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# Role of Coping Self-Efficacy in Working Mothers' Management of Daily Hassles and Health Outcomes

Sonya Kali Broadnax  
*Walden University*

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# Walden University

College of Social and Behavioral Sciences

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Sonya Broadnax

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Walden University  
2016

Abstract

Role of Coping Self-Efficacy in Working Mothers' Management of Daily Hassles and  
Health Outcomes

by

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MA, Ball State University, 1996

BS, Ball State University, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Psychology

Walden University

August 2016

## Abstract

U.S. working mothers experience frequent daily hassles, yet little is known about how working mothers have disproportionate abilities to handle stress. The purpose of this cross-sectional study was to determine the extent to which coping self-efficacy mediated the effect that cumulative daily hassles had on working mothers' health outcomes (i.e., physical functioning, role-physical, bodily pain, general health, vitality, social functioning, role-emotional, and mental health). The transactional model of stress and coping, social cognitive theory, and self-efficacy theory provided the theoretical foundations for this study. Daily hassles were used for this study as an additional theoretical approach for measuring stress. A total of 235 working mothers completed the Daily Hassles Scale, Coping Self-Efficacy Scale, and Short Form 36 version 2 (SF-36v2®) on a secure online website. The respondents reported moderate confidence in their abilities to cope with life despite experiencing an average of 44 daily hassles per month. Simple regressions confirmed repeated exposure to daily hassles was significantly associated with reduced coping self-efficacy and health outcomes. Mediation with multiple regression analysis revealed that coping self-efficacy partially mediated the relationship between cumulative daily hassles and health outcomes, suggesting coping self-efficacy was a protective psychosocial factor for working mothers. This study contributes to positive social change by aiding practitioners in identifying protective psychosocial factors and helping working mothers to implement the findings with the intention of reducing daily hassles and improving health outcomes.

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## Dedication

I dedicate this research study to my family and friends. To my husband, Matthew Broadnax, thank you for your support, loving-kindness, and compassion. You never complained every time I had to stay up late and spend the weekends working on my dissertation; instead, you dove right in to help care for the children and the home. You were especially a rock for me when I was frustrated with the entire process and wanted to break down in tears. Thank you for not allowing me to give up! A special dedication goes to my children (Andre, Hannah, and Alim). Let this be a reminder that anything is possible with hard work, focus, determination, and support from friends and loved ones. A special appreciation goes out to all of my parents: Jay and Lucia Smith and Frank and Carole Craig for cheerleading me on throughout this long and arduous process. Thank you! I can't forget my sister, Joy Mason, who proofread my work and provided me with constructive feedback. After all these years, you are still proofreading my work! Finally, to all my girlfriends...What can I say? You have all been awesome, supportive, loving, and my best friends for life.

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## Chapter 1: Introduction to the Study

### **Background**

The purpose of this cross-sectional study was to determine the role of coping self-efficacy in the relationship between daily hassles and the health outcomes among U.S. working mothers. More precisely, the study examined the role of an “I-can-do” attitude in protecting working mothers’ health from the negative effects of cumulative daily hassles. Although more than 70% ( $n = 25,219$ ) of mothers of dependents are in the labor force (BLS, 2013), their responsibilities of childcare and household care have not diminished (Beatty, 1996; Gjerdingen, McGovern, Bekker, Lundberg, & Willemsen, 2001; Mailey & McAuley, 2015; Offer & Schneider, 2011; Sultana, 2012; Stuart & Garrison, 2002). Working mothers experience pleasurable events associated with their roles, but they also experience daily hassles within those roles (Erlandsson, 2008; Erlandsson & Eklund, 2003a; Erlandsson & Eklund, 2003b). Terrill, Carofalo, Soliday, and Craft (2012) suggested that working mothers were at risk of heart disease due to their conflicting responsibilities. However, not all working mothers succumb to the deleterious effects of cumulative daily hassles, suggesting a psychosocial factor that may be protecting some working mothers more than others. The means by which coping self-efficacy can be used to protect working mothers from the deleterious effects of cumulative daily hassles had not been examined prior to the current study. This study may promote social change by helping to improve working mothers’ health outcomes. Chapter 1 describes the gaps in the literature and purpose of the study; lists the research questions and hypotheses; briefly describes the conceptual framework for the study and

methodology; lists the operational definitions; and describes the assumptions, scope and delimitations, limitations, and significance of the study.

Although more mothers are working outside of the home for pay, they continue to maintain the primary responsibility of tending to the children and home compared with working fathers (Beatty, 1996; Gjerdingen et al., 2001; Offer & Schneider, 2011; Sultana, 2012; Stuart & Garrison, 2002). Working mothers experience daily hassles while engaged in various activities (e.g., housework, childcare, and outside employment) related to their social roles (Alpert & Culbertson, 1987). Daily hassles include, but are not limited to, being interrupted during sleep by a child, confrontation with a daycare provider, traffic jam, financial concerns, and inclement weather. Cumulative daily hassles are a concern because they account for more of the variance associated with poor health than major life events (Kanner, Coyne, Schaefer, & Lazarus, 1981). Stress-related illnesses have been found to be more intrusive to women's daily routine than men's (Kenney, 2000).

The regulation of daily hassles is important for mental and physical health (Lazarus, 1986). Stress regulation requires the facilitation of a single or a multitude of positive coping behaviors such as exercising, getting more sleep, seeking support from friends and family, or seeing a psychotherapist. However, the initiation of proactive coping behaviors may not be a simple task to initiate or maintain for some working mothers. Some working mothers may have minimal difficulty resisting the accumulative effects of daily hassles, whereas others may have significant difficulty. Differences in



confidence in ability to cope may account for some working mothers having better health than others.

Chesney, Neilands, Chambers, Taylor, and Folkman (2006) collaborated with Bandura to combine self-efficacy and coping theory to formulate a new construct called *coping self-efficacy*. Bandura's theory on self-efficacy and Lazarus and Folkman's transactional stress and coping model provided the foundation for the new construct. Self-efficacy describes the perceived confidence in ability to modify a behavior to receive a preferred outcome (Bandura, 1982). Coping describes the cognitive and behavioral changes required to reduce the distress associated with the stressor as well as control the problem that is causing the distress (Folkman & Moskowitz, 2000). The use of proactive or detrimental coping behaviors is influenced by one's beliefs in capability to cope (Chesney et al., 2006). That is, regardless if appropriate or inappropriate, self-efficacy is a prerequisite to the coping behavior (Folkman & Moskowitz, 2000). Therefore, Chesney et al. joined the concepts of coping and self-efficacy together to describe the cognitive processes or antecedents leading up to the management of stressors. According to Colodro, Godoy-Izquierdo, and Godoy (2010), confidence in ability to prevent, tolerate, or reduce stress is associated with subjective health and well-being.

Despite researchers using coping self-efficacy to determine the relationship between health-related variables such as human immunodeficiency virus (HIV) (e.g., Remien et al., 2006), researchers have not applied it to the daily hassles literature. The literature on stress and coping suggests that coping behavior (proactive or detrimental) influences the relationship between the stressor and health outcome; however, the

examination of the prerequisites leading up to the coping behavior is sparse. The current study filled in the gap in the literature by determining the role coping self-efficacy had on a sample of working mothers' perception of daily hassles and health outcomes. Implications from the findings can be used to improve the health outcome of U.S. working mothers.

### **Statement of Problem**

The protective psychosocial factors associated with the optimal health of working mothers are under-researched among U.S. women. Specifically, the extent to which coping self-efficacy influenced the relationship between daily hassles and health outcomes was unknown prior to the current study. The experience of stress among working mothers has been examined within the theoretical framework of work-family conflict (e.g., Entricht, Hughes, & Tovey, 2007), role overload (e.g., Higgins, Duxbury, & Lyons, 2010), and role balance (e.g., Stuart & Garrison, 2002). It has also been examined within the context of occupational science (e.g., Erlandsson, 2008). However, examining working mothers' confidence in ability to cope with daily hassles was sparse within the stress, coping, and health psychology literature.

Research has historically focused on measuring the number of major life events when making predictions about adaptational outcomes such as health outcome (Thoits, 2010); however, critics of this approach suggest life events methodology does not account for the daily hassles that occur in between major life events (Kanner et al., 1981; Rabkin & Struening, 1976). Subsequently, because daily hassles occur more frequently

than major life events, daily hassles should be used when making predictions about health outcome (Lazarus, DeLongis, Folkman, and Gruen, 1985).

Alpert and Culbertson (1987) applied daily hassles methodology to the comparison of dual-earner and non-dual-earner mothers. Alpert and Culbertson found dual-earner mothers ( $n = 22$ ) had more daily hassles than non-dual-earner mothers ( $n = 19$ ); however, the two groups did not differ in level of stress intensity. There was also no significant difference in coping strategy. Alpert and Culbertson's alternative approach to comparing dual-earner mothers with non-dual-earner mothers appeared to be the first of its kind, but their sample size was small ( $N = 41$ ). In addition, Alpert and Culbertson used Ways of Coping Checklist (WCCL) to measure coping strategies. A limitation to using coping measurements such as WCCL is that such measures do not measure the antecedents leading up to the coping behavior (Chesney et al., 2006).

