REACH

Supporting Military Families Through Research and Outreach

Military Families and Financial Stress

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Research

Outreach

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Military REACH, a project of the DoD-USDA Partnership for Military Families, utilizes a multi-disciplinary approach integrating both Research and Outreach to support those who work with and on behalf of military families. Through our three-fold approach, we provide empirical research that identifies and addresses key issues impacting military families and the programs that serve them, offer outreach and professional development through online resources, and host a Live Learning Lab for program staff seeking constructive professional development feedback for their programs.

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Table of Contents

Executive Summary

Management of financial resources is an important task for American families and, if not done well, can result in financial stress and family distress. Based on current research, civilian and military families experience similar amounts of financial stress (e.g., Skimmyhorn, 2014) though there are some differences to consider. For example, military families experience some buffers to financial stress, such as less stress regarding medical care due to subsidized healthcare for Active Duty families (London & Heflin, 2015), but experience higher rates of financial stress in other areas as a result of financial adjustments due to transitions specific to military service, such as multiple relocations (e.g., Weber & Weber, 2005). Given these differences, a better understanding of how financial stress impacts families, generally, and military families, specifically is needed.

A comprehensive review of empirical articles, literature reviews, research and technical reports, book chapters, and websites was conducted using databases that include PsycINFO, Google Scholar, JSTOR, and Academic Search Premier. A variety of search terms were used, including: financial stress and health; financial stress and military; financial stress and family; and financial stress, financial literacy, and financial capability. This resulted in the identification of numerous articles and other materials that were used to inform this report.

This report presents a comprehensive review of the literature regarding the ways families, especially military families, are impacted by and function in the context of financial stress. One way to conceptualize financial stress in families is to examine how financial stressors (e.g., loss of employment, unexpected major expenses) threaten families' present and future security as well as their current and future freedom of choice (Consumer Financial Protection Bureau, 2015). Military families are a special subgroup of all families because their experiences of financial stress occur within the specific context of military service (Hosek & Wadsworth, 2013). As such, it is important to examine the factors that may protect military families from financial stress (e.g., relatively higher pay than civilians, enlistment or reenlistment bonuses) along with the factors that may augment their financial stress (e.g., deployments, reintegration). In addition, some life events that occur across all families, such as having children and caring for elderly relatives, have a heightened impact within military families (Karney & Crown, 2007). This increased stress from common life events exacerbates financial stress and can lead to increased marital conflict, additional parenting stress, worse child outcomes (e.g., academic performance and behavioral problems), and poorer health outcomes for parents and children. Since stress from other areas in life (e.g., marriage, parenting, deployments, separation) interacts with financial stress to impact the functioning of families, in general, and military families, specifically, it is important to reduce financial stress to help lessen families' overall stress and improve their general functioning (Center for the Study of Traumatic Stress, 2016).

In order to lessen the impact of financial stress on families, it is important to consider ways to protect families against financial stress and assist them in coping with financial stress when it does occur. One

strategy for increasing protective factors and coping skills is to use financial education programs. These programs involve preventative and interventional approaches to improve families' financial communication, financial knowledge, and financial engagement, with the aim of providing the knowledge and skills needed to reduce financial stress and increase financial health. Financial communication programs include interventions that target all types of communication about a family's finances (Gartner & Todd, 2005), both within the family (e.g., between a couple, between parents and children) and between financial institutions and the family. Some of this financial communication can be facilitated by social media websites and electronic applications that provide immediate feedback and reminders for families. Financial knowledge-based approaches aim to educate about financial concepts (e.g., savings accounts, loans) through classes, workshops, or online modules to help guide better financial decision-making. Financial engagement programs include active (e.g., financial counseling) and passive (e.g., automatic deposits into savings accounts) approaches to help families change their financial behaviors. While some of these approaches emphasize general awareness and others focus on skill development, generally, they are all aimed at improving how families can communicate, think, and behave more responsibly with their finances (Collins & O'Rourke, 2010).

Based on the review of the literature on financial stress and the impacts of financial stress on functioning of families, in general, and military families, specifically, there are several implications for professionals who work with and on behalf of families. For these professionals, there are many factors to consider when assisting families with financial decisions (e.g., family transitions such as having a new child, responsibilities such as caring for older relatives, potential financial shocks such as sudden unemployment). When these professionals work with military families, it is important that they are attentive to specific transitions that impact the needs of military families (e.g., deployment, relocations, separation). Professionals should be aware of the warning signs that a family is experiencing financial stress. To assess these warning signs, it is advised that professionals consider general factors such as household debt (e.g., credit card debt) as well as military-related factors such as rank and multiple deployments, as both have been associated with increased risk for financial stress (e.g., Hosek & Wadsworth, 2013). A second consideration is to identify ways to strengthen the factors that protect families against financial stress. Honest and open communication as well as positive coping skills and goal-oriented behaviors will likely help a family become more resilient when faced with financial stress. Further, these qualities may also help families reduce the likelihood that they will encounter financial stress in the future. A third consideration for professionals is to learn to support families as they work to access resources that reduce financial stress. For example, professionals can help families identify programs that educate about loans and about computer software or online banking to help them improve management of money. Taken together, there are several considerations that can be applied to families in general and specifically to military families to reduce their financial stress and increase their financial health.

In sum, there is limited research specifically on military families experiencing financial stress. Avenues for future research and investigations should include designing measures of financial stress that take into account the unique experiences of military families, examining the effects of financial stress in the military context, evaluating the efficacy of financial intervention programs for military families, and investigating barriers to military families' usage of current supports (formal and informal) and programs. However, despite limited research, there are multiple ways professionals who work with and on behalf of military families can have a positive impact on military families' levels of financial stress. It is recommended that professionals receive additional training on assessment and intervention approaches (e.g., financial communication, knowledge, and engagement) in order to better support military families. Professionals' ability to improve assessment of financial stress and to engage families in various interventions will likely have lasting effects on not only the families' finances, but their overall well-being and mission readiness.

Financial Stress and Family Life

American families today often find that they lack the capacity to manage daily or monthly finances. For some families, there is a discrepancy between financial resources and financial obligations such that the obligations overwhelm the resources. Moreover, based on current research, military families experience similar areas of financial stress as civilian families (e.g., Skimmyhorn, 2014), while having additional experiences of financial stress that are unique to being embedded within the military (e.g., Griffith, 2015). There is an emerging understanding of the importance of examining financial stress of military Service members and its impact on behavioral health. For example, the Center for the Study of Traumatic Stress hosted a forum on Financial Stress and Behavioral Health in Military Service Members in November 2015 that described many of the ways in which financial stress can affect the well-being of Service members, including increasing the risk of suicide and decreasing physical and mental health while impairing family functioning (Center for the Study of Traumatic Stress, 2016). The forum also identified avenues for future research and interventions, stating, "Understanding the sources and types of financial stress and the web of interactions in which financial stress is embedded in the military member and family's life course can inform scientific knowledge and planning for actionable programs for mitigating negative effects of financial stress on health and performance," (Center for the Study of Traumatic Stress, 2016, p. 3). Recommendations from the forum included examining transitions in the military as times of increased risk for financial shocks (i.e., unexpected events with an associated financial cost) and financial stress, investigating the effect of multiple cumulative stressors, and understanding the context in which financial stress occurs (Center for the Study of Traumatic Stress, 2016). As such, this report aims to place financial stress within a more thorough understanding of family stress in general, illuminate the impact of financial stress on military families, and discuss potential avenues for working with military families who are experiencing financial stress.

American families today often find that they lack the capacity to manage daily or monthly finances.

Financial Well-Being

In order to understand financial stress and its effect on families, it is important to have an understanding of the terminology associated with financial health. A recent study conducted by Consumer Financial Protection Bureau (Consumer Financial Protection Bureau, 2015) defined financial well-being as "a state of being wherein [a family] can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life" (p. 18). This definition of financial well-being can be conceptualized as a balance of competing interests along two dimensions: present versus future needs, and security versus freedom of choice. For example, the ability to provide for the basic needs of one's family characterizes security in the present, while the ability to save money now in order to weather a potential future financial shock characterizes security in the future.

Figure 1. Four Elements of Financial Well-Being (Consumer Financial Protection Bureau, 2015)

	Present	Future
Security	Control over day-to-day, month-to-month finances	Capacity to absorb a financial shock
Freedom of Choice	Financial freedom to make the choices that allow you to enjoy life	On track to meet your financial goals

Financial Stress

While understanding financial well-being is essential to understanding the financial health of American families in general and military families specifically, most existing research examines the inverse of financial well-being: financial stress. Financial stress in families is a process. The financial stress process begins with a financial stressor, or an event that causes strain on financial resources. Following the onset of the stressor, individuals assess the degree to which the event constitutes a stress in the context of their skills and the buffers in place to manage the stressors. If the event is perceived as stressful, individuals then assess the coping resources at their disposal. It is when individuals encounter a financial stressor, perceive the stressor as threatening, and lack effective coping resources that distress occurs (Wheaton & Montazer, 1999).

Thus, financial stress can be viewed as the presence of a stressor that threatens financial well-being. These threats can be assessed both objectively and subjectively and can occur within each domain of financial well-being presented in Figure 1. For example, indicators of threats to present security can include participation in food assistance programs (objective) and feeling stressed about current finances (subjective). Indicators of threats to future security might include not having emergency savings (objective) and feeling worried about future finances (subjective). Threats to present freedom of choice can be measured through indicators such as the presence of high-interest revolving debt (objective) and feeling like financial concerns inhibit ability to do what you would like (subjective). Indicators of threats to future freedom of choice could include lack of retirement or education savings (objective) and feeling worried about long-term finances (subjective).

Current Levels of Financial Stress

Viewing financial stress as a threat to financial well-being provides a structure in which to examine current levels of financial stress among American families, both civilian and military. In assessing financial stress, it is important to take into account indicators that families' current and future security and freedom of choice may be threatened.

Threats to present security. Most research on the financial stress of American families focuses on a lack of capacity to manage daily or monthly finances. For some families, there is a discrepancy between financial resources and financial obligations such that the obligations overwhelm the resources. This creates a threat to present security that is experienced as financial stress. Indicators of this kind of stress include participation in food assistance programs, spending more money than one earns, and feeling stressed about finances.

Use of food assistance programs. One objective indicator of threats to present financial security is the use of food assistance programs. The cut-off for many such programs is gross income less than 130% of the poverty line. According to the United States Department of Agriculture (USDA), 15.1% of American households participated in the Supplemental Nutrition Assistance Program (SNAP, formerly known as the federal Food Stamp Program; USDA Economic Research Service, 2015). Meanwhile, among Active Duty military families, the rate of SNAP usage was found to be 2% (London & Heflin, 2015).

In assessing financial stress, it is important to take into account indicators that families' current and future security and freedom of choice may be threatened.

Spending more than your income. Spending more money than you earn is a particularly destructive threat to financial well-being because it can have a domino effect on other financial areas, causing an increase in debt and a decrease in personal savings. Thus, while spending more money than you earn is a direct threat to present security, it indirectly threatens future security as well as present freedom of choice. Among American families in general, 19% of individuals report spending more money than they earn (FINRA Investor Education Foundation, 2013b) while among Active Duty Service members that rate is only 2% (Defense Manpower Data Center & Research Surveys and Statistics Center, 2016).

Feeling stressed about finances. Recently, 72% of Americans reported that they felt stressed about money at least some of the time (American Psychological Association, 2015) while 29% of Active Duty Service members reported experiencing some discomfort around their financial condition (Defense Manpower Data Center & Research Surveys and Statistics Center, 2016). This is the most direct measure of the subjective experience of financial stress.

Threats to future security. Families often encounter financial shocks, which are unexpected events with an associated financial cost, such as a vehicle or appliance repair, dental work, serious injury or illness, or other large, unexpected expenses. Over half (59%) of Americans reported experiencing a financial shock over the course of a year (Pew Charitable Trust, 2015a). These financial shocks can be a threat to future financial security, particularly in the presence of a lack of savings to absorb the shock. As such, lack of savings and worry about the ability to withstand future shocks can be indicators of possible threats to future security.

Lack of savings. It is often recommended that families have savings that could cover up to three months' of expenses in the case of a significant emergency (Financial Industry Regulatory Authority, 2016). Only 40% of Americans in general report having such savings (FINRA Investor Education Foundation, 2013b). Among military families, 54% report having a three-month emergency fund (FINRA Investor Education Foundation, 2013a).

Worry about ability to withstand financial shocks. Families who do not feel confident in their ability to meet future financial shocks often experience worry about if and when those shocks will come. The vast majority of Americans (83%) report that they feel worried about a lack of savings which are a significant buffer to these financial shocks (Pew Charitable Trust, 2015a). Similar data are not readily available for military families.

