EXAMINING HOW HEALTH AND FINANCIAL RESOURCES RELATES TO STRESS

by

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B. S., University of Maine, 2000

MBA, University of Maine, 2006

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

School of Family Studies and Human Services

Personal Financial Planning

College of Human Ecology

KANSAS STATE UNIVERSITY

Manhattan, Kansas

2015

Abstract

Health and financial resources may be two of the most important resources when individuals experience stress. As one of the most commonly cited theories in the organizational behavior literature over the last 25 years (Halbeslegen, Paustian-Underdahl & Westman, 2014), the conservation of resources (COR) theory will be used in this dissertation to view how health and financial resources relate to general life and financial stress.

The data were collected from a convenience sample. Participants consisted of men and women between the ages of 19 and 65, and were primarily White, female, and averaged less than two dependents. Annual household income averaged between $50,000 and $100,000. Variables for this study were operationalized using established measurements where available, with sound psychometric properties.

In order to assess resources, a measure for resources was developed using a principal axis factor analysis from the conservation of resources evaluation (COR-E), which is a list of 74 items identified as valuable resources by the COR theory's author (Hobfoll, 2001). The relationships among these resources along with demographic characteristics on general life stress and financial stress were examined through ordinary least squares regression analyses. Results indicate that health resources, along with being white, as compared to non-whites, make significant contributions to the variance in general life stress. Financial resources, success resources, being white, as compared to non-whites, and level of household income make significant contributions to the variance in financial stress.

This study's results should help individuals better assess the priority and protection they give to their resources. Employers will likely see savings by designing and implementing properly targeted employer sponsored programs that address resource growth and conservation

to help to reduce stress, which should result in reductions to health care costs, fewer lost work days, and increase productivity.

Financial planners, and therapists will find the results useful in improving their efforts toward working with individuals on understanding, prioritizing, and growing their resources as a way to reduce stress. Researchers and educators will use the results of this study to gain a deeper understanding of the use of the COR theory.

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Chapter 1 - Introduction

Introduction

Americans today are overstressed (American Psychological Association, 2015), overweight, and over-indebted (O'Neill, Sorhaindo, Ziao, & Garman, 2005). Good health and economic security are components of a happy and successful life (O'Neill, 2009) and people are generally seeking solutions to improve their health and economic situation (O'Neill et al., 2005). The link between health, economic well-being, and stress has not gone unnoticed.

The costs of stress related health and economic issues are overwhelming. For instance, poor health due to stress has been associated with decreased employee productivity and increased absenteeism (Kim, Sorhaindo & Garman, 2006), which has an estimated cost of over $150 billion a year (Antoniou & Cooper, 2005). According to the American Psychological Association (2015), individuals report health and money issues as top contributors to stress. Stress, a modifiable health risk factor, has been shown to be one of the most expensive factors in employers' health care costs (Goetzel, Pei, Tabrizi, Henke, Kowlessar, Nelson, & Metz, 2012). The financial burden associated with stress and the rising costs of health care is shared by individuals and governments as well. Employed individuals have also reported a specific stress, financial stress, as a contributor to reduced productivity in the workplace (Garman, Leech, & Grable, 1996) and increased absenteeism (Kim, Sorhaindo, & Garman, 2006). Improving health (National Center for Health Statistics, 2012) and financial aspects of individuals through economic policies and workplace health and financial literacy initiatives (Financial Literacy and Education Commission, 2011) are the efforts that are currently underway in the U.S.

These health and financial aspects that help individuals in their battle against stress are viewed as resources for this dissertation. These two resources may be the most important

resources, and individuals can obtain, protect, and grow them in order to reduce stress. As one of the most commonly cited theories in the organizational behavior literature over the last 25 years (Halbeslegen, Paustian-Underdahl & Westman, 2014), the conservation of resources (COR) theory will be used in this current study to view how health and financial resources relate to general life and financial stress.

Health and financial resources, as measured by the conservation of resources evaluation (COR-E), are related to general life and financial stress (Hobfoll, 2001). This list of 74 resource items include items that are related to financial and health characteristics, but also include several items that are related to other themes, such as relationships, time, work, and positive feelings. Therefore, this dissertation looked at what subscales would emerge from the COR-E through factor analysis. Furthermore, there was not a good measure available for health and financial resources for use in the analysis of resources and stress, and the factor analysis provided a useable subscale for these resource variables.

Stress

Stress is a major factor in individual well-being. High stress can lead not only to long-term mental illness, but also physical illnesses, such as obesity, osteoporosis, and cardiovascular problems (De Kloet, Joels, & Holsboer, 2005). The costs associated with mental and physical illnesses can cause a significant burden to one's financial situation. The increased financial burden that can result from illness relates to increased financial stress, which can relate to more health problems. Stress may be further exacerbated by those with lower financial resources that experience health problems (Bennett, Scharoun-Lee, & Tucker-Seeley, 2009). Individuals experiencing financial stress can also experience negative health effects (Drentea & Lavrakas, 2000), which can have negative social consequences. Employees who suffer from financial stress

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are likely bringing these issues to the workplace. Financial stress was shown to affect 15% of workers in the United States, who reported being less productive while at work (Garman et al., 1996). Financial stress also relates to organizational commitment (Kim & Garman, 2004) and absenteeism (Kim, Sorhaindo, & Garman, 2006). A reduction in financial stress can result in substantial savings for employers, governments, and individuals. Due to these negative effects of general life and financial stress, it remains an important area of study for researchers.

Therefore, an understanding of how health and financial resources contributes to an individual's general life stress and financial stress level is the focus of this dissertation. In addition, resources in relation to stress are an increasingly studied concept (Halbeslegen, Paustian-Underdahl & Westman, 2014). However, the link between resources, as measured by the COR-E and stress is unique.

Relating Health, Wealth, & Stress

Health and personal finance challenges affect millions of Americans and typically these two topics have been addressed separately, but studies have shown that health and wealth are strongly related (O'Neill & Ensle, 2010). Several researchers found a strong correlation between the health status and socioeconomic status of individuals (Adams, Hurd, McFadden, Merrill, & Ribeiro, 2003; Lyons & Yilmazer, 2005; Meara, 2001; Meer, Miller, & Rosen, 2003; O'Neill, 2009). Some have also examined the relationship between health behaviors and financial behaviors (Grafova, 2007; Lynch, Kaplan, & Salonen, 1997; O'Neill, 2009; O'Neill et al., 2005). Likely, those with health issues also have income issues as it has been shown that an individual's health relates to their capacity to earn income (O'Neill et al., 2005).

Government and employer sponsored programs exist that are designed to educate and assist individuals to save money and be healthy. Workplace financial education started in the

1990's (Bernheim & Garrett, 2003), but most have focused on investments and retirement (Merican, Zakaria & Rahman, 2012). The approach may need to be from a stress reduction perspective with a resource growth and conservation focus. If a reduction in stress can lead to improved overall well-being, then programs designed to reduce stress may inherently reduce the negative effects of stress. A unique approach to stress reduction may be a resource growth and conservation approach, which is reviewed in this study.

Health and financial resources may be two of the most important resources related to stress. Being in poor health and having poor health behaviors may increase the extent or frequency of health issues. The extra, or unplanned, costs associated with poor health status, such as obesity, relate to significant financial strain. Poor health behaviors, like overeating, or smoking, put added pressure on individuals' budgets. An individual suffering from substance abuse issues may lack the health resources necessary to appropriately cope with stress. Lower health status and unfavorable health behaviors can reduce an individual's health resources and leave them more vulnerable to stressful events. On the other hand, good health behaviors and being in good health can strengthen an individual's resource pool in the battle against stress. Lack of resources may result in individuals being unprepared to meet life's challenges.

A lack of sufficient financial resources may add to an already stressful situation. In order to be more prepared for life's financial challenges, many financial planners and counselors suggest establishing an emergency fund or savings account. Lack of such funds could lead individuals to use debt, such as credit cards, which may carry high interest rates. A job loss, or reduction in hours or pay, may lead individuals to use credit cards to pay for life's emergencies, but also for basic living expenses (Draut & Silva, 2003). Individuals should manage their income, and make purchase choices that protect their financial resources, such as insurance.

Adequate health insurance, life insurance, and liability insurance may lessen the financial burdens that results from catastrophic events.

Research Purpose and Introduction to Theoretical Framework

This dissertation explored levels of general life stress and financial stress as determined by health and financial resources as theoretically anticipated. Data were collected and examined to measure how health and financial resources are associated with both general life stress and financial stress. It is empirically evident that general life stress, financial stress, health, and wealth are associated. The conservation of resources theory (COR) theory will assist in providing an understanding of how health resources and financial resources are an integral part of the resource pool and relate to general life stress and financial stress. Additionally, the COR-E served as the measurement for health and financial resources.

Theoretical Framework

The COR theory (Hobfoll, 1989) is based on the premise that individuals build and protect their resources in order to spend them when needed. These resources will be needed, as anticipated by Hobfoll's theory, during stressful times, which are a result of an actual loss or potential loss of resources. Hobfoll considers resources as a means to assist in the acquisition of other resources. For example, money is inherently valuable because it can be used to pay for transportation, to get to work, to earn more money. Saving for retirement or emergencies, is a critical resource that will be needed when you either decide to retire or are unable to earn money.

Other resources, identified by Hobfoll (2001), relate to health, such as having adequate medical insurance, or adequate food. Being in good health is inherently valuable because it allows you to be more productive at work. It also allows you to spend more time, possibly better

quality time with friends and family. Consuming adequate food, managing your time in order to get adequate sleep and exercise, should increase your health resource pool as well.

Hobfoll (2007) and colleagues devised a list of 74 resources that were identified as valid, such as personal health, adequate food, transportation, time, hope, humor, feeling successful, and accomplishing goals, to name an few. Protecting and growing the resource pool should allow individuals to have the resources necessary to pull from when faced with a stressful situation. A conceptual model based on Hobfoll's (1989) COR theory is presented in Figure 1.1.
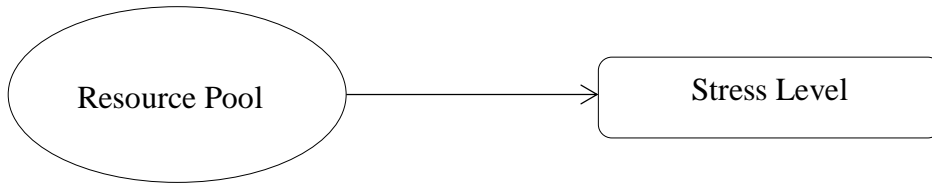
Figure 1.1 Conceptual Model showing how resources relate to stress level

Definitions of Components of the Conceptual Model

This section includes definitions of the components in the conceptual model for use in this dissertation.

Resource Pool

The resource pool is the combination of all of the resources that individuals have that can be used in times of need. This includes "objects, personal characteristics, conditions, or energies" (Hobfoll, 1989, p. 516), such as financial and health resources, time management, personal success, relationships, work resources, and also includes demographic characteristics that can shape an individual's perception of the need. For example, an individual nearing retirement will likely be more distressed by their level of retirement preparedness than a young adult with several years to accumulate savings. Financial resources are defined as anything one owns or does that has economic value. Financial resources can grow if invested in and protected, but are also subject to loss if resources are being depleted as a response to life's challenges. For instance, if an individual is in need of car repairs, and needs to use a credit card to fund the expense, this will reduce that individual's ability to be financially prepared for the next emergency. Health resources are related to physical and mental wellness. Health resources can grow if health aspects improve, and can also be subject to a reduction or loss if health aspects decline. For example, if an individual invests in their health by eating well and exercising, their health status will likely improve, which strengthens their resource pool. Although health and financial resources are the primary predictor variables in this dissertation, there are other resources that exist in an individual's resource pool. For example, time management is a resource that if an individual manages their time well, they will feel like they have adequate time to take care of themselves, their family, as well as adequate time for work. Personal success at home and at

work provides an energy and motivation to continue even when faced with challenging events. A good social network and positive relationships will provide more resources to pull from when needed. Work resources are also important resources for individuals who likely spend most of their awake hours at work. Having the necessary tools for work and an understanding manager are valuable resources.

Stress

Stress is conceptualized as the unmet need that is required of the individual that leaves them in a state of disequilibrium (Mochis, 2007). If the resources are unavailable to meet the needs required to get to a state of equilibrium, the individual is likely to report a higher degree of stress than one who is more prepared, and in this dissertation, has the resources to pull from (Hobfoll, 1989).

Research Questions

Three research questions are proposed for this study:

(a) Are there subscales of the Conservation of Resources Evaluation?

(b) How do resources relate to general life stress as explained by the COR theory?

(c) How do resources relate to financial stress as explained by the COR theory?

Research Objectives

The results from this study presents a subscale of resources that act as a measure for resources for use in future research as well as help individuals understand their resources, and how prioritizing some resources may reduce stress.

The findings of this study will also have implications for financial planners, and therapists in their efforts toward working with individuals on understanding, prioritizing, and growing their resources as a way to reduce stress. Researchers and educators will use the results

of this study to gain a deeper understanding of the use of the COR theory. This study builds on existing literature and advance the understanding of how resources relate to stress. The resource subscales will advance the use of the COR-E in future research.