Stuart and Garrison (2002) used the daily hassles methodology to determine the effect of role balance (meditational variable) on mothers with grade school children's ( $N = 146$ ) perception of daily hassles (predictor variable) and health status (outcome variable). In their correlational analysis of the data, they found role balance significantly mediated between the predictor and outcome variables. That is, the ability to give each role the attention it requires, as opposed to giving one more importance than the other, is associated with fewer health problems (Stuart & Garrison, 2002). The findings were limited to a homogenous group of mothers' and did not explain the mothers' beliefs about their confidence in ability to balance their roles. Further, the instruments chosen for the study were outdated.

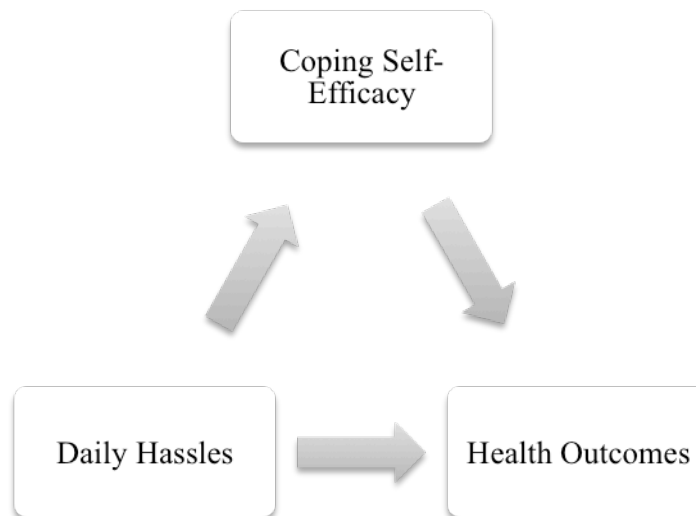
Occupational theorists in Sweden have conducted numerous studies on working mothers' daily hassles and health, but their samples have been limited to Swedish women within occupational science (e.g., Erlandsson, 2008; Erlandsson, 2013; Erlandsson, Björkelund, Lissner, & Håkansson, 2010; Erlandsson & Eklund, 2003a, 2003b, 2006; Håkansson & Ahlberg, 2010; Håkansson, Björkelund, & Eklund, 2011; Håkansson, Lissner, Björkelund, & Sonn, 2009). The occupational theorists also primarily examined commonalities in daily hassles as opposed to individual differences; for instance, Erlandsson and Eklund's (2003a) explored different themes, subthemes, and elements of hassles among a sample of 100 women from the southern part of Sweden. Because the emphasis of their studies was based on occupational theory, psychological constructs such as, coping self-efficacy was not addressed.

Coping self-efficacy requires confidence in ability to self-regulate internal and external factors, which contributes to individual motivation, persistence, and sense control (Colodro et al., 2010). The affect coping self-efficacy or an "I-can-do" it attitude has on the relationship between cumulative daily hassles and working mothers' health is unknown. If the relationship demonstrates to be accurate then efforts can be made to enhance working mothers' coping self-efficacy.

### **Purpose of the Study**

A quantitative, cross-sectional research design was used to determine the extent to which coping self-efficacy mediated the affect daily hassles had on working mothers' health outcomes. The study was conducted online with a nonprobability sampling approach. There was no manipulation of variables in this study. Online survey research

design was chosen due to the quick turnaround in responses to questions pertaining to daily hassles, coping self-efficacy, and health outcomes. The predictor variable was frequency in daily hassles, the mediator variable was four coping self-efficacy measures (overall coping self-efficacy, problem-focused, stop unpleasant emotions and thoughts, and support from friends and family), and the outcome variable consisted of eight health outcome measures (physical functioning, role-physical, bodily pain, general health, vitality, social function, role-emotional, and mental health). The mediating influence of coping self-efficacy on the relationship between daily hassles and health outcome is shown in Figure 1.



*Figure 1.* Mediating influence of coping self-efficacy on the relationship between daily hassles and health outcomes.

## Research Questions and Hypotheses

Research questions and hypotheses for the current study are as follows:

RQ1: What is the relationship between working mothers' frequency in daily hassles (as measured by the Daily Hassles Scale) and health outcomes (as measured by the SF-36v2®)?

*H<sub>0</sub>1*: There is no statistically significant relationship between working mothers' frequency in daily hassles and health outcomes.

*H<sub>1</sub>1*: There is a statistically significant relationship between working mothers' frequency in daily hassles and health outcomes.

RQ2: What is the relationship between working mothers' frequency in daily hassles (as measured by the Daily Hassles Scale) and coping self-efficacy (as measured by the Coping Self-Efficacy Scale)?

*H<sub>0</sub>2*: There is no statistically significant relationship between working mothers' frequency in daily hassles and coping self-efficacy.

*H<sub>1</sub>2*: There is a statistically significant relationship between working mothers' frequency in daily hassles and coping self-efficacy.

RQ3: What is the relationship between working mothers' coping self-efficacy (as measured by Coping Self-Efficacy Scale) and health outcomes (as measured by the SF-36v2®)?

*H<sub>0</sub>3*: There is no statistically significant relationship between working mothers' coping self-efficacy and health outcomes.

*H13*: There is a statistically significant relationship between working mothers' coping self-efficacy and health outcomes.

RQ4: To what extent does coping self-efficacy (as measured by the Coping Self-Efficacy Scale) mediate between working mothers' frequency in daily hassles (as measured by the Daily Hassles Scale) and health outcomes (SF-36v2®)?

*H04*: Coping self-efficacy will not mediate between working mothers' frequency in daily hassles and health outcomes.

*H14*: Coping self-efficacy will mediate between working mothers' frequency in daily hassles and health outcomes.

### **Theoretical Foundation and Conceptual Framework**

Lazarus et al.'s daily hassles were used as an additional theoretical approach to measuring stress (as cited in Kanner et al., 1981). Daily uplifts (i.e., pleasant events) was also a part of Lazarus et al.'s theoretical approach but was not the focus of this study. Daily hassles developed as an alternative to major life events methodology. Critiques of major life events methodology stated it focused too heavily on traumatic events and not enough on the accumulative effects of minor stressors (DeLongis, Coyne, DeKof, Golkman, & Lazarus, 1982; Rabkin & Struening, 1976; Thoits, 2010). Critiques also found the correlation coefficients between major life events and illness were low (e.g., 0.12), and no more than 9% of the variance associated with illness could be explained by major life events (Kanner et al., 1981; Rabkin & Struening, 1976).

Daily hassles are subjective and vary in frequency and intensity throughout the life span (Lazarus & DeLongis, 1983). Daily hassles are related to stress and health based

on intensity, frequency, perceived control, negative emotions, hassle importance, and gender (Kanner et al., 1981; McIntyre, Korn, & Matsuo, 2008). The theory suggests high frequency in daily hassles is associated with poor health (Kanner et al., 1981; McIntyre et al., 2008). The biological relationship between cumulative daily hassles and poor health is associated with the repeated activation of the hypothalamic-pituitary-adrenal axis and prolonged exposure to stress hormones (Crum, Salovey, & Achor, 2013; Hibel, Mercado, & Trumbell, 2012; McEwen, 2004; McEwen, 2008; McIntyre et al., 2008). Daily hassles and its relationship to health will be discussed in more depth in Chapter 2.

To measure working mothers' confidence in ability to cope with life challenges, Chesney et al.'s coping self-efficacy was used as the foundation for this study. Lazarus and Folkman's stress and coping model and Bandura's self-efficacy theories were the cornerstone to the conceptualization of coping self-efficacy. The transactional model of stress and coping describes the transactional relationship between individuals and their environment (Lazarus, 1986; Lazarus et al., 1985). The theory suggests stress occurs when a situation or event is appraised as exceeding one's ability to effectively cope (Lazarus, 1986). The purpose of coping behaviors is to reduce the emotional distress connected with the stressor and modify the problem giving rise to the distress (Thoits, 1995, 2010, 2011).

Self-efficacy explains the degree of confidence in ability to change a behavior and a belief the new behavior will result in the desired outcome (Bandura, 1977, 1982, 1998, 2006; Bandura & Adams, 1977). Self-efficacy is a core component of Bandura's social cognitive theory (Bandura, 1998). The theory suggests behaviors do not occur within



isolation; instead they occur by observing, imitating the observed behavior, and modifying the behavior based on feedback from the environment (Bandura, 1998).

Confidence in capabilities to self-regulate a variety of factors such as mood, tolerance to barriers, mobilization of resources, effort, control, and motivation influences the level of self-efficacy. The focus is on beliefs or perceptions as opposed to actual capabilities to change (Stretcher, DeVellis, Becker, & Rosenstock, 1986). Bandura suggested that self-efficacy is not a dispositional or global trait; instead, self-efficacy varies depending on the situation.

