted AD service member, both AD partners ($\beta = -0.145$, $SE = 0.055$, $z = -$

2.678, $B = -0.217$) and CIV partners ($\beta = -0.111$, $SE = 0.055$, $z = -1.994$, $B = -0.181$) generally perceived less financial wellness than couples with officer AD service members.

A bootstrapping resampling strategy was employed to examine the indirect mediating effects of use of resources, sense of community, and perceptions of financial wellness on the relationship between partners' financial difficulties and mental health. Both AD and CIV partners' financial difficulties were indirectly related to their own mental health (actor effects) through their own perceptions of financial wellness ($z = -3.285$ for AD partners; $z = -3.323$ for CIV spouses). Partner effects were found between AD partners' financial difficulties and mental health through CIV spouse financial wellness ($z = 1.881$); AD partners' financial difficulties and CIV partners' mental health through CIV partners' financial wellness ($z = -2.312$), and; CIV spouses' financial difficulties and AD partners' mental health through both AD partners' financial wellness ($z = -2.551$) and CIV partners' financial wellness ($z = 2.303$). See Table 6 for direct and indirect effects.

Table 6. *Indirect effects between financial difficulties and mental health*

<u>Indirect Path</u>	<u>Z Score</u>
AD Financial Difficulties to AD Mental Health <i>through AD Financial Wellness</i>	-3.285***
<i>through CIV Financial Wellness</i>	1.881~
AD Financial Difficulties to CIV Mental Health <i>through CIV Financial Wellness</i>	-2.312**
CIV Financial Difficulties to CIV Mental Health <i>through CIV Financial Wellness</i>	-3.323***
CIV Financial Difficulties to AD Mental Health <i>through AD Financial Wellness</i>	-2.551*
<i>through CIV Financial Wellness</i>	2.303*

Notes: Only paths with statistical significance shown.

~ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Multigroup analyses. Model invariance was assessed across the three military contextual factors via multi-group analysis to determine if model results varied by spousal employment

status (employed/not employed), housing location (on-post/off-post housing), and/or rank (officer/enlisted). For each contextual factor a model with parameters constrained to be equal across groups (a constrained model), and a model with parameters allowed to vary across groups (the unconstrained model) were tested. To determine the best fitting model, the change in the chi square ($\Delta\chi^2$) was examined. Lastly, pairwise tests of each group parameter were examined to determine if differences in groups existed for specific model paths.

The change in the chi square ($\Delta\chi^2$) model comparison results indicated that the constrained model could not be rejected for each of the three contextual factors. Model comparisons for spouse employment ($\Delta\chi^2/df = 0.709, p = 0.870$), housing location ($\Delta\chi^2/df = 1.099, p = 0.327$), and rank ($\Delta\chi^2/df = 1.141, p = 0.26$) indicate no significant difference between the unconstrained (default) and constrained models, signaling that the more parsimonious model explains the data as equally as the unconstrained model and is therefore preferred.

Finally, analyses of pairwise tests within the unconstrained models were conducted to examine potential group differences for each parameter. The pairwise analyses indicated several individual paths that significantly differed (i.e., were moderated) by group membership. Results showed a significant relationship between AD partners' financial wellness and better AD mental health for couples in which CIV spouses were not employed ($\beta = -0.550, SE = 0.124, p = 0.000$); for couples in which the CIV spouse was employed, there was no significant relationship ($\beta = -0.152, SE = 0.129, p = 0.241$). Second, the relationship between AD financial difficulties and decreased AD financial wellness was significant for both those that lived on- and off-post; however, the relationship was stronger for those that lived off-post ($\beta = -0.275, SE = 0.066, p = 0.000$ for on-post; $\beta = -0.485, SE = 0.080, p = 0.000$ for off-post). The relationship between AD partners' financial difficulties and increased CIV partners' sense of community was significant

for couples with an officer AD partner ($\beta = -0.427$, $SE = 0.214$, $p = 0.047$), but not for couples with an enlisted partner ($\beta = 0.061$, $SE = 0.057$, $p = 0.289$). Lastly, CIV partners' sense of community was significantly related to better CIV mental health in couples with an enlisted AD partner ($\beta = -0.218$, $SE = 0.089$, $p = 0.014$); there was no significant relationship for couples with an officer AD partner ($\beta = 0.125$, $SE = 0.151$, $p = 0.406$). Table 7 presents significant pairwise results for each contextual factor and group.

Table 7. *Multi-group analyses of contextual factors, model invariance, and significant pairwise comparisons*

Military Context	Chi 2 (df)	Statistically significant pairwise comparisons	
		Group 1 <i>n</i> , % B (SE)	Group 0 <i>n</i> , % B (SE)
Spouse Employment	15.444 (4)**	Not Employed <i>n</i> = 147, 66.5% <i>AD financial wellness</i> → <i>AD mental health</i> -0.550 (0.124)***	Employed <i>n</i> = 73, 33.0%, <i>AD financial wellness</i> → <i>AD mental health</i> -0.152 (0.129)
Housing Location	14.478 (4)**	Off-Post Housing <i>n</i> = 127, 57.5%, <i>AD financial difficulties</i> → <i>AD financial wellness</i> -0.485 (0.080)***	On-Post Housing <i>n</i> = 93, 42.1%, <i>AD financial difficulties</i> → <i>AD financial wellness</i> -0.275 (0.066)***
Rank	10.412 (4)*	Enlisted <i>n</i> = 185, 83.%, <i>AD financial difficulties</i> → <i>CIV sense of community</i> 0.092 (0.059) <i>CIV sense of community</i> → <i>CIV mental health</i> -0.218 (.089)**	Officer <i>n</i> = 36, 16.3%, <i>AD financial difficulties</i> → <i>CIV sense of community</i> -0.427 (0.214)* <i>CIV sense of community</i> → <i>CIV mental health</i> 0.125 (.151)

Notes: Model invariance was assessed with individual analyses for each contextual factor. Only paths with significant variance across groups are presented. Unstandardized estimates and SE are provided.

~ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Findings from this study should be interpreted alongside several considerations. This study uses cross-sectional and self-report data, limiting its ability to speak to causality of variable

relationships. Although the data are not well-suited to causal inference, the aims of this research were to understand the perceptions and lived experiences of military couples' finances and mental health—associations which these data do provide insight for. Second, the study relies on a convenience sample which may be subject to selection bias. While there are differences amongst those that volunteer to take a survey and those that don't, motivations may vary (i.e., some may feel motivated to report their satisfaction, while others may feel motivated to disclose their frustrations). Regardless, researchers must be mindful of selection bias in non-random samples and attempt to account for it, where possible. Finally, because the couples in this study fit a narrow definition of inclusion (i.e., active duty service members that identified as male, coupled with civilian spouses that identified as female, in a self-reported heterosexual marriage), findings from this study may not be generalizable to other populations. These unexplored points of diversity provide for rich opportunities for future studies.

Implications and conclusions

Whereas clear links between individual finances and individual mental health exist, this study has shown how both individual and partner mechanisms affect the relationship between finances and mental health. The CMFS, the theory that guided this study, informed hypotheses that expected resources, sense of community (perception of context), perceptions of financial wellness (perceptions of the problem), and unique military contextual factors to affect the relationship between finances and mental health. The study hypothesized that there would be direct and indirect associations between financial difficulties and mental health through use of resources, sense of community, and perceptions of financial health with both actor and partner effects. In turn, it was hypothesized that the associations would vary depending on couples' military context (spouse employment, housing location, and rank).

The direct and indirect associations between financial difficulties and mental health in this study converges with existing literature (e.g., Starrin, Åslund, & Nilsson, 2009; Rudolf & Watts, 2002) and partially confirms the first hypothesis. While AD financial difficulties were only directly related to poorer AD mental health, AD financial difficulties were indirectly related to poorer CIV mental health through CIV perceptions of financial wellness. Put differently, AD financial difficulties, while significantly related to AD diminished perceptions of financial wellness, were also significantly related to poorer CIV perceptions of financial wellness, which in turn affected CIV mental health. Additionally, CIV financial difficulties were related to poorer mental health for both AD and CIV respondents, with indirect relationships emerging through perceptions of financial wellness. The direct and indirect relationships between financial difficulties, mental health, and perceptions of financial wellness are noteworthy, as they provide evidence for the theoretical proposition that perceptions of the problem are an important mechanism through which stress results in coping or crisis. Notably, these findings also suggest a relational effect, in a person's partners' perceptions of the stressor can also affect coping or crisis.

Patterns surrounding financial difficulties also emerged for CIV spouses, where increased CIV financial difficulties were related to greater CIV use of programs. This is important feedback for military family program specialists and clinicians, as programs are typically geared towards relieving stressors to improve overall force fitness and readiness, and primarily for the AD partner. This finding suggests that CIV spouses are utilizing resources in the face of stress as intended, while perhaps AD partners may not be. Additionally, use of military programs may be increased due to the access and unaffordability of comparable programs in the civilian sector. On the other hand, use of programs (resources), was unrelated to mental health outcomes for either

partner. These are interesting points when considered together, implying that while resources may help to relieve stressors, they may be neutral in their effect on mental health; or it may also speak conflation in the sum measurement of use of resources. Furthermore, as financial and mental health are intertwined, and both mental health and financial planning professionals goals often intersect (e.g., Kim, Gale, Goetz, & Bermudez, 2011), it will be a worthwhile study to examine how and when specific resources (e.g., financial support, couples' therapy, parenting support, etc.) affect the relationship between financial difficulties and mental health.