Employers will likely see savings by designing and implementing properly targeted employer sponsored programs that target financial and health resource growth, retention, and protection in an effort to reduce stress. Successful programs should result in reductions to health care costs, fewer lost work days, increased productivity, and improved overall well-being.

Limitations of the Study

There are limitations within which this study will be conducted. First, the sample used to collect the data was a sample of convenience. The sample is not representative of the general population. Second, the conceptualization of financial resources and health resources, as they relate to general life stress and financial stress may be limiting as they are measured as a one item scale. Therefore, definitions and support for these concepts were provided.

Third, the sample was also familiar to the researcher, which may have introduced bias that affected the respondent's ability to honestly and accurately provide information that is sensitive and personal in nature. To increase generalizability of the findings, follow-up studies should collect data from a larger, more diverse population.

Summary

The purpose of this dissertation is to explore general life stress and financial stress level, both subjectively measured, and their relationship with resources, as theoretically anticipated. Additionally, resources were assessed using the COR-E as a way to measure not only health and financial resources, but also to recognize the subscales that exist within the list of 74 items. According to the COR theory, individuals will seek to gain, protect, and maintain their resources.

A threat of loss of those resources, actual loss, or no gain from investment in resources relates to stress (Hobfoll, 1989). Since financial and health resources are so intertwined (O'Neill, 2009), the two are of particular importance in this study. Understanding how these resources relate to stress would allow therapists and those in the financial planning and counseling profession to address an individual's resource protection and gain in order to reduce stress. Employers would also find the results useful, as a majority of the population spends a major part of their time at work, and stress can have negative consequences, such as low productivity and high turnover (Kim & Garman, 2004; Kim, Sorhaindo & Garman, 2006). The sample population consisted of adults aged 19 to 65. A multivariate analysis using ordinary least squares (OLS) regression was used to analyze the data. A principal axis factor analysis was used to see what subscales emerged from the COR-E.

There are two regression models included in this research. The models explored associations of resources, and demographic characteristics on general life and financial stress, respectively. Due to the negative effects of stress, such as long-term mental illness, physical illnesses, such as obesity, osteoporosis, and cardiovascular problems (De Kloet, Joels, & Holsboer, 2005), it is important to better understand how resources relate to an individual's general life and financial stress levels. Individuals can use the results of this study to understand their own resource pool and how growing and protecting their resources can help in reducing stress. The findings would also allow employers to develop programs that can help employees protect and gain resources to better prepare them for stressful occasions.

Chapter 2 - Literature Review

As one of the most commonly cited theories in the organizational behavior literature over the last 25 years (Halbeslegen, Paustian-Underdahl & Westman, 2014), the conservation of resources (COR) theory will be used in this current study to view how health and financial resources relate to general life and financial stress. An overview of the theoretical framework used to guide this dissertation is provided followed by an explanation of how the concepts relate to the research questions in this chapter. In addition, the relevant literature related to resource profiles, financial stress, general life stress, and demographic characteristics will be reviewed.

Theoretical Framework and Related Literature

The conservation of resources (COR) theory was constructed by Hobfoll (1989) in response to a need for a stress theory that integrated both internal and external resources. Hobfoll outlined COR theory as a stress model that views stress as a result of actual or potential resource loss or lack of resource gain after investment. "The basic tenet of COR theory is that individuals strive to obtain, retain, protect, and foster those things that they value" (Hobfoll, 2001, p. 341). A primary goal of human functioning is concerned with earning, protecting, and spending resources. We work to earn money, and spend it for food and shelter. We consume calories, and expend them for work and play throughout the day. We build social networks, and call upon them when support is needed. According to Hobfoll (1989), anything valued by individuals that help during a stressful situation, can be a resource, such as personal health, adequate income, retirement security, and financial stability (Hobfoll, 2001). Along with colleagues, Hobfoll (2001) devised a list of 74 resources that were identified as valid in many Western contexts, such as personal health, adequate food, time, and transportation. This dissertation follows the COR assumption that people are somewhat strategic in how they determine what resources are

valuable. For example, retirement security, which is one item on the list of 74, may be valued more by individuals that are nearing retirement than younger individuals that have several years to work and save. This suggests that the personal characteristics of individuals provide insight into the value placed on resources (Morelli & Cunningham, 2012). Additionally, the notion of resource caravans (Hobfoll, 2002, 2011), which is the idea that a group of resources occur together, was a premise for its analysis and use in this dissertation.

Hobfoll (2001) also noted two principles associated with resource gain and loss: (a) events that decrease resources have a higher stress implication than events that increase resources and (b) individuals must invest resources in order to protect, recover, and gain resources. The first principle is descriptive of prospect theory (Kahneman, 1979) used in the financial planning field, in that losses are more painful than gains are rewarding. According to COR theory, one's level of stress can be predicted by the amount of resources available (Hobfoll, 1989). If an individual has the resources needed to address demands, then a stressful event may have less effect on them as opposed to an individual with fewer resources. Resources have been defined as "those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies" (Hobfoll, 1989, p. 516). According to the COR theory, people are inherently motivated to protect their resources, as well as accumulate more (Hobfoll, 2001).

In line with the COR theory, the review of literature will focus on three areas: (a) stress outcomes—general life stress and financial stress, in particular; (b) resource pool profile—with a focus on health and financial resources; and (c) empirical evidence relating financial and health resources.

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Stress Outcomes

General Life Stress

To understand and conceptualize how general life stress will be used in this dissertation, it is necessary to be familiar with how others have defined this concept. Many definitions of the term "stress" exist (Furnham, 1997; McGuigan, 1999; Selye, 1983). One of the first attempts appears to be by Hans Seyle in the 1930's, as the body's physical response after exposure to disruptive environmental stimuli (Selye & Cherry, 1978). McEwen expanded on Selye's General Adaptation Syndrome (GAS) (Viner, 1999) by making a more extensive assessment of how people perceive and receive stress (McEwen, 1998). The perception of stress was thought to be influenced by an individual's experiences, genes, and behavior (MacArthur & MacArthur, 1999). An individual's response, whether mental, or physical, that is the result of a perceived threat or demand, may be due to the inability to respond at the time of need (Furnham, 1997).

General life stress can be defined as a stimulus, a response, or a combination of both (Moschis, 2007). The key assumption is that there is an experience or circumstance, known as a stressor, which augments change. If an individual has the appropriate resources available to cope with that stress, this may limit or overcome any negative outcome. This is an objective way to view general life stress, as a stimulus. Stress can also be viewed in terms of acute and chronic, where acute is considered a stressor (a life event or observable event during the recent past that may be threatening because it represents change) and chronic stress is a continuous or persistent condition and its effects are enduring (McEwen, 2007; Radenback, Reiter, Engert, Sjoerds, Villringer, Heinze, Deserno & Schlagenhauf, 2015). Subjective definitions of stress have been found to be more useful and subject to less criticism (Elder, George, & Shanahan, 1996), which provides support for its subjective use in this dissertation.

General life stress will be viewed as related to resources, namely health and financial

resources. Individuals subjectively value stress based on their physical and psychological well-

being, as well as their family characteristics (McCubbin & Patterson, 1983). Certain

characteristics may have an influence on how individuals perceive some events as more

threatening than others (Furnham, 1997; Kirkcaldy, Shephard & Furnham, 2002). An

individual's resources, such as health insurance, money to pay for necessities, and other health

and financial related resources, may not be sufficient for the demands that are requested of them.

Financial Stress

To understand and conceptualize how financial stress will be used in this study, it is

necessary to be familiar with how others have defined this concept. Financial stress has also been

referred to as financial strain, economic stress, or economic strain, and most notably defined as

"an evaluation of one's current financial status such as perceived financial adequacy, financial

concerns and worries, adjustments to changes in one's financial situation, and one's projected

financial situation" (Voydanoff, 1984, p. 275). Half of general life stress can be attributed to

financial stress (Bailey, Woodiel, Turner & Young, 1998). This is not surprising as many of the

fundamental activities of daily living are tied to the level of personal financial resources

available (Peirce, Frone, Russell, & Cooper, 1996). The stress related to personal finances is a

perception of the individual, which is a subjective phenomenon. A subjective perception of

financial stress has been used frequently by other researchers interested in this concept (Xiao,

Tang & Shim, 2009), which provides support for its use in this study.

If individuals perceive their income is enough to meet their needs, then it is likely they

have lower financial stress. This can also be applied to medical insurance coverage, level of

retirement assets, and other financial matters. If individuals' level of debt is within their ability to

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pay it down, the outstanding debt may be a valued part of their overall financial plan. These items are viewed as resources for this dissertation. The key may be what resources the individual values over other resources and how those resources are applied to meet the needs of the individual. This dissertation will focus on the resources of the individual in terms of gains and losses in resources and financial stress will be viewed as predicted by resources.

Resource Pool Profile

To study how financial and health resources relate to both financial and general life stress, a construct of individual resources based on the COR theory (Hobfoll, 1989; 2001) will be needed. Hobfoll (2002) defined resources as those that are personal traits or values, and those that act as a means to obtain these values.

Financial resources

Within the framework of COR theory, general life and financial stress will be viewed as associated with financial resources (Hobfoll, 2001). Of the 74 resources listed as part of the Conservation of Resources Evaluation (COR-E) (Hobfoll, 2001), nine are identified as financial resources as they relate to the financial aspects of one's life, such as having savings, adequate financial credit, financial stability, and retirement security. Based on the theorized direction and related literature, it is hypothesized that financial resources will be negatively related to general life stress and financial stress.

Quick and Gavin (2001) examined wealth perspective through the lens of COR theory and purported that the lower one's financial status, as measured by income, education, and occupation, the more susceptible he is she is to the stresses of life in terms of the vulnerability to resource loss, as well as the lack of resource reservoirs needed to invest or to overcome a loss. Fox and Chancey (1998) found a significant relationship between perceived economic well-

being and stress among 366 householders age 18 to 65 in a southeastern U.S. metropolitan county. Individuals with financial reserves experienced fewer effects of job and economic loss, according to Kessler, Turner, Blake, and House (1988). Long-term distress was less severe for those individuals that had their material asset losses reimbursed through insurance payments after a natural disaster (Ironson, Wynings, Schneiderman, Baum, Rodriguez, et al., 1997). An examination of three resources, financial, social, and psychological, on job seekers fatigue, reemployment quality, and reemployment outcomes by Lim, Chen, and Tan (2013) found the lack of financial and social resources after job loss negatively impacted the job seekers. The socioeconomic status of African American women related to their ability to cope with stress, which was associated with poorer health (Schulz, Israel, Williams, Parker, Becker, & James, 2000).

These previous studies used aspects of the COR theory that are consistent in this dissertation and supports the use of this framework in answering the two main research objectives, which is how resources relate to general life and financial stress. This dissertation is unique in its design. All 74 of the resources from the COR-E were asked of survey participants and through factor analysis, the groups of resources that empirically clustered together were used as measures for the two main independent variables, financial and health resources. The factor analysis allowed for the results to indicate other resources that emerged as potentially important predictors of stress for use in the regression analysis.

Health resources

Within the framework of COR theory, health resources were viewed as indicators of financial and general life stress (Hobfoll, 2001). Of the 74 resources listed in the COR-E, six were identified as health resources as they are related to the health aspects of one's life, such as

personal health, health of loved ones, and having stamina and endurance. Based on the theorized direction and related literature, it is hypothesized that health resources will be negatively related to general life stress and financial stress.

Individuals in better health are likely able to increase productivity at work, which could result in higher earnings. Better health may result in lower medical costs. According to a study by the Center for Studying Health System Change (HSC), about 20 million American families, approximately 43 million people, reported problems paying medical bills in 2003 (May & Cunningham, 2004). Two-thirds of these families reported having medical insurance. Stress may be the result of an individual's perception of the adequacy of the insurance, coupled with other financial resources needed to meet the medical costs. Unpaid medical bills can relate to reductions in savings, increases in other debt, and even bankruptcy (O'Neill, Sorhaindo, Xiao, & Garman, 2005; Seifert & Rukavina, 2006).

An individual's health status is considered a resource that has value. Few, if any individuals would question the value of good health. A significant relationship between stress and overall health status was found in a sample of 100 individuals from California, age 45-64 with at least an eighth grade education, and an income over $7,000 per year (in 1982 dollars; DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982). The quality of personal health was found to be significantly associated with psychological resilience as explained using COR theory by Bonanno, Galea, Bucciarelli, and Vlahov (2007), using 2,752 individuals within the New York, New Jersey, and Connecticut regions surrounding New York City six months after the terrorist attacks on September 11, 2001. Bonanno et al. measured resources as including the availability of a regular physician, and retaining or losing health insurance. Stress was found to be negatively

related to the physical health of infants and their mothers when resources were deficient (Nuckolls, Cassel, & Kaplan, 1972).