Threats to present freedom of choice. Threats to present freedom of choice occur when families limit their activities because of a lack of financial resources or worry about financial situation. Debt can also be an indicator of threats to present freedom of choice because it creates an obligation to use money in certain ways (e.g., repaying the debt), which decreases the amount of money available for other things.

Debt. According to recent studies, 75-80% of American households report having some debt, with mortgages being the most common source (Bricker et al., 2014; Pew Charitable Trust, 2015b). Mortgages, unlike high-interest revolving credit card debt, are not always threatening to financial well-being (FINRA Investor Education Foundation, 2013a). Among military households, 91% report having some debt, the most common source of which is auto loans (FINRA Investor Education Foundation, 2013a). In a National Foundation for Credit Counseling survey in 2014, 34% of civilians reported carrying high-interest, revolving credit card debt from month to month, while 58% of Service members did the same (National Foundation for Credit Counseling, 2014).

Constraints due to limited finances. There is a dearth of comprehensive, population-based data on the extent to which civilians and Service members feel that they have to limit their current activities because of a lack of finances or worries about finances. However, there are several survey instruments (e.g., Hill & Angel, 2005) that have assessed constraints due to limited financial resources in relatively small samples.

Threats to future freedom of choice. Threats to future freedom of choice impinge on the family's ability to be prepared for the long-term and include not having a retirement plan and not having a savings plan for their children's education. Less research has focused on these issues compared to immediate financial concerns and needs. However, these are important factors to consider in overall family financial well-being.

Investments. While it is difficult to compare retirement investments between civilian Americans and Service members because of the differences in retirement structures, one way to examine future freedom of choice is to look at non-retirement investments. Arguably, not having non-retirement investments can be seen as a long-term threat to future choice. The majority (65%) of Americans do not have non-retirement investments (FINRA Investor Education Foundation, 2013b), while a much smaller proportion (50%) of Service members do not have non-retirement investments (FINRA Investor Education Foundation, 2013a).

Feeling worried about long-term finances. Over two-thirds (69%) of Americans report being worried about not having enough money to be able to retire (Pew Charitable Trust, 2015a). In contrast, over half (57%) of Active Duty Service members surveyed reported saving for retirement (Defense Manpower Data Center & Research Surveys and Statistics Center, 2016).

While these statistics on financial well-being in military families include all types of military families, it is important to take into account the heterogeneity of military families. Not all military families experience the same levels of financial well-being. For example, Active Duty Service members' families tend to have greater financial well-being than Reserve Service members' families (London & Heflin, 2015), Airmen's families tend to have greater financial well-being than Soldiers' families (Skimmyhorn, 2014), and officers' families tend to have greater financial well-being than enlisted Service members' families (Hosek & Wadsworth, 2013).

Generally, these data regarding levels of financial well-being among civilian and military families demonstrate that financial stress is present in many American families. As such, it is important to examine buffers and stressors faced by families (both civilian and military), the effect of financial stress in the family, and programs that aim to diminish those effects.

Active Duty Service members' families tend to have greater financial well-being than Reserve families.

Impact of Financial Stress on Families

When buffers are not sufficient to prevent stressors from becoming financial stress, or when financial stress overwhelms resources, there are adverse consequences for individuals and families. These adverse effects include problems with family relationships, physical health, and mental health. Notably, most of the research examining the impact of financial stress on families has a focus on civilian families with limited research focusing directly on the impact of financial stress on military families. Given this limit to the literature, it can be very beneficial to examine the existing civilian literature in order to gain a broad understanding of the effect of financial stress on families.

Marital Relationships

Financial stress can have a contagion effect in romantic relationships; when one person in an intimate relationship experiences financial stress, the other person is likely to suffer the effects as well (Barton, Futris, & Nielsen, 2015). Theoretical models of financial stress and martial adjustment suggest that economic pressures lead to psychological distress in both partners, which in turn can lead to increased hostility between partners and thereby reduce marital satisfaction (Conger, Ge, & Lorenz, 1994). Financial stress can compromise marriages and committed romantic relationships through a variety of mechanisms, including reducing relationship satisfaction, increasing conflict, and compromising communication between partners.

Improved couple's communication and coping skills can have positive and enduring impacts on relationship satisfaction.

Financial stress is often associated with increased psychological distress (Gudmunson, Beutler, Israelsen, McCoy, & Hill, 2007; Lincoln & Chae, 2010), particularly anxiety and depression (Lincoln & Chae, 2010) for people in romantic relationships. Financial stress and the associated psychological distress often correlate with increases in couple conflict (Dew, 2011), maladaptive communication (Barton et al., 2015), irritability (Hraba, Lorenz, & Pechačová, 2000), hostility (Hraba et al., 2000), and fighting among partners (Gudmunson et al., 2007). When couples are experiencing elevated financial stress, they tend to spend less time together, argue more, and feel that their marriage is unfair (Dew, 2008), which further impairs the health of romantic relationships. Increases in psychological distress and conflict combined with negative perceptions of a spouse's behavior in the face of financial stress erode marital satisfaction (Britt, Grable, Nelson Goff, & White, 2008; Cutrona et al., 2003). Furthermore, couples experiencing financial distress are more likely to end or consider ending their relationships (Archuleta, Britt, Tonn, & Grable, 2011; Dew, 2011). These general processes have been documented in couples at varying levels of income, indicating that the effects of financial stress on romantic relationships are not limited to families of inadequate financial means (Dew et al., 2012; Sturgeon, Zautra, & Okun, 2014).

Furthermore, couples respond to financial stress in a variety of ways. When couples experience disagreement about their finances, they are equally likely to avoid each other as to engage in conflict, with both strategies having negative effects on relationship satisfaction (Gudmunson et al., 2007). Many people are uncertain about how to talk to their partners about financial issues; this lack of self-efficacy leads to both avoidance and conflict (Romo, 2014). Although there is limited intervention research with couples experiencing financial stress, programs that improve couple communication and coping skills can have positive and enduring impacts on relationship satisfaction (Falconier, 2015; Kim, Gale, Goetz, Bermudez, 2011).

While there is little research examining the connections between financial stress and marital satisfaction in military samples, the research that does exist demonstrates that financial stress has several impacts on the marital relationships of Service members. When couples are experiencing financial stress, the subjective impact of military-specific stressors (e.g., moves, deployment) is greater (Karney & Crown, 2007). Military couples experiencing financial stress also have been shown to have higher levels of both emotional (Foran, Heyman, & Smith Slep, 2014) and physical abuse (Smith Slep, Foran, Heyman, & Snarr, 2010).

Overall, the experience of financial stress is associated with decreased satisfaction in marital relationships and increased relationship stress, both in civilian and military couples. These outcomes seem to be associated with a lack of communication about finances or financial challenges and difficulty regulating the emotions associated with financial stress.

Family and Parenting Processes

In addition to the effect on marital relationships, financial stress has been associated with a variety of changes in parenting behavior. Parents who are experiencing objective financial stress and do not have adequate incomes to meet their needs are less able to invest resources in their children's development (Yeung, Linver, & Brooks-Gunn, 2002). These parents are less likely to provide stimulating home environments that include books and other educational materials (Bradley & Caldwell, 1984; Garrett, Ng, & Ferron, 1994; Magnuson & Duncan, 2002) and they have lower levels of school involvement (Gutman & Eccles, 2015), putting their children at risk for poor academic achievement. Thus, declines in parental investment due to financial concerns are related to poorer outcomes for children.

> Financial stress increases strain on parents and limits their ability to use positive parenting practices and invest in their children.

In many families, the effects of family financial stress on child adjustment are very likely to be transmitted through compromised parent well-being (e.g., increased psychological distress), and a subsequent decline in the quality of parenting practices (e.g., parent-child communication), rather than only through lowered investment in children (Magnuson & Duncan, 2002; Yeung et al., 2002). Financially stressed parents also exhibit less positivity in the home, which is associated with lower positivity in adolescents and young adults (Neppl, Jeon, Schofield, & Donnellan, 2015). The profound stress associated with serious financial problems is also related to higher levels of mental health problems in parents, particularly depression (Lee, Lee, & August, 2011). Parents who are experiencing financial stress also report higher levels of parenting stress (Puff & Renk, 2014). Parents who are suffering from psychological distress or parenting stress have more difficulty performing positive child rearing practices, which often results in negative interpersonal interactions between parents and children, such as the use of harsh discipline (Ponnet, Van Leeuwen, Wouters, & Mortelmans, 2014; Puff & Renk, 2014) and increased parent-child conflict (Gutman & Eccles, 2015; Gutman et al., 2005).

Within the limited research available examining this relationship in military families, there is evidence that this relationship holds in military families as well. Financial stress is associated with increased psychological stress in Service members (Bell et al., 2014) and Service members who are experiencing increased psychological distress present worse parental functioning and parental satisfaction (Cohen, Zerach, & Solomon, 2011).

Financial stress seems to increase strain on parents and limit their abilities to use positive parenting practices and invest in their children. These decreases in positive parental functioning are in turn associated with negative outcomes for children.

Child Outcomes

Likely through the mechanism of changes in parenting behaviors (among other factors), financial stress is associated with poorer child outcomes across a variety of domains including mental and physical health (Hamilton, Noh, & Adlaf, 2009; Puff & Renk, 2014), academic achievement (Gutman & Eccles, 1999), and behavior problems (Lee et al., 2011). Both objective and subjective financial stress is associated with high levels of problem behavior in children and adolescents, including both internalizing behaviors (Leininger, 2014; Puff & Renk, 2014) and externalizing behaviors (Stover et al., 2016). There is a relationship between financial stress and lower cognitive development and academic achievement in children (Gutman & Eccles, 2015). Financial stress also has links to children's physical health. Children in low-income families have higher rates of obesity and are less physically fit than more affluent children (Jin & Jones-Smith, 2015), possibly due to families' lack of disposable income and leisure time in which to participate in health-promoting activities. Children who perceive their families are less well-off financially also have higher levels of dangerous drinking and use of illicit substances (Hamilton et al., 2009) than their peers.

Financial stress is associated with poorer child outcomes across a variety of domains, including mental and physical health, academic achievement, and behavior problems.

In addition, children in families that lack adequate material resources are at greater risk for experiencing maltreatment than families who are not experiencing that type of financial stress (Maguire-Jack & Klein, 2015; Warren & Font, 2015). This association between financial stress and child maltreatment also exists for subjective financial stress (Cadzow, Armstrong, & Fraser, 1999).

While increased financial stress has not been directly linked to child outcomes in military families, military families experience unique stressors that may be related to increases in financial stress, including deployment, especially for young, married Service members (e.g., Varcoe et al., 2003). These unique stressors may be related to increased incidents of child maltreatment in military families. For example, rates of child maltreatment, including neglect and abuse are higher during times of greater levels of deployment (Gibbs, Martin, Kupper, & Johnson, 2007) and rates of child sexual abuse and severe neglect may be higher post-deployment (Thomsen et al., 2014). Abuse is also more likely during the time surrounding relocations (Dubanoski & McIntosh, 1984). As such, it is important to note the complex web of factors (including financial stress) during transition times which can have deleterious effects for children.

The experience of financial stress has many noticeable effects on children in civilian and military families. These effects are wide-reaching and range from behavior problems and physical health to experiences of child abuse and maltreatment and so it is essential to pay attention to the financial well-being of families when examining these outcomes for children.

Individual Physical and Mental Health

While financial stress has a profound impact on the family, it also has unique and important impacts on individuals, particularly in the areas of physical and mental health. This is important to consider since the health of individuals within the family is the health of the family itself.

Higher perceived financial stress is associated with poorer self-rated health after controlling for demographic characteristics and objective financial well-being (Huijts, Reeves, Mckee, & Stuckler, 2015; Sweet, Nandi, Adam, & McDade, 2013). Financial stress is also associated with biological markers of poorer physical health, including increased blood pressure (Steptoe, Brydon, & Kunz-Ebrecht, 2005), cortisol response (Grossi, Perski, Lundberg, & Soares, 2001), functional impairment from health problems (Kahn & Pearlin, 2006), and being overweight and obese (Münster, Rüger, Ochsmann, Letzel, & Toschke, 2009; Webley & Nyhus, 2001). Financial stress can also produce physical pain, decreased pain tolerance, and increased use of over-the-counter painkillers (Chou, Parmar, & Galinsky, 2016).

Although poor health is a common antecedent of economic problems, financial stress can also worsen existing health problems (Turunen & Hiilamo, 2014). People who are experiencing financial stress often do not receive necessary health care services (Sterk, Theall, & Elifson, 2002), which might further compromise health and limit working hours (Chirikos & Nestel, 2016; Pelkowski & Berger, 2004). Lantz and colleagues (Lantz, House, Mero, & Williams, 2005) found that low income was a significant predictor of mortality such that those with low and moderate incomes were two to three times as likely to die in the seven-year study period, relative to those who were the most well-off.