Findings between the mediators and mental health reiterate the point that the perception of the problem (perceptions of financial wellness) is an important component of the theoretical model, as greater perceptions of financial wellness for both AD and CIV partners were related to better individual mental health. However, the finding that greater perceptions of financial wellness for CIV partners were related to *poorer* AD mental health was unexpected. There are several possible explanations for this unexpected finding, including partners' mismatched financial values or misalignment of perceptions (i.e., one partner feels financially optimistic and the other doesn't). Another possible explanation is that there could be another variable that is masked by financial wellness, something not accounted for, that is influencing the unexpected relationship between CIV greater perceptions of financial wellness and poorer AD mental health.

The finding that AD sense of community was related to better AD mental health comports with prior literature that suggests perceptions of community and social support improve mental health (Taylor, 2007) and adult life satisfaction (DeGraff, O'Neal, & Mancini, 2016); however, it is peculiar that no significant relationship emerged between CIV spouses' sense of community and mental health. Because the AD partner more actively participates in the military community, the fact that AD partners' sense of community is associated with their own

mental health may be a representation of their profound integration with the military system and community. Whereas spouses still actively participate in the military community, their participation in civilian life may work to dilute similar effects on their mental health (e.g., Huebner, Mancini, Bowen & Orthner, 2009). Further investigation into the mechanisms through which community affects mental health is an important effort for researchers and military family providers.

Spouse employment. In couples with an employed spouse both AD and CIV partners perceived less financial wellness and AD partners experienced poorer mental health. These findings suggest that, while spousal employment is championed for those who want and need it, there may be unintended consequences of having an employed CIV spouse, such as strain on relationship and parenting responsibilities due to a dual-earning, high-demands military career, and family schedule. Additionally, multigroup analysis results found that in couples with an employed spouse (compared to those without an employed spouse), AD partners' greater perceptions of financial wellness were related to better AD mental health, indicating that CIV spouse employment may play an important role in meaning making, and in turn mental health. From a SI and CMFS theorizing perspective, it will be important to examine the conditions in which consequences (both positive and negative) of spouse employment exist; for example, do these conditions exist similarly across ranks? Or, does necessity of spouse employment affect these associations?

Housing location. Additionally, in couples that live off-post (compared to those that live on-post), both AD and CIV partners used fewer programs, likely because of increased distance to on-post resources and immersion in a civilian community that may provide similar resources. Couples that live off-post were also more likely to have AD partners with greater perceptions of

financial wellness. Because off-post housing is typically more costly, increased financial wellness may allow families to live off-post because they are financially better off; another interpretation is that living off-post is seen as an increase in status and may evoke a sense of success and pride, positively impacting financial wellness. Housing location also emerged as an important moderating contextual factor in the multigroup analyses, as AD financial difficulties were significantly related to AD partners' decreased perceptions of financial wellbeing for both couples that lived on- and off-post; the relationship for those that lived off-post was stronger than the relationship for those that lived on-post. Modern technology has made it easy to maintain connection despite a transient military career; technology and constant connection may make it easier to compare one's self to their neighbor as a benchmark for social class or measurement of success. As military couples are increasingly living off-post (National Academies of Science, Engineering, and Medicine, 2019), and maintenance of the status-quo of living standards exist both on- and off-post, housing location will be an important contextual factor for consideration. Future research on the intersections of military contextual variables as they associate with status and finances will be worthy of study.

Rank. Military rank permeates many facets of work and family life with much nuance (DeGraff, O'Neal, & Mancini, 2016). Rank has long been established as an indicator of social class, and this study reaffirms that notion as it applies to perceptions of financial wellness. For example, in couples with an enlisted AD partner, both AD and CIV partners perceived less financial wellness, and CIV partners experienced poorer mental health. Previous research suggests rank may be otherwise related to adult life satisfaction (DeGraff, O'Neal, & Mancini, 2016); the findings in this study connect rank to perceptions of financial wellness, and in turn, to mental health. Additionally, two moderating effects for rank emerged in the multigroup analyses.

First, AD greater financial difficulties were related to increased CIV sense of community for officer couples (compared to enlisted couples). Second, greater CIV sense of community was related to better CIV mental health for enlisted couples (compared to officer couples). These group differences suggest rank effects CIV partners' sense of community differently for officer and enlisted couples. As rank and status are explicitly articulated in the military community (e.g., worn on sleeves of uniforms and saluted according to hierarchy), servicemembers are keenly aware of their social standings in relation to other couples in their community. As Burgess (1926) suggests, perceptions of financial wellness are real in their consequences for mental health. These findings also support the social determinants of financial health literature that suggests social class impacts both financial and mental health.

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CHAPTER V

**FINANCES & RELATIONSHIP HEALTH: RESOURCES, PERCEPTIONS, &
CONTEXTS OF FAMILY STRESS IN MILITARY COUPLES²**

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Abstract

Finances consistently rank as one of the top issues that couples contend with in their relationships. This study examines the ways in which financial difficulties directly and indirectly affect relationship health through use of resources, perceptions of community, and perceptions of financial wellness. Employing the Contextual Model of Family Stress (CMFS) and dyadic data analyses, this study draws on a sample of military couples (N=221) to examine the mechanisms through which financial difficulties affect relationship health through use of resources, perceptions of community, and perceptions of financial wellness. In turn, the moderating role of military contextual variables of spouse employment, housing location, and military rank are examined via multi-group analyses. Findings provide support for the CMFS' theoretical emphasis on perceptions over resources, and the importance of contextual factors in couples' stress. Implications for future research, clinical practice, and program development are discussed.

Keywords: Family stress theory, finances, relationship health, military couples.

A recent survey found that Americans are more willing to talk about almost any topic—marital issues, religion, family disagreements, addiction, and politics—rather than talk about their personal finances (APCO Insight, 2018). Personal finances have potential to affect couples' well-being as the long-standing social taboo, intensified in intimate relationships, permeates multiple levels of interpersonal and social relationships (Vogler, Lyonette, & Wiggins, 2008; Kim, Gale, Goetz, & Bermudez, 2011). While links between financial and relationship issues have been long-established (e.g., Terling-Watt, 2001), this study focuses on how couples maintain well-being in the face of financial stressors (as opposed to mechanisms of financial dysfunction) in an effort to support clinicians, financial service providers, program developers, and other interdisciplinary stakeholders invested in supporting couple resilience.

The goal of this study is to understand how couples navigate financial difficulties through use of resources, sense of community, and perceptions of financial wellness in a sample military population from an Army post in the southern United States (N=221 active duty couples). Three aims were identified to achieve this goal. First, the study organizes mechanisms through which financial difficulties result in relationship health through the Symbolic Interaction (e.g., Blumer, 1969; Doherty, Boss, LaRossa, Schumm, & Steinmetz, 2009; Boss, Bryant, & Mancini, 2017) theoretical lens and the Contextual Model of Family Stress (CMFS; Boss, Bryant, & Mancini, 2017); the theoretical orientation and model posit that stressors (financial difficulties) result in an outcome of either coping or stress (relationship health) through contextual factors, use of resources, and perceptions and meanings of the stressor. Second, the study examines direct and indirect effects of the association between financial difficulties and relationship health through the use of resources, perceptions of community, and perceptions of financial wellness, while accounting for key military contextual variables (spouse employment, housing location, and

military service members' rank) . Lastly, multi-group moderation analyses are conducted to determine if the strengths of the relationships vary across the key military contextual factors.

Background

Theoretical orientation.

Symbolic interactionism (SI; Blumer, 1969; Denzin, 2016) is a systemic theory that orients the human experience within the social context and asserts that people assign meanings to their experiences to make sense of their worlds; these meanings are both developed in, and exert influence on, social contexts (Turner & West, 2006). Particularly for the military population, perceptions of circumstances and the process of meaning making has been linked to coping with the unique circumstances of the military lifestyle (Schok, Kleber, Elands, & Weerts, 2008). The SI philosophy is historically embedded in pragmatism (Burr, Hill, Nye, & Reiss, 1979), resulting in a dynamic application as social norms and families change, as do military families. Because of the pragmatic commitment to a reformist approach, SI has an inherent ability to continuously provide a framework for the changing military population, their contexts, and societal fluctuations (Boss, Doherty, LaRossa, Schumm, & Steinmetz, 1993).

The Contextual Model of Family Stress (CMFS, Boss, Bryant, & Mancini, 2017), an extension of the SI theory, organizes the processes through which couples' stress results in either coping or crisis. The application of the CMFS in this study seeks to identify the processes that support relationship health (coping) given the unique financial difficulties inherent in the military lifestyle. The model first asserts that families do not live in isolation, but rather exist in a rich environment comprised of both internal and external contexts (Mancini, O'Neal, Martin, & Bowen, 2018). Contextual factors—the surrounding circumstances that help to define, understand, and assess families—are positioned as both internal and external. Internal contexts

include other close military community members with which the couple interacts, the boundaries between the military community/culture and the couple, and values of the couple (e.g., courage, honor, loyalty, warrior ethos, etc.). External contexts include the hierarchy and hierarchical standing of the military couple, military branch-specific culture, and collectivistic and transient norms and expectations inherent in the military lifestyle. Contextual factors examined in this study include spouse employment, housing location, and rank.

Within the CMFS, and situated amongst the internal and external contextual factors, is Ruben Hill's (1949) ABC-X model of stress and coping. This model asserts that an event (A), is organized through resources (B), and assigned meanings and definitions (C), resulting in an outcome specified as the degree of stress or coping experienced (X); this process occurs within the context of the internal and external circumstances. This model is mapped on to the current study variables with financial difficulties positioned as the stressor (A), use of community programs as resources (B), perceptions of the community as one assigned meaning (C), perceptions of financial wellness as the perception of the stressor (C), and relationship health as the coping/crisis outcome (X).