Coping self-efficacy is different than self-efficacy in that it focuses specifically on confidence in ability to cope with life challenges (Chesney et al., 2006). Coping self-efficacy does not focus on coping behaviors per se, but on the cognitive antecedents leading up to the coping behavior (Chesney et al., 2006; Colodro et al., 2010). Coping self-efficacy suggests people have to believe an adaptational outcome (e.g., relief or good health) is within their control through the regulation of their emotions and ability to change the situation. High coping self-efficacy is associated with low stress and low risk of developing a stress-related illness, and low coping self-efficacy is associated with high stress and increased risk for poor health (Chesney et al., 2006). High coping self-efficacy was found to improve psychosocial resources, social support, and mental and physical health (Colodro et al., 2010; Remien et al., 2006). Further discussion regarding self-efficacy, coping self-efficacy, and the transactional stress and coping model can be found in Chapter 2.

### **Nature of the Study**

A cross-sectional design was selected to describe the relationship between frequency in working mothers' daily hassles (independent variable), coping self-efficacy (mediator variable), and health outcomes (outcome variable) at a single point in time. The participants completed 117-item Daily Hassles Scale (Lazarus & Folkman, 1989) to measure frequency in daily hassles. The instrument has strong validity and high reliability among the following three samples: 100 Caucasian middle class adults between the ages of 45 and 64 years, 432 college students, and 448 adults between the ages of 20 and 60 years (Lazarus & Folkman, 1989). The 26-item Coping Self-Efficacy Scale (Chesney et al., 2006) was selected to measure overall coping self-efficacy and ability to use problem-focused coping, stop unpleasant emotions and thoughts, and get support from friends and family. The Coping Self-Efficacy Scale (CSES) has a high reliability as measured by Cronbach's alpha and high levels of test-retest reliability (Chesney et al., 2006). The CSES has been used for different samples with specific diseases such as HIV-positive women (e.g., Remien et al., 2006). It has not been used within the context of working mothers' daily hassles and health outcomes. The respondents also completed the Medical Outcomes Study Short Form 36 Health Survey Version 2 (Ware et al., 2007) to evaluate eight different aspects of health (physical functioning, role physical, bodily pain, general health, vitality, social function, role-emotion, and mental health). The SF-36v2® is the most widely accepted and validated generic health survey in the United States and internationally (Maurish & Turner-Bowker, 2009; QualityMetrics, 2014). Reliability and validity have been found to be

acceptable among diverse samples (QualityMetrics, 2014; Maurish & Turner-Bowker, 2009). The respondents also completed a demographic question, which was created to ask the women about their age, gender, ethnicity/race, employment status, number of children, and others.

The participants were invited to participate through the Walden Participation Pool, Facebook, and LinkedIn. The participants had to be an adult woman older than 18 years, a U.S. citizen, fluently speak and read English, have at least one child younger than 18 years still in the home, and work 20 or more hours per week. The invitation directed the women to a secure website, SurveyMonkey, via a URL link. Consent was given once the women proceeded to the survey. A total of 235 working mothers successfully met criteria for the study and completed more than 50% of the survey.

I used the International Business Machines SPSS Statistics Version 21.0 to analyze the data and answer the four research questions. First, I used a simple regression to test the path between frequency in daily hassles and the eight health outcome measures. Second, I used a simple regression to test the relationship between frequency in daily hassles and coping self-efficacy measures. Third, I used a simple regression to test the association between coping self-efficacy measures and the eight health outcome measures. Finally, I used a multiple linear regression to test if coping self-efficacy mediated the relationship between frequency in daily hassles and health outcomes. Three-step hierarchical regressions were run to control for the effects of covariates such as number of children and level of education.

## Definitions

*Coping self-efficacy*: Level of belief in capabilities to execute and orchestrate coping behaviors when confronted with a stressor, and a belief the coping behavior will result in the desired outcome such as, good health (Chesney et al., 2006).

*Coping strategies or behaviors*: Coping strategies consist of cognitive and behavioral attempts (proactive or detrimental) to manage the stressor that is perceived as exceeding her ability to cope (Thoits, 1995, 2010, 2011).

*Cumulative and frequency in daily hassles*: Cumulative and frequency in daily hassles are used interchangeably throughout this study. The relationship between daily hassles and health is influenced by the accumulation in daily hassles (Kanner et al., 1981). Daily hassles are usually tolerable and within women's capabilities to cope (Erlandsson & Eklund, 2006). However, stress occurs when the accumulation of daily hassles peaks to the point where she is no longer able to tolerate it (Erlandsson & Eklund, 2006; Kanner et al., 1981).

*Daily hassles*: Daily hassles are ongoing minor stressors that occur throughout the day and cause frustration, distress, and irritation (DeLongis et al., 1982). Subjective daily hassles become salient to the individual when the hassles are appraised as a threat to one's well-being (Lazarus, 1986).

*Health outcomes*: Health is a perception of mental, social, and physical wellness and functioning along a continuum from poor to good health (Antonovsky, 1979; World Health Organization, 2003).

*Stress*: Stress occurs when a situation or event (i.e., a stressor) is appraised as exceeding one's ability to effectively cope (Lazarus, 1986).

*Working mothers*: Adult women who are employed 20 or more hours per week for pay while also caring for the home and their children who are younger than 18 years.

### **Assumptions**

One assumption in this study was that working mothers value their health. According to Smith and Wallston (1992), the level of importance people place on their health will influence health-related behaviors. That is, if health is highly valued then one is more likely to change his or her behavior in order to obtain the desired outcome. The second assumption was that working mothers were aware of the relationship between stress and health. Bandura (1982) suggested people cannot change their behavior unless they are first aware of the negative effect that stress has on their mental and physical condition. The third assumption suggested a transactional relationship between stress, coping, and health (e.g., Thoits, 1995, 2010, 2011). Fourth, I assumed the respondents' reading comprehension skills were greater than the eighth-grade level. The fifth assumption suggested participants responded honestly to the items on the instruments. The participants' responses were anonymous to encourage honest responses to the online survey. Sixth, based on prior research, it was assumed working mothers with dependents under the age of 18 years at home experienced frequent daily hassles (e.g., Alpert & Culbertson, 1987; Erlandsson, 2008; Erlandsson & Eklund, 2003a, 2003b). Finally, I

assumed that all three surveys accurately measured daily hassles, coping self-efficacy, and health outcomes.

### **Scope and Delimitations**

The scope of this study was limited to theories on daily hassles and coping self-efficacy. The findings cannot be generalized to other theories such as the Transtheoretical Model (TTM) and Health Belief Model (HBM). The relationship between working mothers' daily hassles and health outcome may be influenced by perceptions regarding severity, susceptibility, benefits, and barriers, or where they are in their stage of change (precontemplation, contemplation, action, maintenance, and either termination or relapse) as the TTM and HBM suggest; however, TTM and HBM were not selected because the research questions focused on the relationship between working mothers perception of daily hassles, coping self-efficacy, and health. The findings collected to answer the research questions were limited to the scope of the three measures (Daily Hassles Scale, Coping Self-Efficacy Scale, and SF-36v2®).

The study focused on adult women older than 18 years who were U.S. citizens and fluently reading and speaking English, had at least one child younger than 18 still at home, and were working 20 or more hours per week. The study was also limited to working mothers who chose to complete a secure online survey on SurveyMonkey. Due to the delimitations of this study, the findings were not generalizable to working mothers who were not U.S. citizens or fluent in reading and speaking English, had adult children older than 18, and did not have access to the internet. As a result of using a nonprobability sampling approach, the findings were also limited to generally healthy

working mothers who were of a high socioeconomic status. The scope of this study can be used to expand the literature on daily hassles, coping self-efficacy, and health, and help improve U.S. working mothers' health outcome.

### **Limitations**

As a result of being a cross-sectional study, the findings only provide insight into a single point in the respondents' lives; therefore, careful consideration was made not to generalize the findings throughout their lifespan. To describe the role of coping self-efficacy on the relationship between daily hassles and health outcomes, the study did not include potential psychosocial factors such as uplifts, coping behaviors, and psychological hardiness. The study also did not include major life events. The next study can include additional psychosocial factors in order to determine full mediation.

Having to depend on the respondents' recall of past events was a limitation to this study. The study was dependent on respondents' ability to accurately reflect on their perceptions in the past month. Having to recall beliefs and experiences more than a day ago is associated with overestimation of beliefs and experiences (Schwartz, 1999). Selection bias also limited the generalizability of the findings. The respondents were invited to participate in the online survey via Walden Participation Pool and social media. Individuals who volunteer to participate in online studies tend to be altruistic and select studies that are interesting to them (Evsenbach & Wyatt, 2002; Fan & Yan, 2010). Selecting a topic that is suitable for the audience the researcher is trying to reach will maximize the response rate and minimize selection bias (Evsenbach & Wyatt, 2002).

The findings were limited to those who had access to the internet. Those with high accessibility to the internet tend to be White, well-educated, employed full-time, and have a household income of greater than \$100,000, as opposed to those with minimal or no access to the Internet (U.S. Census, 2013). Therefore, the findings may not fully represent working mothers with less education and socioeconomic status. Threat to external validity was minimized by not generalizing the findings to noninternet users.