Poor health is a common antecedent of economic problems; financial stress can also worsen existing health problems.

Financial stress is also associated with a host of mental health concerns such as anxiety and depression that may persist across the life course. For example, in a longitudinal study of more than 11,000 people, Kiely, Leach, Olesen, and Butterworth (2015) found that people who reported financial stress at one point in their lifetime were more likely to report future mental health problems, even after financial stress had abated. Furthermore, there is a wealth of evidence indicating that both objective and subjective aspects of financial stress predict poor mental health (Bradshaw & Ellison, 2010).

People experiencing financial stress may cope by engaging in unhealthy behaviors such as abusing alcohol and drugs (Dee, 2001; Nelson, Lust, Story, & Ehlinger, 2008; San José, Van Oers, Van de Mheen, Garretsen, & Mackenbach, 2000). Financial stress is also associated with higher rates of smoking across the lifespan (Grafova, 2011; Shaw, Agahi, & Krause, 2011), and with lower rates of smoking cessation (Siahpush & Carlin, 2006). Serido and colleagues (2014) found that young adults experiencing financial stress engaged in more binge drinking than those who were not financially stressed. People with high levels of debt are twice as likely to be alcohol-dependent and four times as likely to be drug-dependent as those with lower debt (Jenkins et al., 2009).

People with significant debt report more hopelessness and are more than twice as likely to report considering suicide.

Financial stress is often a contributing factor in suicidal ideation and suicide attempts (Duberstein, Conwell, Conner, Eberly, & Caine, 2004). People experiencing financial stress report less hope (Prawitz, Kalkowski, & Cohart, 2012) and are more likely to consider suicide after controlling for income and demographic characteristics (Duberstein et al., 2004). In a case-review study of people who have completed suicide, financial stress that was accompanied by problems in personal relationships was among the most common triggers of suicide (Stack & Wasserman, 2007). People who face long-term employment problems seem to be particularly at risk for taking their own lives (Classen & Dunn, 2012).

The connection between financial stress and health is one area in which there is research that focuses specifically on Service members. However, this focus is on individual Service members rather than a more broad examination of military families as a whole. Similar to civilians, there is a connection between financial stress and health (physical and mental) among Service members. For example, Veterans who report having money to cover basic needs are significantly less likely to have post-deployment adjustment problems including substance abuse and aggression (Elbogen, Johnson, Wagner, Newton, & Beckham, 2012). Service members experiencing higher levels of financial difficulties are also more likely to use tobacco (Pyle, Haddock, Poston, Bray, & Williams, 2007) and exhibit drinking problems (Foran, Smith Slep, & Heyman, 2011). This use of tobacco and increased drinking can then exacerbate financial stress given the cost of cigarettes and alcohol (Pyle et al., 2007). Furthermore, suicidal ideation is associated with financial stress in National Guard Service members (Kline, Ciccone, Falca-Dodson, Black, & Losonczy, 2011), female Service members (Langhinrichsen-Rohling, Snarr, Smith Slep, Heyman, & Foran, 2011), and Veterans (Elbogen et al., 2012).

The experience of financial stress in families clearly has numerous negative outcomes for family members individually and for the family as a whole. Given the pervasiveness of financial stress for all American families, it is important to consider stressors and buffers in relationship to military families.

Stressors and Buffers in Military Families

Given the effect of financial stress on families, it is important to develop an awareness of the unique context in which that stress occurs. Military families experience certain stressors and buffers to stress that civilian families do not and as such, it is important to take these factors into account.

Stressors Specific to Military Families

There exist certain stressors that are specific to military families that can increase the risk for a family experiencing financial stress. These stressors include relocations, deployment and reintegration, and separation.

Military families experience different stressors and buffers to stress than civilian families.

Relocations. Military life is characterized by a series of geographic relocations that can be a cause of stress for military families (Weber & Weber, 2005). According to Varcoe, Lees, Wright, and Emper, (2003), relocations generally involve financial costs such as storage or household set-up expenses. Yet, there is evidence of no direct effect of relocation on the stress reported by military families (Marchant & Medway, 1987; Weber & Weber, 2005). This could be due to protections in place for military families, or to both the official and informal networks of support available to military families that are not available to civilian families. However, Service members are likely to be separated from their networks of social support, including extended family networks, due to frequent relocations (Barker & Berry, 2009). Separation from family can mean separation from family resources such as informal child care.

Deployment and reintegration. In a survey of National Guard members who served in OEF/OIF, 7% reported money problems during deployment and 12% reported money problems following deployment (Griffith, 2015). Among National Guard members, financial problems following deployment may be due to loss of hazard/combat pay or due to difficulties securing employment following deployment, despite putative protections that are in place (Burnett-Zeigler & Valenstein, 2011).

Separation. The transition out of service can also be accompanied by changes in financial security for Active Duty Service members. The military offers relatively high pay, so Service members and their families sometimes experience a decrease in income following separation (Hosek & Wadsworth, 2013). In addition, military families lose supplemental benefits associated with service upon retirement, including free or subsidized meals, lower cost and tax free groceries at commissaries, and free health care (London & Heflin, 2015) . In addition to challenges entering the civilian workforce, some military families face challenges in learning to effectively manage money. It is possible that some Service members have not had to develop good money management skills while in the military; in one study, 30% of Veterans reported money mismanagement behaviors, including check bouncing, check forging, going over credit limits, and falling victim to credit scams (Elbogen & Sullivan, 2013).

Life Events that Increase Financial Stress in Military Families

Certain life events are associated with increased financial stress in all families, but are experienced differently by military families. These life events include marriage, having children, caring for elderly relatives, medical care, and mental and physical injuries. While these stressors are not exclusive to military families, it is useful to discuss them from the perspective of military families.

Military families with children are more likely to feel that they have too much debt compared to those without children.

Marriage, children, and caring for elderly relatives. While starting families is usually viewed positively, getting married and having children can increase the presence of financial stressors. Military families can experience greater financial stress due to difficulties for spouses looking for employment, and being separated from family support systems (e.g., Trougakos et al., 2007; Varcoe et al., 2003). Spouses of Service members tend to earn less than individuals in the civilian population with similar characteristics (Meadows, Griffin, Karney, & Pollak, 2015). Moreover, spouses of lower ranking Service members are significantly more likely to report not feeling comfortable about their financial situation than spouses of higher ranking Service members (Defense Manpower Data Center, 2014). In addition, Service members’ spouses may feel dissatisfied with the diminished opportunities available to them as a result of frequent moves and an inability to invest in their own careers. Military families with children are more likely to feel that they have too much debt compared to those without children (FINRA Investor Education Foundation, 2013a). Also, levels of financial stress related to having children is greater for military parents in the junior enlisted ranks than it is for higher ranking personnel because junior enlisted Service members have lower incomes, and, on average, more children who are under 18 years (Clever & Segal, 2013). Financial obligations to older generations in military families may also increase the families’ experiences of stress. Some Service members have obligations (e.g., financial, cultural) to parents and relatives who experience their own financial stress (Center for the Study of Traumatic Stress, 2016). This obligation increases and exacerbates financial stress, especially if the family is geographically separated from relatives.

Medical care. Service members with families may be vulnerable to financial stress as a result of healthcare costs that are not covered by TRICARE insurance. It is important to note, however, that these vulnerabilities are similar to those experienced by civilians since the TRICARE system mirrors civilian health insurance systems. According to the CSTS report (Center for the Study of Traumatic Stress, 2016), the TRICARE benefit for orthodontia is low despite the significant financial cost for orthodontia services. In addition, TRICARE does not cover infertility treatments, so Service members who encounter fertility problems often find themselves facing a financial stressor even before the arrival of a new child. Finally, mental health treatment may represent an additional financial stressor for Service members. While mental health services are available for military personnel and their families, studies show significant stigma associated with seeking mental health counseling among Service members (Gorman, Blow, Ames, & Reed, 2011). This may lead Service members and spouses to seek treatment off-site, thereby incurring additional healthcare costs.

Mental illness and physical injury. Non-deployed Soldiers have been found to be more likely to experience mental illness (Kessler et al., 2014) and Veterans may experience poorer physical health (Kramarow & Pastor, 2012), which are associated with increased financial stress. In one sample of Veterans, the presence of traumatic brain injury (TBI), posttraumatic stress disorder (PTSD), or major depressive disorder was associated with an increased risk of experiencing financial stress (Elbogen et al., 2012). Furthermore, Soldiers who experience suicidal thoughts and high levels of anger and frustration are more likely to have experienced financial stress (Griffith, 2015). Disability in Veterans' households is associated with a greater likelihood of experiencing financial stress when compared to civilian households and to Veteran households without a disability (Heflin, Wilmoth, & London, 2012).

Military-specific protections provide assistance to families through the deployment cycle, and may ease the transition into retirement from military service.

Buffers for Military Families

Buffers for military families include certain benefits that civilian families do not receive. These benefits, such as commissary benefits (London & Heflin, 2015) and affordable quality childcare (Floyd & Phillips, 2013) can act as a buffer to financial stress. In addition, Service members generally have higher pay relative to their civilian counterparts, and these salaries generally include basic pay, subsistence allowance, and housing allowance (for Service members living off base). Further, Service members and their families benefit from separation pay, hardship duty, enlistment/reenlistment bonuses, vacation time, health care, and other financial assurances that help to buffer against financial stress (Hosek & Wadsworth, 2013). Service members and their families benefit from steady work and access to quality education for their children (Floyd & Phillips, 2013). Military-specific protections can provide assistance to help families through the deployment cycle, and can ease the transition into retirement from military service, through benefits like the Servicemen's Readjustment Act of 1944 "GI Bill", the Service member Civil Relief Act, the Uniform Service Employment/Reemployment Rights Act, and many others.

Promoting Financial Well-Being and Resilience among Families

Current Approaches to Increasing Financial Well-Being

The premise of most financial education programs is that families lack adequate financial knowledge and that armed with better information they will exhibit more positive financial behaviors (Agnew & Szykman, 2005). As a result, governments and businesses have created interventions that aim to improve financial knowledge with the hope of increasing positive financial behaviors (Fernandes, Lynch, & Netemeyer, 2014) including money management, research and knowledge-seeking, planning and goal-setting, and following through (Consumer Financial Protection Bureau, 2015). These types of interventions are also widely available specifically to Service members through various programs developed and delivered by each Service branch.

Financial education programs work under the premise that financial knowledge will improve financial behaviors.

Financial education programs use a wide array of approaches, from low-resource, low-touch, to high-resource, high-touch. These approaches can be implemented in combination to create holistic interventions that support family financial well-being (Sledge, Tescher, & Gordon, 2010). Financial education approaches primarily fall into three categories: financial communication, financial knowledge, and financial engagement.

Financial Communication

Financial communication approaches focus on providing immediate feedback, reminders of financial commitments, and motivation to follow through on pursuing important goals. Examples of financial communication approaches are media campaigns, account alerts, e-mail or text messaging, and other forms of mass or individual communication (Gartner & Todd, 2005). Advantages of these approaches include their relatively low cost and the ability to engage with families over time. However, with those advantages comes limited opportunity for personalization (Sledge et al., 2010).

Examples: (See Appendix A for more information on program examples):

- **Military Saves.** This organization aims to motivate and encourage Service members to save money every month and to promote use of automatic savings programs for Service members (http://www.militarysaves.org/).
- **Text Message Reminders**. Monthly text messages remind participants to make monthly savings deposits in hopes of increasing savings as a buffer to potential future financial stress (Chan, Cohen, Derbigny, & Markoff, 2014).
- **Social Saving.** This web-based program asks individuals to sign up friends and family members to keep them on the path to reaching their financial goals. SmartyPig (https://www.smartypig.com/) lets users share savings goals with friends and family, and PiggyMojo (https://secure.piggymojo.com/) will go as far as to send a text message to your spouse (if you choose) every time you move $15 into the savings account instead of buying something that you do not need.

Financial Knowledge

Financial knowledge approaches are very common within the financial education field (Gale & Levine, 2011). A majority of financial knowledge programs are in the form of online or in-person workshops and include topics such as general financial education, bankruptcy, and credit repair (e.g., Elliehausen, Lundquist, & Staten, 2002; Lyons, Chang, & Scherpf, 2006; Wiener, Baron-Donovan, Gross, & Block-Lieb, 2005). Overall, the advantages of financial knowledge programming are that it requires fewer resources than more intensive approaches such as financial therapy and can increase families' financial knowledge. However, there is mixed evidence as to whether programs that increased knowledge actually change financial behaviors (Collins & O'Rourke, 2010; Consumer Financial Protection Bureau, 2015).