A recent study of military couples' experiences of deployment examined resources, perceptions, and the outcome of stress (Bergmann, Renshaw, Allen, Markman, & Stanley, 2014). While this study was not explicitly organized through any particular theoretical lens, the study outcomes do provide preliminary findings that support further research organized by the CMFS. Contrary to some literature on military community support (e.g., O'Neal, Richardson, & Mancini, 2018; O'Neal, Mancini, & DeGraff, 2016; DeGraff, O'Neal, & Mancini, 2016) that suggests community support is a key factor in resilience, Allen, Rhoades, Stanley, & Markman (2014) found no association between military community connections and stress. Furthermore, in

Allen et al.'s study, perceptions of financial circumstances (feeling challenged to make ends meet) were more salient than actual income (the objective measure of financial circumstances), however, perceptions of financial difficulties predicted stress more strongly than rank for husbands and wives. Lastly, negative perceptions of service (the military and/or the mission) were associated with higher stress for husbands and wives (Allen et al., 2014). Vulnerabilities inherent in the military lifestyle, such as financial difficulties around spouse employment and the transient lifestyle, are often opportunities for growth and increased connections amongst military couples that can ultimately support resilience and family life satisfaction (O'Neal, Lucier-Greer, Duncan, Mallette, Arnold, & Mancini, 2018; DeGraff, O'Neal, & Mancini, 2016).

Finances, relationship health, and the military population.

Although money is often a taboo and uncomfortable topic, it carries significant implications for couples and relationships. Money is one of the most frequent argument topics and conflict generators in marriages—even more so than disagreements about chores, sex, and quality time (Bryant, Taylor, Lincoln, Chatters, & Jackson, 2008; Dew & Dakin, 2011; Stanley, Markman, & Whitton, 2002); money problems are also associated with lower marital satisfaction and significantly predict a desire for divorce (Bryant et. al., 2008; Dew, Britt, & Huston, 2012; Terling-Watt, 2001). Moreover, because military couples tend to marry younger, they tend to experience exacerbated relational, financial, and individual stressors in addition to the challenges inherent in the military lifestyle and occupation (Gomulka, 2010).

Studies have associated financial conflict with broader relationship issues like commitment issues and lack of respect (Dew & Stewart, 2012), and some research suggests money-related conflict and conflict tactics are more intense, significant, and problematic than other topics of relationship conflict (Papp, Cummings, & Goeke-Morey, 2009; Dew & Dakin,

2011). Ross, O’Neal, Arnold, & Mancini (2017) found that military couples with more financial management concerns engaged in more hostile interactions, as evidenced by behaviors such as arguing over disagreements and criticizing each other. Hostile relationship interactions are particularly dangerous for couples, as they have been related to increased risk and danger, intimate partner violence, and suicidal ideation (Tinney & Gerlock, 2014).

The associations between financial well-being and relationship health are cyclical feedback loops, as finances impact partnerships, and partner dynamics impact finances. Relationship satisfaction has been predicted by financial satisfaction (Archuleta, Grable, & Britt, 2013), “good” financial management behaviors (Dew & Xiao, 2013), and minimal debt (Skogrand, Johnson, Horrocks, & DeFrain, 2011). Healthy marriages with high levels of support and effective problem-solving have been shown to have decreased levels of financial conflict and stress (Conger & Conger, 2002; Conger, Reuter, & Elder, 1999), and couples that work together to make financial decisions experience increased relationship and life satisfaction (Vogler et al., 2008).

Gender and power are also influential factors that affect couples’ finances (Abraham, Auspurg, & Hinz, 2009; Britt, Huston, & Durband, 2010; Dew & Dakin, 2011). Given the unique role of gender in expressions of power and privilege, gender is an animating topic in relationships and finances. Women often have less power related to money, even when they have equal access to pooled finances (Kenney, 2006). Relationships with low socioeconomic status and unequal distributions of power that experience higher financial conflict are also at higher risk for intimate partner violence (Jewkes, 2002). For military couples, civilian spouses of active duty service members are often disadvantaged in their opportunities to find gainful employment and careers due to the transient military lifestyle. Specifically, civilian military spouses (which tend

to be female, married to active duty males; Febbraro & Gill, 2010; Hoobler, 2014) experience gendered pay inequality and child-birthing employment penalties (Bertrand, Golden, & Katz, 2010), increased gendered perceptions of being an employment flight risk due to the transient military lifestyle (Lyness & Judiesch, 2001), higher likelihood of single parenting challenges due to the absence of the service member partner, and the perception that the civilian spouse's career is secondary to their active duty partner's career (Hoobler, 2014). These gendered relational financial consequences can thwart a military couple of the benefits of a dual-income household, introducing further strain to the relationship.

The financial landscape of military couples is also inherently different from that of the general population, as military couples reap many benefits such as comprehensive health care, tuition benefits, child care subsidies, dependent allowances, and housing allowances (Hosek & Wadsworth, 2013). Some of these benefits are dependent on years of service and rank (discussed further in the next paragraph), while housing allowances to offset the cost of living are dependent on the cost of living in which the military installation is located. Hosek and Wadsworth (2013) found that military couples with a one-income household and those with an enlisted service member still experienced financial difficulties when they did not live in housing on the military installation. Over time, more military couples have begun to live in off-installation housing, which results in more opportunities, but also increased isolation and financial difficulties (National Academies of Science, Engineering, and Medicine, 2019).

As noted above, many benefits are dependent on years of service and rank. Rank is an order that establishes status, pay grade, and social address (O'Neal, Mancini, & DeGraff, 2016). Rank can dictate power, responsibility, access, and social standing. Service members' rank has been associated with individual and couple stress in that stress tends to be lower if service

members have more power or status in their jobs and more economic resources (Allen et al., 2014). Additionally, lower ranking service members tend to have higher credit card debt (FINRA IEF, 2010), and enlisted ranks tend to have poorer credit card outcomes and a higher likelihood of financial problems (Skimmyhorn, 2014; Tiemeyer, Wardynski, & Buddin, 1999).

Methods

Data were collected at an Army post youth center in the United States from active duty (AD) service members and their civilian (CIV) spouses. Originally a convenience sample of 273 families, the analytic sample ultimately included 221 couples after 32 responses were excluded because they were single parent families, and 20 additional responses were excluded to minimize potential gender and contextual differences (7 were dual-military parents, and 13 were female AD and male CIV dyads). The couple data analyzed in this study were part of a larger family study that included child data (not used here).

Male active duty (AD) service members and female civilian spouses (CIV) in the analytic sample had an average relationship length of 12.72 years ($SD=5.62$). Most respondents' education level was between high school and some college (AD, 61.4%; CIV 57.0%), followed by associate's degree (19.0%, 18.6%), bachelor's degree (14.5%, 15.8%), and graduate degree or higher (4.5%, 8.6%). Fifteen percent of the respondents were of junior enlisted ranking (E1-E4) and 73.7% were senior enlisted; 9.5% were second lieutenant to major officers (O1-O4) or warrant officers (WO1-CW5), and 1.3% were lieutenant colonel to lieutenant general (O5-O9). Over half of respondents lived in on-post military housing (57.5%), and 8.1% lived in off-post military housing; 34% lived in off-post civilian housing. Most couples had experienced a deployment (91.4%), with 16.3% experiencing one deployment, 19.9% experiencing two, 29.9%

experiencing three, 16.3% experiencing four, and 9.7% experiencing five or more; the average cumulative number of months deployed since 2001 was 30.2 (SD=15.3).

Measures

The concepts that organize this study are positioned within the CMFS and ABC-X models, and include financial difficulties (A, the predictor variable), use of resources (B, a mediating variable), sense of community (C, a mediating variable), perceptions of financial wellness (C, a mediating variable), and relationship health (X, the outcome variable). These concepts are measured by the constructs presented in Table 8, and univariate statistics are presented in Table 9.

Table 8. *Measures, constructs, and locations of variables*

Construct	Measures Used	ABC-X Location
Financial Difficulties	Financial Management Difficulties (10 items, PREPARE/ENRICH; Olson & Olson, 1999)	Stressor (A) – Predictor
Use of Resources	Programs Used (sum of programs/services used, out of 11 programs/services offered by the Army)	Resources (B) – Mediator
Perceptions of Community Support	Sense of Community Subscale (7 items; Community Connections Index; O’Neal O’Neal, Mallette, & Mancini, 2018)	Perceptions (C) - Mediator
Perceptions of Financial Wellness	Personal Financial Wellness (3 items; Prawitz et al., 2006a, 2006b)	Perceptions (C) – Mediator
Relationship Health (a latent construct)	Quality Marriage Index (4 items; Norton, 1983) Adapted Authoritative Parenting/Relationship Behaviors (15 items; Conger et al., 1989)	Outcome (X), manuscript 2
Contextual factors	1. Rank 2. Spouse employment 3. Housing	Context- Control variables /moderators

Financial difficulties. The A factor in the ABC-X framework, and the independent variable in the study is measured by Olson & Olson’s (1999) PREPARE/ENRICH, 10 item assessment of financial management. The assessment included items such as, “We had difficulty

deciding how to handle our money,” “We had trouble saving money,” and, “I was concerned about how [my partner] handled money.” Responses include (1) strongly disagree, (2) disagree, (3) undecided, (4) agree, and (5) strongly agree; the measure has high internal consistency ($\alpha=0.84$ for active duty partners, and $\alpha=0.84$ for spouses). Responses were totaled, with higher scores indicating increased financial difficulties.