The selection process also limited the respondents to narrow characteristics (Evsenbach & Wyatt, 2002). For instance, the respondents tended to be highly educated, generally healthy, and of high socioeconomic status. As a result of the women being of high socioeconomic status, there may have existed a bias toward a high sense of coping self-efficacy and control over their environment; therefore, skewing the findings (Grimes & Schulz, 2002; Persaud & Mamdani, 2006). To address the limitations, recommendations for future research are discussed in more detail in Chapter 5.

### **Significance**

The current study was unique, because it was able to determine the effect that coping self-efficacy or an “I-can-do” it attitude had on the relationship between working mothers’ daily hassles and health outcomes. Although coping self-efficacy only partially mediated between daily hassles and health outcomes, the findings suggest an “I-can-do” it attitudes is part of the cognitive process used by working mothers to maintain their health; however, more research is needed to determine full mediation. Findings can be used to not only expand on the stress, coping, and health literature, but also to change the questions mental health and medical practitioners ask working mothers. Practitioners can



ask questions that go beyond mental and physical health such as, “On average, how many times have you been annoyed by such responsibilities as planning meals, too many things to do, and not enough sleep over the past month?” The findings can also be used to help encourage working mothers to have an “I-can-do” it attitude to improve their health outcomes. Overall, understanding the protective factors associated with coping self-efficacy can help to improve the mental and physical well-being and functioning of working mothers.

### **Summary**

The purpose of this study was to determine the extent to which coping self-efficacy influenced the relationship between daily hassles and health outcomes. The theories on daily hassles and coping self-efficacy were used as the theoretical foundation for the study. The cross-sectional study was limited to U.S. working mothers with children still in the home. Coping self-efficacy was found to partially mediate between most of the health outcomes. The findings expand upon the existing literature and can be used to improve working mothers’ health outcomes. Relevant literature pertaining to daily hassles, coping self-efficacy, and health will be discussed in Chapter 2. The methodology of the study, setting and participants, test instruments, data collection, and data analysis will be described in Chapter 3. Chapter 4 will summarize the results, and Chapter 5 will summarize the findings, describe limitations to the study, and discuss implications and application for future studies.

## Chapter 2: Literature Review

### **Introduction**

The health of U.S. women is a public health concern because they experience more stress than men (APA, 2007, 2008, 2009, 2010a, 2012, 2013). However, the protective psychosocial factors associated with the optimal health of working mother are under-researched among U.S. women. Working and caring for the family and home can be self-fulfilling and gratifying for working mothers, but it can also be potentially stressful due to the hassles they experience throughout their daily activities (Gjerdingen et al., 2001). It is well supported that cumulative daily hassles are associated with increased risk for developing a stress-related illness such as heart disease (e.g., Bomhof-Roordink et al., 2015) and depression (Schönfeld, Brailovskaia, Bieda, Zhang, & Margraf, 2016). However, not all working mothers succumb to poor health as a result of cumulative daily hassles. Prior to the current study, research had not examined the extent to which coping self-efficacy or an “I-can-do” attitude helped to protect working mothers from the negative effects of cumulative daily hassles. Therefore, the purpose of the current study was to investigate the extent to which coping self-efficacy influenced the relationship between frequency in daily hassles and health outcomes.

Chapter 2 describes the theories of daily hassles and coping self-efficacy as the theoretical foundation for the study. General self-efficacy and transactional stress and coping model were used as the foundation for the coping self-efficacy construct (Chesney et al., 2006), and are also discussed throughout Chapter 2. Chapter 2 provides examples of studies that examined the relationship between cumulative daily hassles and health

(e.g., Schönfeld et al., 2016; Stuart & Garrison, 2002), as well as coping self-efficacy and health (Colodro et al.; Remien, et al., 2006) among different populations. Qualitative and quantitative studies were conducted to examine working mothers' experiences of daily hassles and uplifts, but they were conducted in Sweden and within the context of occupational science (e.g., Erlandsson, 2008; Erlandsson & Eklund, 2003a; Erlandsson & Eklund, 2003b; Erlandsson & Eklund, 2006). There were no found studies that examined the role of coping self-efficacy on the relationship between cumulative daily hassles and health outcomes among U.S. working mothers.

### **Literature Search Strategy**

I conducted a systematic search of a broad range of databases and various search engines for the articles published in the English language between 1977 and 2016. Databases from Walden Library included Academic Search Complete, Psychology: A SAGE Full-Text Collection, PsycArticles, Business Source Complete, PubMed, SocINDEX, CINAHL Plus with Full Text, PsycTESTS, ProQuest, and Mental Measurements Yearbook. Additional sources from the internet included Google Scholar database and review of web pages from established organizations such as Bureau of Labor and Statistics (BLS) and American Psychological Association (APA). Seminal work by Bandura on general self-efficacy, Lazarus and Folkman's work on stress and coping, and Thoits's contribution to the stress, social support, and coping literature were also reviewed for this research study.

Keywords for the electronic literature review included combinations of the following terms on Google Scholar and Walden Library databases: *women's stress, daily*

*hassles and uplifts, women's daily hassles and uplifts, transactional model of stress and coping, stress appraisal and coping, self-efficacy, coping self-efficacy, stress, coping, health, Coping Self-Efficacy Scale, Daily Hassles Scale, and SF-36v2®.*

### **Working Mothers, Stress, and Health**

The prevalence of mothers entering the work force has increased from 17% in 1948 (Cohany & Sok, 2007) to 70.5% ( $n = 25,219$ ) in 2012 (BLS, 2013). The risk for developing a stress-related illness is high with more than 70% of mothers working in the United States, while also maintaining the primary responsibility of the home (Terrill et al., 2012). Heart disease was the number one cause of death for women in the United States in 2013 (BLS, 2013). One of the contributing psychosocial risk factors in elevated coronary heart disease in women is stress associated with family responsibilities (Low, Thurston, & Matthews, 2010). Working mothers tend to be stressed over too many commitments and “trying to do it all” (Rout, Cooper, & Kerslake, 1997, p. 273). Terrill et al. postulated working mothers are at increased risk for heart disease secondary to conflicting home and work responsibilities. The following have been found to be associated with increased risk for health problems among working mothers: inadequate sleep, overload, and reduced leisure activity associated with multiple roles (Presser, 1995); elevated cortisol levels on work days in comparison with nonworkdays (Hibel et al., 2012); and increased time spent completing chores (Saxbe, Repetti, & Nishina, 2008). Home strain and having at least one child at home have also been found to be risk factors for health problems due to persistently elevated cortisol levels throughout the day in comparison to those women without dependents at home (Luecken et al., 1997).

## Theoretical and Conceptual Framework

### Daily Hassles

Lazarus et al.'s theory on daily hassles was used to guide the current study. Daily hassles are persistent, chronic everyday life experiences that include practical annoyances (e.g., losing keys), disruptions (interruption from a nap), and unexpected occurrences (e.g., traffic jam; Kanner et al., 1981). Lazarus et al. postulated that daily hassles had more of an effect on health than major life events (as cited in Kanner et al., 1981); however, it was not until Kanner et al. classical study that their claim was supported by empirical evidence.

Not all daily hassles are created equally (McInyre et al., 2008). That is, there are different types of hassles and some hassles may have a greater influence on perceived stress than other hassles (McIntyre et al., 2008). Variables influencing the relationship between hassles and stress include perceived control (having a sense of control over a stressor is linked to successful coping), negative emotions (high reactivity to daily hassles is associated with greater distress), gender (women are more hassled by interpersonal relationships than men), and hassle importance (one will be less hassled by an event if it is not considered important) (McIntyre et al., 2008). The association between daily hassles and stress is also influenced by the accumulative effect of daily hassles as well as the amplification (Kanner et al., 1981). The amplification effect suggests stressful major life events alter daily experiences resulting in an amplification of the distress associated with daily hassles (Kanner et al., 1981). For instance, stress associated with going

through a divorce amplifies the experiences of daily hassles such as, a conversation with a daycare provider or unexplained glitch in the computer.

Major life events such as, death of a spouse, filing for bankruptcy, termination from a job, and divorce are significant causes of stress (McIntyre et al., 2008). Although major life events are important causes of stress, the relationship between major life events and health outcome is weak and may not significantly account for the variance of poor health (Barker, 2011; DeLongis et al., 1982; Kanner et al., 1981; Lazarus, 1986; Lazarus et al., 1985; McIntyre et al., 2008; Sorbi, Maassen, & Spierings, 1996; Thoits, 2010). Therefore, Lazarus et al. suggested predictions about health outcome are incomplete if daily hassles are not also considered (as cited in Kanner et al., 1981).

Alpert and Culbertson (1987) examined the association between daily hassles and coping styles among 22 dual-earner and 19 nondual-earner women from a midwestern city in the United States. Dual-earner women were married, had children younger than 18 years living in the home, and were working full time (i.e., more than 30 hours). Nondual-earner women were defined as married, working less than 30 hours or not at all, and having children younger than 18 years living in the home (Alpert & Culbertson, 1987). Alpert and Culbertson found dual-earner women had more hassles pertaining to family, work, achievement, and individual concerns than non-dual-earner women, but the intensity in stress levels was the same. Alpert and Culbertson's study was one of the first studies to use daily hassles methodology as an alternative approach to measuring dual-earner and non-dual earner mothers' stress; however, their sample was small ( $N = 41$ ). Alpert and Culbertson also did not examine individual differences in terms of degree in

confidence in ability to cope with daily hassles. According to Wiedenfeld et al. (1990), self-efficacy in ability to cope influences how individuals respond to stressful situations and events.