Examples

- **Army Personal Financial Management Course**. Soldiers attending a mandatory training at Fort Bliss were offered a two-day financial education course, with the hope of increasing the use of spending plans and other deliberate financial planning (Bell et al., 2009).
- **Stash Your Cash and Win**. During financial education classes, participants were offered the opportunity to open an emergency savings account in which they would receive raffle tickets for each deposit of a certain amount (Chan et al., 2014).

Financial Engagement

Financial engagement programs are designed to engage people in the process of developing and maintaining positive financial behaviors. These programs fall into two categories: passive engagement and active engagement.

Programs that support passive engagement put into place defaults that enable people to engage in positive financial behavior without much thought or effort. Sometimes these programs are required by employers who automatically enroll workers unless the individual opts out of the program. Examples include opt-out retirement plans or automatic work savings plans (Barr et al., 2009; Boshara, Gannon, Mandell, Phillips, & Sass, 2010; Choi, Laibson, Madrian, & Metrick, 2003; Thaler & Sunstein, 2008).

Financial engagement programs can be passive, requiring no effort (e.g., opt-out retirement plan) or active, requiring an ongoing relationship with a support professional (e.g., financial therapy).

Active financial engagement programs, however, aim to develop an ongoing relationship between consumers and support professionals and serve both individuals and couples (Sledge et al., 2010). These active financial engagement programs fall into the categories of financial therapy and financial coaching. Financial therapy aims to provide holistic support for couples and families through attention to cognitive, behavioral, emotional, relational, and economic factors (Archuleta et al., 2012). Financial coaching aims to help families align positive financial behaviors with financial goals (Collins, Baker, & Gorey, 2007). Financial therapy and coaching approaches focus on long-term outcomes, and use ongoing, collaborative processes to support families' attempts to create positive financial behaviors in a highly personalized manner. The primary challenge of these programs is that they are intensive and often require a high level of resources, including time and training, which makes them more costly to administer.

Examples:

- **Automatic workplace savings**. Employers encourage employees to designate a portion of their paycheck to be automatically deposited into a savings account, thus removing monthly decision-making, with the aim of creating a default of consistent savings (Chan et al., 2014). This type of financial engagement includes programs like the Thrift Savings Plan (TSP) available to Service members (https://www.tsp.gov/).
- **Individual development accounts.** Individual development accounts (IDAs) are designed to help individuals and families whose income is at or below 200% the poverty line save for goals such as homeownership or starting a business. For at least six months, participants make a monthly savings deposit, attend workshops, receive credit counseling, and work with a case manager (Birkenmaier & Curley, 2015; Kiviat & Morduch, 2012).
- **TOGETHER financial therapy program.** The TOGETHER program has been found to be moderately effective at reducing the potential harmful effects of financial stress on both individuals and couples and at improving the couple's financial management skills through long-term multi-faceted therapy and education (Falconier, 2015).

General Programmatic Considerations

While increasing financial knowledge is a goal of many programs that address financial stress, it is important to note that knowledge is necessary (Fernandes et al., 2014), but not sufficient (Ajzen, Joyce, Sheikh, & Cote, 2011), for creating behavior change. Financial knowledge operates within a much broader context of important factors including individual characteristics such as attitudes and perceived level of control over outcomes, the contexts in which financial decisions are made, and available resources (Perry & Morris, 2005). Thus, it is necessary to consider these factors when attempting to improve financial behaviors through financial education programs (Stawski, Hershey, & Jacobs-Lawson, 2007).

> It is important to note that knowledge is necessary, but not sufficient, for creating healthy financial behaviors.

Audience. Many current financial education programs are targeted at individuals. There is mounting evidence demonstrating that focusing on the whole family and including children is important to both short- and long-term family financial well-being (Lusardi & Mitchell, 2007).

Relevance and Timing. Effective financial interventions are situation-specific and appropriately timed; the longer the time between dissemination of financial information and possible utilization, the less likely behavior change will occur (Fernandes et al., 2014). Education programs that are relevant to the current financial needs of families and provide an immediate opportunity to act on newly acquired knowledge show the most improvements in financial behaviors (Fernandes et al., 2014). For example, young Soldiers who participated in a two-day financial education program made higher automobile down payments and acquired smaller loans, but the program did not impact Soldiers' management of checking accounts or credit cards or whether they saved for retirement (Bell & Hogarth, 2010). This suggests the importance of using "just-in-time" financial education that is directly tied to current financial decisions or actions. However, not all major financial decisions can be predictably timed, making event-specific education a somewhat limited strategy for intervention.

Effective financial interventions are situation specific and appropriately timed

Furthermore, programs can link financial education to key life events or major transitions with the aim of helping families better understand the consequences of their financial behaviors (Kiviat & Morduch, 2012; Sledge et al., 2010) as several models suggest habits are more amenable to intervention during periods of transition (e.g., Verplanken & Wood, 2006). Military life includes many transitions that might serve as valuable leverage points for financial education, including relocations, deployment, reintegration, and separation.

Design and Curriculum. Programs that are personalized can support positive financial behaviors by providing highly relevant information, gauging the use of that information, and providing feedback for an individual over time (Elliehausen et al., 2002). Personal characteristics to consider when customizing programs include age (Kim, Garman, & Sorhaindo, 2003), socioeconomic status (Botti & Iyengar, 2004), and level of education (Fallis & Lusardi, 2008) as financial behaviors vary based on those characteristics. There are also possible advantages to offering financial education programs through a variety of mediums, including e-mail, text, phone-based, online, and in-person, as well as considering both group and individual formats (Gartner & Todd, 2005; Kiviat & Morduch, 2012).

One factor that could be included in programs that aim to increase positive money management strategies is self-awareness (Kiviat & Morduch, 2012). In order to act on newly obtained knowledge, one must first have a solid awareness of one's current financial standing, knowledge, habits, and behaviors (Fernandes et al., 2014). Awareness of the complex factors that motivate financial behaviors is essential to an individual's ability to enact new ways of managing finances (Botti & Iyengar, 2004; Lynch & Wood, 2006), which makes it an important possible element in the curriculum of financial education programs.

Financial education programs that incorporate skill development in addition to the acquisition of knowledge might be particularly effective, given the complex relationship between financial knowledge and behavior (Fernandes et al., 2014). Skill development can include planning for the future, organizational strategies, and delay of gratification (Hastings, Madrian, & Skimmyhorn, 2013). In addition, financial education programs can aim to instill a sense of financial self-efficacy (Kiviat & Morduch, 2012). For additional resources on financial education and programs see Appendix B.

As previously described, approaches to increasing financial well-being are varied and are aimed at multiple areas where families might experience difficulties (e.g., poor communication, lack of knowledge, limited engagement) with financial management. An awareness of these programs will help professionals who work with military families to better assist families aiming to improve their financial well-being.

Implications for Professionals Who Work with Families

Many American families are dealing with a multitude of wide-ranging effects of financial stress. For military families in particular, there are numerous factors (e.g., relocation to another installation, marriage and having children, retirement, etc.) impacting their levels of financial stress. As families do their best to navigate the changing economy, there are several considerations that are relevant for professionals who assist families in general and military families specifically, including warning signs of financial stress, protective factors, and families' use of available resources.

Assess Warning Signs of Financial Stress

When assessing warning signs of family financial stress, it is important to consider factors such as household debt, usage of food assistance, and unstable housing, as those factors can be indicators of financial stress (e.g., Pew Charitable Trust, 2015b, 2015c). For military families, other risk factors can be more salient, such as rank (Hosek & Wadsworth, 2013) and monthly credit card debt (Skimmyhorn, 2014).

It can be difficult to determine when families are experiencing financial stress as many Americans report being uncomfortable discussing issues related to their finances

It can be difficult to determine when families are experiencing financial stress as many Americans report being uncomfortable discussing issues related to their finances (American Psychological Association, 2015). However, there are ways for families and organizations to detect signs of financial stress. Based on the American Psychological Association's (2015) findings, the following are examples of indicators that individuals may be experiencing financial stress:

- Avoid thinking and talking about finances
- Avoid mail and/or phone calls about finances
- Use high-interest credit cards or high-cost loans (e.g., Payday loans) to meet short-term needs
- Overdue on multiple bills and can only pay certain bills each month

- Have an overdrawn checking account
- Met or exceeded credit card limit(s)
- Unaware of credit score or have a low credit score
- Can identify a negative impact financial stress has on home life and/or employment

Professionals who work with families in general and military families specifically might also assess the gap between families' responsibilities and their resources in order to better determine their risk for financial stress. With military families, this is particularly important during high-stress times such as transition periods (e.g., relocation, deployment, reintegration, separation), as these transitions can be accompanied by increased financial stress.

Increase Protective Factors

One way to decrease families' experiences of financial stress is to increase protective factors. These protective factors act as buffers that prevent financial stressors from ever becoming financial stress for a family.

Encourage families to engage in financial behaviors that reduce financial stress. Among low-income individuals, those who use online banking report that online banking makes it easier to pay their bills on time (Servon & Kaestner, 2008). Professionals can educate families about online banking, software programs, and mobile apps, and suggest that families use online banking when possible in order to benefit from automated financial tools such as reminders, bill pay, and deposits in savings and retirement accounts. Also, using the aforementioned tools allows for creating a detailed budget, which can help families prioritize expenditures, monitor regular expenses, and set financial goals (American Psychological Association, 2015). Furthermore, since there is evidence that access to the internet (e.g., online banking) differs by socioeconomic level, with lower socioeconomic levels having less consistent access to the internet (Pearce & Rice, 2013), it is important to consider demographic factors when providing recommendations to families about the use of online tools.

Protective factors act as buffers that prevent financial stressors from ever becoming financial stress for a family.

Empower families to openly and regularly communicate about finances. A lack of open discussion can prevent individuals and families from engaging in behaviors that could buffer against financial stress. Professionals should encourage families to work together to create budgets and make financial decisions, as well as to access tools and resources (Servon & Kaestner, 2008). With better communication, families can improve their self-awareness about financial behaviors, which has been shown to be a first step in developing positive financial behaviors (Kiviat & Morduch, 2012). Open communication with children about finances can also be an important strategy for educating them about budgeting and financial well-being (Shim, Serido, Tang, & Card, 2015). Parents' expectations, communication, and modeling about managing finances positively impact late adolescents' attitudes and behaviors surrounding finances (Shim et al., 2015). Financial counseling combined with financial education may help improve financial well-being, so families may benefit from engaging in financial counseling to improve the family's communication and decisions about finances.

Address personality factors that impact management of finances. How individuals perceive and cope with financial stress impacts their well-being (e.g., Bradshaw & Ellison, 2010). Programs can help reduce levels of financial stress by emphasizing persistence as well as positive reappraisal of difficult financial situations (Wrosch, Heckhausen, & Lachman, 2000), and this approach may help alter family members' perspectives of themselves. Some families' debt management strategies are impacted by an effort to meet goals that create a new identity; debts that bolster this identity are most likely to be paid consistently (Tach & Greene, 2014). Furthermore, although it is unclear which comes first, individuals who feel they are in control of their destiny have fewer debt problems, more financial knowledge, and more responsible financial management behaviors (Perry & Morris, 2005). Individuals who engage in more practical coping behaviors are more hopeful about their finances (Prawitz et al., 2012).

A highly effective approach combines provision of emotional support (e.g., therapy, counseling) that helps families deal with stress due to negative consequences of financial decisions, and education to increase their financial knowledge.

Protective factors mentioned in this section are not mutually exclusive, and may be used together to support families (e.g., increase communication about savings and checking bank accounts). Furthermore, these approaches may be used in both a proactive, universal manner with all families, and with families experiencing current financial stress or difficulties. A highly effective approach often combines provision of emotional support (e.g., therapy, counseling) that helps families deal with stress due to negative consequences of financial decisions, with education to increase their financial knowledge (Collins & O'Rourke, 2010).

Encourage Families to Use Resources

Another way to decrease families' experiences of financial stress is to increase their use of available resources. These resources can act to increase skills and buffers that prevent financial stressors from becoming financial stress, or they can increase coping for families that are already experiencing financial stress.

Offer materials that urge discussion of financial matters. One barrier that families face in accessing financial management resources is the belief that financial problems will reflect badly on the individual or the family (Tach & Greene, 2014), or, within military families, that discovery of financial problems may negatively impact Service members' careers (Varcoe et al., 2003). Materials (e.g., pamphlets, books, online forums, and modules) for couples and families on how to talk about financial matters can help to increase open communication about financial matters and improve relationship quality (Falconier, 2015). Moreover, these materials can provide education as to how individuals and families can identify when they should seek professional help and can be provided to families in various life stages (e.g., marriage, having children, relocations, retirements).

Provide options for families at different stages of finance management. Individuals are most likely to seek help for financial concerns when they perceive the information is relevant to their current financial needs (Fernandes et al., 2014). It is clear that not all families who experience financial stress need the same resources at the same time. Therefore, offering resources that are differentiated by skill or knowledge level and topic may increase the likelihood that families will access those resources. Further, individuals receive the most benefit from a financial education program when they view the material as relevant to their current need, they have an immediate opportunity to apply the information, and they can see the consequences of their financial behaviors (Fernandes et al., 2014).