Use of resources. A sum score measurement of use of programs and services in the respondents’ community was used to measure use of resources, the B factor in the ABC-X framework. This measure is not a continuous indicator of how many times a respondent used each particular service, but rather a count variable indicating how many programs and services a respondent used out of a list of 11. The list of programs and services included career support, education support, couples and family therapy, and parenting support. Higher sum scores indicate increased use of resources, and in turn, increased accessing of resources.

Sense of community. The first of two C factors in this study is a measure of perceptions of the community context. Because the military couple exists in the military community that provides key support for the inherent challenges posed by the military lifestyle, this measure was included to assess their perceptions of the contexts in which they experience stress. The 7-item Sense of Community Subscale, part of the larger Community Connections Index (O’Neal, Mallette, & Mancini, 2018), measures the respondents’ perceptions of community and includes items such as, “In the past year how often have you... felt close to other people in your community?” “...spent time with people in your community when you needed a little company?” and, “...talked with people in your community about your problems or difficulties?” Responses were coded as (1) never, (2) sometimes, (3) often, and (4) always; higher scores indicate

increased sense of community, and in turn, a more positive perception of community support. The scale had high internal consistency ($\alpha=0.86$ for AD partners, and $\alpha=0.91$ for CIV partners).

Perceptions of financial wellness. The second of the two C factors in this study is a measure of perceptions of the stressor. Three items from Prawitz et al's (2006a, 2006b) assessment of personal financial wellness were used to comprise the construct measuring respondents' perceptions of the stressor. The items were: "What do you feel is the level of your financial stress today?" with responses coded as (1) overwhelming stress, (2) high stress, (3) low stress, and (4) no stress at all; "How do you feel about your current financial condition?" with responses coded as (1) overwhelmed, (2) sometimes worried, (3) just okay, and (4) comfortable; and, "How often do you find yourself living paycheck to paycheck?" with responses coded as (1) always, (2) sometimes, (3) rarely, and (4) never. Higher sum scores indicate increased financial wellness, and in turn, a more positive perception of financial wellness. The scale had good internal consistency ($\alpha=0.81$ for AD partners, and $\alpha=0.83$ for CIV partners).

Relationship health. The outcome variable is a latent construct measured by two observed variables, marital quality and relationship behaviors. The first indicator of relationship health was the Quality Marriage Index (Norton, 1983). The index is a sum of four items: "I think we have a good relationship," "I think our relationship is very stable," "I feel like we are a team," and "I am committed to making my relationship a success," with responses coded as (1) strongly disagree (2) disagree, (3) agree, and (4) strongly agree. Higher scores indicate higher marital quality. This scale has high internal consistency ($\alpha=0.95$ for AD partners, and $\alpha=0.94$ for CIV partners). The second observed construct of relationship behaviors is a measure of Authoritative Parenting (Conger et al., 1989), which was adapted to assess relationship behaviors (warmth and hostility) with 15 items. Example items include "During the past year, when you and your

partner spent time talking or doing things together, how often did he or she... let you know that they really care about you?" "...listen carefully to your point of view?" and, "let you know that they appreciate you, your ideas, or the things you do?" Responses were coded as (1) never, (2) sometimes, (3) often, and (4) always, with higher scores indicating better relationship behaviors, and in turn, increased relationship health. The scale has high internal consistency ($\alpha=0.90$ for AD partners, and $\alpha=0.92$ for CIV partners).

Military Contextual Variables. To assess the ways in which the military context may affect the model, several binary indicators of context are examined as control variables in a mediation model, and as moderators in a multi-group analysis. These indicators include spouse employment, specified as employed ($n=73$, 33.0%) or not employed ($n=147$, 66.5%), housing location, dichotomized as living on post ($n=127$, 57.5%) or living off-post ($n=93$, 42.1%), and rank, an indicator of status, pay grade, and social address (O'Neal, Mancini, & DeGraff, 2016) binarily categorized as enlisted personnel (E1-E9; $n=185$, 83.7%) and officer personnel (O1-O9/WO1-CW5; $n=36$, 16.3%), These indicators account for some aspects of community in the military lifestyle . See Table 9 for univariate statistics for all study variables.

Table 9. *Univariate statistics for all study constructs*

Variable	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	Range	Alpha	Missing
<i>Financial difficulties</i>							
AD Financial Difficulties	2.44	0.83	0.36	-0.18	1.00-5.00	0.84	0.0%
CIV Financial Difficulties	2.51	0.82	0.33	0.33	1.00-5.00	0.84	3.2%
<i>Mediators</i>							
AD Programs Used	1.40	1.94	1.19	0.53	0.00-9.00	-	0.0%
CIV Programs Used	1.17	1.85	1.34	0.55	0.00-7.00	-	0.0%
AD Sense of Community	2.00	0.58	0.31	-0.01	1.00-3.86	0.86	0.0%
CIV Sense of Community	2.26	0.66	0.49	0.18	1.00-4.00	0.91	0.5%
AD Financial Wellness	2.48	0.71	0.16	-0.50	1.00-4.00	0.81	0.0%
CIV Financial Wellness	2.37	0.78	0.13	-0.64	1.00-4.00	0.83	0.0%
<i>Relationship health outcomes</i>							
AD Marital Quality	3.49	0.48	-1.13	2.49	1.00-4.00	0.87	0.0%
CIV Marital Quality	3.36	0.55	-0.66	-0.50	1.50-4.00	0.90	0.9%
AD Relationship Behaviors	3.16	0.47	-0.51	0.10	1.60-4.00	0.90	0.0%
CIV Relationship Behaviors	3.23	0.49	-0.70	0.21	1.47-4.00	0.92	0.9%
<i>Military contextual variables</i>							
Spouse employment	0.33	0.47	0.72	-1.50	0.00-1.00	-	0.5%
Housing	0.42	0.50	0.32	-1.92	0.00-1.00	-	0.5%
Rank	0.84	0.37	-1.84	1.39	0.00-1.00	-	0.0%

Notes: Active Duty Partner (AD). Civilian Partner (CIV).

Data Analyses

To assess the associations between financial difficulties and relationship health, a structural equation model (SEM) was fit to account for the dyadic effects and mediating roles of use of resources, sense of community, and perceptions of financial wellness. Subsequently, a multi-group moderation analysis of key military contextual variables (spouse employment, housing location, and rank) was conducted to determine model invariance across the groups.

Full information maximum likelihood (FIML; Enders, 2001) was used to account for missing data; rates of missing data were minimal, averaging less than one percent for most variables. To assess for goodness-of-fit in the SEM models, a range of fit statistics that are not related to sample size were employed. Chi-square statistics (degrees of freedom ratio; χ^2/df) below 3.0 (Carmines & McIver, 1981), comparative fit indices (CFI) values greater than 0.95

(Browne & Cudek, 1993), and root mean squared error of approximations (RMSEA) values less than 0.08 (Hu & Butler, 1999) were considered indicative of acceptable model fit. Sobel's test was used to estimate statistical significance of indirect effects, and group comparison was used to estimate any significant model invariance of the moderating effects of military contexts. Mplus Version 7 (Muthen & Muthen, 2005) was used to obtain estimates for the SEM, and AMOS 21.0 was used to obtain estimates for multi-group analyses.

In dyadic analyses with standardized coefficients, variances can be biased due to sampling error and non-normal distributions in the underlying variables, thus affecting the standard errors of the test statistics and biasing tests of statistical significance, including their associated p-values and degrees of freedom. To minimize bias, this study utilizes the unstandardized coefficient as suggested by the literature, as the standardized coefficients may be bias in dyadic analyses accounting for actor and partner effects simultaneously (Kenny, Kashy, & Cook, 2001).

Results

The dyadic SEM analyzed variables positioned within the ABC-X model, including financial difficulties (the A factor), use of resources (the B factor), sense of community (the first C factor), perceptions of financial wellness (the second C factor), and relationship health (the X factor). Key military contextual variables included were spouse employment, housing location, and rank. Results from the SEM are presented in *Figur*.