Health behaviors include the choices that individuals make that result in better health, or in some cases, poor health. For Lakerveld, Bot, Chinapaw, Knol, de Vet, and Nijpels (2011), healthy lifestyle behaviors consisted of three parts—physical activity, dietary behavior, and smoking. A study by Pronk, Anderson, Crain, Martinson, O'Connor, Sherwood, and Whitebird (2004) indicated that the notion of a comprehensive lifestyle-related health measure holds promise as a meaningful summary metric. Their assessment of healthy lifestyle factors also included physical activity, diet, and smoking status. In a study by the American Psychological Association (2006), respondents who reported being "very concerned" about the stress in their lives, were more likely to be smokers than the respondents who reported being "not at all concerned" about the stress in their lives. Better health behaviors may increase longevity, which could result in better returns from future income streams, such as Social Security benefits (Lee & McKenzie, 1999).

Unhealthy behaviors, like substance abuse, lack of exercise, and unhealthy eating have been linked to stress (Weibe & McCallum, 1986). The psychology of the stress response and eating were studied by Adam and Epel (2007), who looked at how the obesity epidemic may be intensified by chronic stress. The stress response can associate with physiological, psychological, and behavioral changes that relate to eating performance (Adam & Epel, 2007). Stress can derail healthy eating behavior (Epel, Lapidus, McEwen, & Brownell, 2001). Lee, Moschis, and Mather (2001) suggested that people change their consumption habits in an effort to cope with stress. Stressful events, or stressors, can put individuals in a state of disequilibrium and they consume in an effort to return to equilibrium (Moschis, 2007).

Although stress can be a cause and a consequence of poor health, Lyons and Yilmazer (2005) found the direction of causality is more likely from poor health to lower socioeconomic status, since serious health issues can result in heavy financial burdens, but it is less likely that a financial burden will increase poor health. However, other researchers viewed the direction from stress to health, as more profound. Tice, Bratslavsky, and Baumeister (2001) found that people will choose the immediate gratification of a non-nutritious food choice when under stress. Furthermore, they determined that this is a short term fix. An individual that chooses to cope with stress with a positive health behavior, such as eating a nutritious snack, may experience a more long term effect. In Mehlum's (1999) study on alcohol and stress, diet, smoking, and alcohol consumption was used as strategies for coping with stress by respondents.

As noted above, there is extensive research supporting the connections between stress and health status and health behaviors. This dissertation viewed these as health resources and participants were asked to indicate the change in these resources over the last twelve months, which varied from loss to gain. Health as a resource is a unique way to view this connection and may be a more useful way to design programs that are targeted at lowering stress and improving health.

Demographic variables

Several demographic variables have been shown to have associations with general life and financial stress, including age, race, education, marital status, gender, family size, and household income. Being female was found to be associated with higher levels of stress, measured by a reduced likelihood of resilience, after a disaster(Bonnano et al., 2007). Bonnano et al. also found associations between being Hispanic and African American with higher levels of stress, however it was noted that when socioeconomic status (SES) was controlled for, the

relationship was non-significant for Hispanics. In the same study, Asian participants were three times as likely to be resilient as White participants (Gallo & Matthews, 2003). Older and more educated individuals were less likely to have post-traumatic stress disorder (PTSD), an extreme form of stress (Bonanno & Kaltman, 1999; Bonnano et al., 2007; Brewin, Andrews, & Valentine, 2000). In contrast, being older, divorced, separated, or widowed was found to be significantly associated with high levels of stress, and gender and ethnicity did not appear to be significantly related to stress among a sample of 243 social workers in northern England (Collings & Murray, 1996). Income level has been found to be associated with PTSD symptoms when considered separate from other factors, but was not found as explaining much of the variance when controlling for other demographic variables (McCarren, Janes, Goldberg, Eisen, True, & Henderson, 1995; Middleton, Willner & Simmons, 2002). Family size is included as a predictor variable of interest due to the possible constraints that extra members of the family inherently have on financial resources.

The demographics of the participant are particularly important when using COR theory as a framework for viewing the relationship between resources and stress. Resources are valued by the individual. Certain cultures may put more value on financial resources than relationships and social networks. Furthermore, it may be based on age, or family size across cultures.

Relating Financial and Health Resources

The relationship between health and financial aspects has been studied extensively and the findings conclude a strong positive correlation (Adams, Hurd, McFadden, Merrill, & Ribeiro, 2003; Adler & Ostrove, 2006; Deaton, 2002; Lyons & Yilmazer, 2005; Meara, 2001; Meer, Miller, & Rosen, 2003). Lyons and Yilmazer (2005) used data from the Survey of Consumer Finances to examine the relationship between health status and financial strain. They found that

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poor health significantly increases the probability of financial strain. Also, they concluded that health may be contributing to widening financial disparities. O'Neill (2009) presented her position on the strong relationship between health and wealth and laid out six key connections between health and personal finance: (a) financial effects of health and longevity, (b) increasing workplace intervention, (c) costs of an unhealthy lifestyle, (d) income, (e) behavioral changes, and (f) psychological and social factors. O'Neill's proposed actions which included helping program participants develop a future and internal locus of control by encouraging small action steps that produce tangible results, educating employers about the benefits of workplace programs on health and wealth, using emotion as a strategy to convince individuals to change their unhealthy behaviors, and helping learners understand financial implications.

These connections provide support for the research objectives outlined in this dissertation, however, the design is unique relative to prior literature that incorporates health and wealth. This dissertation is focused on the resources of the individual, namely health and financial resources and their relationship with stress. As shown in Figure 1.1, the path is from resources to stress. When a stressful event occurs, individuals employ resources, which results in a reduction to the resource pool. Reductions to the resource pool add to stress. Individuals also invest resources in order to gain resources. If successful, their resource pool grows. If unsuccessful, this results in a loss of resources, which results in reductions to their resource pool, and increases to stress. Along with these principles, and following COR theory's corollaries that individuals who have more resources are more capable of resource gain and report lower levels of stress, and individuals that have less resources are less capable of resource gain and report higher levels of stress. Based on the theorized direction and related literature, it is hypothesized that increases in the resource pool are negatively related to general life stress and financial stress.

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In essence, COR theory suggests it may be possible to understand an individual's level of stress by examining gains and losses to the resource pool along with demographic characteristics. The demographic variables are interesting not only as control variables, but also as social and cultural characteristics. Hobfoll (2001) indicated that the predictive capacity of COR theory will be limited if the social and cultural scripts of individuals are not considered. Hobfoll recognized stress situations as perceived differently based on social and cultural scripts. For example, an individual who is nearing retirement may suffer from higher stress if their financial stability has been lost. Therefore, a loss or potential loss of retirement stability may relate to a near retiree reporting higher levels of stress. A resources importance can be a product of a demographic factor, such as age. The expected relationship between demographic characteristics, and general life and financial stress based upon relevant literature can be viewed in Table 2.1.

Table 2.1 Expected Direction of Relationship

Demographic predictor variables	General life and financial stress
Age	-
Race (White)	-
Education (Bachelor's or above)	-
Marital Status (Married)	-
Gender (Male)	+
Dependents	+
Household Income	-

Chapter 3 - Methods

In the previous chapters, an introduction to the research was presented. This included an introduction to the problem, relevance of the problem, the theoretical framework and hypotheses that were investigated and served to direct the data analysis. In addition, a review of the relevant literature related to resource profiles, general life stress, financial stress, and demographics established a background of support for the study. The review indicated that several factors relate to general life stress and financial stress and several resources have been studied as individual variables in relation to stress.

This dissertation examined the same model with two separate target variables—general life stress and financial stress. The research examined the relationship between resources and stress while controlling for demographic characteristics. Using ordinary least squares (OLS) regression, the models were as follows:

(a) The relationship between demographics, resources, and general life stress.

a. $Y_{gls} = \beta 0 + X_d + X_r + e$

Where Y_{gls} denotes the general life stress level, $\beta 0$ is the slope, X_d denotes demographic characteristics, X_r denotes increases/decreases in resources, and e as the error term.

(b) The relationship between demographics, resources, and financial stress.

a. $Y_{fs} = \beta 0 + X_d + X_r + e$

Where Y_{fs} denotes the financial stress level, $\beta 0$ is the slope, X_d denotes demographic characteristics, X_r denotes increases/decreases in resources, and e as the error term. The demographic variables of interest will help determine if the different levels of general life stress and financial stress are a result not only of resource capacity, but also of social and limited cultural differences.

Participants

The analysis for the current study included 271 survey participants with 243 useable responses for the general stress and 244 in the financial stress analysis. There were nearly twice as many females (61.99%) than males (38.01%), and the average age of participants was 41 years ($M = 40.92$, $SD = 11.51$). Participants were primarily white (83.95%), and married (61.32%). Although most (62.14%) of the respondents did not have a bachelor's degree, a noteworthy portion did (37.86%). The average number of dependents reported by respondents was 1.5 ($M=1.52$, $SD = 1.48$). The average household income category was more than $50,000 but less than $100,000 ($M = 3.86$, $SD = 2.54$). Descriptive statistics are shown in Table 3.1 below.

Table 3.1 Descriptive Statistics of Demographic Variables (N = 243)

Variables	*M*	*SD*	Range	α
Age	40.92	11.51	19 – 65	
Race[a]	.84	.37	0 – 1	
Marital Status[b]	.61	.49	0 – 1	
Education[c]	.38	.49	0 – 1	
Dependents	1.52	1.48	0 – 6	
Household Income[d]	3.87	2.54	1 – 13	
Gender[e]	.38	.49	0 – 1	

[a]Race: 0 = *Black, Asian, Hispanic/Latino,* 1 = *White*. [b]Marital Status: 0 = *never married, separated, divorced, widowed, or not married but living with significant other*, 1 = *married*. [c]Education: 0 = *less than high school, high school graduate or GED, some college, Associate's degree, 1 = Bachelor's degree, Master's degree, or Doctoral degree,=.* [d]Household income: ranged from 0 = less than $25,000 to 13 = more than $300,000. [e]Gender: 0 = *female*, 1 = *male*.

Survey Instrument

In Fall 2014, based on the conservation of resources theory and relevant literature, a survey was developed to assess one's resources, financial stress and general life stress level, along with demographic variables of interest. Upon receiving approval from the university's Institutional Review Board (IRB), the survey was pretested among a doctoral cohort at a Midwestern university. This cohort provided insightful suggestions for the readability, wording, and question order of the survey instrument. The questionnaire was finalized and disseminated in Spring 2015. The instrument was a 132-item questionnaire administered using the Qualtrics online survey service to a sample of convenience. The average time it took to take the survey was 15 minutes. The first question of the survey gave participants the necessary information about the purpose, procedures, duration, risks, benefits, confidentiality, compensation, voluntary nature of participation, and contact information of this study.

The survey was administered via an email invitation to the doctoral students at a Midwestern university, as well as in invitation via Facebook and LinkedIn. The researcher also posted an invitation to take the survey in the breakroom of a New England financial institution's office. There was one $200 incentive that was based on a random drawing at the close of the survey. Follow up reminders were sent every week on Facebook for five months.

There were 13 predictors in the final model and the desired sample size was 153. In order to reach the desired number of responses, this researcher also reached out to Qualtrics and paid for 100 responses in June of 2015, which increased the total to 275 responses, of which 271 were usable. Qualtrics outsources their panels to the resources of large panel providers, such as researchnow.com. The respondents volunteer to take surveys and are paid an hourly rate. They are compensated at a rate of $10 per hour, which may vary depending on the specifics needed by

the researcher. Since this survey was only restricted to individuals between the ages of 18 and 65, the responses to the survey were returned within 24 hours of the request and the cost was $500, which was paid by this researcher. Only those respondents who provided useable information for all variables were included for analysis. This resulted in a useable sample of 243 respondents in the general stress OLS regression model and 244 in the financial stress model.

Respondents who had missing values were compared to those analyzed to check for any statistically or substantively significant differences. The missing values were either intentional (i.e., "you can skip this section if you do not have a spouse") or the respondent chose not to answer certain items. Those 28 respondents with missing data that were not used in the final analysis were not different on key demographic, resource, or outcome variables. General stress and financial stress reported by the missing data group was an average of 6.05 and 4.98, respectively as compared to the group without missing data, which averaged 6.08 and 5.48, respectively. The demographic characteristics of the missing data group reported being primarily married, White, and female, with an average age of 36.84, and primarily had a bachelor's degree. These are consistent with the demographic characteristics of the sample used in the analysis.

The survey instrument can be viewed in Appendix A.

Measures

Variables for this study were operationalized using established measurements where available, with sound psychometric properties, in order to improve reliability and validity of the study.

General life stress

General life stress, the first target variable, is defined in this study as the respondent's self-reported perception of their feelings of stress and was measured by one 10-point Likert-type

question. Respondents were asked, "over the last 12 months, what is your level of general life stress?" Their responses were scaled from (1) *Not at all Stressed* to (10) *Extremely Stressed*. The successful use of this one item stress measure was used along with a stressful events scale by Joo and Grable (2004) in their study on the determinants of financial satisfaction and provides support for its use in this dissertation. A score of 10 would indicate twice as much stress as a score of 5. Using the COR theoretical framework, the results of the general life stress measurement allowed for testing the relationship between the predictor variables and level of general life stress.