Although higher levels of financial knowledge and self-mastery can lead to better financial behaviors (Danes, Huddleston-Casas, & Boyce, 1997; Perry & Morris, 2005), more financial knowledge does not guarantee that individuals will make adjustments to their financial behaviors, especially in the long-term (Mandell & Klein, 2009). Furthermore, few financial management programs address personal qualities (e.g., self-control, self-mastery) that are important skills for financial management. As such, professionals might consider increasing families' involvement in financial management programs by offering programming that teaches "soft skills," such as planning and organization, as well as specific financial skills, such as creating a budget (Fernandes et al., 2014).

Consider availability of and access to resources for financial management. There are many resources available to families to help them manage their finances and deal with financial stress. For military families in particular, these resources can be supports or services that are available for all American families or specifically available to meet the needs of military families. Military spouses have rated formal civilian services (e.g., accountants or financial counselors) as more "useful" than military resources (Plantier & Durband, 2007). Overall, however, these spouses reported informal services (e.g., advice from other military spouses) as more useful than formal services. Although this finding is from a single study, it suggests that military spouses have specific preferences that might be considered when encouraging them to access financial management resources.

In sum, for those individuals who work with and on the behalf of families there are several considerations to keep in mind. The first consideration is to understand and identify signs families may be in financial distress (e.g., taking out high-interest loans, exceeding the maximum on credit cards) and ask families about their management of money. The second consideration is to be prepared to offer strategies that could prevent or minimize financial stress, (e.g., online banking, software to help create a family budget) and improve financial management behaviors. The final consideration is to encourage open communication about finances, which could include how to access financial management programs. It is crucial that families are aware of tools and programs that not only manage their stress, but also improve their financial behaviors.

Recommendations

All families encounter financial stressors, and Service members' families may encounter a greater number of stressors due to the numerous transitions inherent in military service. Financial stressors become financial stress when the stressors threaten well-being and outweigh the available coping strategies. The following recommendations are intended to decrease the intensity of financial stressors, increase financial management skills and buffers against financial stressors, as well as increase coping resources and behaviors. These recommendations can be applied to existing programs or utilized in the creation of new programs.

Financial stressors become financial stress when the stressors threaten well-being and outweigh the available coping strategies.

Assessment

Assessment of families' financial stressors, coping strategies, and distress at critical transitions using comprehensive measures provides needed information for both preventative and intervention programming. Further, it reinforces the importance of open communication about financial matters within the family and with professionals who can provide assistance to the family.

- Train those individuals who work with and on behalf of families to comprehensively assess financial well-being during transition periods.
    - Include formal measures and informal methods to determine families' levels of financial stress and distress.
    - Schedule assessments during transition periods that occur for all families (e.g., births, marriages, deaths) as well as transitions that are unique to military families (e.g., deployment).
    - Incorporate assessments of financial well-being in programs for Service members who are disabled, as families with a disabled Service member are at a higher risk for financial distress.
- Develop a database of diverse assessment protocols that can be used to assess financial stress among families to measure different families varying needs.

Programs

A wide array of financial education approaches exist, from low-resource, low-touch, to high-resource, high-touch. Financial education programming should be offered through a variety of delivery methods focusing on both "soft skill" and more concrete financial knowledge development. Overall, assessment findings can help inform what kind of approaches are needed to support Service member families' financial well-being.

- Provide financial education programs that are differentiated by skills and levels that support family financial well-being.
- Offer financial education through a variety of delivery methods (e.g., phone-based, online, group, face-to-face).
- Include development of "soft skills" (e.g., planning and organization, delay of gratification, self-awareness) to increase positive financial behaviors.
- Focus on deficits in financial knowledge as well as on family financial well-being, which should include information related to:
    - Emotional factors (e.g., worry or guilt)
    - Cognitive factors (e.g., awareness of current financial status)
    - Personality factors (e.g., source and motivation of money management behaviors and strategies).
- Consider offering financial education programming for children. Evidence suggests that the earlier positive financial habits such as saving are introduced to children the more likely they will exhibit these behaviors in adulthood.
- Program development should include information that offers skills that:
    - Decrease stressors (e.g., by teaching budgeting and cash-management skills)
    - Increase skills and buffers (e.g., by assisting people in creating emergency savings)
    - Increase the effectiveness of behavioral responses to stress and regulate emotional responses to stress (e.g., on-going financial coaching or therapy)

Future Research

As noted throughout this report, further research is warranted on financial stress in military families to increase understanding of how to best serve these families. The following list presents gaps in the current literature that, when addressed, will increase professionals and practitioners ability to support military families.

- Design and validate measures of financial stress that include indexes of stress unique to military families as current measures have been developed exclusively in civilian samples. (For a list of current measures of financial stress, see Appendix C.)
- Examine the relationship between financial stress and family outcomes in military samples.
- Determine the extent to which families limit their spending due to financial stress.
- Evaluate programs among military families to determine their efficacy in decreasing stressors, increasing skills and buffers, and increasing coping ability.
- Investigate barriers to military families' usage of current supports and programs.

In conclusion, financial stress is a topic that deserves energy and attention, given its prevalence among civilian and military families and the wide-ranging effects it can have within those families. While more research is needed, there are steps that can currently be taken to help military families decrease financial stressors, increase financial skills and buffers, and bolster families' ability to cope with financial stress when it occurs.

References

Agnew, J. R., & Szykman, L. R. (2005). Asset allocation and information overload: The influence of information display, asset choice, and investor experience. *Journal of Behavioral Finance*, *6*(2), 57–70. http://doi.org/10.1207/s15427579jpfm0602_2

Ajzen, I., Joyce, N., Sheikh, S., & Cote, N. G. (2011). Knowledge and the prediction of behavior: The role of information accuracy in the theory of planned behavior. *Basic and Applied Social Psychology*, *33*(2), 101–117. http://doi.org/10.1080/01973533.2011.568834

American Psychological Association. (2015). *Stress in America: Paying with our health*. Washington D.C. Retrieved from www.stressinamerica.org

Archuleta, K. L., Britt, S. L., Tonn, T. J., & Grable, J. E. (2011). Financial satisfaction and financial stressors in marital satisfaction. *Psychological Reports*, *108*(2), 563–576. http://doi.org/10.2466/07.21.PR0.108.2.563-576

Archuleta, K. L., Burr, E. A., Dale, A. K., Canale, A., Danford, D., Rasure, E., … Horwitz, E. (2012). What is financial therapy? Discovering mechanisms and aspects of an emerging field. *Journal of Financial Therapy*, *3*(2), 57–78. http://doi.org/10.4148/jft.v3i2.1807

Barker, L. H., & Berry, K. D. (2009). Developmental issues impacting military families with young children during single and multiple deployments. *Military Medicine*, *174*(10), 1033–1040. http://doi.org/10.7205/MILMED-D-04-1108

Barr, M. S., Mullainathan, S., & Shafir, E. (2009). The case for behaviorally informed regulation. In D. Moss & J. Cisternino (Eds.), *New Perspectives on Regulation* (pp. 25–61). Cambridge, MA: The Tobin Project.

Barton, A. W., Futris, T. G., & Nielsen, R. B. (2015). Linking financial distress to marital quality: The intermediary roles of demand/withdraw and spousal gratitude expressions. *Personal Relationships*, *22*(3), 536–549. http://doi.org/10.1111/pere.12094

Bell, C., Gorin, D., & Hogarth, J. M. (2009). *Does financial education affect soldiers' financial behaviors* (No. 2009-WP-08).

Bell, C., & Hogarth, J. M. (2010). Better deals on wheels: The effects of financial education on car buying | Federal Reserve Bank of Minneapolis. Retrieved from https://www.minneapolisfed.org/publications/community-dividend/better-deals-on-wheels-the-effects-of-financial-education-on-car-buying

Bell, M., Nelson, J., Spann, S., Molloy, C., Britt, S., & Goff, B. (2014). The Impact of Financial Resources on Soldiers' Well-Being. *Journal of Financial Counseling and Planning*, *25*(1), 41–52. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2466556

Birkenmaier, J., & Curley, J. (2015). Financial credit outcomes of IDA participation: Longitudinal findings. *Journal of Financial Therapy*, *5*(2), 37–55. http://doi.org/10.4148/1944-9771.1082

Boshara, R., Gannon, J., Mandell, L., Phillips, R. J. W., & Sass, S. (2010). *Consumer trends in the public, private, and nonprofit sector*. *National Endowment for Financial Education*.

Botti, S., & Iyengar, S. S. (2004). The psychological pleasure and pain of choosing: When people prefer choosing at the cost of subsequent outcome satisfaction. *Journal of Personality and Social Psychology*, *87*(3), 312–326.

Bradley, R. H., & Caldwell, B. M. (1984). The HOME Inventory and family demographics. *Developmental Psychology*, *20*(2), 315–320. http://doi.org/10.1037/0012-1649.20.2.315

Bradshaw, M., & Ellison, C. G. (2010). Financial hardship and psychological distress: Exploring the buffering effects of religion. *Social Science and Medicine*, *71*(1), 196–204. http://doi.org/10.1016/j.socscimed.2010.03.015

Bricker, J., Dettling, L., Henriques, A., Hsu, J., Moore, K., Sabelhaus, J., & Krimmel, J. (2014). *Changes in U.S. family finances from 2010 to 2013: Evidence from the survey of consumer finances* (Vol. 100). Board of Governors of the Federal Reserve System. Retrieved from http://www.federalreserve.gov/pubs/bulletin/2014/pdf/scf14.pdf

Britt, S., Grable, J. E., Nelson Goff, B. S., & White, M. (2008). The influence of perceived spending behaviors on relationship satisfaction. *Financial Counseling and Planning*, *19*(1), 31–43. Retrieved from http://www.afcpe.org/publications/

Burnett-Zeigler, I., & Valenstein, M. (2011). Civilian employment among recently returning Afghanistan and Iraq National Guard veterans. *Military Medicine*, *176*(6), 639–646. http://doi.org/10.7205/MILMED-D-10-00450

Cadzow, S. P., Armstrong, K. L., & Fraser, J. A. (1999). Stressed parents with infants: Reassessing physical abuse risk factors. *Child Abuse and Neglect*, *23*(9), 845–853. http://doi.org/10.1016/S0145-2134(99)00063-0

Center for the Study of Traumatic Stress. (2016). *Financial stress and behavioral health in military Servicemembers: Risk , resilience , mechanisms and targets for intervention: Conference report*. Bethesda, MD. Retrieved from https://www.researchgate.net/publication/293488346_Financial_Stress_and_Behavioral_Health_in_Military_Servicemembers_Risk_Resilience_Mechanisms_and_Targets_for_Intervention

Chan, P., Cohen, P., Derbigny, D., & Markoff, S. (2014). *Saving by design: An anaylsis of six strategies' potential for scale*. *CFED Expanding Economic Opportunity*.

Chirikos, T. N., & Nestel, G. (2016). Further evidence on the economic effects of poor health, *67*(1), 61–69.

Choi, J. J., Laibson, D., Madrian, B. C., & Metrick, A. (2003). Optimal defaults. *The American Economic Review*, *93*(2), 180–195.

Chou, E. Y., Parmar, B. L., & Galinsky, A. D. (2016). Economic insecurity increases physical pain. *Association for Psychological Science*, 1–12. http://doi.org/10.1177/0956797615625640

Classen, T. J., & Dunn, R. A. (2012). The effect of job loss and unemployment duration on suicide risk in the United States: A new look using mass-layoffs and unemployment duration. *Health Economics*, *21*, 338–350. http://doi.org/10.1002/hec.1719

Clever, M., & Segal, D. R. (2013). The demographics of military children and families. *Future of Children*, *23*(2), 13–39. http://doi.org/10.1353/foc.2013.0018

Cobaugh, D. J., Angner, E., Kiefe, C. I., Ray, M. N., LaCivita, C. L., Weissman, N. W., … Allison, J. J. (2008). Effect of racial differences on ability to afford prescription medications. *American Journal of Health-System Pharmacy*, *65*(22), 2137–2143. http://doi.org/10.2146/ajhp080062

Cohen, E., Zerach, G., & Solomon, Z. (2011). The implication of combat-induced stress reaction, PTSD, and attachment in parenting among war veterans. *Journal of Family Psychology*, *25*(5), 688–698. http://doi.org/10.1037/a0024065

Collins, J., Baker, C., & Gorey, R. (2007). *Financial coaching: A new approach for asset building*. Ithaca, NY. Retrieved from http://caseyfoundation.com/~/media/Pubs/Topics/Economic Security/Other/FinancialCoachingANewApproachforAssetBuilding/financial_coaching_nov20.pdf

Collins, J. M., & O'Rourke, C. M. (2010). Financial education and counseling - Still holding promise. *Journal of Consumer Affairs*, *44*(3), 483–498. http://doi.org/10.1111/j.1745-6606.2010.01179.x

Conger, R. D., Conger, K. J., Elder Jr., G. H., Frederick, F. O., Simons, R. L., & Whitbeck, L. B. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development*, *63*(3), 526–541.