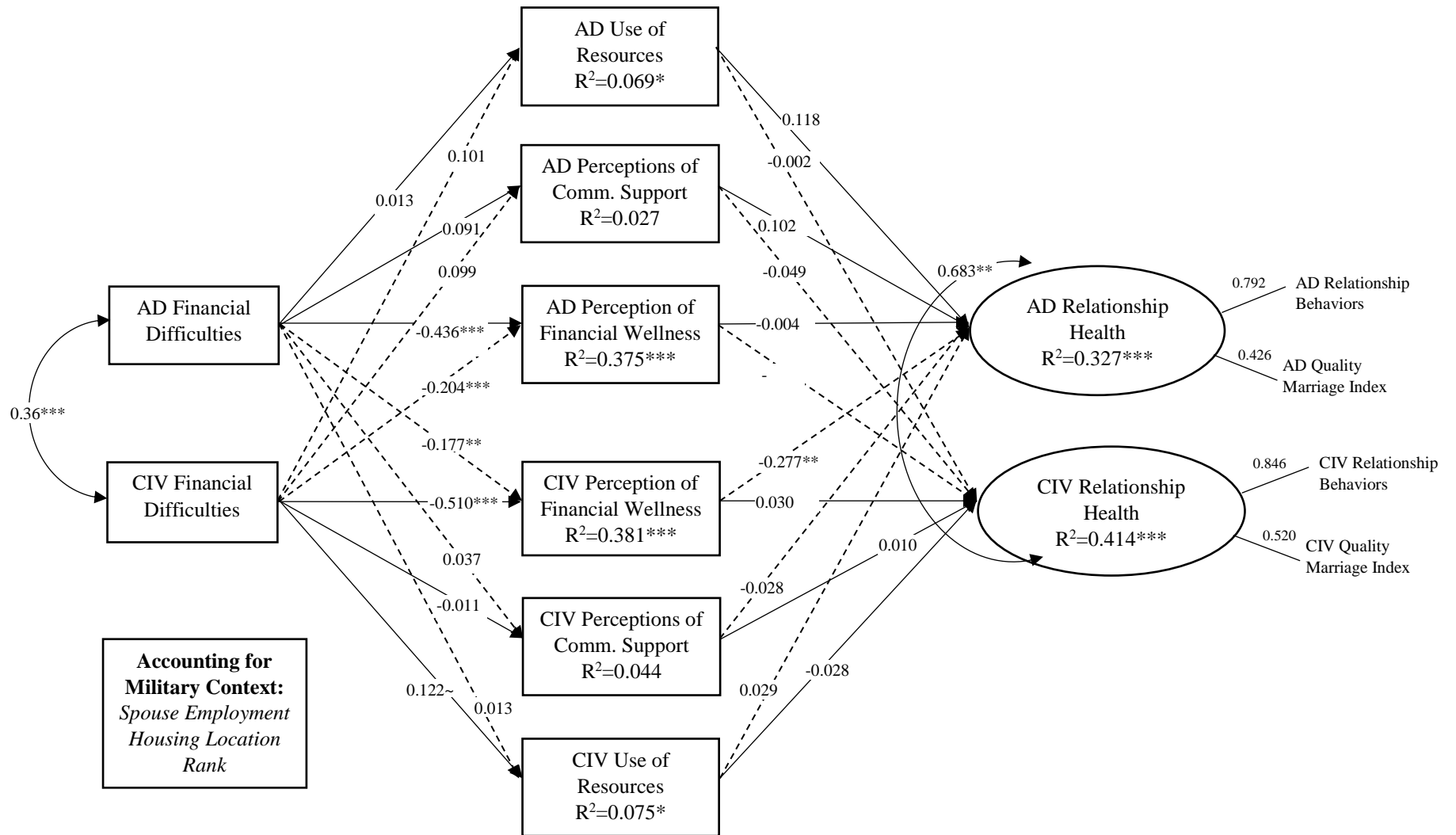


Figure 7. Results from a SEM assessing the associations among military contexts, partners' financial difficulties, resources used, perceptions, and relationship health (standardized coefficients). $\chi^2/df = 1.378$, CFI = 0.982, RMSEA = 0.041. $\sim p < 0.10$, $^*p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.

First, results for financial difficulties are presented as they relate to resources used, sense of community, and perceptions of financial wellness. A marginally significant relationship ($p < 0.10$) between CIV financial difficulties and CIV use of resources suggests that CIV spouses with greater financial difficulties generally used more programs than those with less financial difficulties ($\beta = 0.122$, $SE = 0.070$, $z = 1.744$, $B = 0.276$). There were no significant actor or partner relationships between financial difficulties and sense of community for either partner. For the association between financial difficulties and perceptions of financial wellness, all actor and partner tests resulted in statistically significant relationships. Specifically, actor effects showed that for both AD and CIV partners, greater financial difficulties were related to lower perceptions of financial wellness ($\beta = -0.436$, $SE = 0.054$, $z = -8.135$, $B = -0.374$ for AD partners; $\beta = -0.510$, $SE = 0.051$, $z = -9.994$, $B = -0.484$ for civilian partners). Partner effects were also significant in that, when CIV spouses experienced more financial difficulties, their AD partners typically perceived less financial wellness ($\beta = -0.204$, $SE = 0.057$, $z = -3.549$, $B = -0.180$); similarly, when AD partners experienced greater financial difficulties, their CIV partners typically perceived lower financial wellness ($\beta = -0.177$, $SE = 0.057$, $z = -3.096$, $B = -0.166$).

Next, results linking the mediators (programs used, sense of community, and perceptions of financial wellness) to the relationship health outcomes are presented. There were no significant actor or partner effects between programs used and relationship health, or sense of community and relationship health. One partner effect was significant for CIV partners' perceptions of financial wellness in that greater perceptions of financial wellness among CIV partners were related to poorer relationship health for their AD partners ($\beta = -0.277$, $SE = 0.110$, $z = -2.515$, $B = -0.132$).

The model also found several statistically significant direct effects from financial difficulties to relationship health (not pictured in Figure 7). Both actor and partner significant effects occurred for AD partners' relationship health and financial difficulties. Specifically, AD partners experienced poorer relationship health both when they reported more financial difficulties ($\beta = -0.416$, $SE = 0.090$, $z = -4.627$, $B = -0.186$), and when their CIV partners reported more financial difficulties ($\beta = -0.387$, $SE = 0.118$, $z = -3.279$, $B = -0.174$). CIV partners experienced poorer relationship health when they themselves reported more financial difficulties ($\beta = -0.605$, $SE = 0.083$, $z = -7.256$, $B = -0.307$), but there was no statistically significant partner effect for CIV relationship health and AD financial difficulties.

All paths between military contextual variables (spouse employment, housing location, and rank) and endogenous variables were tested. Spouse employment was coded (1) for not employed and (0) for employed; housing location was coded as (1) for off-post housing, and (0) for on-post housing; and rank was coded as (1) for enlisted, an (0) for officer. Statistically significant effects were found for each of the control variables:

Spouse employment. Both actor and partner relationships were found between spouse employment and use of resources; in couples with an employed CIV spouse, both AD partners ($\beta = 0.151$, $SE = 0.065$, $z = 2.315$, $B = 0.532$) and CIV partners ($\beta = 0.142$, $SE = 0.065$, $z = 2.187$, $B = 0.480$) generally used fewer programs. Additionally, both actor and partner effects were found between spouse employment and perceptions of financial wellness; in couples with an employed CIV spouse, both AD partners and CIV partners generally perceived lower financial wellness ($\beta = 0.170$, $SE = 0.054$, $z = 3.173$, $B = 0.222$, for AD partners; $\beta = 0.093$, $SE = 0.054$, $z = 1.732$, $B = 0.132$, a marginal effect for CIV partners). Finally, employed CIV partners

generally experienced a lower sense of community ($\beta = 0.172$, $SE = 0.0054$, $z = 3.156$, $B = 0.207$), a significant actor effect.

Housing location. Housing location, specified as on-post or off-post housing of couples, displayed multiple significant actor and partner relationships. In couples that lived off-post, both AD partners ($\beta = -0.164$, $SE = 0.067$, $z = -2.452$, $B = -0.645$) and CIV partners ($\beta = -0.223$, $SE = 0.066$, $z = -3.372$, $B = -0.833$) generally used fewer resources than partners that lived on-post. Lastly, an actor only, marginally statistically significant relationship between off-post housing location and financial wellness emerged, as AD partners generally perceived greater financial wellness for couples that lived off-post ($\beta = 0.098$, $SE = 0.056$, $z = 1.756$, $B = 0.142$).

Rank. Many statistically significant relationships were found between rank, a binary variable of enlisted and officer AD participants, and other study variables. Rank showed both an actor and partner relationship with financial wellness; in couples with an enlisted AD service member, both AD partners ($\beta = -0.145$, $SE = 0.055$, $z = -2.646$, $B = -0.216$) and CIV partners ($\beta = -0.111$, $SE = 0.055$, $z = -2.003$, $B = -0.181$) generally perceived lower financial wellness than couples with officer AD service members.

To examine the indirect mediating effects of use of resources, sense of community, and perceptions of financial wellness on the relationship between partners' financial difficulties and relationship health, supplementary analysis draws on Preacher and Hayes (2008) bootstrapping resampling strategy with 5,000 draws, a technique that avoids the assumption of multivariate normality. Both AD and CIV partners' financial difficulties were indirectly related to AD relationship health through CIV perceptions of financial wellness ($z = 1.954$ for AD partners' financial difficulties; $z = 2.413$ for CIV partners' financial difficulties). **Error! Reference source not found.** presents indirect effects.

Table 10. *Indirect effects between financial difficulties and relationship health*

<u>Indirect Path</u>	<u>Z Score</u>
AD Financial Difficulties to AD Relationship Health through CIV Financial Wellness	1.954~
CIV Financial Difficulties to AD Relationship Health through CIV Financial Wellness	2.413*

Notes: Only paths with statistical significance are presented.

~ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Multigroup analyses. Model invariance was assessed across the three military contextual factors via multi-group analysis to determine if the SEM model findings varied depending on spouse employment status (employed/not employed), housing location (on-post/off-post housing), and/or rank (officer/enlisted). For each contextual factor, a model with parameters constrained to be equal across groups (a constrained model), and a model with parameters allowed to vary across groups (the unconstrained model) were tested. To determine the best fitting model, the change in the chi square ($\Delta\chi^2$) was examined. Lastly, pairwise tests of each group parameter were examined to determine if differences in groups existed for specific model paths.

The change in the chi square ($\Delta\chi^2$) model comparison results indicated that the constrained model could not be rejected for each of the three contextual factors. Model comparisons for spouse employment ($\Delta\chi^2/df = 0.852, p = 0.690$), housing location ($\Delta\chi^2/df = 1.442, p = 0.061\sim$), and rank ($\Delta\chi^2/df = 1.437, p = 0.084\sim$) indicate no significant difference between the unconstrained (default) and constrained model, meaning that the more parsimonious constrained model explains the data as well as the unconstrained model and is therefore preferred. Lastly, analyses of pairwise tests within the unconstrained models were conducted to examine potential group differences for each parameter. The pairwise analyses indicated several

individual paths that significantly differed (i.e., moderated), depending on group membership for housing location and rank; there were no significant pairwise results for spouse employment.