Financial stress

Financial stress, the second target variable, is defined in this study as the respondent's self-reported perception of their feelings. For this study, the financial stress level of respondents was measured by one 10-point Likert-type question. Respondents were asked, "over the last 12 months, how stressed have you felt about your personal finances?" Their responses were scaled from (1) *Not at all Stressed* to (10) *Extremely Stressed*. In a review by Joo and Grable (2004), of the determinants of financial satisfaction, a one-item measure of financial stress was used successfully to show the relationship between level of financial stress and financial satisfaction.

Resources

All 74 of the resources in the Conservation of Resources Evaluation (COR-E) scale (Hobfoll, 2001) were included in the survey. Respondents were asked "for each item listed below, please select from the dropdown whether you have experienced 1) an actual loss, or decrease, in this resource, 2) a threat of loss, or decrease, in this resource, 3) no change in this resource, or 4) a gain, or increase, in this resource, over the last 12 months." Upon initial review of these 74, it was expected that five categories would emerge as common themes and included

(a) financial resources, (b) health resources, (c) work resources (d) relationship resources, and (e) time resources. A principal axis factor analysis was conducted on the 74 resources with oblique rotation in order to group them into subscales.

Financial resources

Financial resources were defined as anything one owns or has access to that holds economic value. From the 74 item scale identified by Hobfoll and his colleagues, via factor analysis, there were nine items that were clustered together to measure financial resources. The nine items were as follows:

(a) Money for extras;

(b) Savings or emergency money;

(c) Adequate income;

(d) Adequate financial credit;

(e) Financial assets (stocks, property, etc.);

(f) Financial stability;

(g) Money for transportation;

(h) Retirement security;

(i) Money for advancement or self-improvement (education, starting a business).

Participants responded whether they had experienced variations of gain or loss. Item's responses were coded as 1 = *Actual Loss or Decrease in this Resource*, 2 = *Threat of Loss of this Resource*, 3 = *No Change in this Resource,* and 4 = *Gain or Increase in this Resource* over the past 12 months for each of the nine financial resources indicated. Responses were summed for a total possible score of 9 to 36, where a higher score indicated that individuals perceived getting closer to gains in resources. According to the COR framework for this study, an increase in

financial resources should be associated with lower stress levels. Alternatively, a perceived decrease in financial resources should be associated with higher levels of stress. Cronbach's alpha was .92 in this sample.

Health resources

Health resources were defined using six-items related to health. Health resources for this study were measured using the Conservation of Resources Evaluation (COR-E) scale (Hobfoll, 2001). A factor analysis did not support a subscale of items that appropriately represented health resources. Therefore, six items were chosen as all of the items that addressed health resources to be included out of the total of 74 identified by Hobfoll and his colleagues. The six items were as follows:

(a) Personal health;

(b) Adequate food;

(c) Health of family/close friends;

(d) Time for adequate sleep;

(e) Stamina/endurance;

(f) Spouse/partner's health.

Participants responded whether they had experienced gain or variations of loss, (1) *actual loss or decrease in this resource*, (2) *threat of loss of this resource*, (3) *no change in this resource,* and (4) *gain or increase in this resource* over the past 12 months for each of the six health resources indicated. Responses were summed for a total possible score ranging from 6 to 24, where a higher score indicated a gain in resources. According to the COR framework for this study, an increase in health resources should be associated with a lower stress level. Cronbach's alpha reliability for this sample was .62.

Other resources

Although it was expected that the five categories that would result from the principal axis factor analysis that was conducted on the 74 resources in the COR-E would include (a) financial resources, (b) health resources, (c) work resources, (d) relationship resources, and (e) time resources, this was not supported by the factor analysis. There were five subscales, which did include financial resources discussed above, but did not include health resources. The other four factors identified by the analysis, included (a) positive feelings resources, (b) work resources, (c) success resources, and (d) relationship resources. The positive feelings subscale consisted of the following six items:

    (a) Sense of pride in myself;

    (b) Hope;

    (c) Sense of optimism;

    (d) Feeling that I have control over my life;

    (e) Knowing where I am going with my life;

    (f) Positive feelings about myself.

These items were common to positive feelings resources, which was not an expected common theme. The Cronbach's alpha on these items was .89.

The next factor was an expected common theme that would emerge from the list of 74 resources. The items that were grouped together in this factor centered around a common theme, work resources, and included the following items:

    (a) Understanding from my employer/boss;

    (b) Support from co-workers; and

    (c) Help with tasks at work.

These items all centered around work resources, which was expected, based on the initial review of resources. The Cronbach's alpha on these items was .83.

The items that were grouped together in the fifth factor centered around a common theme, success resources, and consisted of the following four items;

(a) Feeling that I am successful;

(b) Feeling valuable to others;

(c) Feeling that I am accomplishing my goals;

(d) Acknowledgment of my accomplishments.

These items were combined and this variable was analyzed. These items had a reliability of .87 based on Cronbach's alpha.

The next factor centered around relationships, which was an expected common theme, and consisted of two items;

(a) Good marriage/relationship, and

(b) Intimacy with spouse or partner.

The Cronbach's alpha on these items was .87.

Demographic variables

Demographic characteristics of the respondents were collected and include age, race, education, marital status, gender, household income and family size. Age was measured continuously and ranged from 19 to 65. Family size was measured by asking respondents how many people were financially dependent on them. Answers ranged from 0 to 10 or more. Race was measured by asking respondents to select the race that best describes them from a dropdown list. Options included Black, Asian, Hispanic/Latino, other or White. The sample did not consist of enough variability in race and there were a limited number of minority races

reported by respondents, therefore this variable was recoded into a dichotomous variables where

(1) White and (0) for all other race categories for use in the analysis. Education was measured

by a categorical variable with seven response options: less than high school graduate, high

school graduate or GED, some college, Associate's degree, Bachelor's degree, Master's degree,

and Doctoral degree. Education was also recoded into a two categories: (a) all responses below

a Bachelor's degree = 0, and (b) Bachelor's degree and above = 1. Marital status was measured

as (1) married and (0) never married, separated, divorced, widowed, or not married but living

with significant other. Gender was measured as (1) male and (0) female. Household income was

measured in $25,000 increments. An answer of 1 indicated the total household income of the

respondent was less than $25,000. An answer of 13 indicated the total household income of the

respondent was greater than $300,000. Household income was treated as a continuous variable

in the analysis.

Table 3.2 Measurement of Variables

Variables	Measurement
Target Variables	
Financial stress level	Scores ranging from 1 to 10
General stress level	Scores ranging from 1 to 10
Predictor Variables	
Financial resources	Summated scores ranging from 6 to 36
Health resources	Summated scores ranging from 6 to 23
Success resources	Summated scores ranging from 4 to 16
Work resources	Summated scores ranging from 3 to 12
Relationships resources	Summated scores ranging from 2 to 8
Positive feelings resources	Summated scores ranging from 6 to 24
Age	Ranging from 19 to 65
Race	1 if White; 0 otherwise
Bachelor's	All responses below Bachelor's degree $= 0$ and all responses with a Bachelor's degree and above $= 1$
Marital status	1 if respondent was married; 0 otherwise
Gender	1 if respondent was male; 0 if female
Family size	Scores ranging from 0 to 10
Household income	12 categories ranging from <$25,000 to >$300,000

The wording of the questions had consistent meaning across the population of interest. Questions were grouped so they flowed smoothly and easily. Closed ended questions were used with many including ranges as possible answers for increased accuracy of factual responses and where great precision was unnecessary. One open ended question was used where the list of possible answers was longer than feasible. A preliminary review of the data was done in order to check that the measures avoided multicollinearity, and were in accordance with the literature, which provided a good measure of validity.

Approach to Data Analysis

This data analysis explored the association between financial stress, general life stress, resources, and several demographic variables through data collected from a cross-sectional survey. Data from the respondents were entered into the Statistical Analysis Software (SAS) computer program. In addition to a variety of summary statistics, ordinary least squares (OLS) hierarchical regression analysis was used to explore relationships within the data. The predictor variables used in this study serve to represent the resources that individuals seek to acquire, maintain, and protect. Principal axis factor analysis was conducted to see what subfactors would emerge from the COR-E. These subfactors were used as the independent variables, along with demographic characteristics in the regression model. The target variable in the first model, general life stress, and the second model, financial stress, are expected to be associated with resources according to the conservation of resources theory (Hobfoll, 1989).

In order to provide a description of the sample from which data were collected, descriptive information on (a) age, (b) race, (c) education, (d) marital status, (e) gender, (f) household income, and (g) family size, is described, as well as the means, range, and standard deviations of the resources. The relationship between the predictor variables and the target

variables are provided. In order to interpret the relationship between the target variable, stress, and the predictor variables, resources, and several demographic variables, OLS regression analysis was used. OLS regression analysis allowed for analyzing the correlation and the directionality of the data, estimating how well the model fit, and for evaluating the validity and usefulness of the model. OLS regression was used to determine the size of the relationship between the predictor variables and stress and the proportion of variance accounted for, controlling for other variables in the model, which determined whether there was evidence that the alternative hypotheses exist.

Summary

Stress is a serious issue that affects many people. The more information and understanding there is on the factors that are associated with stress provides more opportunities of areas of potential intervention and prevention. This dissertation examined how resources relate to stress using the conservation of resources framework. A factor analysis was utilized to group COR-E item, which is the list of 74 resources, in its entirety to gather empirical evidence that a cluster of resources will band together as a measure for financial health resources. Additionally, all resources along with demographic characteristics will be included in one model with general stress and one model with financial stress.

Chapter 4 - Findings and Results

Data Assumptions and Analyses

The models were developed from samples and in order to generalize them to the entire population, several assumptions were met. All predictor variables were either continuous or dichotomous and the two outcome variables were continuous. No multicollinearity was present in the predictor variables and the errors, or residuals, in the model are random, normally distributed variables with a mean of 0.

The first analysis discussed is the factor analysis, which was used generate the subfactors that are used as measures for the resources used in the regression analysis. The next analysis is the OLS regression analysis used to understand how resources relate to general life stress. The final analysis is the OLS regression analysis used to understand how resources relate to financial stress.

Factor Analysis

In order to answer the first research question, are there subfactors that will emerge from the COR-E, a principal axis factor analysis was conducted. There were five subscales, which included (a) financial resources, (b) success resources, (c) work resources, (d) relationship resources, and (e) positive feelings resources.

An initial analysis was run to obtain eigenvalues for each factor in the data. Nineteen components had eigenvalues over 1. The scree plot showed inflexions that would justify retaining five factors. Table 4.1 shows the factor loadings after rotation. The items that clustered on the same factors suggest that factor 1 represents financial resources, factor 2 represents

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positive feelings resources, factor 3 represents work resources, factor 4 represents success

resources and the fifth resource was relationship resources.

As noted in Table 4.1 below, there were some items that loaded at .40 or more that were

not used in the subscale variable. This was decided after a Cronbach's alpha indicated better

reliability without certain items.

There was also a sixth factor, not shown in Table 4.1 that emerged and consisted of five

items;

    (a) Medical insurance;

    (b) Financial help if needed;

    (c) Family stability;

    (d) Help with tasks at home;

    (e) Involvement in organizations with others who have similar interests.

These items do not have a common theme, and this was not expected. This subscale was not used

in the regression analysis. Although the Cronbach's alpha on these items was .75, there was no

common theme.