Conger, R. D., Ge, X., & Lorenz, F. O. (1994). Economic stress and marital relations. In R. D. Conger & G. H. Elder (Eds.), *Families in troubled times: Adapting to change in rural America* (pp. 187–203). New York: Aldine de Gruyter.

Consumer Financial Protection Bureau. (2015). *Financial well-being : The goal of financial education*. Retrieved from http://files.consumerfinance.gov/f/201501_cfpb_report_financial-well-being.pdf

Cutrona, C. E., Russell, D. W., Abraham, W. T., Gardner, K. A., Melby, J. N., Bryant, C., & Conger, R. D. (2003). Neighborhood context and financial strain as predictors of marital interaction and marital quality in African American couples. *Personal Relationships*, *10*(3), 389–409. http://doi.org/10.1111/1475-6811.00056

Danes, S. M., Huddleston-Casas, C., & Boyce, L. (1997). Financial planning curriculum for teens: Impact evaluation. *Journal of Financial Counseling and Planning*, *10*(1), 26–39.

Dee, T. S. (2001). Alcohol abuse and economic conditions: Evidence from repeated cross-sections of individual-level data. *Health Economics*, *10*(3), 257–270. http://doi.org/10.1002/hec.588

Defense Manpower Data Center. (2014). 2012 Survey of Active Duty Spouses. Retrieved from http://www.dmdc.osd.mil/surveys

Defense Manpower Data Center, & Research Surveys and Statistics Center. (2016). *Status of Forces Surveys of Active Duty Members (2013 & 2014 SOFS-A): Briefing on leading indicators, Military OneSource, financial health, family life, access to technology, impact of deployments, and permanent change of station (PCS) moves*.

Dew, J. (2008). Debt change and marital satisfaction change in recently married couples. *Family Relations*, *57*(1), 60–71. http://doi.org/10.1111/j.1741-3729.2007.00483.x

Dew, J. (2011). The association between consumer debt and the likelihood of divorce. *Journal of Family and Economic Issues*, *32*(4), 554–565. http://doi.org/10.1007/s10834-011-9274-z

Dew, J., Britt, S., & Huston, S. (2012). Examining the relationship between financial issues and divorce. *Family Relations*, *61*(4), 615–628. http://doi.org/10.1111/j.1741-3729.2012.00715.x

Dubanoski, R. A., & McIntosh, S. R. (1984). Child abuse and neglect in military and civilian families. *Child Abuse & Neglect*, *8*(1), 55–67. http://doi.org/10.1016/0145-2134(84)90050-4

Duberstein, P. R., Conwell, Y., Conner, K. R., Eberly, S., & Caine, E. D. (2004). Suicide at 50 years of age and older: Perceived physical illness, family discord and financial strain. *Psychological Medicine*, *34*(1), 137–146. http://doi.org/10.1017/S0033291703008584

Elbogen, E., Johnson, S. C., Wagner, H. R., Newton, V. M., & Beckham, J. C. (2012). Financial well-being and postdeployment adjustment among Iraq and Afghanistan war veterans. *Military Medicine*, *177*(6), 669–675. http://doi.org/10.7205/MILMED-D-11-00388

Elbogen, E., & Sullivan, C. (2013). Homelessness and money mismanagement in Iraq and Afghanistan veterans. *American Journal of Public Health*, *103*(S2), 248–254. http://doi.org/10.2105/AJPH.2013.301335

Elliehausen, G., Lundquist, C. E., & Staten, M. E. (2002). The impact of credit card counseling on subsequent borrower credit usage and payment behavior. *Journal of Consumer Affairs*, *41*(1), 1–38.

Falconier, M. K. (2015). TOGETHER - A couples' program to improve communication, coping, and financial management skills: Development and initial pilot-testing. *Journal of Marital and Family Therapy*, *41*(2), 236–250. http://doi.org/10.1111/jmft.12052

Fallis, A., & Lusardi, A. (2008). *Household saving behavior: The role of financial literacy, information, and financial education programs* (No. 13824). *National Bureau of Economic Research*. Cambridge, MA. Retrieved from http://www.nber.org/papers/w13824.pdf

Fernandes, D., Lynch Jr, J. G., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, *60*(8), 1861–1883. http://doi.org/10.1287/mnsc.2013.1849

Financial Industry Regulatory Authority. (2016). Start an emergency fund. Retrieved from http://www.finra.org/investors/start-emergency-fund

FINRA Investor Education Foundation. (2013a). *Financial capability in the United States: 2012 Report of military findings*. Washington D.C. Retrieved from http://www.usfinancialcapability.org/downloads/NFCS_2012_Report_Military_Findings.pdf

FINRA Investor Education Foundation. (2013b). *Financial capability in the United States: Report of findings from the 2012 National Financial Capability Study*. Washington, DC. Retrieved from http://www.usfinancialcapability.org/downloads/NFCS_2012_Report_Natl_Findings.pdf

Floyd, L., & Phillips, D. A. (2013). Child care and other support programs. *The Future of Children*, *23*(2), 79–97. http://doi.org/10.1353/foc.2013.0013

Foran, H. M., Heyman, R. E., & Smith Slep, A. M. (2014). Emotional abuse and its unique ecological correlates among military personnel and spouses. *Psychology of Violence*, *4*(2), 128–142. http://doi.org/10.1037/a0034536

Foran, H. M., Smith Slep, A. M., & Heyman, R. E. (2011). Hazardous alcohol use among active duty Air Force personnel: Identifying unique risk and promotive factors. *Psychology of Addictive Behaviors*, *25*(1), 28–40. http://doi.org/10.1037/a0020748

Gale, W. G., & Levine, R. (2011). *Financial literacy: What works? How could it be more effective?* (Financial Security Project No. FSP 2011-1). Chesnut Hill, MA.

Garrett, P., Ng, N., & Ferron, J. (1994). Poverty experiences of young children and the quality of their home environments. *Child Development*, *65*(2), 331–345.

Gartner, K., & Todd, R. M. (2005). *Effectiveness of online "Early Intervention" financial education for credit cardholders* (No. 962). *Federal Reserve Bank of Chicago Proceedings*. Washington, DC. Retrieved from https://www.chicagofed.org/digital_assets/others/events/2005/promises_and_pitfalls/paper_intervention.pdf

Gibbs, D. A., Martin, S. L., Kupper, L. L., & Johnson, R. E. (2007). Child maltreatment in enlisted soldiers' families during combat-related deployments. *JAMA*, *298*(5), 528–535. http://doi.org/10.1001/jama.298.5.528

Gorman, L. A., Blow, A. J., Ames, B. D., & Reed, P. L. (2011). National Guard families after combat: Mental health, use of mental health services, and perceived treatment barriers. *Psychiatric Services*, *62*(1), 28–34. Retrieved from papers3://publication/uuid/0F2FE012-028C-498E-8935-D5567D496D8C

Grafova, I. B. (2011). Financial strain and smoking. *Journal of Family and Economic Issues*, *32*(2), 327–340. http://doi.org/10.1007/s10834-011-9247-2

Griffith, J. (2015). Homecoming of soldiers who are citizens: Re-employment and financial status of returning Army National Guard soldiers from Operations Iraqi Freedom (OIF) and Enduring Freedom (OEF). *Work*, *50*(1), 85–96. http://doi.org/10.3233/WOR-131794

Grossi, G., Perski, A., Lundberg, U., & Soares, J. (2001). Associations between financial strain and the diurnal salivary cortisol secretion of long-term unemployed individuals. *Integrative Physiological and Behavioral Science*, *36*(3), 205–219. http://doi.org/10.1007/bf02734094

Gudmunson, C. G., Beutler, I. F., Israelsen, C. L., McCoy, J. K., & Hill, E. J. (2007). Linking financial strain to marital instability: Examining the roles of emotional distress and marital interaction. *Journal of Family and Economic Issues*, *28*(3), 357–376. http://doi.org/10.1007/s10834-007-9074-7

Gutman, L. M., & Eccles, J. S. (1999). Financial strain , parenting behaviors , and adolescents' achievement : Testing model equivalence between African American and European American single- and two-parent families, *70*(6), 1464–1476.

Gutman, L. M., & Eccles, J. S. (2015). Financial strain, parenting behaviors, and adolescents' achievement: Testing model equivalence between African American and European American single- and two-parent families. *Child Development*, *70*(6), 1464–1476. http://doi.org/10.1111/1467-8624.00106

Gutman, L. M., McLoyd, V. C., & Tokoyawa, T. (2005). Financial strain, neighborhood stress, parenting behaviors, and adolescent adjustment in urban African American families. *Journal of Research on Adolescence*, *15*(4), 425–449. http://doi.org/10.1111/j.1532-7795.2005.00106.x

Hamilton, H. A., Noh, S., & Adlaf, E. M. (2009). Perceived financial status, health, and maladjustment in adolescence. *Social Science and Medicine*, *68*(8), 1527–1534. http://doi.org/10.1016/j.socscimed.2009.01.037

Hastings, J. S., Madrian, B. C., & Skimmyhorn, W. L. (2013). Financial literacy, financial education, and economic outcomes. *Annual Review of Economics*, *5*, 347–373. http://doi.org/10.1146/annurev-economics-082312-125807

Heflin, C. M., Wilmoth, J. M., & London, A. S. (2012). Veteran status and material hardship: The moderating influence of work-limiting disability. *Social Service Review*, *86*(1), 119–142. http://doi.org/10.1086/665643

Hill, T. D., & Angel, R. J. (2005). Neighborhood disorder, psychological distress, and heavy drinking. *Social Science and Medicine*, *61*(5), 965–975. http://doi.org/10.1016/j.socscimed.2004.12.027

Hosek, J., & Wadsworth, S. M. (2013). Economic conditions of military families. *Future of Children*, *23*(2), 41–59. http://doi.org/10.1353/foc.2013.0009

Hraba, J., Lorenz, F. O., & Pechačová, Z. (2000). Family stress during the Czech transformation. *Journal of Marriage and Family*, *62*(2), 520–531. http://doi.org/10.1111/j.1741-3737.2000.00520.x

Huijts, T., Reeves, A., Mckee, M., & Stuckler, D. (2015). The impacts of job loss and job recovery on self-rated health: Testing the mediating role of financial strain and income. *European Journal of Public Health*, *25*(5), 801–806. http://doi.org/10.1093/eurpub/ckv108

Jenkins, R., Bebbington, P., Brugha, T., Bhugra, D., Farrell, M., Coid, J., … Meltzer, H. (2009). Mental disorder in people with debt in the general population. *Public Health Medicine*, *6*(3), 88–92.

Jin, Y., & Jones-Smith, J. C. (2015). Associations between family income and children's physical fitness and obesity in California, 2010-2012. *Preventing Chronic Disease*, *12*, 1–9. http://doi.org/10.5888/pcd12.140392

Kahn, J. R., & Pearlin, L. I. (2006). Financial strain over the life course and health among older adults. *Journal of Health and Social Behavior*, *47*(1), 17–31. http://doi.org/10.1177/002214650604700102

Karney, B. R., & Crown, J. S. (2007). *Families under stress: An assessment of data, theory, and research on marriage and divorce in the military*. Santa Monica, CA: RAND Corporation. Retrieved from http://www.rand.org/content/dam/rand/pubs/monographs/2007/RAND_MG599.pdf

Kendzor, D. E., Businelle, M. S., Costello, T. J., Castro, Y., Reitzel, L. R., Cofta-Woerpel, L. M., … Wetter, D. W. (2010). Financial strain and smoking cessation among racially/ethnically diverse smokers. *American Journal of Public Health*, *100*(4), 702–706. http://doi.org/10.2105/AJPH.2009.172676

Kessler, R. C., Heeringa, S. G., Stein, M. B., Colpe, L. J., Fullerton, C. S., Hwang, I., … Ursano, R. J. (2014). Thirty-day prevalence of DSM-IV mental disorders among nondeployed soldiers in the US Army: Results from the Army Study of Assess Risk and Resilience in Servicemembers (Army STARRS). *JAMA Psychiatry*, *71*(5), 504. http://doi.org/10.1001/jamapsychiatry.2014.28

Kiely, K. M., Leach, L. S., Olesen, S. C., & Butterworth, P. (2015). How financial hardship is associated with the onset of mental health problems over time. *Social Psychiatry and Psychiatric Epidemiology*, *50*(6), 909–918. http://doi.org/10.1007/s00127-015-1027-0

Kim, J., Garman, E. T., & Sorhaindo, B. (2003). Relationships among credit counseling clients' financial well-being, financial behaviors, financial stressor events, and health. *Financial Counseling and Planning*, *14*(2), 75–88.