**An occupational perspective.** Extensive research has been done on women's experiences of daily hassles within the occupational science literature. Researchers in Sweden examined the experiences of daily hassles within various aspects of their daily occupations, as well as at different stages of their lifespan (Erlandsson, 2008; Erlandsson & Eklund, 2003a; Erlandsson & Eklund, 2003b; Erlandsson & Eklund, 2006). For instance, main occupations of an early aged adult woman (e.g., age 35 years) may consist of working, maintaining the home, and tending to young children and elderly parents. Work and family obligations may constitute a time in her life when daily hassles are more abundant in comparison to a woman in middle adulthood (e.g., age 50 years) when the children leave home.

To understand the types of hassles working mothers' experience, Swedish occupational theorists (e.g., Erlandsson, 2008; Erlandsson, 2013; Erlandsson et al., 2010; Erlandsson & Eklund, 2003a, 2003b, 2006; Håkansson & Ahlberg, 2010; Håkansson et al., 2011; Håkansson et al., 2009) examined daily hassles within the context of women's daily activities or occupations. According to Erlandsson (2008) and Erlandsson and Eklund (2003b), working mothers are hassled within their daily repertoire of working, taking care of others, completing chores, and maintaining social relationships. The cumulative effects of daily hassles can potentially result in feeling worn down, fatigued,

and overwhelmed, subsequently, increasing their risk for poor health (Erlandsson & Eklund, 2003b).

Erlandsson and Eklund (2003a) conducted an exploratory mixed-method study in which 100 Swedish women were randomly selected from southern Sweden, initially from a computer then telephoned. Erlandsson and Eklund's purpose was to explore working mothers experience of hassles, uplifts, and unexpected occupations in their day-to-day lives. The working mothers were between 25 and 44 years ( $M = 35.8$ -years-old), married or cohabitating, worked more than part-time (criteria for hours was not specified), spoke Swedish, and had at least one child between the ages of 3 and 6 year at home. As a result of the criteria used for the selection process, the findings cannot be generalized to working mothers in other countries. The quantitative portion consisted of completing 393 hassles and 432 uplifts statements. The qualitative portion consisted of semi-structured interviews in order to isolate themes, subthemes, and elements associated with daily hassles and uplifts. Erlandsson and Eklund found the following themes and subthemes (subthemes are in parentheses):

1. Social context (children, spouse, parents, in-laws, and other people).
2. Temporal context (time-pressure and inconvenient working hours).
3. Doing (maintenance and work).
4. Physical context (working conditions and discomfort at home).
5. Reflections (worries about children and own health).



In terms of Social context, women identified the following most “troubling” elements of daily hassles (on a scale from “pretty much” to “not at all” troubling):

1. Conflicts with their children.
2. Conflicts with their spouse.
3. Conflicts with parents and in-laws over interfering.
4. Conflicts with others (e.g., customers, colleagues, supervisor).

In terms of Temporal context, women identified the following most “troubling” elements of daily hassles: 1) “No control over time, stress, too little time” and 2) “Lack of flexibility, work takes too much time” (p. 103). The women identified the following most “troubling” elements of “Doing” (p. 103):

1. Cleaning.
2. Shopping.
3. Cooking.
4. Doing the laundry.
5. Organizing of the household.

The women reported the organization of the home and family was their responsibility, and they felt hassled when something unexpected happened or there was an imbalance (Erlandsson & Eklund, 2003a). The women also endorsed feeling hassled when they forgot to do something (Erlandsson & Eklund, 2003a). Unexpected occupations were considered among the hassles and were categorized into the following

contexts based on the samples responses:

1. Physical context (e.g., washing machine broke down).
2. Temporal context (e.g., “those last-minute tasks”).
3. Social context (e.g., “interrupted lunch” at work).

Although the working mothers identified their hassles as coming from tasks (i.e., “Doing” context) and environmental domains (i.e., social and temporal contexts), 42% of the 184 doing uplift statements were endorsed as bringing them happiness. “Doing” occupations that uplifted them included, but were not limited to working, cleaning, cooking, playing with their children and taking their children to activities, exercising, tending to their hobbies, watching television, and reading. Thirty-two percent of the 139 items, pertaining to social occupation, also brought them happiness such as receiving affection from their children and spouse and support from their parents, colleagues, friends, and other relatives. The findings suggested Swedish working mothers could experience both hassles and uplifts from a sector of an occupation (Erlandsson & Eklund, 2003a).

Erlandsson and Eklund (2003b) researched the link between hassles/uplifts and women’s health status. Erlandsson and Eklund’s selected 100 women with complex daily occupations, which consisted of full-time employed mothers, 25 and 44 years, cohabitating or married, healthy, and had at least one young child (3–6 years) at home. A total of 1,739 women met criteria from the community population registry and were called. The women were interviewed on the phone until 100 agreed to participate in the study. Because the sample was isolated to a sample of working mothers from southern

Sweden, the findings weren't generalized to working mothers from other countries. A mixed-method design was used in which the participants completed open structured interviews and instruments. The interviewers asked the women questions pertaining to their profession, living conditions, housing, hobbies, pets, and smoking habits. The women also completed questionnaires about hassles and uplifts and health-related variables (i.e., perceptions of health, sense of coherence, quality of life, and control/self-mastery). Erlandsson and Eklund conducted a univariate logistic regression for the first section of their study in order to measure the relationship between the predictor variables (i.e., lifestyle variables) and occupational variables (hassles/uplifts and unexpected occupations) as the dependent variable. Predictor variables with a  $p < .10$  were accepted for further multivariate logistic analysis; however,  $p < .05$  was used to determine significance. The same procedure was followed for determining the relationship between the lifestyle and occupational variables and the three health variables (i.e., sense of coherence, quality of life, and perception of health). Mastery or perception of control was also explored in order to determine its effect on lifestyle, occupational, and health related variables via further multivariate logistic regression analysis. In determining the relationship between occupational and health related variables, Erlandsson and Eklund found high frequency in daily hassles was associated with low quality of life ( $p = .018$ ) and sense of coherence ( $p = .012$ ); however, a significant relationship was not found between hassles and self-rated health. When assessing the relationship between lifestyle and occupational variables, working more hours per week ( $p = .037$ ) and having a university diploma ( $p = .037$ ) were significantly related to increase in number of hassles.

Additionally, having two or more children ( $p = .009$ ) and less than one leisure occupation a week ( $p = .024$ ) were significantly related to having fewer uplifts. Low perception of control ( $p = .007$ ) was significantly related to low perception of health, increase in hassles, and decrease in well-being. Erlandsson and Eklund suggested health-related variables might be improved upon by enhancing Swedish women's perception of control and participation in leisure occupations and lowering number of hassles.

**Daily hassles and women's health outcome.** Different methodologies and theories have been used to predict the relationship between daily hassles and a broad range of health-related variables among different samples of women. For instance, a significant relationship was found between frequent daily hassles, high cortisol reactivity, and increased snacking among a sample of pre-menopausal women (Newman, O'Connor, & Conner, 2007). Sorbi et al. (1996) found an increase in daily hassles, followed by increase in fatigue, and decrease in energy prior to a sample of women having a migraine attack. Cumulative daily hassles was also found to predict reduction in sexual satisfaction and sexual activity in women (Hamilton & Julian, 2014), and reduction in positive mental health in women (Schönfeld et al., 2016).

Stuart and Garrison examined the relationship between women's daily hassles and health status as well as the mediating effects of role balance. Their definition of role balance suggested that stress occurred when mothers gave one role more attention than the other role, as opposed to giving each role equal attention (Stuart & Garrison, 2002). A convenient sample of mothers ( $N = 146$ ) with children in the first or third grade participated in the study. A total of 70% of the women were employed outside of the

home 30 or more hours. The average age for the mothers was 37 years, and 73% were Caucasian and 22% were African American. The mothers completed three self-inventories (53-item Daily Hassles Scale, role balance questionnaire, and Brief Symptom Inventory). Stuart and Garrison found more role balance was significantly related to fewer health problems ( $\beta$  of  $-.31$ ), and more daily hassles were significantly related to more health symptomatology ( $\beta$  of  $.48$ ). Overall, Stuart and Garrison found mothers had less hassles and less health problems when they balanced their roles.

A proactive coping behavior such as, role balance, was the focus in determining the mediating effects between daily hassles and health status in the Stuart and Garrison study; however, Stuart and Garrison did not examine the evaluative cognitive processes that led up to the proactive coping behavior. More precisely, confidence in ability to cope was not included in their study, so it is unknown how much coping self-efficacy mediated between daily hassles, role balance, and health status. The sample of mothers was homogenous. The findings were unable to be generalized to mothers from other parts of the country with younger or older dependents at home, as well as from different ethnic backgrounds. Stuart and Garrison did not focus on a specific subgroup of mothers despite 70% of the sample being employed full-time. Working mothers are at increased risk for a stress-related illness such as, heart disease (Terrill et al., 2012); thus, suggesting more research is needed to understand the accumulative effects of daily hassles on their health. In terms of methodology, Stuart and Garrison used DeLongis' 53-item Daily Hassles Scale despite Lazarus and Folkman's Daily Hassles Scale being the most widely used in the stress, coping, and health literature. They also used the Brief Symptoms Inventory

(1975), as opposed to the SF-36v2®, which is an older instrument and not as internationally recognized as the SF-36v2®.