Results for housing location indicated a significant relationship between greater AD partners' sense of community and poorer CIV partners' relationship health for those that live off-post ($\beta = -0.329$, $SE = 0.140$, $p = 0.018$); the relationship between AD sense of community and CIV relationship health was not significant for those that lived on-post ($\beta = 0.027$, $SE = 0.110$, $p = 0.810$). Second, the relationship between AD financial difficulties and decreased AD financial wellness was significant for both those that lived on- and off-post; however, the relationship was stronger for those that lived off-post ($\beta = -0.274$, $SE = 0.066$, $p = 0.000$ for on-post partners; $\beta = -0.486$, $SE = 0.080$, $p = 0.000$ for off-post partners). Lastly, there was a moderately significant relationship between CIV partners' use of programs and AD partners' relationship health for couples that lived off-post; CIV spouses that used more programs had AD partners that generally reported decreased relationship health ($\beta = -0.092$, $SE = 0.051$, $p = 0.070$); for couples living on-post, this relationship was not significant ($\beta = 0.035$, $SE = 0.035$, $p = 0.315$).

Results for rank indicated a significant relationship between greater CIV use of programs and poorer CIV relationship health for those with officer AD partners ($\beta = -0.196$, $SE = 0.099$, $p = 0.048$); the relationship was not significant for those with enlisted AD partners ($\beta = 0.008$, $SE = 0.030$, $p = 0.785$). Second, CIV partners' increased sense of community was significantly related to improved AD partners' relationship health for those couples with an officer AD partner ($\beta = 0.341$, $SE = 0.145$, $p = 0.019$); the relationship was not significant for those couples with enlisted AD partners ($\beta = -0.063$, $SE = 0.088$, $p = 0.473$). Lastly, the relationship between AD partners' financial difficulties and increased CIV partners' sense of community was significant for couples with an officer AD partner ($\beta = -0.427$, $SE = 0.215$, $p = 0.047$), but not for couples

with an enlisted partner ($\beta = 0.095$, $SE = 0.059$, $p = 0.110$). Table 11 presents significant results for each contextual factor and group.

Table 11. *Multi-group analyses of contextual factors, model invariance, and significant pairwise comparisons*

Military Context	Chi 2 (df)	Statistically significant pairwise comparisons	
		Group 1 <i>n</i> , % B (SE)	Group 0 <i>n</i> , % B (SE)
Spouse Employment	23.842 (28)	Not Employed $n = 147$, 66.5% <i>No significant pairwise comparisons</i>	
Housing Location	40.389 (28)~	Off-Post Housing $n = 127$, 57.5%, <i>AD financial difficulties</i> → <i>AD financial wellness</i> -0.486 (0.080)*** <i>AD sense of community</i> → <i>CIV relationship health</i> -0.329 (0.140)* <i>CIV use of programs</i> → <i>AD relationship health</i> -0.092 (0.051)~	
		On-Post Housing $n = 93$, 42.1%, <i>AD financial wellness</i> -0.274 (0.066)*** <i>CIV relationship health</i> 0.027 (0.110) <i>AD relationship health</i> 0.035 (0.035)	
Rank	40.241 (28)~	Enlisted $n = 185$, 83.%, <i>AD financial difficulties</i> → <i>CIV sense of community</i> 0.092 (0.059) <i>CIV use of programs</i> → <i>CIV relationship health</i> 0.008 (.030) <i>CIV sense of community</i> → <i>AD relationship health</i> -0.063 (0.088)	
		Officer $n = 36$, 16.3%, <i>CIV sense of community</i> -0.427 (0.215)** <i>CIV relationship health</i> -0.196 (.089)** <i>AD relationship health</i> 0.341 (0.145)**	

*Notes: Model invariance was assessed with individual analyses for each contextual factor. Only paths with significant variance across the groups are presented. Unstandardized estimates and SE are provided. ~ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$*

Findings from this study should be interpreted alongside several considerations. First, the cross-sectional and self-report data limit the ability to speak to causality between variable relationships. While the data are not suited to causal inference, the data do provide insights to achieve goal of this study, which was to understand the perceptions and experiences of military couples' finances and relationship health. Source data is also limited by the use of a convenience

sample, which is often subject to selection bias and may skew findings due to differences between those that volunteer to participate and those that do not. Motivations for participation may vary in that some volunteers may want to report on their satisfaction, while others on their frustrations. The couples included in this study fit a narrow demographic (male active duty service members, female civilian spouses, in a heterosexual marriage); findings from this study may not be generalizable to other populations. Because the patterns analyzed in this study are not known for the full population, it is not possible to know the amount of selection bias in this sample. However, to the extent that this sample is reflective of the demographic distribution of the full population, it can be assumed that findings have some external validity beyond the sample.

Implications and conclusions

The association between finances and couples' relationship health is well-established in the literature. This study contributes to the literature by examining the mechanisms through which use of resources, sense of community (perceptions of the context), perceptions of financial wellness (perceptions of the problem), and key military contextual factors affect the association between finances and relationship health. The study advanced two hypotheses—first, that there would be direct and indirect associations between financial difficulties and relationship health through use of resources, sense of community, and perceptions of financial health with both actor and partner effects, and second, that the associations would vary depending on couples' military context (spouse employment, housing location, and rank).

The direct links between financial difficulties and relationship health in this study converge with the existing literature (e.g., Bryant, Taylor, Lincoln, Chatters, & Jackson, 2008; Dew & Dakin, 2011; Stanley, Markman, & Whitton, 2002) and partially confirm the first

hypothesis. While both actor effects confirmed the study hypotheses (i.e., AD financial difficulties were associated with poorer AD relationship health, and CIV financial difficulties were associated with poorer CIV relationship health), the direct partner effect only emerged for CIV partners (only CIV financial difficulties were related to poorer AD relationship health; the path between AD financial difficulties and CIV relationship health was not significant). Additionally, both AD and CIV financial difficulties were indirectly related to AD relationship health through CIV perceptions of financial wellness. These direct and indirect associations also provide support for the CMFS that first, hypothesizes the direct and indirect associations of stress and coping, and second, that perceptions of the stressor are the most significant factor in mediating the direct relationship. This study also echoes the SI notion that situations perceived as real are real in their consequences (Burgess, 1926); in other words, despite the reality of financial difficulties (real or perceived), there are real consequences for relationship health.

Clear patterns emerged between financial difficulties and financial wellness. Financial difficulties were associated with poorer perceptions of financial wellness for all actor and partner paths, but there were no significant actor or partner paths between financial difficulties and sense of community (the measure of perceptions of the context). These findings support the theoretical notion that perceptions of the problem are more significant in the relationship between the stressor and outcome. Similarly, perceptions of financial wellness were the only mediator significantly related to relationship health. One partner effect emerged, as CIV greater perceptions of financial wellness were related to AD poorer relationship health. These findings, when considered together, provide a theme around the importance of perceptions of the stressor and their intra- partner effects, which confirm the SI and CMFS theoretical propositions.

The only other mediator that had a significant association with financial difficulties was an actor effect: greater CIV financial difficulties were related to greater CIV use of programs and resources. While military programs and resources aim to support overall readiness, spouses appear to engage with resources in the face of stressors whereas service members may not. Another noteworthy point is that this study examined use of programs and resources broadly, entertaining the collective role of financial counseling, parenting support, and marriage and family therapy; examination of if and when specific programs/resources (i.e., financial counseling, marriage and family therapy, parenting support, etc.) affect the association between finances and relationship health is an important avenue for further research.

Related to the challenges inherent in the military lifestyle, CIV spouse employment can be a point of strain for military couples (e.g., Hoobler, 2014). These findings suggest that, in couples with an employed CIV spouse, both AD and CIV partners used fewer programs while CIV partners felt a weaker connection to the military community. These findings suggest that spouse employment may attenuate access to community support and resources. Because maintaining CIV full-time employment while tending to the demands of the military partner's career and family responsibilities is time consuming, employed CIV spouses may not have time to access community support and resources. Furthermore, in couples with an employed CIV spouse, both AD and CIV partners also had lower perceptions of financial wellness. Taken together, these results imply an important role in meaning making and perceptions of CIV spouse employment as a necessity, keeping up with the status quo, and making contributions towards the maintenance of relationship health. From an SI and CMFS theorizing perspective, it will be important to examine both the positive and negative consequences of CIV spouse employment for relationship health.

Financial difficulties have also been linked to military couples' housing location in existing literature (e.g., Hosek & Wadsworth, 2013), which converges with the findings of this study. For couples that lived off-post (rather than on-post), both AD and CIV partners used fewer programs, and AD partners reported greater perceptions of financial wellness. While use of military programs may simply be reflection of proximity to resources, it may also be the case that couples living off-post are utilizing off-post civilian resources. Furthermore, though prior research has shown off-post living is related to increased isolation and financial difficulties (National Academies of Science, Engineering, and Medicine, 2019), findings from this study help illuminate distinctions in the actor-partner experiences of this context. For example, these findings suggest that, for couples living off-post, greater AD sense of community was related to poorer CIV relationship health, and greater CIV use of programs was related to poorer AD relationship health. While housing location may be symbolic of success and status, for CIV partners that neither work nor live on-post, there appear to be negative consequences for relationship health. Moreover, housing location may exacerbate vulnerability and isolation of the CIV spouse due to not being integrated within the military post and community.