Kim, J. H., Gale, J., Goetz, J., & Bermudez, M. J. (2011). Relational financial therapy: An innovative and collaborative treatment approach. *Contemporary Family Therapy*, *33*(3), 229–241. http://doi.org/10.1007/s10591-011-9145-7

Kinnunen, U., & Feldt, T. (2004). Economic stress and marital adjustment among couples: Analyses at the dyadic level. *European Journal of Social Psychology*, *34*(5), 519–532. http://doi.org/10.1002/ejsp.213

Kiviat, B., & Morduch, J. (2012). *From financial literacy to financial action*. New York City. Retrieved from http://mcgraw-hillresearchfoundation.org/wp-content/uploads/2012/01/Financial_Literacy_WP.pdf

Kline, A., Ciccone, D. S., Falca-Dodson, M., Black, C. M., & Losonczy, M. (2011). Suicidal ideation among National Guard troops deployed to Iraq. *The Journal of Nervous and Mental Disease*, *199*(12), 914–920. http://doi.org/10.1097/NMD.0b013e3182392917

Kramarow, E. A., & Pastor, P. N. (2012). *The health of male Veterans and nonveterans aged 25-64: United States, 2007-2010. U.S. Department of Health and Human Services: NCHS Data Brief*. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/23101789

Langhinrichsen-Rohling, J., Snarr, J. D., Smith Slep, A. M., Heyman, R. E., & Foran, H. M. (2011). Risk for suicidal ideation in the U.S. Air Force: An ecological perspective. *Journal of Consulting and Clinical Psychology*, *79*(5), 600–612. http://doi.org/10.1037/a0024631

Lantz, P. M., House, J. S., Mero, R. P., & Williams, D. R. (2005). Stress, life events, and socioeconomic disparities in health: Results from the Americans' changing lives study. *Journal of Health and Social Behavior*, *46*(3), 274–288. http://doi.org/10.1177/002214650504600305

Lee, C.-Y. S., Lee, J., & August, G. J. (2011). Financial stress, parental depressive symptoms, parenting practices, and children's externalizing problem behaviors: Underlying processes. *Family Relations*, *60*(4), 476–490. http://doi.org/10.1111/j.1741-3729.2011.00656.x

Leininger, L. J. (2014). Economic strain and children's behavior in the aftermath of the Great Recession. *Journal of Marriage and Family*, *76*(4), 998–1010. http://doi.org/10.1111/jomf.12140

Lincoln, K. D., & Chae, D. H. (2010). Stress, marital satisfaction, and psychological distress among African Americans. *Journal of Family Issues*, *31*(8), 1081–1105. http://doi.org/10.1177/0192513X10365826

London, A. S., & Heflin, C. M. (2015). Supplemental Nutrition Assistance Program (SNAP) use among Active-Duty military personnel, Veterans, and reservists. *Population Research and Policy Review*, *34*(6), 805–826. http://doi.org/10.1007/s11113-015-9373-x

Lusardi, A., & Mitchell, O. S. (2007). *Financial literacy and retirement planning: New evidence from the Rand American Life Panel* (Retirement Research Consortium (RRC) and the Pension Research Council at the Wharton School No. Paper No. WP 2007-157). Retrieved from http://www.dartmouth.edu/~alusardi/Papers/American_Life_Panel.pdf

Lynch Jr, J. G., & Wood, W. (2006). Special issue editor's statement: Helping consumers help themselves. *Journal of Public Policy & Marketing*, *25*(1), 1–7. http://doi.org/http://dx.doi.org/10.1509/jppm.25.1.1

Lyons, A. C., Chang, Y., & Scherpf, E. M. (2006). Translating financial education into behavior bhange for low-income populations. *Journal of Financial Counseling and Planning*, *17*(2), 27–45. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2232122

Magnuson, K., & Duncan, G. (2002). Parents in poverty. In M. H. Bornstein (Ed.), *Handbook of parenting: Social conditions and applied parenting* (2nd ed., Vol. 4, pp. 95–121). Mahwah, NJ: Lawrence Erlbaum. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED464759&site=ehost-live

Maguire-Jack, K., & Klein, S. (2015). Parenting and proximity to social services: Lessons from Los Angeles County in the community context of child neglect. *Child Abuse & Neglect*, *45*, 35–45. http://doi.org/doi:10.1016/j.chiabu.2015.04.020

Mandell, L., & Klein, L. S. (2009). The impact of financial literacy education on subsequent financial behavior. *Journal of Financial Counseling and Planning*, *20*(1), 15–24. Retrieved from http://www.eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=EJ859556

Marchant, K. H., & Medway, F. J. (1987). Adjustment and achievement associated with mobility in military families. *Psychology in the Schools*, *24*(3), 289–294. http://doi.org/DOI: 10.1002/1520-6807(198707)24:3<289::AID-PITS2310240315>3.0.CO;2-A

Meadows, S. O., Griffin, B. A., Karney, B. R., & Pollak, J. (2015). Employment gaps between Military spouses and matched civilians. *Armed Forces & Society*, 1–20. http://doi.org/10.1177/0095327X15607810

Münster, E., Rüger, H., Ochsmann, E., Letzel, S., & Toschke, A. M. (2009). Over-indebtedness as a marker of socioeconomic status and its association with obesity: A cross-sectional study. *BMC Public Health*, *9*(1), 1–6. http://doi.org/10.1186/1471-2458-9-286

National Foundation for Credit Counseling. (2014). National Foundation for Credit Counseling® survey reveals financial weaknesses among military Service members. Retrieved from https://www.nfcc.org/press/multimedia/news-releases/national-foundation-for-credit-counseling-survey-reveals-financial-weaknesses-among-military-servicemembers/

Nelson, M. C., Lust, K., Story, M., & Ehlinger, E. (2008). Credit card debt, stress and key health risk behaviors among college students. *American Journal of Health Promotion*, *22*(6), 400–407. http://doi.org/10.4278/ajhp.22.6.400

Neppl, T. K., Jeon, S., Schofield, T. J., & Donnellan, M. B. (2015). The impact of economic pressure on parent positivity, parenting, and adolescent positivity into emerging adulthood. *Family Relations*, *64*(1), 80–92. http://doi.org/10.1111/fare.12098

Pearce, K. E., & Rice, R. E. (2013). Digital divides from access to activities: Comparing mobile and personal computer internet users. *Journal of Communication*, *63*(4), 721–744. http://doi.org/10.1111/jcom.12045

Pelkowski, J. M., & Berger, M. C. (2004). The impact of health on employment, wages, and hours worked over the life cycle. *Quarterly Review of Economics and Finance*, *44*(1), 102–121. http://doi.org/10.1016/j.qref.2003.08.002

Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, *39*(2), 299–313. http://doi.org/10.1111/j.1745-6606.2005.00016.x

Pew Charitable Trust. (2015a). *Survey of American family finances*. Philadelphia, PA. Retrieved from http://www.pewtrusts.org/~/media/assets/2015/03/fsm-poll-results-toplines_artfinal_v3.pdf

Pew Charitable Trust. (2015b). *The complex story of American debt*. Philadelphia, PA. Retrieved from http://www.pewtrusts.org/~/media/assets/2015/07/reach-of-debt-report_artfinal.pdf?la=en

Pew Charitable Trust. (2015c). *The role of emergency savings in family financial security*. Philadelphia, PA. Retrieved from http://www.pewtrusts.org/~/media/assets/2015/10/emergency-savings-report-1_artfinal.pdf?la=en

Plantier, J. H., & Durband, D. B. (2007). Assessing the use and usefulness of current financial resources for civilian military spouses. *Association for Financial Counseling and Planning Education*, *18*(2), 76–88. Retrieved from http://poseidon01.ssrn.com/delivery.php?ID=687101067008103019027018001076084090096055058047023043031088006109087106029089029121061053000000033097052116076124016022096066009094010045014112118004126124073014001067043087097028023124083126094094104120081026 10

Ponnet, K., Van Leeuwen, K., Wouters, E., & Mortelmans, D. (2014). A family system approach to investigate family-based pathways between financial stress and adolescent problem behavior. *Journal of Research on Adolescence*, *25*(4), 765–780. http://doi.org/10.1111/jora.12171

Prawitz, A. D., Kalkowski, J. C., & Cohart, J. (2012). Responses to economic pressure by low-income families: Financial distress and hopefulness. *Journal of Family and Economic Issues*, *34*(1), 29–40. http://doi.org/10.1007/s10834-012-9288-1

Puff, J., & Renk, K. (2014). Relationships among parents' economic stress, parenting, and young children's behavior problems. *Child Psychiatry and Human Development*, *45*, 712–727. http://doi.org/10.1007/s10578-014-0440-z

Pyle, S. A., Haddock, C. K., Poston, W. S. C., Bray, R. M., & Williams, J. (2007). Tobacco use and perceived financial strain among junior enlisted in the U.S. Military in 2002. *Preventive Medicine*, *45*(6), 460–463. http://doi.org/10.1016/j.ypmed.2007.05.012

Romo, L. K. (2014). "These aren't very good times": Financial uncertainty experienced by romantic partners in the wake of an economic downturn. *Journal of Family and Economic Issues*, *35*(4), 477–488. http://doi.org/10.1007/s10834-014-9389-0

San José, B., Van Oers, H. A. M., Van de Mheen, H. D., Garretsen, H. F. L., & Mackenbach, J. P. (2000). Stressors and alcohol consumption. *Alcohol and Alcoholism*, *35*(3), 307–312. http://doi.org/10.1093/alcalc/35.3.307

Serido, J., Lawry, C., Li, G., Conger, K. J., & Russell, S. T. (2014). The associations of financial stress and parenting support factors with alcohol behaviors during young adulthood. *Journal of Family and Economic Issues*, *35*(3), 339–350. http://doi.org/10.1007/s10834-013-9376-x

Servon, L. J., & Kaestner, R. (2008). Consumer financial literacy and the impact of online banking on the financial behavior of lower-income bank customers. *Journal of Consumer Affairs*, *42*(2), 271–305. http://doi.org/10.1111/j.1745-6606.2008.00108.x

Shaw, B. A., Agahi, N., & Krause, N. (2011). Are changes in financial strain associated with changes in alcohol use and smoking among older adults? *Journal of Studies on Alcohol and Drugs*, *72*(6), 917–925. http://doi.org/10.15288/jsad.2011.72.917

Shim, S., Serido, J., Tang, C., & Card, N. (2015). Socialization processes and pathways to healthy financial development for emerging young adults. *Journal of Applied Developmental Psychology*, *38*, 29–38. http://doi.org/10.1016/j.appdev.2015.01.002

Siahpush, M., & Carlin, J. B. (2006). Financial stress, smoking cessation and relapse: Results from a prospective study of an Australian national sample. *Addiction*, *101*(1), 121–127. http://doi.org/10.1111/j.1360-0443.2005.01292.x

Skimmyhorn, W. L. (2014). *The financial welfare of military households: Descriptive evidence from recent surveys*. Retrieved from http://www.usma.edu/sosh/SiteAssets/SitePages/Faculty/Publications/FINRA-Paper-2014.pdf

Sledge, J., Tescher, J., & Gordon, S. (2010). *From financial education to financial capability: Opportunities for innovation*.