Given the empirical support for daily hassles methodology in predicting health outcome, Lazarus et al.'s theory on daily hassles was appropriate in determining how cumulative minor annoyances influences working mothers' mental and physical health. Findings from the current study can be used to build upon the existing literature on the negative effect of daily hassles on working mothers' health. The protective influences of coping self-efficacy will be discussed next.

### **Social Cognitive Theory: Coping Self-Efficacy**

The conceptual framework of coping self-efficacy was selected for the current study in order to provide insight into the cognitive processes that protect working mothers' health from the harms of cumulative daily hassles. Although the research on the interaction between stress, coping, and health has been extensively studied within the health psychology literature, the extent to which an "I-can-do" attitude can protect working mothers from the harms of cumulative daily hassles had not been examined prior to the current study. Coping is needed to tolerate, avoid, or approach a stressful situation, and the effectiveness of the coping behavior is directly linked to health outcome (Colodro et al., 2010). However, the execution of a coping behavior, regardless if proactive or detrimental, will depend on one's level of confidence in ability to regulate emotions, thoughts, mood, and resources necessary to change the problem that is giving rise to the distress.

In relation to the other theories discussed throughout this chapter, coping self-efficacy is relatively new. Although Chesney and colleagues developed the framework for coping self-efficacy, Albert Bandura assisted in its development. The seminal works of Bandura's self-efficacy and Lazarus and Folkman's transactional model of stress and coping were the seeds of the development of coping self-efficacy (Colodro et al., 2010). Below is a review of each of the theories used for the development of coping self-efficacy.

**Transactional model of stress and coping.** Based on Lazarus and Folkman's transactional stress and coping model, stress occurs when the individual appraises an external or internal event as being beyond his or her perceived capabilities to cope (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Green, 1986; Folkman & Moskowitz, 2000; Lazarus, 1986). Stress describes the emotional arousal and physiological changes that occur in response to a stressor (Thoits, 1995, 2010). Stressors are the internal or external stimuli women are responding to (Thoits, 1995). Stressors can range from background noise to major life events such as, divorce. Micro stressors such as, daily hassles, become salient to the individual when the hassles are appraised as a threat to one's well-being (Lazarus, 1986). Cognitive appraisal and coping are two components of stress (Folkman et al., 1986). Cognitive appraisal is an evaluative process in which one judges direct and immediate danger to one's well-being (primary appraisal) and assesses what needs to be done to minimize the threat (Folkman et al., 1986). Coping occurs within the secondary appraisal process. Coping suggests the implementation of cognitive and behavioral changes with the intention of reducing the distress associated with the

stressor (Folkman et al., 1986; Folkman & Moskowitz, 2000). Coping entails both emotion-focused coping and problem-focused coping (Folkman et al., 1986; Folkman & Moskowitz, 2000). Problem- and emotion-focused are two coping strategies that are used together; however, personality dispositions influence if one is used more than the other. Adaptive coping occurs when individuals believe the stressful situation is controllable and there is a choice in coping strategies, thus, minimizing negative emotions (Folkman et al., 1986; Chesney et al., 2006). Maladaptive coping occurs when efforts to regulate emotional distress or change the problem fail, and when people primarily use problem-focused coping for uncontrollable stressors or emotion-focused coping for controllable stressors (Chesney et al., 2006). Coping strategy directly influences the direction of the health outcome (poor to good health), but confidence/efficacy in ability to execute coping behaviors indirectly influences the nature of the outcome. Therefore, the contribution of self-efficacy to the health psychology literature will be discussed next.

**Bandura's social cognitive theory and self-efficacy.** Albert Bandura's social cognitive theory suggests working mothers learn by observing others behaviors, imitating the observed behavior, and then modifying the behavior based on the positive or negative feedback they receive from the environment (Bandura, 1977, 1982, 1998, 2004, 2006). However, the learning process of health related behavior change is influenced by level of self-efficacy (Bandura, 1998). Self-efficacy suggests the obtainment of a desired outcome (e.g., good health) is influenced by level of confidence in capability to change the behavior (Bandura, 1998). More precisely, the health outcome is directly related to level of self-efficacy (Bandura, 1998). Self-efficacy provides insight



into the evaluative cognitive processes associated with behavior change (Bandura, 1977, 1982, 1998, 2004, 2006; Bandura & Adams 1977; Gist, 1987; Stretcher, et al., 1986). The focus is on beliefs or perceptions as opposed to actual capabilities to change (Stretcher et al., 1986). Similar to the transactional model of stress and coping, self-efficacy includes judgment regarding ability to exert control over situations that may negatively influence their lives (Cheung & Sun, 2000). An “I-can-do” attitude is important to gain control over one’s environment as well as rally together the resources necessary to minimize stress and improve health outcome (Bandura, 2004). An “I-can-do” attitude also implies an optimistic belief that people can change their internal state, behavior, and environment in order to achieve a desired goal. On the other hand, lack of belief in one’s capabilities to change (“I-can’t-do-it”), is associated with poor psychological adjustment and physical health (Bandura, 2004; Maddux, Norton, & Stoltenberg, 1986; Salanova, Llorens, & Schaufeli, 2011).

Self-esteem, locus of control, and outcome expectancy should not be mistaken for self-efficacy. Self-esteem describes judgment of self-worth, and locus of control describes perception of control over a particular outcome that can be attributed to one’s own actions or outside/external forces (Bandura, 2006; Noor, 2002; Roddenberry & Renk, 2010; Sherman, Higgs, & Williams, 1997; Steptoe & Wardle, 2001). Outcome expectancy is the belief the behavior will result in the preferred outcome (Bandura, 1998; Bandura, 2006). Self-efficacy is also not a global trait; instead, self-efficacy differs depending on the type of behavior needing to be executed (Bandura, 2006; Stretcher et

al., 1986). The variability in self-efficacy suggests it can be high in one realm of functioning (e.g., weight management), but low in another (e.g., smoking cessation).

Self-efficacy is influenced by four sources of information: 1) mastery experience, 2) vicarious experience, 3) verbal persuasion, and 4) physiological arousal (Bandura, 1977, 1982, 1998, 2006; Bandura & Adams, 1977; Gist, 1987; Stretcher et al., 1986). Self-efficacy directly influences motivation, effort, and persistence (Bandura, 1977, 1982, 1998, 2006; Bandura & Adams, 1977; Gist, 1987; Stretcher et al., 1986). Self-efficacy also influences the self-regulation of affect, environmental impediments, habits, and cognitive processes (Bandura, 1977, 1982, 1998, 2006; Bandura & Adams, 1977; Gist, 1987; Stretcher et al., 1986). The ability to self-regulate a multitude of domains is pertinent to the behavior change people seek to accomplish for the betterment of their health. The self-regulation of the aforementioned domains is complex yet important in determining motivation to change. People are faced with the task of not only weighing their capabilities to change a behavior, but also weighing their efficacy to manage their affect, mood, coping capabilities, environment, learning, thoughts, and social support (Stretcher et al., 1986). Once such an assessment has been subjectively weighed (“Yes, I can regulate these variables” or “No, I cannot”), goals are set and the amount of effort and perseverance established. If the assessment of one’s capabilities has been determined to be high (not too high, though) then the effort and persistence will be high (Bandura, 1977, 1982, 1998, 2006; Bandura & Adams, 1977; Gist, 1987; Stretcher et al., 1986). Some level of uncertainty is needed, however (Bandura, 1982; Stretcher et al., 1986).

The theory of self-efficacy suggests stress occurs when people attempt to exert control over environmental impediments, but the demand of the environmental impediments exceeds their ability to cope (Bandura, 1998; Wiedenfeld et al., 1990). Perception of control is a key factor in self-efficacy, which is evident in the classical Whitehall II study, which suggests low employment status was linked to low sense of control over their environment, high stress, and poor health outcome in comparison to those of high employment status (Bell et al., 2004). The stress experienced is expected during the developmental process of capabilities; however, too much stress can create doubt in one's capabilities to continue forward with the new behavior (Bandura, 1998). Wiedenfeld and colleagues (1990) suggested stress is largely influenced by perception of self-efficacy as opposed to the actual environmental demand. More precisely, it is the perception of one's inability to execute or maintain coping efficacy that triggers the stress response (Bandura, 1998; Wiedenfeld et al., 1990).

**Coping self-efficacy.** Level of self-efficacy varies depending on the desired goal (e.g., to lose weight or manage diabetes). In this particular case, Chesney et al. chose to focus on efficacy in ability to cope with life challenges in order to experience relief from distress. Coping self-efficacy describes the level of confidence in capability to initiate and orchestrate coping behaviors when confronted with a major stressor or daily hassle, and belief the coping behavior will result in the desired outcome such as relief or good health (Chesney et al., 2006). Similar to Lazarus and Folkman's stress and coping model, coping self-efficacy suggests people have to believe their desired health outcome is within their control through the modification of their emotions and the situation.