Lastly, while it might be expected that rank be treated as an indicator of income and hierarchical standing, rank is a nuanced contextual variable that represents status, social address, access, and power (e.g., O'Neal, Mancini, & DeGraff, 2016). Findings of this study provide additional nuance to the picture surrounding rank and military couples' relationship health. These results provide clear evidence for group differences in meaning making, in that, in couples with an enlisted AD partner (rather than an officer AD partner), both AD and CIV partners had poorer perceptions of financial wellness. Furthermore, for couples with an officer AD partner (rather than an enlisted AD partner), greater CIV use of programs was related to poorer CIV

relationship health, and greater CIV sense of community was related to better AD relationship health. While many studies provide insights around the financial circumstances of enlisted versus officer service members (e.g., Tiemeyer, Wardynski, & Buddin, 1999), this study provides firm evidence for partner effects related to rank and finances. Moreover, whereas it might be expected that couples experience financial challenges in similar ways, these instances elucidate both when and how enlisted and officer couples differ.

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CHAPTER VI

Summary and Discussion

Study overview

The purpose of these studies were to gain understanding around the associations between financial difficulties, mental health, and relationship health in military couples. Current literature supports the use of contextual-focused theory and models (e.g., DeGraff, O’Neal, & Mancini, 2016). The SI theory and CMFS model provided the appropriate organization of couples’ stress (financial difficulties) and outcomes (mental health and relationship health). The present studies test the assumptions of the theory and model while also examining important factors related to couples’ finances, mental health, and relationship health. Tables 12 and 13 provide an overview of the findings of the study. Theoretical and clinical implications are then discussed, followed by a review of the study limitations and recommendations for next steps.

Table 12. *Summary of significant findings from manuscript 1*

<u>Financial difficulties (FD) → Mediators</u>		<u>Effect</u>
CIV FDs related to:	CIV greater use of programs.	Actor
	CIV poorer perceptions of financial wellness	Actor
	AD poorer perceptions of financial wellness	Partner
AD FDs related to:	AD poorer perceptions of financial wellness	Actor
	CIV poorer perceptions of financial wellness	Partner
<u>Mediators → Mental health (MH)</u>		
Resources	<i>no significant partner or actor effects between programs used and MH</i>	
Sense of Community	AD greater sense of community related to better AD MH	Actor
Perceptions of Financial Wellness	CIV greater perception of financial wellness related to CIV better MH	Actor
	CIV greater perception of financial wellness related to AD poorer MH	Partner
	AD greater perception of financial wellness related to better AD MH	Actor
<u>Military Contextual Variables → X, M, & Y</u>		
In couples with an employed CIV spouse	AD used fewer programs	
	CIV used fewer programs	
	AD and CIV perceived less financial wellness	
	AD experienced poorer MH	
In couples that lived off- post	AD and CIV used fewer programs	
	AD perceived greater financial wellness	
In couples with an enlisted AD partner	AD and CIV perceived less financial wellness	
	CIV experienced poorer MH	
<u>Financial difficulties → Mental health</u>		
AD FDs related to:	AD worsened MH	Actor
CIV FDs related to:	AD worsened MH	Partner
	CIV worsened MH	Actor
<u>Indirect effects</u>		
AD FD → AD MH	through AD perceptions of financial wellness	Actor
	through CIV perceptions of financial wellness	Partner
CIV FD → CIV MH	through CIV perceptions financial wellness	Actor
AD FD → CIV MH	through CIV perceptions of financial wellness	Partner
CIV FD → AD MH	through AD perceptions of financial wellness	Partner
	through CIV perceptions of financial wellness	Partner
<u>Multi-group/Military contextual factors (Moderation)</u>		
Spouse employment	greater AD perception of financial wellness related to better AD MH for those with employed spouse	
Housing location	greater AD FD related to decreased AD FW for those off-post (stronger)	
	greater AD FD related to decreased AD FW for those on-post (weaker)	
Rank	greater AD FD related to increased CIV sense of community for officer couples	
	greater CIV sense of community related to better CIV MH for enlisted couples	

Table 13. *Summary of significant findings from manuscript 2*

<u>Financial difficulties (FD) → Mediators</u>		<u>Effect</u>
CIV FDs were related to:	CIV greater use of programs.	Actor
	CIV poorer perceptions of financial wellness	Actor
	AD poorer perceptions of financial wellness	Partner
AD FDs were related to:	AD poorer perceptions of financial wellness	Actor
	CIV poorer perceptions of financial wellness	Partner
 <u>Mediators → Relationship health (RH)</u>		
Resources	<i>no significant partner or actor effects between programs used and RH</i>	
Sense of Community	<i>no significant partner or actor effects between sense of community and RH</i>	
Perceptions of Financial Wellness	CIV greater perception of financial wellness was related to AD poorer relationship health	Partner
 <u>Military Contextual Variables → X, M, & Y</u>		
In couples with an employed CIV spouse	AD and CIV partners used fewer programs	
	AD and CIV partners had poorer perceptions financial wellness	
	CIV partners perceived a lessened sense of community	
In couples that lived off-post	AD and CIV partners use fewer programs	
	AD partners had greater perceptions of financial wellness	
In couples with an enlisted AD partner	AD and CIV partners had poorer perceptions of financial wellness	
 <u>Financial difficulties → Relationship health</u>		
AD FDs were related to:	AD poorer RH	Actor
CIV FDs were related to:	AD poorer RH	Partner
	CIV poorer RH	Actor
 <u>Indirect effects</u>		
AD FD → AD RH	through CIV perceptions of financial wellness	Partner
CIV FD → AD RH	through CIV perceptions of financial wellness	Partner
 <u>Multi-group/Military contextual factors (Moderation)</u>		
Spouse employment	<i>No moderation</i>	
Couples living off-post: (<i>ref. on-post</i>)	greater AD sense of community related to poorer CIV RH	
	greater AD FD related to decreased AD FW	
	greater CIVs use of programs related to poorer AD RH	
Couples with officer AD: (<i>ref. enlisted AD</i>)	greater CIVs use of programs related to poorer CIV RH	
	greater CIV sense of community related to better AD RH	

Theoretical implications

The SI theory and CMFS model provided the essential theoretical consonance to organize and examine the associations in the study model. As previously discussed, the theory and model emphasize meaning making and contextual factors in the relationship between stress and coping. The theory and model offered several key insights and limits.

First, SI asserts that the subjective meanings that individuals and families assign to stress mediate objective realities and are situated as the key to navigating stress (Boss, Bryant, & Mancini, 2017; Blumer, 1969; Daly, 2003). SI recognizes the dialectical tension and enmeshment between subjective and objective processes (Thomas, Znaniecki, & Strubing, 1984) and accounts for the contextual influences in environments (Doherty, Boss, LaRossa, Schumm, & Steinmetz, 2009). In line with the critique of SI, it is difficult to measure and understand the symbolic meaning that a person has attributed to a stressor; this study aimed to measure assigned meaning of financial difficulties through perceptions of financial wellness.

Second, the CMFS evoked in the present studies considered both internal and external contexts. While spouse employment, housing location, and rank were key contextual factors considered, Boss et al. (2017) do develop the CMFS further by adding a third ring of context which they refer to as the community contexts. The intention of this study was to examine finances, mental health, and relationship health and the key military contextual factors previously listed and the studies do consider aspects of community (through the sense of community variable). However, more intentional consideration of community contexts to support the extended version of the CMFS will be important next steps in the model development.

Clinical implications

The studies present important clinical and theoretical implications for couple and family therapists. First, while behavior-based models of therapy that engage cognitive and behavioral aspects of clients (e.g., cognitive behavioral therapy) are gaining ground as evidenced-based practices, this study provides support for insight-based models of therapy that aim to shift meaning and perceptions (e.g., symbolic experiential). Second, the findings of these studies reiterate the importance of a systems-based approach in the clinical setting, as the contexts of clients' environments were found to influence the factors of mental and relational health. Finally, this study provides support for the holistic approach of financial therapy, which engages the emotional, cognitive, relational, and behavioral aspects of the overlapping space between finances, mental health, and relational health.

Limitations

Several considerations should be taken into account when interpreting the findings of the proposed studies. First, the study uses cross-sectional and self-reported data, limiting the ability to speak to causal relationships. However, the research aims of this proposal are to understand the perceptions and lived experiences of military couples as it relates to finances, mental health, and relationship health. Therefore, these cross-sectional and self-reported data, although not able to provide causal inferences, do provide insight to the research questions presented in these studies. Second, the studies rely on a convenience sample which may be subject to selection bias. While there are differences amongst those that volunteer to take a survey and those that don't, motivations may vary (i.e., some may feel motivated to tell their satisfaction, and some may feel motivated to tell their dissatisfaction). Regardless, researchers must be mindful of selection bias in non-random samples and attempt to account for it, where possible. Finally, because the

couples in this study were couples that fit a narrow definition of inclusion (i.e., active duty service members that identified as male, coupled with civilian spouses that identified as female, in a self-reported heterosexual marriage), findings from this study may not be generalizable to other populations. For example, there are contextual differences across various populations (e.g., military couples, civilian couples, LGBTQ couples, etc.) which were not explicitly studied in these analyses. However, these points of diversity provide for rich opportunities for future studies.