Table 4.1 Summary of Principal Axis Factor Analysis Results for Resources (N = 92)

Item	Financial Resources	Positive Resources	Work Resources	Success Resources	Relationship Resources
Savings or emergency money	**.86**	.07	-.02	.02	.01
Money for extras	**.79**	.12	.07	.15	.11
Financial assets	**.76**	.18	.07	.08	.04
Adequate income	**.74**	.07	.28	.18	.06
Financial stability	**.73**	.11	-.08	.12	.33
Money for transportation	**.58**	.13	.26	.06	.05
Adequate financial credit	**.47**	.23	-.03	.23	.30
Adequate home furnishing	**.46**	.09	-.11	.12	.05
Money for advancement or self-improvement	**.44**	.13	.07	.11	.05
Hope	.11	**.81**	.09	.22	.04

Feeling that I have control over my life	.09	**.79**	.04	.08	-.02
Sense of optimism	.17	**.72**	.09	.06	.02
Positive feelings about myself	.23	**.54**	.11	.11	.02
Sense of pride in myself	.25	**.46**	.22	**.41**	.09
Knowing where I am going with my life	.20	**.41**	.17	.15	.02
Understanding from my employer/boss	.02	.12	**.83**	.01	.18
Support from co-workers	.10	.19	**.80**	.18	.07
Help with tasks at work	.09	-.03	**.69**	.13	-.01
Feeling that I am successful	.27	.27	.21	**.74**	-.05
Feelings that I am accomplishing my goals	.22	**.44**	.10	**.66**	.12

Acknowledgment of my accomplishments	.34	.15	.33	**.41**	-.01
Feeling valuable to others	.26	.07	.29	**.40**	.11
Intimacy with spouse or partner	.18	.00	.11	.08	**.90**
Good marriage/ relationship	.13	.04	.10	-.07	**.88**
Personal transportation	.14	.01	.09	.11	.03
Adequate clothing	.19	.09	.19	.17	.07
More clothing than I need	.34	.18	.17	-.01	-.01
Necessary home appliances	.18	.09	.08	.07	-.05
Personal health	.10	.10	.04	.06	.05
Housing that suits my needs	.11	.08	.13	.03	.08
Adequate food	.20	-.12	.30	.07	.13

Larger home than I need	.19	.01	-.02	.03	.18
Intimacy with one or more family members	.14	.22	.08	.23	.32
Time with loved ones	.10	.21	.09	.09	.12
Affection from others	.30	.19	.08	-.01	.12
Feeling that my life has meaning/purpose	.31	**.41**	.22	.20	.03
Medical insurance	.24	.12	.31	-.01	.04
Financial help if needed	.34	.08	.03	.15	.03
Health of family/close friends	.06	.12	.05	.08	.02
Time for adequate sleep	.16	.05	.10	.09	.11
Family stability	**.40**	.14	.02	.13	.24
Free time	.10	.06	-.05	.01	.05

Stamina/endurance	.09	.14	.17	.07	-.03
Feeling that my future success depends on me	.19	.24	.09	.22	.03
Positively challenging routine	.15	.36	.06	.18	.05
Sense of humor	.06	.20	.08	.03	.05
Role as a leader	.29	.38	.21	.16	.03
Ability to communicate well	.20	.17	.09	.14	.01
Feeling that my life is peaceful	.16	.30	.11	.05	.03
Ability to organize tasks	.15	.28	.07	.26	-.07
Sense of commitment	.14	.16	.06	.15	.14
Intimacy with at least one friend	.10	.15	.11	.07	.01
Self-discipline	.20	.22	.07	.03	-.01
Motivation to get things done	.06	.33	.03	.11	-.01

Feeling that I know who I am	.07	.34	.11	.12	.06
Advancement in education or job training	.19	.24	.18	.24	-.08
Feeling independent	.08	.15	.25	-.01	.04
Companionship	.19	.08	.08	-.02	.24
People I can learn from	.23	.17	.15	.13	-.04
Involvement with church	.08	.11	-.07	.03	.15
Help with tasks at home	.19	.14	.10	.00	.04
Loyalty with friends	.11	-.06	.31	.07	.03
Involvement in organizations with others who have similar interests	.11	.32	.09	-.01	.12
Children's health	.06	-.01	-.06	.05	-.12
Providing children's essentials	.19	.03	.10	-.03	-.03

Extras for children	.36	.05	-.03	.01	.02
Good relationship with my children	.03	.09	.04	.05	-.07
Help with child care	.02	.03	-.04	-.02	-.05
Spouse/partner's health	.05	-.04	.00	.02	.19
Time for work	-.06	.10	.11	.05	-.01
Necessary tools for work	.05	.08	.12	.01	.05
Status/seniority at work	.18	.09	.33	.13	.05
Stable employment	.31	.05	**.40**	.14	.01
Stamina/endurance	.09	.14	.17	.07	-.03
Self-discipline	.20	.22	.07	.03	-.01
Eigenvalues	20.69	4.21	3.21	2.92	2.53

Note: Factor loadings over .40 appear in bold.

Based on the factor analysis, there were five sub factors. Although the focus of this dissertation is the effects of health and financial resources on general and financial stress, the other factors may play a more significant role in predicting levels of stress and were deemed important for inclusion in the regression analysis. The descriptive statistics of all resource variables used in the analysis are shown in Table 4.2 below.

Health resources is a summated variable made up of six of the conservation of resources evaluation items. A summated score of 6 would indicate more of a loss in these six items and a score of 23 would indicate a more of a gain in these six items. The mean total score for each of the summated resource scales were divided by the number of items in the scale. The respondent mean score for health resources was 2.73 meaning they experienced somewhere between threat of loss and no change in health resources. Financial resources are a summated variable made up of nine of the COR-E items. The mean score of 2.69 indicated the respondent's perception of financial resources was between threat of loss and no change over the last 12 months. .

The remaining five resource variables that are used in the general stress and financial stress models and their descriptive statistics are also shown in Table 4.2 below. Positive feelings resources is a summated variable made up of six of the conservation of resources evaluation items. The mean score of 2.87 indicated the respondent's perception of positive feelings resources was between threat of loss and no change over the last 12 months. Work resources is a summated variable made up of three of the COR-E items. The mean score of 3.05 was somewhat higher than the previous three resources meaning respondents perceived no change in work resources over the last 12 months. Success resources is a summated variable made up of four of the COR-E items. The mean score of 2.87 indicated the respondent's perception of success resources was between threat of loss and no change over the last 12 months. Relationship

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resources is a summated variable made up of two of the COR-E items. The mean score of 2.91

indicated the respondent's perception of relationship resources was closer to no change over the

last 12 months.

Table 4.2 Descriptive Statistics of Resources Variables (N = 243)

Variables	M	SD	Range	α
General stress	6.08	2.20	0 - 10	
Financial stress	5.48	2.93	0 - 10	
Health resources[a]	2.73	0.46	1 - 4	.63
Financial resources[b]	2.69	0.77	1 - 4	.92
Positive feelings[c]	2.87	0.69	1 - 4	.89
Work resources[d]	3.05	0.58	1 - 4	.83
Success resources[e]	2.87	0.76	1 - 4	.87
Relationship resources[f]	2.91	0.71	1 - 4	.87

[a]Health resource: mean score of six items with answers ranging from 1 - 4. [b]Financial resources: mean score of nine items with answers ranging from 1 - 4. [c]Positive feelings resources: mean score of six items with answers ranging from 1 – 4. [d]Work resources: mean score of three items with answers ranging from 1 - 4. [e]Success resources: mean score of four items with answers ranging from 1 - 4. [f]Relationship resources: mean score of two items with answers ranging from 1 - 4.

Report of statistical results

The predictor variables were divided into two general categories for analysis: (a) resources, and (b) demographics. There were six resources used in each model. Demographics were made up of seven survey items, including age, gender, race, marital status, education level, family size, and household income.

Target Variables

General Stress

A forward block entry multiple regression was performed to examine the relationship between general stress, resources, and demographics. The following six resources: (a) health, (b) financial, (c) positive feelings, (d) work, (e) success, and (f) relationship resources were entered first as a block, followed by demographics. All variables contained within the first block were controlled for before the next block was entered. Resources were controlled for when demographics were entered. This was done in order to observe the individual predictive value between each group of variables to stress while these variables were contained in these distinct blocks. As shown in Table 4.3, Block 1, $F(6, 236) = 7.26$, $p < .001$, contained the six resource variables as the predictors to the model. The block was significant and contributed 15.58% of the explained variance. Block 2, $F(13,229) = 4.01$, $p < .001$, included all resources and demographic variables, and explained an additional 2.98% of the variance in the model.

This full model accounted for the most explained variance to the model and was selected as the best fitting model and was statistically significant. As shown in Table 4.3, general stress was predicted by health resources ($\beta = -0.18$, $p < .05$), and being White ($\beta = -0.13$, $p < .05$). The closer individuals came to perceiving gains in their health resources and being white, as compared to others, was associated with lower levels of general stress. The rest of the resources

and demographic variables did not make a significant contribution to the variance in the general stress model: positive feelings resources (β = -0.17, $p < .08$), financial resources (β = -0.11, $p < .19$), age, (β = -0.06, $p < .34$), the number of dependents (β = 0.06, $p < .37$), household income (β = -0.06, $p < .44$), having a bachelor's degree or more (β = 0.04, $p < .57$), relationship resources (β = -0.03, $p < .60$), work resources (β = 0.03, $p < .67$), success resources (β = 0.03, $p < .78$), being married (β = -0.02, $p < .80$), and being male (β = -0.01, $p < .90$).

Table 4.3 Summary of Regression Analysis for Variables Predicting General Stress (N = 243)

Variable	Model 1			Model 2		
	B	$SE\ B$	β	B	$SE\ B$	β
Health resources	-0.13	0.06	-0.16*	-0.14	0.06	-0.18*
Financial resources	-0.05	0.02	-0.16*	-0.04	0.03	-0.11
Positive feelings resources	-0.10	0.05	-0.18	-0.09	0.05	-0.17
Work resources	-0.01	0.08	-0.01	0.04	0.09	0.03
Success resources	0.04	0.07	0.05	0.02	0.07	0.03
Relationship resources	-0.05	0.10	-0.03	-0.05	0.10	-0.03
Male				-0.04	0.29	-0.01
Age				-0.01	0.01	-0.06
White				-0.81	0.38	-0.13*
Bachelor's				0.18	0.32	0.04
Married				-0.09	0.35	-0.02
Dependents				0.10	0.11	0.06
Income				-0.05	0.07	-0.06
R^2	.16			.19		

F for change in R^2	7.26***	4.01***

Note: *p* < .05. **p* < .01. ***p < .001

Financial Stress

A forward block entry multiple regression was performed to examine the relationship between financial stress, resources, and demographics. The six resources were entered first as a block, followed by demographics. As shown in Table 4.4, Block 1, F (6, 237) = 21.90, $p < .001$, contained all six resources as the predictors to the model. The block was significant and contributed 35.67% of the explained variance. Block 2, F (13,230) = 11.87, $p < .001$, included resources and demographic variables, and explained an additional 4.48% of the explained variance in the model.

This final model was statistically significant and accounted for the most explained variance in the model and was selected as the best fitting model. As shown in Table 4.4, financial stress was predicted by financial resources (β = -0.36, $p < .001$), being White (β = -0.14, $p < .01$), household income (β = -0.17, $p < .01$), and success resources (β = -0.19, $p < .05$). The closer individuals came to perceiving gains in their financial and success resources, increases in household income, and being white, as compared to others, was associated with lower levels of financial stress. Health resources (β = -0.12, $p < .06$), number of dependents (β = 0.08, $p < .19$), work resources (β = 0.07, $p < .24$), relationship resources (β = -0.06, $p < .31$), being male (β = 0.04, $p < .45$), positive feelings resources (β = 0.06, $p < .47$), being married (β = -0.03, $p < .61$), having a bachelor's degree or above (β = 0.01, $p < .87$), and age (β = -0.00, $p < .98$), did not make significant contributions to the financial stress model.

Table 4.4 Summary of Regression Analysis for Variables Predicting Financial Stress (N = 244)

Variable	Model 1			Model 2		
	B	*SE B*	*β*	*B*	*SE B*	*β*
Health resources	-0.09	0.07	-0.09	-0.13	0.07	-0.12
Financial resources	-0.19	0.03	-0.45***	-0.15	0.03	-0.36***
Success resources	-0.17	0.08	-0.18*	-0.19	0.08	-0.19*
Relationship resources	-0.12	0.12	-0.06	-0.12	0.12	-0.06
Work resources	0.06	0.10	0.03	0.11	0.10	0.07
Positive feelings resources	0.04	0.06	0.06	0.04	0.06	0.06
Male				0.25	0.33	0.04
Age				0.00	0.01	0.00
White				-1.14	0.43	-0.14**
Bachelor's				0.06	0.36	0.01
Married				-0.20	0.39	-0.03
Dependents				0.16	0.12	0.08
Income				-0.20	0.08	-0.17**
R^2	.36			.40		

F for change in R^2	21.90***		11.87***

*Note: *p* < .05. **p* < .01. ***p < .001

Summary of Findings

There were two purposes for this dissertation. The primary purpose was to examine the predictive value of resources on stress. The relationships among these resources along with demographic characteristics on general life stress and financial stress were examined through ordinary least squares regression analyses. Results indicate that health resources, along with being White, compared to non-whites, make significant contributions to the variance in general life stress. Financial resources, success resources, being White, and level of household income make significant contributions to the variance in financial stress.

The secondary purpose was to determine the subscales of resources that emerged from the list of 74 resources that make up the Conservation of Resources Evaluation (COR-E). Using principal axis factor analysis, five useable factors emerged, and included, financial, positive feelings, work, success, and relationship resources. Although health resources was not the best measure based on reliability test and the factor analysis did not reveal a factor for health resources, it was of particular interest for this dissertation.

Chapter 5 - Discussion, Conclusions, Recommendations, and Implications

This chapter will begin with a discussion of the findings. Then, a further examination of the conclusions drawn from this study will be addressed and the possible implication of these results on the field of resource conservation, specifically health and financial resources, and their relationship with stress. Finally, this chapter will conclude with recommendations for future research

Discussion of Research Findings

There were some noteworthy findings for this dissertation. As theoretically anticipated, health and financial resources play an important role in individual's level of stress. Year after year, the American Psychological Association report health and money issues as top contributors to stress (American Psychological Association, 2015). Although the sample used for this dissertation reported being more generally stressed than the average person, based on a mean score of 6.08 on a scale of 1-10 and slightly more financially stressed than the average person, based on a score of 5.49 on a scale of 1-10, resource conservation was significantly associated with the level of reported stress.