Therefore, high coping self-efficacy is associated with a sense of control, less negative reactivity, and confidence in ability to lower distress and change the environment that is giving rise to the distress (Chesney et al., 2006; Colodro et al., 2010; Kwasky & Groh, 2014). Conversely, low coping self-efficacy is associated with low sense of control over internal and external factors, high stress, and greater negative reactivity to stressful situations (Chesney et al., 2006; Colodro et al., 2010; Kwasky & Groh, 2014). The psychosocial benefits of coping self-efficacy have been found to be associated with low depressive symptoms among a sample of young women (Kwasky & Groh, 2014), and greater access to resources for HIV management among a sample of HIV positive women in comparison to those with low coping self-efficacy (Chesney et al., 2006; Colodro et al., 2010; Remien et al., 2006).

Coping self-efficacy was selected for this study, because the research specifically targets the cognitive processes associated with coping with life challenges such as daily hassles. The current study will contribute to the existing literature by describing the protective benefits of coping self-efficacy on working mothers' health outcomes. Given the negative effect cumulative daily hassles has on health, it is important to investigate the protective factors of an "I-can-do" attitude on working mothers mental and physical health, well-being, and functioning.

### **Summary**

Lazarus et al.'s daily hassles was used as an alternative theoretical approach to measuring stress. The study was grounded in Lazarus and Folkman's transactional model of stress and coping and Bandura's social cognitive theory and self-efficacy. Empirical evidence suggests cumulative daily hassles have a negative effect on various samples of women's mental and physical health. Despite the inverse relationship between cumulative daily hassles and health outcome, not all working mothers succumb to the negative effects of daily hassles. That is, the optimistic beliefs associated with working mothers' mental and physical well-being and functioning were unknown prior to the current study. Coping self-efficacy has been shown to improve health by improving the regulation of thoughts, mood, behaviors, motivation, and sense of control. Findings from the current study can be used to enhance working mothers' confidence in their ability to cope with daily hassles and enhance their health outcomes. Research design and approach, statistical analyses, threats to validity, and ethical procedures will be discussed in Chapter 3.

## Chapter 3: Research Method

### **Introduction**

The cognitive processes associated with the optimal health of working mother are under-researched among U.S. women. The aim of the current study was to determine the extent to which coping self-efficacy mediated the relationship between cumulative daily hassles and health outcomes among a sample of U.S. working mothers. Theories of daily hassles and coping self-efficacy were used to provide structure to the investigation. The literature suggested an inverse relationship between cumulative daily hassles and poor health outcome (e.g., Schönfeld et al., 2016; Stuart & Garrison, 2002). The literature also suggested coping self-efficacy protected various samples of women from the negative effects of life challenges (Colodro et al., 2010; Kwasky & Groh, 2014; Remien et al., 2006). Findings from the current study can be used to bolster an “I-can-do” attitude among working mothers in order to improve their health outcome. The following are addressed within this chapter: (a) research design and approach, (b) statistical analyses, (c) threats to validity, and (d) ethical considerations.

### **Research Design and Approach**

A quantitative, cross-sectional research design was used in order to investigate the role of coping self-efficacy (mediator variable) on the relationship between daily hassles (predictor variable) and health outcomes (outcome variable) at one point in time. There was no manipulation of the variables. A self-administered survey approach was selected because self-administered surveys are commonly used in the health literature to quickly collect information about respondents' beliefs and, subsequently, generalize the findings

to the population (Bennett et al., 2011; Eysenbach & Wyatt, 2002). Self-administered surveys are also common in health research because objective assessments of stress (e.g., measurement of blood pressure, heart rate variability, pupil dilation, respiratory changes) are not always easily accessible or practical (Bennett et al., 2011; Masood, Ahmed, Choi, & Guiterrez-Osuna, 2012). Therefore, self-administered surveys are more of the norm in the health literature as opposed to objective assessment of stress (e.g., Colodro et al., 2010; Hamilton & Julian, 2014; Kwasky & Groh; Schönfeld et al., 2016).

Online was selected due to the speediness of the distribution of self-report measurements' and rapid turnaround (Andrews, Nonnecke, & Preece, 2007; Eysenbach & Wyatt, 2002). Online surveys have been cited as being low in cost (Andrews et al., 2007; Eysenbach & Wyatt, 2002); however, use of SurveyMonkey resulted in a significant cost. SurveyMonkey is a secure online survey website for researchers and businesses seeking to collect data from targeted audiences (SurveyMonkey, 2016). The informed consent, demographic questionnaire, and three self-administered questionnaires were accessed on SurveyMonkey. Invitations to participate were sent via Facebook, LinkedIn, and Walden Participation Pool. Walden University Participation Pool is limited to anyone affiliated with Walden University. The respondents were able to choose for themselves if they wanted to participate in the study, which resulted in a nonprobability sample of working mothers.

### **Time and Resource Constraints**

The respondents were not given a time constraint in which to complete the online survey. Collection of data on SurveyMonkey was limited to an annual cost. There were no resource constraints for use of the Daily Hassles Scale and Coping Self-Efficacy Scale. Noncommercial license agreement for use of the SF-36v2® was authorized from March 1, 2015 until February 28, 2016.

### **Population**

U.S. working mothers with children younger than 18 still in the home were the focus of this study. More than 70% ( $n = 25,219$ ) of women with children younger than 18 years in the home were working outside of the home at least part-time for pay in 2012 (BLS, 2013). Approximately 58% of those women were employed full-time (BLS, 2013).

### **Sampling and Sampling Procedure**

**Sampling procedure.** A nonprobability sampling approach was used for this study given its convenience and lack of a list of working mothers with access to the internet (Andrews et al., 2003; Eysenbach & Wyatt, 2002; Rhodes, Bowie, & Hergenrather, 2003). As noted above, the national prevalence of working mothers with children younger than 18 in the United States is 70.5% ( $n = 25,219$ ; BLS, 2013). Given the large population size, probabilistic sampling was not feasible or practical. A true response rate was unable to be determined because there was not a way to calculate the number of individuals who received the invitation and decided not to participate (Rhodes et al., 2003).



**Power analysis.** An optimal sample size is important in determining statistical significance when a null hypothesis is truly false (Cohen, 1988). An online power calculator ([www.statstodo.com/SSizMReg\\_Pgm.php](http://www.statstodo.com/SSizMReg_Pgm.php)) was used to yield an appropriate sample size. The online power calculator yielded a sample size of at least 220 to participate in the study for a conservative effect size of .25, an alpha set at .05, and correlational power analysis set at .85. A conservative effect size was chosen because prior literature on women's daily hassle did not cite the power analysis used to determine sample size (e.g., Erlandsson, 2008; Stuart & Garrison, 2002).

**Inclusion criteria.** The inclusion criteria for the working mothers initially had an age range between 25 and 44 years, but the age range was abandoned due to being considered too restrictive by Walden University's Internal Review Board (IRB). Therefore, the inclusion criteria was revised to include respondents who were adult woman older than 18, U.S. citizen and fluent in reading and speaking English, had at least one child younger than 18 in the home, and were employed at least 20 hours per week.

### **Procedures for Recruitment, Participation, and Data Collection**

Customized invitations were approved by IRB and sent through Facebook, LinkedIn, and Walden Participation Pool in order to attract potential participants to SurveyMonkey. The invitation provided a description of the study, inclusion criteria, and a URL link, which guided potential respondents to SurveyMonkey. Potential respondents were immediately shown the anonymous informed consent on the screen. Consent was given by clicking on "Next." The demographic questionnaire was presented first followed

by the Daily Hassles Scale, Coping Self-Efficacy Scale, and SF-36v2®. The respondents were able to edit their responses, close out, and return to the last item they completed (SurveyMonkey, 2016). Debriefing along with appreciation for completing the study was expressed at the conclusion of the survey (McShane, Davey, Rouse, Usher, & Sullivan, 2015)

SurveyMonkey only allowed participants to complete the survey one time (SurveyMonkey, 2016). SurveyMonkey does not claim ownership of the data (SurveyMonkey, 2016). Access to the data requires a username and password. I am the only one who has access to the username and password. Hard copies were made of each of the respondents' responses. The hard copies are stored in a fire/water-protected safe, which is secured with a passcode. Data will be stored for at least 5 years per the request of Walden University's IRB guidelines.

### **Instrumentation and Operationalization of Constructs**

#### **Demographic Questionnaire**

Similar to Stuart and Garrison's (2002) study, the demographic questionnaire had 10 questions, which inquired about citizenship, fluency in reading and speaking English, age range, gender, ethnicity/race, employment status, number of children, marital status, household income, and years of education. Data from the questionnaire was used to ensure the respondents met criteria to participate in the study. It was also used for descriptive purposes and to determine the influence of socio-demographic variables on the relationship between the variables. The Demographic Questionnaire is presented in Appendix A.