Recommendations and next steps

Future research should consider the following recommended next steps in their study of military couples, mental health, relationship health, and contextual factors. First, while study findings suggest that perceptions and meanings of the stressor are the most significant mediating factor, it is still worthwhile to examine resources in more depth. For example, this study examined broad use of resources; a specific study on different types of resources, and when and how they affect the associations between finances, mental health, and relationship health can provide more nuance on the B factor of the ABC-X model. In other words, do financial resources, mental health resources, and/or relationship resources mediate the associations differently? Such a study should also consider measuring specific internal, external, and community contexts so as to continue the development of the SI theory and CMFS model. Lastly, broadened participant inclusion factors will also provide richness and generalizability to a diversity of the population. While the present studies provide a glimpse of military couples' finances, mental health, and relationship health, there is still a need to gain more depth on the contextual nuances that affect these variables.

Summary and conclusion

The ways in which finances affect mental and relational health are nuanced through use of resources, meaning making, and within and between couples. Further complexity in the associations exist within contextual factors of the military and our society at large. As hypothesized, the present studies found actor and partner effects on the associations between financial difficulties, use of resources, perceptions of community, perceptions of financial wellness, contextual factors, and mental and relationship health. Mainly, the study confirmed the importance of the mediating effect of perceptions of the stressor (as posited by Boss et al., 2017) as the most significant factor in resilience building. Second, while key contextual variables related to finances (spouse employment, housing location, and rank) did influence the associations in the models, the specific ways in how and when they affected the associations provide further evidence for theorizing about context, and rich material for future studies on the contextual factors that affect family stress and resilience.

Overall, the present studies provide rich results that speak to the resilience of the military population, context-attentive theorizing, and the SI theory of human development. The CMFS and ABC-X models provide important conceptual foundations to organize and define the ways in which stress results in crisis or resilient coping. As much as finances are a necessity of day to day life and an inevitable stressor in this culture (military and broader American culture), financial difficulties, mental health, and relationship health are heavily influenced by one's perceptions and meanings of the stressor, their partners' stress and assigned meanings, and the social contexts in which they exist.

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APPENDIX A: MEASURES

Table A1. *PREPARE/ENRICH Financial Management Scale (Olson & Olson, 1999)*

Please answer the following questions about how you and (your partner) handled money and made financial decisions in the past year.

Over the past year...	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Does not apply (coded as missing)
(1) I was concerned about how (my partner) handled money.	1	2	3	4	5	6
(2) I was concerned that (my partner) was more of a spender than I am.	1	2	3	4	5	6
(3) (My partner) tried to control the money we had.	1	2	3	4	5	6
(4) We usually agreed on how to spend our money (reverse scored).	1	2	3	4	5	6
(5) I was satisfied with our decisions about how much money we should save (reverse scored).	1	2	3	4	5	6
(6) We had trouble saving money.	1	2	3	4	5	6
(7) Use of credit cards and charge accounts was a problem for us.	1	2	3	4	5	6
(8) Sometimes, I wish (my partner) was more careful about spending money.	1	2	3	4	5	6
(9) We were aware of our major debts, and they were not a problem for us (reverse scored).	1	2	3	4	5	6
(10) We had difficulty deciding how to handle our finances.	1	2	3	4	5	6

Table A2. *A summative measure of military programs and services used.*

Now we want to know about your awareness of, use of, and satisfaction with other programs and services provided by the Army. Please select an answer for every program.

	Were you aware that the Army offers programs and services in the following areas? (yes=1, no=0)	If yes, has your family used it? (yes=1, no=0)
(1) Career support	1 / 0	1 / 0
(2) Education support	1 / 0	1 / 0
(3) Financial support	1 / 0	1 / 0
(4) Parenting support	1 / 0	1 / 0
(5) Deployment support	1 / 0	1 / 0
(6) Relocation support	1 / 0	1 / 0
(7) Grief counseling	1 / 0	1 / 0
(8) Marriage enrichment	1 / 0	1 / 0
(9) Couple and/or family therapy	1 / 0	1 / 0
(10) Counseling or mental health services	1 / 0	1 / 0
(11) Single parent groups	1 / 0	1 / 0

Table 3A. *Community Connections Index (O'Neal, Mallette, & Mancini, 2018)*

This section continues to ask you about your community and community members. Questions include community topics on safety, friendliness of civilians, quality of community, and neighbors. Please select the response that best describes your feelings or opinions.

In the past year, how often have you...	Never	Sometimes	Often	Always
(1) Spent time with people in your community when you needed a little company?	1	2	3	4
(2) Joined with people in your community to solve community problems?	1	2	3	4
(3) Felt like you could make a positive difference in your community?	1	2	3	4
(4) Looked after of shown concern for other people in your community?	1	2	3	4
(5) Talked with people in your community about your problems or difficulties?	1	2	3	4
(6) Volunteered in your community?	1	2	3	4
(7) Made new friends with someone in your community?	1	2	3	4
(8) Felt like you belonged in your community?	1	2	3	4
(9) Felt your circumstances were similar to others in your community?	1	2	3	4
(10) Participated in community events or activities?	1	2	3	4
(11) Attended club or organization meetings in your community?	1	2	3	4
(12) Attended an informal meeting about an issue affecting your community?	1	2	3	4
(13) Attended a local government or political meeting?	1	2	3	4
(14) Felt close to other people in your community?	1	2	3	4

Notes: Sense of community (items 1, 4, 5, 7, 8, 9, 14)

Table 4A. *Abbreviated Center for Epidemiologic Studies Depression Scale (Radloff, 1977)*

Below is a list of ways you may have felt or acted. Please choose how often you felt this way during the past week. Please respond to all items.

During the past week...	None of the time	Some of the time	Most of the time
(1) I felt that I could not shake off the blues even with help from my family or friends.	1	2	3
(2) I had trouble keeping my mind on what I was doing.	1	2	3
(3) I felt depressed.	1	2	3
(4) I felt everything I did was an effort.	1	2	3
(5) My sleep was restless.	1	2	3
(6) I enjoyed life (reverse scored).	1	2	3
(7) I felt sad.	1	2	3

Table 5A. *Zung Self-Rating Anxiety Scale (Zung, 1971)*

The following questions ask about your level of worry and stress. For each item below, please click on the column which best describes how often you felt this way during the past week.

During the past week...	None of the time	Some of the time	Most of the time
(1) I felt more nervous and anxious than usual.	1	2	3
(2) I felt afraid for no reason at all.	1	2	3
(3) I got upset easily or felt panicky.	1	2	3
(4) I felt like I was falling apart and going to pieces.	1	2	3
(5) I felt that everything was all right and nothing bad would happen (reverse scored).	1	2	3
(6) My arms and legs shook and trembled.	1	2	3
(7) I was bothered by headaches, neck and back pain.	1	2	3
(8) I felt weak and got tired easily.	1	2	3
(9) I felt calm and could sit still easily (reverse scored).	1	2	3
(10) I could feel my heart beating fast.	1	2	3
(11) I was bothered by dizzy spells.	1	2	3
(12) I had fainting spells or felt like fainting.	1	2	3
(13) I could breathe in and out easily (reverse scored).	1	2	3
(14) I got feelings of numbness and tingling in my fingers and toes.	1	2	3
(15) I was bothered by stomach aches or indigestion.	1	2	3
(16) I had to go to the bathroom often.	1	2	3
(17) My hands were usually dry and warm (reverse scored).	1	2	3
(18) My face got hot and blushed.	1	2	3
(19) I fell asleep easily and got a good night's rest (reverse scored).	1	2	3
(20) I had nightmares.	1	2	3

Table 6A. *Personal Wellbeing Index (International Wellbeing Group, 2013)*

These statements are about your personal well-being. Please answer based on how you felt over the past week.

	Strongly disagree	Disagree	Agree	Strongly agree
(1) I was satisfied with my life as a whole.	1	2	3	4
(2) I was satisfied with my standard of living.	1	2	3	4
(3) I was satisfied with my health.	1	2	3	4
(4) I was satisfied with what I was currently achieving in life.	1	2	3	4
(5) I was satisfied with my personal relationships.	1	2	3	4
(6) I was satisfied with how safe I felt.	1	2	3	4
(7) I was satisfied with feeling part of my community.	1	2	3	4
(8) I was satisfied with my future security.	1	2	3	4

Table 7A. *Quality Marriage Index (Norton, 1983)*

For each of the following statements, (select the response) that best fits your relationship with (your partner).

	Strongly disagree	Disagree	Agree	Strongly agree
(1) I think we have a good relationship.	1	2	3	4
(2) I think our relationship is very stable.	1	2	3	4
(3) I feel like we are a team.	1	2	3	4
(4) I am committed to making my relationship a success.	1	2	3	4

Table 12A. *Adapted Authoritative Parenting/Relationship Behaviors (Conger et al., 1989)*

During the past year, when you and (your partner) spent time talking or doing things together, how often did he or she...

	Never	Sometimes	Often	Always
(1) Help you do something that was important to you?	1	2	3	4
(2) Get angry at you? (reverse scored)	1	2	3	4
(3) Let you know that they really care about you?	1	2	3	4
(4) Get so mad at you that they broke or threw things? (reverse scored)	1	2	3	4
(5) Listen carefully to your point of view?	1	2	3	4
(6) Shout or yell at you because they were mad at you? (reverse scored)	1	2	3	4
(7) Act supportive and understanding toward you?	1	2	3	4
(8) Criticize you or your ideas? (reverse scored)	1	2	3	4
(9) Act loving and affectionate toward you?	1	2	3	4
(10) Have a good laugh with you about something that was funny?	1	2	3	4
(11) Argue with you whenever you disagreed about something? (reverse scored)	1	2	3	4
(12) Let you know that they appreciate you, your ideas, or the things that you do?	1	2	3	4
(13) Tell you that they love you?	1	2	3	4
(14) Insult or swear at you? (reverse scored)	1	2	3	4
(15) Understand the way you felt about things?	1	2	3	4