General Stress

In the first general stress block, the closer individuals came to perceiving gains in their health and financial resources, the less stress they reported. Health and financial resources were both top predictors of levels of general life stress in a group of other resources. Prior research links health and money in many ways (Adams, Hurd, McFadden, Merrill, & Ribeiro, 2003; Lyons & Yilmazer, 2005; Miller, & Rosen, 2003; O'Neill, 2009; O'Neill & Ensle, 2010;

O'Neill, Sorhaindo, Ziao, & Garman, 2005). These results are unique to prior research on health and wealth topics by utilizing a measure for health and financial resources based on the COR-E.

Health and financial resources had higher betas than the other four resources in the first model when observed with general stress. As individuals perceived gains in their health resources by one unit, stress decreases by 0.131 units. Since health resources and stress are on different scales, it may be easier to interpret the standardized versions of the b-values as they are not dependent on the units of measurement of the variables. As individuals perceived gains in their health resources by one standard deviation (0.46), stress decreases by 0.164 standard deviations. The standard deviation for stress is 2.20 and so this constitutes a change of 0.36 (0.164 x 2.20).). Therefore, for every 0.46 perceived gain in health resources, there is a 0.36 decrease in stress, assuming all other resources are held constant. As individuals perceived gains in their financial resources by one standard deviation (0.77), stress decreases by 0.162 standard deviations. The standard deviation for stress is 2.20 and so this constitutes a change of 0.36 (0.162 x 2.20).). Therefore, for every 0.77 perceived gain in financial resources, there is a 0.36 decrease in stress, assuming all other resources are held constant.

When demographic characteristics were added to the second block, health resources remained a significant contributor to general stress. As individuals came closer to perceiving gains in their health resources by one standard deviation (0.46), stress decreases by 0.179 standard deviations. This constitutes a change of 0.39 (0.179 x 2.20). Therefore, for every 0.46 perceived gain in health resources, there is a 0.39 decrease in stress. Also, as compared with non-whites, being White experienced a lower level of general stress. Financial resources did not significantly contribute to the variance in general stress in the final block, once demographic characteristics were added. In the final model, health resources ($t(229) = -2.37$, $p < .05$), and

being White ($t(229) = -2.13$, $p < .05$) are both significant predictors of stress. From the magnitude of the t-statistics, along with the standardized estimates of 0.179 for health resources and 0.135 for being White, it is apparent that health resources had more impact on stress.

As compared to non-whites, being white was a significant predictor of general stress, which was similar to the findings in the Bonnano, Galea, Bucciarelli, and Vlahov (2007) study, which found that Hispanics and African Americans had higher levels of stress when measuring the likelihood of resilience after a disaster. Participants for the sample in this dissertation were primarily White (83.95%), and therefore the lack of variability did not allow for the ability to draw conclusions about other races.

Financial Stress

In the first financial stress block, the closer individuals came to perceiving gains in their financial and success resources, the less stress they reported. This is another confirmation of the link between financial resources and financial stress. Financial stress is defined as "an evaluation of one's current financial status such as perceived financial adequacy, financial concerns and worries, adjustments to changes in one's financial situation, and one's projected financial situation" (Voydanoff, 1984, p. 275), which is consistent with the resources in the COR-E that made up the subscale from the factor analysis. Although there is empirical evidence to support the connection between financial stress and financially related aspects of individuals, the definition and measure of financial resources in this dissertation is unique. Success resources also made a significant contribution to the explained variance in the financial stress model.

Financial and success resources had higher betas than the other four resources in the model when observed with financial stress. As individuals perceived they were closer to gains in financial resources by one unit, stress decreases by 0.193 units. As individuals perceive their

financial resources were closer to gains by one standard deviation (0.77), stress decreases by

0.455 standard deviations. The standard deviation for financial stress is 2.92 and so this

constitutes a change of 1.32 (0.455 x 2.92). Therefore, for every 0.77 perceived gain in financial

resources, there is a 1.32 decrease in financial stress, assuming all other resources are held

constant. As individuals perceive their success resources were closer to gains by one standard

deviation (0.76), stress decreases by 0.184 standard deviations. This constitutes a change of 0.54

(0.184 x 2.92). Therefore, for every 0.76 perceived gain in success resources, there is a 0.54

decrease in financial stress, assuming all other resources are held constant.

When demographic characteristics were added to the second and final block, financial

and success resources remained as significant contributors to financial stress, however being

White, and level of household income also became significant. As individual's perceived they

were closer to gains in financial resources by one standard deviation (0.77), stress decreases by

0.356 standard deviations. This constitutes a change of 1.04 (0.356 x 2.92). Therefore, for every

0 .77 perceived gain in financial resources, there is a 1.04 decrease in financial stress. As

household income increases by one standard deviation (2.53), stress decreases by 0.174 standard

deviations. This constitutes a change of 0.51 (0.174 x 2.92). Therefore, for every 2.53 increase in

household income, there is a 0.51 decrease in financial stress. As compared with non-whites,

being White experienced a lower level of general stress. As individual's perceived they were

closer to gain in success resources by one standard deviation (.076), financial stress decreases by

0.195 standard deviations. This constitutes a change of 0.57 (0.195 x 2.92). Therefore, for every

0.76 perceived gain in success resources, financial stress decreases by 0.57.

In the final model, financial resources ($t(229) = -4.73$, $p < .0001$), being White ($t(229) = -2.64$, $p < .01$), household income ($t(229) = -2.48$, $p < .01$), and success resources ($t(229) = -2.30$,

p < .05), are all significant predictors of financial stress. From the magnitude of the t-statistics, along with the standardized estimates, it is apparent that financial resources had the most important impact on financial stress.

An individual's perception of gains in financial resources can help an individual be more prepared for life's challenges and a lack of financial resources can add to stress when the need is not met. As individual's perceive getting closer to losses in financial resources, the more susceptible they are to the stresses of life in terms of the vulnerability to resource loss, as well as the lack of resource reservoirs needed to invest or to overcome a loss (Quick and Gavin, 2001). An event such as a job loss, or other economic loss was found to have fewer effects when individuals with financial reserves experienced them, according to Kessler, Turner, Blake, and House (1988). Success resources, like personal success and acknowledgement of hard work at home and at work provides an energy and motivation to continue even when faced with challenging events. The four items that hung together in the factor analysis had a common theme, noted in this study as success resources, were (a) feeling that I am successful, (b) feeling valuable to others, (c) feeling that I am accomplishing my goals, and (d) acknowledgement of my accomplishments. These items could also be coined as goals and motivation. The COR theory was proposed as a motivation theory and some have defined resources as anything that individuals perceive that help them reach their goals (Halbesleben, Neveu, Paustian-Underdahl & Westman, 2014). Therefore, although it was not expected as a significant resource to predicting levels of stress, it is not unfounded. However, further research around this construct is needed to fully understand how it should be considered when designing future studies.

Connection of findings to theoretical/conceptual framework

The COR theory (Hobfoll, 1989) is based on the premise that individuals build and protect their resources in order to spend them when needed. Hobfoll outlined COR theory as a stress model that views stress as a result of resource loss or lack of resource gain. According to Hobfoll (1989), anything valued by individuals that help during a stressful situation, can be a resource, such as personal health, adequate income, retirement security, and financial stability (Hobfoll, 2001). For example, money is inherently valuable because it can be used to pay for transportation, to get to work, to earn the money. Along with colleagues, Hobfoll (2001) devised a list of 74 resources that were identified as valid in many Western contexts.

As was shown in Figure 1.1, the path is from resources to stress. When a stressful event occurs, individuals employ resources, which results in a reduction to the resource pool. Loss to the resource pool increases stress. Gains to the resource pool reduce stress. Based on these principles, and following COR theory's corollaries that individuals that have more resources are more capable of resource gain and report lower levels of stress, individuals that have less resources are less capable of resource gain and report higher levels of stress. Based on the theorized direction and related literature, it was hypothesized that gains to the resource pool are negatively related to general life stress and financial stress.

General Stress

There were six subscales of resources that were used from the 74 items in the COR-E, including health, financial, positive feelings, work, success, and relationship resources. As anticipated in this dissertation, health and financial resources, prior to adding demographic characteristics, were the most important in predicting level of general stress. These findings are theoretically anticipated and prior literature provided support for using aspects of health and

wealth in a model predicting general stress. There is no question that good health is a valuable resource. A significant relationship between stress and overall health status (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982), and the quality of personal health was found to be significantly associated with psychological resilience as explained using COR theory (Bonanno, Galea, Bucciarelli, & Vlahov,2007). Individuals in better health are likely able to increase productivity at work, which could result in higher earnings. Better health may result in lower medical costs. Having medical insurance can help offset the costs of unanticipated health issues. It is the individual's perception of the adequacy of the insurance along with the financial resources needed to meet the medical costs demanded. Unpaid medical bills can relate to reductions in savings, increases in other debt, and even bankruptcy (O'Neill, Sorhaindo, Xiao, & Garman, 2005; Seifert & Rukavina, 2006).

This dissertation utilized a unique definition and measure for the constructs of financial resources and health resources. Additionally, considering there were 74 items in the COR-E that were identified as valuable resources by the COR theory's author (Hobfoll, 2001), the measurement of these resources was found empirically through factor analysis. This also provided for other resources to emerge from this scale. The COR theory suggests it may be possible to understand an individual's level of stress by examining not only gains and losses to the resource pool but also including demographic characteristics. Although the predictive capacity of COR theory may be limited if the social and cultural scripts of individuals are not considered, the sample in this dissertation was fairly homogeneous. Hobfoll recognized stress situations as perceived differently based on social and cultural scripts. For example, an individual who is nearing retirement may suffer from higher stress if their financial stability has been lost or they perceived losses in retirement security. Therefore, a loss or potential loss of

retirement stability may relate to a near retiree reporting higher levels of stress. A resources' importance can be a product of a demographic, such as age. When demographics were added to the general stress model, financial resources were no longer significantly related to general stress. The average age of respondents was just over 41 years old, which is an age in the lifecycle that likely have more or less than 20 years of time to save money for retirement, and have other financially stable qualities. However, health resources continued to make an important contribution to understanding how individual's perceptions of getting closer to gains in resources relate to general stress. As compared to non-whites, Whites reported having lower levels of general stress and can also be interpreted that as compared to whites, non-whites reported having higher levels of general stress, however the lack of variability in this variable did not allow for interpretation of the different races and stress level.

Financial Stress

As anticipated in this dissertation, financial resources were important in predicting level of financial stress. It was also anticipated that health resources would be an important predictor, but this was not supported. However, the increased financial burden that can come with illness can relate to this specific stress-financial stress, which can relate to more health problems. The costs associated with mental and physical illnesses can cause a significant burden to many individual's financial situation.

Once demographic characteristics were included in the model, financial resources, along with success resources, household income, and being White also became important to understanding the relationship between resources and level of stress. As compared to whites, non-whites reported having higher levels of financial stress. Non-whites reporting higher levels of stress is consistent with prior literature (Cohen & Janicki-Deverts, 2012) and it is also

consistent to see many studies with under representations of minorities in research in the United States (Rao & Donaldson, 2015). A better understanding of why minorities are more stressed continues to be warranted as it may be the social issues that come with being a minority, or it may be that minorities have lower household incomes than whites, for example. That understanding is beyond the scope of this dissertation.

Implications of Findings

Previous research has not utilized the COR theory in this context, as a way to understand the relationship between health and financial resources, and stress. The findings provide support for the use of the COR theory in resource and stress research. The definition of resources used in this dissertation is a unique way to view predictors of stress. Stress is a highly researched area of study. Several programs exist that help to combat the effects of stress. This study provides a different approach that would include a look into how individuals protect, and invest in their resources. This provides a programmatic implication for individuals, educators, therapists, and others in the battle against stress.

Specifically, financial and health resources should be considered together when formulating programs to help reduce stress. The two are closely related and continue to be top contributors to stress (American Psychological Association, 2015). Health and financial resources were the most important contributors to stress in this dissertation and therefore provide further support to view predictors of stress in terms of resources. Although prior researchers have found similar connections of health, wealth, and stress (Grafova, 2007; Lyons & Yilmazer, 2005; O'Neill, 2009; O'Neill & Ensle, 2010; O'Neill, Sorhaindo, Ziao, & Garman, 2005), none have viewed the predictors in terms of resources. Furthermore, the value of resources differ based on personal characteristics of the individual, which allows employers, governments, therapists, and

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others in the field of stress reduction to look at adapting their programs to the appropriate demographic.

Employees that are stressed are likely less satisfied with their job, less engaged, and less productive. Furthermore, high stress can lead not only to long-term mental illness, but also physical illnesses, such as obesity, osteoporosis, and cardiovascular problems (De Kloet, Joels, & Holsboer, 2005), which has an effect on the employer as well. Employers can play an active role in helping their employees increase their resource pool. Employers can empower employees to take control of their time. Employers can provide a place and support for exercise, and provide healthy choices for snacks at the office. Employers may want to consider getting guidance from worksite wellness professionals to choose the best wellness program for their worksite (Marinescu, 2007). Employers can offer financial planning as a benefit to their employees in order to help them see the future effect of protecting and investing in resources. There is evidence to support good savings behaviors now to increase future positive financial behaviors (Bhargava & Lown, 2006; Loibl, Grinstein-Weiss, Zahn, & Red Bird, 2010; Rha, Montalto, & Hanna, 2006).