Smith Slep, A. M., Foran, H. M., Heyman, R. E., & Snarr, J. D. (2010). Unique risk and protective factors for partner aggression in a large scale Air Force survey. *Journal of Community Health*, *35*(4), 375–383. http://doi.org/10.1007/s10900-010-9264-3

Stack, S., & Wasserman, I. (2007). Economic strain and suicide risk: A qualitative analysis. *Suicide & Life-Threatening Behavior*, *37*(1), 103–112. http://doi.org/10.1521/suli.2007.37.1.103

Stawski, R. S., Hershey, D. a, & Jacobs-Lawson, J. M. (2007). Goal clarity and financial planning activities as determinants of retirement savings contributions. *International Journal of Aging & Human Development*, *64*(1), 13–32. http://doi.org/10.2190/13GK-5H72-H324-16P2

Steptoe, A., Brydon, L., & Kunz-Ebrecht, S. (2005). Changes in financial strain over three years, ambulatory blood pressure, and cortisol responses to awakening. *Psychosomatic Medicine*, *67*(2), 281–287. http://doi.org/10.1097/01.psy.0000156932.96261.d2

Sterk, C. E., Theall, K. P., & Elifson, K. W. (2002). Health care utilization among drug-using and non-drug-using women. *Journal of Urban Health*, *79*(4), 586–599. http://doi.org/10.1093/jurban/79.4.586

Stover, C. S., Zhou, Y., Kiselica, A., Leve, L. D., Neiderhiser, J. M., Shaw, D. S., … Reiss, D. (2016). Marital hostility, hostile parenting, and child aggression: Associations from toddlerhood to school age. *Journal of the American Academy of Child & Adolescent Psychiatry*, *55*(3), 235–242. http://doi.org/10.1016/j.jaac.2015.12.008

Sturgeon, J. A., Zautra, A. J., & Okun, M. A. (2014). Associations between financial stress and interpersonal events: A daily diary study of middle-aged adults and their life circumstances. *Psychology and Aging*, *29*(4), 803–813. http://doi.org/10.1037/a0037961

Sweet, E., Nandi, A., Adam, E. K., & McDade, T. W. (2013). The high price of debt: Household financial debt and its impact on mental and physical health. *Social Science & Medicine*, *91*, 94–100. http://doi.org/10.1016/j.socscimed.2013.05.009

Tach, L. M., & Greene, S. S. (2014). Robbing Peter to pay Paul : Economic and cultural explanations for how lower-income families manage debt. *Social Problems*, *61*(1), 1–21. http://doi.org/10.1525/sp.2013.11262

Thaler, R. H., & Sunstein, C. R. (2008). Save More Tomorrow. In *Nudge: Improving Decisions About Health, Wealth, and Happiness* (pp. 103–117). New Haven, CT: Yale Publishing Press.

Thomsen, C. J., Rabenhorst, M. M., McCarthy, R. J., Milner, J. S., Travis, W. J., Foster, R. E., & Copeland, C. W. (2014). Child maltreatment before and after combat-related deployment among active-duty United States Air Force maltreating parents. *Psychology of Violence*, *4*(2), 143–155. http://doi.org/10.1037/a0031766

Trougakos, J. P., Bull, R. A., Green, S. G., MacDermid, S. M., & Weiss, H. M. (2007). Influences on job search self-efficacy of spouses of enlisted Military personnel. *Human Performance*, *20*(4), 391–413. http://doi.org/10.1080/08959280701522114

Turunen, E., & Hiilamo, H. (2014). Health effects of indebtedness: A systematic review. *BMC Public Health*, *14*(1), 489–496. http://doi.org/10.1186/1471-2458-14-489

USDA Economic Research Service. (2015). Key statistics & graphics. Retrieved February 12, 2016, from http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx#foodsecure

Varcoe, K. P., Lees, N. B., Wright, J., & Emper, N. (2003). Financial issues faced by Marine Corps families. *Journal Financial Counseling and Planning*, *14*(1), 43–50.

Verplanken, B., & Wood, W. (2006). Interventions to break and create consumer habits. *Journal of Public Policy & Marketing*, *25*(1), 90–103. http://doi.org/doi:10.1509/jppm.25.1.90

Warren, E., & Font, S. (2015). Housing insecurity, maternal stress, and child maltreatment: An application of the family stress model. *Social Service Review*, *89*(1), 9–39. http://doi.org/10.1086/680043

Weber, E. G., & Weber, D. K. (2005). Geographic relocation frequency, resilience, and military adolescent behavior. *Military Medicine*, *170*(July), 638–642.

Webley, P., & Nyhus, E. K. (2001). Life-cycle and dispositional routes into problem debt. *British Journal of Psychology*, *92*(3), 423–446. http://doi.org/10.1348/000712601162275

Wheaton, B., & Montazer, S. (1999). *Stressors, stress, and distress*. *A Handbook for the Study of Mental Health: Social Contexts, Theories, and Systems*. http://doi.org/10.1007/978-94-007-4276-5_25

Wiener, R. L., Baron-Donovan, C., Gross, K., & Block-Lieb, S. (2005). Debtor education, financial literacy, and pending bankruptcy legislation. *Behavioral Sciences and the Law*, *23*(3), 347–366. http://doi.org/10.1002/bsl.634

Wrosch, C., Heckhausen, J., & Lachman, M. E. (2000). Primary and secondary control strategies for managing health and financial stress across adulthood. *Psychology and Aging*, *15*(3), 387–399. http://doi.org/10.1037/0882-7974.15.3.387

Yeung, W. J., Linver, M. R., & Brooks-Gunn, J. (2002). How money matters for young children's development: Parental investment and family processes. *Child Development*, *73*(6), 1861–1879. http://doi.org/10.2307/3696422

Appendices

Appendix A. Reviewed Programs

Program Name	Description- Outcomes and Link to Resources	Goal	Approach
Text Message Reminder	Monthly text messages reminding IDA participants to make their required monthly savings deposits. http://www.azearntolearn.org/the-process/saver/	Reminder for monthly savings deposit	Communication
Social Saving	SmartyPig https://www.smartypig.com/ lets users share savings goals with friends and family, and PiggyMojo https://secure.piggymojo.com/ will go as far as to send a text message to your spouse (if you choose) every time you move $15 into the savings account instead of buying something that you do not need.	Foster accountability for saving	Communication
Fort Bliss 2-day Financial Education Program	Workshop covering basic financial management, budgeting, credit, spending, and saving. http://www2.indstate.edu/business/NFI/leadership/papers/2009-WP-08_Bell_Gorin_Hogarth.pdf	Increase financial knowledge	Knowledge
Stash Your Cash and Win	A prize-linked savings program to help future IDA participants build an emergency savings account. http://jhbcc.org/stash-your-cash/	Increase rainy day/ future savings	Knowledge
Automatic Workplace Savings	Employers encourage employees to designate a portion of their paycheck to be automatically deposited into a savings account. https://www.unitedway.org/our-impact/focus/income	Increase savings	Engagement

Appendix A. Reviewed Programs (continued)

Program Name	Description- Outcomes and Link to Resources	Goal	Approach
Individual Development Accounts	IDA accounts are designed to help individuals and families whose income is at or below 200% the poverty line save for goals such as homeownership or starting a business. http://www.ohiocdc.org/ida-participants/	Saving for large purchase (e.g., home, business)	Engagement
TOGETHER Financial Therapy Program	The main goal of the TOGETHER program was to reduce the financial stress on and potential harmful effects on both the individual and the couple's relationship and to improve the couple's financial management skills. (Falconier, 2015)	Reduction of couples financial stress and increase couples financial management skills	Engagement

Appendix B. Program Resource List

Financial Education Non-Profits Associated with the Military

- **Military One Source**
  http://www.militaryonesource.mil/financial-and-legal
- **Working Families Success**
  http://workingfamiliessuccess.com/
- **Army Emergency Relief (AER)**
  http://www.aerhq.org/dnn563/
- **Navy-Marine Corps Relief Society**
  http://www.nmcrs.org/
- **Air Force Aid Society**
  http://www.afas.org/
- **The FINRA Investor Education Foundation's Military Financial Readiness Program**
  http://www.finrafoundation.org/programs/military/index.html
  (Delivers free, unbiased financial education tools and training to service members, their spouses and on-base financial educators through a variety of programs and public awareness initiatives. In collaboration with the U.S. Department of Defense Financial Readiness Campaign, the program's primary goal is to help military families manage their money with confidence)
- **Consumer Financial Protection Bureau (CFPB)**
  http://www.consumerfinance.gov/servicemembers/
  - For Service Members, Recently-transitioned veterans, and Vulnerable families Financial Coaching by State
    http://www.consumerfinance.gov/blog/the-launch-of-the-cfpb-financial-coaching-initiative/#coaching
  - For Families
    http://www.consumerfinance.gov/money-as-you-grow/

Financial Education Non-Profits Not Associated with the Military

- **The National Endowment for Financial Education (NEFE)**
  http://www.nefe.org/
  The National Endowment for Financial Education is the leading private nonprofit 501(c)(3) national foundation dedicated to inspiring empowered financial decision making for individuals and families through every stage of life. With more than a quarter-century of dedication to the public good, NEFE continues its legacy of service with commitment to providing financial education and practical information to people at all financial levels, including:
  - Youth and adult financial education resources
  - Training tools from the classroom to the workplace
  - Research and consumer surveys

Appendix B. Program Resource List (continued)

• **Financial Literacy and Education Commission** https://www.treasury.gov/resource-center/financial-education/Pages/commission-index.aspx
• **Money Management International (MMI)** http://www.moneymanagement.org/Credit-Counseling.aspx MMI is the largest nonprofit, full-service credit counseling agency in the United States. Since 1958, we have been helping consumers find the tools and solutions they need to achieve financial freedom. We provide professional financial guidance, credit counseling, community-wide educational programs, debt management assistance, bankruptcy counseling and education services, and housing counseling assistance to consumers via phone, Internet and in-person sessions. MMI is a member of the National Foundation for Credit Counseling (NFCC), Financial Counseling Association of America (FCAA), Consumer Federation of America (CFA), and National Council of Higher Education Resources (NCHER).
• **MyMoney.gov** (US Department of Treasury) http://www.mymoney.gov/Pages/default.aspx
• **Institute of Personal Financial Planning** http://ipfp.k-state.edu/
• **Financial Therapy Degree** http://ipfp.k-state.edu/grad/
• **Association for Financial Counseling**, Planning and Education http://www.afcpe.org/
• **CFED** http://cfed.org/programs/ CFED is a multi-faceted organization working at the local, state, and federal levels to create economic opportunity that alleviates poverty.
• **Financial Counseling Association of America (FCAA)** http://www.fcaa.org/
• **National Foundation of Credit Counseling (NFCC)** https://www.nfcc.org/
• **Federal Deposit Insurance Corporation (FDIC)**: Financial Education for Youth https://www.fdic.gov/consumers/consumer/moneysmart/young.html
• **Financial Educators Council**: Financial Literacy for Kids https://www.financialeducatorscouncil.org/financial-literacy-for-kids/
• **Jumpstart Coalition** http://www.jumpstart.org/

Appendix C. Table of Measures of Financial Stress Applicable to Families

Measure	Description of Measure
Financial Stress Scale Northern, J. J., O'Brien, W. H., & Goetz, P. W. (2010). The development, evaluation, and validation of a financial stress scale for undergraduate students. *Journal of College Student Development*, *51*(1), 79–92.	Measures how often respondents think about a variety of financial-related stressors, such as childcare expenses, holiday expenses, loss of employment, and large debts.
Subjective Economic Hardship Measure Ishii-Kuntz, M., Gomel, J. N., Tinsley, B. J., & Parke, R. D. (2010). Economic Hardship and Adaptation Among Asian American Families. *Journal of Family Issues*, *31*(3), 407–420.	Measures indicators of the extent to which the economic conditions changed the respondents' lifestyle and how much management of finances, pursuit of education or training, and/or housing have been affected by economic conditions.
Economic Stress Questionnaire Barlett, C. P., & Anderson, C. A. (2014). Bad news, bad times, and violence: The link between economic distress and aggression. *Psychology of Violence*, *4*(3), 309–321.	Measures how much stress respondents feel from current economic events.
Financial Anxiety Scale Shapiro, G. K., & Burchell, B. J. (2012). Measuring financial anxiety. *Journal of Neuroscience, Psychology, and Economics*, *5*(2), 92–103.	Measures an anxious disposition toward cognitive engagement with one's personal finances.
Financial Strain Measure Judge, T. a, Hurst, C., & Simon, L. S. (2009). Does it pay to be smart, attractive, or confident (or all three)? Relationships among general mental ability, physical attractiveness, core self-evaluations, and income. *The Journal of Applied Psychology*, *94*(3), 742–755.	Measure experiences of financial pressures.
Financial Strain and Economic Support Krause, N., Liang, J., & Gu, S. (1998). Financial strain, received support, anticipated support, and depressive symptoms in the People's Republic of China. *Psychology and Aging*, *13*(1), 58–68.	Measures financial strain, received financial support, and anticipated financial support.
Family Economic Strain Scale Hilton, J. M., & Devall, E. L. (1997). The Family Economic Strain Scale : Development and Evaluation of the Instrument with Single- and Two-Parent Families. *Journal of Family and Economic Issues*, *18*(3), 247–271.	Measures indicators of financial strain in single and two-parent households.
Financial Strain Survey Aldana, S. G., & Liljenquist, W. (1998). Validity And Reliability Of A Financial Strain Survey. *Financial Counseling and Planning*, *9*(2), 11–19.	Measures financial strain.
Family Economic Pressure Index Grant, K. E., McCormick, A., Poindexter, L., Simpkins, T., Janda, C. M., Thomas, K. J., … Taylor, J. (2005). Exposure to violence and parenting as mediators between poverty and psychological symptoms in urban African American adolescents. *Journal of Adolescence*, *28*(4), 507–521.	Modified from (Conger et al., 1992), measures perceptions of adequate financial resources and specific stressors associated with poverty.

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