Limitations of Current Study

Certain limitation should be kept in mind when interpreting the results of this dissertation. One potential limitation is the lack of extreme responses to the 74 COR-E items. There were four possible responses to the resources items: 1 = loss of resources, 2 = threat of loss of resources, 3 =no change, and 4 = gain in resources. Respondents primarily chose option 3. The COR theory states that loss of resources will relate to higher stress and gain in resources will relate to lower stress. The lack of extreme responses did not allow enough data to appropriately test all of the principals of the theory.

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The sample was a sample of convenience and therefore findings are not generalizable and should be interpreted with caution. The sample was also familiar to the researcher, which may have introduced bias that affected their ability to honestly and accurately provide information that is sensitive and personal in nature. There were also an over representation of Whites, over 83% of the respondents, and an under representation of minorities. Due to the lack of variability in race, the variable was recoded to a dichotomous variable for use in the analysis. The cross-sectional design also prohibits any causal inferences about how resources relate to stress. There were also several missing responses to the 74 COR-E items. Therefore, there were 179 of the 271 observations that were omitted in the principal axis factor analysis. The length of the 74 items may have been a deterrent to answering each item with a response that was other than the no change option. Furthermore, the factor analysis did not result in a subscale for health resources and the health resources subscale had a lower reliability.

Recommendations for Future Studies

There were three main goals for this dissertation. The first two goals were to understand the relationship between resources and general and financial stress. This dissertation specifically looked at resources and as such included a unique way to define and measure resources. Resource measurement is a common criticism because of a lack of a clear definition and measurement (Thompson & Cooper, 2001). The subscales that emerged from the factor analysis need to be replicated in future studies to establish their veracity. This may lead to deleting some survey items, which may increase the number of extreme responses, which would be easier to interpret along with COR theory's corollaries.

Another avenue that future studies should consider is how individuals with different personal characteristics and the cultural aspects value and prioritize resources. This may be

accomplished through different samples of populations of interest, whether it is a certain age group, or race, or other demographic. It is anticipated that certain demographics and cultures put different values on resources. Additionally, resources may change over time, so a longitudinal approach would allow for causal relationships to be inferred between variables.

One of the goals of this research was to discover what subscales would emerge from the COR-E. The notion of resource caravans in terms of how resources work together is an important goal for individuals, employers, governments, therapists and others who work in the field of stress reduction. Therefore, continued use of the COR-E may further the understanding of these resource caravans for use in how programs should be structured and which resources should be worked on simultaneously based on the desired outcome.

Conclusions

Past studies that have used the COR theory have defined resources as amounts and types of resources and their association with stress. The findings of this dissertation inform the theory by using a measure for resources that is defined as how gains or losses in those resources associate with level of stress. A resources value can change based on individual needs and priorities, and over time. As individuals meet goals, such as retirement, they may not consider savings as a valuable resource and instead put more value on their health as a resource.

There were 74 resource items from the COR-E that were considered valuable to individuals and of those, 30 items were grouped into six subscales of resources, via the factor analysis on all 74, and used in the analysis to understand how and to what extent they had on level of general stress and financial stress. In both models, only one or two of those resources were considered significant predictors of stress level. The COR-E was not intended to be an exhaustive list of all possible resources, and as such, it was not expected that all of the resource

subscales would be significant predictors of stress. However, the principal axis factor analysis challenged the conservation of resources theory's evaluation by significantly shrinking the list of resources that associate with level of stress.

The OLS regression analysis did inform the conservation of resources theory as a framework that can be used to understand which resources and to what extent they predict level of stress. In the sample for this study, as individuals perceived they were getting closer to gains in health resources, along with being White, as compared to non-whites, they reported lower levels of general stress. As individuals perceived they were getting closer to gains in financial and success resources, and increased household income, along with being White, as compared to non-whites, they reported lower levels of stress. These results are consistent with the conservation of resources theory's proponents that losses in resources associate with higher levels of stress, and gains in resources associate with lower levels of stress. Not all of the principals of the COR theory were tested in this dissertation, however the framework did aid in understanding the associations between resources and stress.

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Appendix A – Survey With Coding

Financial and Health Resources, and Stress

Q1 The purpose of this study is to determine how health and financial resources are associated with stress. By completing this survey you are agreeing to have your data used for research purposes. Your name, email, or other identifying information will not be associated with your responses in any way. All data will be kept confidential. The survey should take you about 15-20 minutes to complete, possibly longer if using a mobile device. You may quit the survey at any time. Your participation is completely voluntary. At the conclusion of the survey, you may send an email to a Racquel Tibbetts at racquelt@ksu.edu, a member of the research team, to be entered into a drawing for a $200 gift card.

Questions about this project or its conduct should be directed to one of the following individuals:

- ❖ Dr. Sonya Britt, Principal Investigator, 317 Justin, Kansas State University, Manhattan, KS 66506, 785-532-3541
- ❖ Dr. Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, KSU, Manhattan, KS 66506, 785-532-3224
- ❖ Dr. Jerry Jaax, Associate Vice Provost for Research Compliance and University Veterinarian, 203 Fairchild Hall, KSU, Manhattan, KS 66506, 785-532-3224

Q2 Over the last 12 months, what is your level of general life stress? **GenStress**

_____ General Life Stress Level (1-10) *A higher score indicates higher stress.*

Q3 Gender   Gender *Recoded as **Male***

- ○ Male (1) *Recoded as 1*
- ○ Female (2) *Recoded as 0*

Q4 What was your age on your last birthday? **Age** *(18-65) continuous*

Q5 Which of the following best describes your Race? Please select your race from the

dropdown list. Race *Recoded as **White***

- ○ Black (1) *Recoded as 0*
- ○ Asian (2) *Recoded as 0*
- ○ Hispanic/Latino (3) *Recoded as 0*
- ○ Other (4) *Recoded as 0*
- ○ White (5) *Recoded as 1*

Q6 Relationship Status. Please select your relationship status from the dropdown list.

Married

- ○ Never Married (1) *Recoded as 0*
- ○ Separated (2) *Recoded as 0*
- ○ Married (3) *Recoded as 1*
- ○ Divorced (4) *Recoded as 0*
- ○ Widowed (5) *Recoded as 0*
- ○ Not Married but living with Significant Other (6) *Recoded as 0*

Q7 Please select the level of education you have completed from the dropdown list.

Education *Recoded as **Bachelorsa***

- ○ Less than High School Graduate (1) *Recoded as bbachelors =1, else 0*
- ○ High School Graduate or GED (2) *Recoded as bbachelors =1, else 0*
- ○ Some College (3) *Recoded as bbachelors =1, else 0*
- ○ Associates Degree (4) *Recoded as bbachelors =1, else 0*
- ○ Bachelor's Degree (5) *Recoded as bachelorsa = 1, else 0*
- ○ Master's (6) *Recoded as bachelorsa = 1, else 0*
- ○ Doctorate (7) *Recoded as bachelorsa = 1, else 0*

Q8 Please select your satisfaction with your present financial situation: **Finsat** is the summed total of the 4 items below.

	Agree (1)	Somewhat Agree (2)	Somewhat Disagree (3)	Disagree (4)
I am satisfied with my present financial situation. (1)	○	○	○	○
My income is enough for me to meet my monthly living expenses. (2)	○	○	○	○
I worry about how much money I owe. (3)	○	○	○	○
I am satisfied with the amount of money that I am saving and investing for retirement. (4)	○	○	○	○

Q9 How many people are financially dependent on you? If you are the only one, select

0. **Dependents**

❍ 0 (1) *Recoded as 0*
❍ 1 (2) *Recoded as 1*
❍ 2 (3) *Recoded as 2*
❍ 3 (4) *Recoded as 3*
❍ 4 (5) *Recoded as 4*
❍ 5 (6) *Recoded as 5*
❍ 6 (7) *Recoded as 6*
❍ 7 (8) *No one answered 7*
❍ 8 (9) *No one answered 8*
❍ 9 (10) *No one answered 9*
❍ 10+ (11) *No one answered 10*

Q10 To what extent do you think your income is enough for you to live on? Please select

the most appropriate answer from the dropdown list. IncAdequacy *Recoded as **IncAdeq***

❍ Not at all adequate (1) *Recoded as 0*
❍ Can meet necessities only (2) *Recoded as 0*
❍ Can afford some of the things I want, but not all I want (3) *Recoded as 1*
❍ Can afford about everything I want (4) *Recoded as 0*
❍ Can afford everything I want and still have money left over (5) *Recoded as 0*

Q11 What is your yearly household income? Please select the appropriate range of

income from the dropdown list. **Income** *continuous*

○ Less than $25,000 (1) _____
○ $25,001 - $50,000 (2)
○ $50,001 - $75,000 (3)
○ $75,001 - $100,000 (4)
○ $100,001 - $125,000 (5)
○ $125,001 - $150,000 (6)
○ $150,001 - $175,000 (7)
○ $175,001 - $200,000 (8)
○ $200,001 - $225,000 (9)
○ $225,001 - $250,000 (10)
○ $250,001 - $275,000 (11)
○ $275,001 - $300,000 (12)
○ Greater than $300,001 (13)

Q12 If you had no more income (ex: lost your job today, cutoff from parents, etc) how

many months could you live using your savings? Please select the number of months from the

dropdown list. **EmergFunds**

○ 0 (1) _____ Recoded as 0
○ 1 (2) Recoded as 1
○ 2 (3) Recoded as 2
○ 3 (4) Recoded as 3
○ 4 (5) Recoded as 4
○ 5 (6) Recoded as 5
○ 6 (7) Recoded as 6
○ 7 (8) Recoded as 7
○ 8 (9) Recoded as 8
○ 9 (10) Recoded as 9
○ 10 (11) Recoded as 10
○ 11 (12) Recoded as 11
○ 12+ (13) Recoded as 12

Q13 For each item listed below, please select from the dropdown whether you have

experienced 1) an actual loss, or decrease, in this resource, 2) a threat of loss, or decrease, in this

resources,3) no change in this resource, or 4) a gain, or increase, in this resource, over the last 12

months.

		Actual Loss/Decrease (1)	Threat of Loss/Decrease (2)	No Change (3)	Gain/Increase (4)	Not Applicable (5)
Personal transportation (car, truck, etc.) (1)	COR1	❍	❍	❍	❍	❍
Adequate clothing (2)	COR2	❍	❍	❍	❍	❍
More clothing than I need (3)	COR3	❍	❍	❍	❍	❍
Necessary home appliances (5)	COR4	❍	❍	❍	❍	❍
Personal health (6)	COR5	❍	❍	❍	❍	❍
Housing that suits my needs (7)	COR6	❍	❍	❍	❍	❍
Adequate food (8)	COR7	❍	❍	❍	❍	❍
Larger home than I need (9)	COR8	❍	❍	❍	❍	❍
Adequate home furnishings (10)	COR9	❍	❍	❍	❍	❍
Money for extras (13)	COR10	❍	❍	❍	❍	❍
Savings or emergency money (14)	COR11	❍	❍	❍	❍	❍
Adequate income (16)	COR12	❍	❍	❍	❍	❍
Adequate financial credit (17)	COR13	❍	❍	❍	❍	❍
Financial assets (stocks, property, etc.) (18)	COR14	❍	❍	❍	❍	❍

Financial stability (19)	**COR15**	○	○	○	○	○
Money for transportation (20)	**COR16**	○	○	○	○	○
Medical insurance (21)	**COR17**	○	○	○	○	○
Retirement security (financial) (22)	**COR18**	○	○	○	○	○
Money for advancement or self-improvement (education, starting a business) (23)	**COR19**	○	○	○	○	○
Financial help if needed (24)	**COR20**	○	○	○	○	○
Health of family/close friends (25)	**COR21**	○	○	○	○	○
Feeling that I am successful (26)	**COR22**	○	○	○	○	○
Time for adequate sleep (27)	**COR23**	○	○	○	○	○
Feeling valuable to others (29)	**COR24**	○	○	○	○	○
Family stability (30)	**COR25**	○	○	○	○	○
Free time (31)	**COR26**	○	○	○	○	○
Sense of pride in myself (32)	**COR27**	○	○	○	○	○
Intimacy with one or more family members (33)	**COR28**	○	○	○	○	○
Time for work (34)	**Deleted**	○	○	○	○	○
Feelings that I	**COR30**	○	○	○	○	○

am accomplishing my goals (35)						
Time with loved ones (37)	**COR31**	○	○	○	○	○
Hope (39)	**COR32**	○	○	○	○	○
Stamina/enduran ce (40)	**COR33**	○	○	○	○	○
Feeling that my future success depends on me (41)	**COR34**	○	○	○	○	○
Positively challenging routine (42)	**COR35**	○	○	○	○	○
Sense of optimism (43)	**COR36**	○	○	○	○	○
Sense of humor (45)	**COR37**	○	○	○	○	○
Feeling that I have control over my life (48)	**COR38**	○	○	○	○	○
Role as a leader (49)	**COR39**	○	○	○	○	○
Ability to communicate well (50)	**COR40**	○	○	○	○	○
Feeling that my life is peaceful (51)	**COR41**	○	○	○	○	○
Acknowledgmen t of my accomplishment s (52)	**COR42**	○	○	○	○	○
Ability to organize tasks (53)	**COR43**	○	○	○	○	○
Sense of commitment (54)	**COR44**	○	○	○	○	○
Intimacy with at	**COR45**	○	○	○	○	○

least one friend (55)					
Self-discipline (56)	**COR46**	○	○	○	○	○
Motivation to get things done (58)	**COR47**	○	○	○	○	○
Feeling that I know who I am (60)	**COR48**	○	○	○	○	○
Advancement in education or job training (61)	**COR49**	○	○	○	○	○
Feeling independent (62)	**COR50**	○	○	○	○	○
Companionship (63)	**COR51**	○	○	○	○	○
Knowing where I am going with my life (64)	**COR52**	○	○	○	○	○
Affection from others (65)	**COR53**	○	○	○	○	○
Feeling that my life has meaning/purpose (66)	**COR54**	○	○	○	○	○
Positive feelings about myself (67)	**COR55**	○	○	○	○	○
People I can learn from (68)	**COR56**	○	○	○	○	○
Involvement with church, synagogue, etc. (70)	**COR57**	○	○	○	○	○
Help with tasks at home (71)	**COR58**	○	○	○	○	○
Loyalty with friends (72)	**COR59**	○	○	○	○	○
Involvement in organizations	**COR60**	○	○	○	○	○

with others who have similar interests (74)						

HealthR=sum(COR5, COR7, COR21, COR23, COR33, COR66)
Financial=sum(COR10, COR11, COR12, COR13, COR14, COR15, COR16, COR18, COR19)
Success=SUM(COR42, COR30, COR24, COR22)
WORK=SUM(COR73, COR74, COR75)
positivef=sum (COR27, COR32, COR36, COR38, COR52, COR55)
intimacyf=sum(COR67, COR68)

Q14 If you do NOT currently have children, you may SKIP this question: For each item listed below, please select from the dropdown whether you have experienced 1) an actual loss, or decrease, in this resource , 2) a threat of loss, or decrease, in this resources,3) no change in this resource, or 4) a gain, or increase, in this resource, over the last 12 months.

		Actual Loss/Decrease (1)	Threat of Loss/Decrease (2)	No Change (3)	Gain/Increase (4)	Not Applicable (5)
Children's health (4)	**COR61**	❍	❍	❍	❍	❍
Providing children's essentials (11)	**COR62**	❍	❍	❍	❍	❍
Extras for children (12)	**COR63**	❍	❍	❍	❍	❍
Good relationship with my children (36)	**COR64**	❍	❍	❍	❍	❍
Help with child care (73)	**COR65**	❍	❍	❍	❍	❍

Q15 If you are NOT currently married/or have a partner, you may SKIP this question: For each item listed below, please select from the dropdown whether you have experienced 1) an actual loss, or decrease, in this resource , 2) a threat of loss, or decrease, in this resources,3) no change in this resource, or 4) a gain, or increase, in this resource, over the last 12 months.

	Actual Loss/Decrease (1)	Threat of Loss/Decrease (2)	No Change (3)	Gain/Increase (4)	Not Applicable (5)
Spouse/partner's health (15)	**COR66**	○	○	○	○
Good marriage/relationship (28)	**COR67**	○	○	○	○
Intimacy with spouse or partner (47)	**COR68**	○	○	○	○

Q16 If you are NOT currently working, you may SKIP this question: For each item listed below, please select from the dropdown whether you have experienced 1) an actual loss, or decrease, in this resource , 2) a threat of loss, or decrease, in this resources,3) no change in this resource, or 4) a gain, or increase, in this resource, over the last 12 months.

		Actual Loss/Decrease (1)	Threat of Loss/Decrease (2)	No Change (3)	Gain/Increase (4)	Not Applicable (5)
Time for work (34)	**COR69**	❍	❍	❍	❍	❍
Necessary tools for work (38)	**COR70**	❍	❍	❍	❍	❍
Status/seniority at work (44)	**COR71**	❍	❍	❍	❍	❍
Stable employment (46)	**COR72**	❍	❍	❍	❍	❍
Understanding from my employer/boss (57)	**COR73**	❍	❍	❍	❍	❍
Support from co-workers (59)	**COR74**	❍	❍	❍	❍	❍
Help with tasks at work (69)	**COR75**	❍	❍	❍	❍	❍

Q17 Suppose you were to sell all of your major possessions (including your home), and turn all of your retirement, investment, and other assets into cash, and pay all of your debts off. Please select the best response as to where you would be from the dropdown list. NetWorth

○ Be in serious debt (1)   **NW1** *recoded as 1 / 0*
○ Have some debt (2)   **NW2** *recoded as 1 / 0*
○ Break even (3)   **NW3** *recoded as 1 / 0*
○ Have money left over (4)   **NW4** *recoded as 1 / 0 This is the one to compare to*
○ Be set for life (5)   **NW5** *recoded as 1 / 0*

Q18 According to your most recent Health Assessment, how would you rate your overall health? Please select your overall health from the dropdown list. Health Recoded as **AvgHealth**

○ Very Unhealthy (1)   *Recoded as 0*
○ Below Average Health (2)   *Recoded as 0*
○ Average Health (3)   *Recoded as 1*
○ Above Average Health (4)   *Recoded as 0*
○ Very Healthy (5)   *Recoded as 0*

Q19 How many days per week do you get 30 minutes or more (for at least 10 minutes at a time) of light to moderate physical activity? Examples include walking, mowing (push mower), or slow cycling. **Exercise**

○ 0 days (1) *Recoded as 0*
○ 1 day (2) *Recoded as 1*
○ 2 days (3)   *Recoded as 2*
○ 3 days (4)   *Recoded as 3*
○ 4 days (5)   *Recoded as 4*
○ 5 days (6)   *Recoded as 5*
○ 6 days (7)   *Recoded as 6*
○ 7 days (8)   *Recoded as 7*

Q20 When was the last time you had these preventive services or health screenings?

		Never or more than 5 years ago (1)	Within the last 5 years (2)	Within the last 3 years (3)	Within the last year (4)	Within the last 30 days (5)	Not Applicable (6)
Physical exam (1)	**Screenings1**	❍	❍	❍	❍	❍	❍
Dental exam (2)	**Screenings2**	❍	❍	❍	❍	❍	❍
Self Skin exam (3)	**Screenings3**	❍	❍	❍	❍	❍	❍
Colonoscopy (4)	**Screenings4**	❍	❍	❍	❍	❍	❍
Self Breast exam (5)	**Screenings5**	❍	❍	❍	❍	❍	❍
Mammography (6)	**Screenings6**	❍	❍	❍	❍	❍	❍
Pap smear (7)	**Screenings7**	❍	❍	❍	❍	❍	❍
Flu shot (8)	**Screenings8**	❍	❍	❍	❍	❍	❍

Q21 The following are personal financial behavior items. Please select from the dropdown how often these happened to you during the past 12 months. **Finbeh** is the sum of the 10 finbeh items below

		Never (1)	Sometimes (2)	Usually (3)	Always (4)
I set money aside for savings. (1)	**FinBeh1**	❍	❍	❍	❍
I set money aside for retirement. (2)	**FinBeh2**	❍	❍	❍	❍
I had a plan to reach my financial goals. (3)	**FiinBeh3**	❍	❍	❍	❍
I had a weekly or monthly budget that I followed. (4)	**FinBeh4**	❍	❍	❍	❍
I paid credit card bills in full and avoided finance charges. (5)	**FinBeh5**	❍	❍	❍	❍
I reached the maximum limit on a credit card. (6)	**FinBeh6** *Reverse Code*	❍	❍	❍	❍
I spent more money than I had. (7)	**FinBeh7** *Reverse Code*	❍	❍	❍	❍
I had to cut living expenses. (8)	**FinBeh8** *Reverse Code*	❍	❍	❍	❍
I had to use a credit card because I ran out of cash. (9)	**FinBeh9** *Reverse Code*	❍	❍	❍	❍

I had financial troubles because I did not have enough money. (10)	**FinBeh10** *Reverse Code*	○	○	○	○

Q22 I have calculated the amount of savings I will need for my retirement. Select yes or no from the dropdown. Retire Renamed **Retiregood**

○ Yes (1) *Recoded as 1*
○ No (2) *Recoded as 0*

Q23 How many hours of sleep do you usually get each day? Sleep

○ Less than 6 hours (1) if sleep = **1** then **sleep1**=**1**; else sleep1=**0**; *sleep less than 6 hours;
○ About 6 hours (2)
○ About 7 hours (3) if sleep in (**2 3**) then **sleep2**=**1**; else sleep2=**0**; *sleep 6-7 hours;
○ About 8 hours (4)
○ About 9 hours (5) if sleep in (**4 5 6**) then **sleep3**=**1**; else sleep3=**0**; *sleep 8 or mor hours;
○ More than 9 hours (6)

Q24 Would you agree you are satisfied with your job? JobSat

○ Strongly Disagree (1)   **jobsat1** recoded as 1 / 0
○ Disagree (2)   **jobsat2** recoded as 1 / 0
○ Neither Agree nor Disagree (3)   **jobsat3** recoded as 1 / 0
○ Agree (4)   **jobsat4** recoded as 1 / 0. This is the one to compare to
○ Strongly Agree (5)   **jobsat5** recoded as 1 / 0

Q25 Please select from the dropdown your level of agreement with the following

statements.   **LOC** is the sum of the below items

		Almost Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Almost Always (5)
There is really no way I can solve some of my problems. (1)	**LOC1**	○	○	○	○	○
I am being pushed around in my life. (2)	**LOC2**	○	○	○	○	○
There is little that I can do to change the important things in my life. (3)	**LOC3**	○	○	○	○	○
I can do anything I set my mind to. (4)	**LOC4** *Reverse Code*	○	○	○	○	○
I am helpless in dealing with the problems of life. (5)	**LOC5**	○	○	○	○	○
What happens to me in the future depends on me. (6)	**LOC6** *Reverse Code*	○	○	○	○	○
I have little control over the things that happen	**LOC7**	○	○	○	○	○

to me. (7)						

Q26 Over the last 12 months, how stressed have you felt about your personal finances?

FinStress

_____ Financial Stress Level (1-10)

Q27 How many hours per week do you work? **WorkHours**

- ❍ Do not work (1) Recoded as **work1** is 1 / 0
- ❍ Less than 20 hours (2)   Recoded as **work2** is 1 / 0
- ❍ 20 to 40 hours (3)   Recoded as **work3** is 1 / 0
- ❍ 40 hours (4)   Recoded as **work4** is 1 / 0
- ❍ More than 40 hours (5)   Recoded as **work5** is 1 / 0 Will be compared to this one.

Q28 How would you rate your financial knowledge level compared to your peers?

FinKnow

_____ Financial Knowledge Level (1-10)

Q29 Select from the dropdown, what best describes your blood pressure. BP Recoded as

normbp

- ❍ High (1) Recoded as 0
- ❍ Normal or Low (2) Recoded as 1
- ❍ Don't know (3) left out as only 14 responses

Q30 Select from the dropdown, what best describes your cholesterol. Chol

❍ High (1) **Chol1** is 1 / 0
❍ Normal or Low (2) **Chol2** is 1 / 0 Comparison group
❍ Don't know (3)   **Chol3** is 1 / 0

Q31 Please indicate any stress management techniques that you use: **StressMgmt:**

Grouped by 1) Exercise, 2) Religious Activity, 3) Socialize/Play, 4) Be Alone/Relaxation, 5)

Work, 6) Eat/Drink

Q32 Think of this as a ladder that represents where people stand in their

communities.People define community in different ways; please define it in whatever way is

most meaningful to you. At the top (10) of the ladder are the people who have the highest

standing in their community. At the bottom (0) are the people who have the lowest standing in

their community. **SESComm**

_____ Slide the scale to the rung where you think you stand at this time in your life,

relative to other people in your community . (1)

Q33 Think of this as a ladder that represents where people stand in the United States. At the top (10) of the ladder are the people who are the best off - those who have the most money, the most education and the most respected jobs. At the bottom (0) are the people who are the worst off - who have the least money, least education and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom. **SESCountry**

_____ Where would you place yourself on this ladder? Slide the scale to the rung where you think you stand at this time in your life, relative to other people in the United States. (1)

Q34 Below are a list of resources that individuals feel are valuable when dealing with threatening conditions, assist in gaining more resources, and may result in better coping skills, and less stress. Please rank them in order of what you believe to be the most valuable resource as 1 and the least valuable resource as 5

_____ Personal Relationships (1) **Resource1**

_____ Job Satisfaction (2) **Resource2**

_____ Financial Security (3) **Resource3**

_____ Personal Health (4) **Resource4**

_____ Personal Time (5) **Resource5**

Answer If custom1 Is Empty
Q35 To be entered into a drawing for a $200 gift card, please email racquelt@ksu.edu with "survey drawing" in the subject line. The drawing will occur around July 2015. The winner will be notified by email. Your data will not be associated with your survey in anyway.