### **Dailey Hassles Scale**

Daily hassles are operationally defined as daily minor stressors that result in emotional distress (DeLongis et al., 1982). The perception of being hassled by daily life experiences was measured via Lazarus and Folkman's (1989) 117-item Daily Hassles Scale (DHS). DHS was not in the public domain; therefore, permission was granted by Mind Garden in order to administer the instrument online. The DHS is one of three instruments included in the Hassles and Uplifts Scales collection of instruments (117-item Daily Hassles Scale, 135-item Uplifts Scale, and 53-item Combined Hassles and Uplifts Scales) published by Mind Garden, Inc. All three of the Hassles and Uplifts Scales are used mostly in the stress and coping literature; however, the DHS is the most validated in assessing minor irritants and annoyances in comparison to the other two (Lazarus & Folkman, 1989). The initial Hassles and Uplifts Scale consisted of 117 hassles and 135 uplifts (Kanner et al., 1981). It was developed as an alternative to the major life events methodology (Kanner et al., 1981). The normative data for the Hassles and Uplifts Scales consisted of a sample of 100 Caucasian, middle-class adults between the ages of 45 and 64 years, a sample of 448 adults between the ages of 20 and 60 years, and a sample of 432 college students (Lazarus & Folkman, 1989).

In DeLongis et al. (1982) classical study, the initial HUS was used for part of the assessment of the relationship between major life events, daily hassles and uplifts, and health status among a sample of 100 Alameda County residents (age range between 45 and 64 years) obtained from a probability sample surveyed by the Human Population Laboratory of the California State Health Department. DeLongis et al. found a high

frequency in daily hassles was significantly associated with somatic complaints at the initial assessment ( $n = 98, r = .27, p < .01$ ), as well as at the final assessment 10 months later ( $n = 87, r = .35, p < .01$ ). They also found hassles frequency and intensity accounted for 13% of the variance ( $F [2,89] = 6.60, p < .01$ ) associated with somatic health in comparison to major life events.

**Format.** Respondents were prompted to answer each of the DHS items based on their experiences of hassles over the past month. It was estimated to take approximately 10 to 15 minutes to complete the survey. Each item on the survey was measured on a scale from 0 to 3 (none or did not occur, somewhat severe, moderately severe, or extremely severe). Respondents were asked, “How much of a hassle was this for you?” Examples of hassles included such items as “Misplacing or losing things” and “Concerns about owing money” (Lazarus & Folkman, 1989, p. 39). The content of 63 items fell within eight factors: Future Security (4 items), Time Pressures (9 items), Work (6 items), Household Responsibilities (11 items), Health (10 items), Inner Concerns (8 items), Financial Responsibilities (7 items), and Neighborhood/Environmental (8 items).

**Reliability and validity.** Cronbach’s alpha for each subscale was high and ranged from .79 to .91 (Lazarus & Folkman, 1989). DHS also showed stability over a nine-month period with an average coefficient of .79 (Kanner et al., 1981). The subscales were consistent with Lazarus and Folkman’s transactional model of stress and coping, suggesting content validity (Lazarus & Folkman, 1989). In terms of discriminate validity, the correlation between DHS and major life events scale was low ( $r = .36$ ); and, in terms of convergent validity, DHS scores correlated with psychological symptoms with a

convergent validity of ( $r = .34$  to  $.60$ ; Lazarus & Folkman, 1989). The average Frequency score showed greater significant reliability at  $.79$  in comparison to the average Severity score of  $.48$  (Kanner et al., 1981).

**Scoring.** Frequency in daily hassles score was obtained by calculating the total number of hassles endorsed by the participant (Lazarus & Folkman, 1989). Frequency scores ranged from 0 (no reported hassles) to 117 reported hassles over the past month (Lazarus and Folkman, 1989). Summing the severity ratings for each of the hassle items and dividing it by the number of hassle items endorsed by the respondents obtained the severity daily hassles score. The severity score ranged from 0 = none or did not occur to 3 = extremely severe (Lazarus & Folkman, 1989).

### **Coping Self-Efficacy Scale**

Coping self-efficacy is operationalized as level of confidence in ability to initiate and orchestrate coping behaviors, and belief the coping behavior will result in the desired outcome (Chesney et al., 2006). Confidence in ability to cope with life challenges was measured via the CSES. Chesney et al. first presented the psychometric properties of CSES in their 2006 article. The 26-item CSES was in public domain, which was confirmed by Margaret Chesney through a private email I sent her in order to confirm the status of the instrument.

CSES is an alternative approach to measuring coping behavior in comparison to traditional methods that use such measures as the Ways of Coping Questionnaire. Chesney et al. used the CSES in order to evaluate the effectiveness of a coping self-efficacy training (CET) intervention designed to enhance the coping skills of 348 men

who had sexual intercourse with men, were HIV positive, and diagnosed with depression. The data came from two separate studies ( $N1 = 149$ ) and ( $N2 = 199$ ). The purpose of the intervention was to reduce the distress associated with being HIV positive and to increase positive mood. Traditional methodology used to assess differences between coping styles prior to CET and after CET did not account for the changes in levels of self-efficacy. That is, coping style did not change before and after CET; however, coping self-efficacy did change after completing the CET (Chesney et al., 2006).

**Format.** The subscales for the CSES are presented in Table 1.

Table 1

*Subscales and Content for the Coping Self-Efficacy Scale*

Subscale	Content
Problem Focused Coping (PFC; 12 items)	Confidence in ability to change the problem
Stop Unpleasant Emotions and Thoughts (SUET; 9 items)	Confidence in ability to change emotional responses
Support from Friends and Family (SFF; 5 items)	Confidence in ability to reach out to friends and family for support

*Note.* Adapted from “A Validity and Reliability Study of the Coping Self-Efficacy Scale,” by M.A. Chesney, T. B. Neilands, D. B. Chambers, J. M. Taylor, & S. Folkman, 2006, *British Journal of Health Psychology*, 11, p. 425.

The respondents were asked, “When things aren’t going well for you, or when you’re having problems, how confident or certain are you that you can do the following?” (Chesney et al., 2006). Respondents were asked to write a number from 0 to 10 with the following anchor points: 0 = cannot do at all, 5 = moderately certain can do, and 10 =

certain can do (Chesney et al., 2006). It was estimated to take 5 to 10 minutes to complete.

**Reliability and validity.** The internal consistency for each subscale (self-efficacy for problem-focused coping, self-efficacy for emotion focused, and self-efficacy for social support) ranged between .79 and .92 (Chesney et al., 2006). Overall coping self-efficacy yielded an alpha coefficient of .95 (Chesney et al., 2006). Test retest reliability for specific periods in time were the following: .49 to .80 at 3 months, .54 to .68 at 6 months, and .40 to .49 at 12 months. Partial correlations between CSES subscales and Ways of Coping Questionnaire indicated those who scored high on use of problem-focused coping also scored high on planful problem solving (partial  $r = -.22$ ), individuals who scored high on self-efficacy to stop unpleasant emotions and thoughts scored low on cognitive escape-avoidance (partial  $r = -.20$ ,  $p < .001$ ), and those high in self-efficacy to get support from friends and family were more likely to pursue social support (partial  $r = .21$ ,  $p < .001$ ). Overall, there was good convergent and divergent validity between CSES and WAYS (Chesney et al., 2006).

**Scoring.** In order to get a summary score, at least 80% of the items had to be completed from each of the three subscales (Chesney et al., 2006). Summary score was set to missing if less than 80% of the items for that particular subscale were not answered. In order to obtain a score for each of the subscales, the items were summed and divided by the number of items answered within the particular subscale. In order to obtain an overall coping self-efficacy score, all of the items were summed and divided by the total number of items completed. A score of 5, along a Likert scale from 0 = cannot

do at all to 10 = certain can do, suggests moderate confidence in ability to cope with life challenges.

### **SF-36v2®**

Health outcomes are operationalized as occurring across eight different aspects of mental and physical health, well-being, and functioning (e.g., vitality, general health, physical functioning) along a continuum from poor to good health. Eight aspects of health outcomes were assessed using Ware and colleagues' (2007) Medical Outcomes Study Short Form 36 Health Survey Version 2 (SF-36v2®). The SF-36v2® is not within public domain; therefore, a licensure agreement was obtained from QualityMetric. The licensure agreement included access to the instrument, scoring software, and three different guides to the development and scoring of the SF-36v2®. The manual was not part of the licensure agreement. All of the material included in the licensure agreement was free to students.

The SF-36v2® measures various dimensions of physical and mental health, well-being, and functioning. The SF-36v2® is a generic health survey that can be applied among a wide variety of populations and individuals (QualityMetric, 2014). The SF-36v2® is the most widely accepted and validated generic health survey worldwide (QualityMetric, 2014). SF-36v2® was introduced in 1996 in an effort to improve upon the parent SF-36®, which was released in 1990 (QualityMetric, 2014).



**Format.** The SF-36v2® is published in standard (4 week) and acute (1-week) recall versions for self-administration. I chose the standard 4 weeks recall version in order to be consistent with the instructions for the Daily Hassles Scale and CSES and to minimize confusion for the respondents. The SF-36v2® consists of 36 items, two component summary measures (Physical Component Summary and Mental Component Summary), and eight subscales (Physical Functioning, Role-Physical, Bodily Pain, General Health, Vitality, Social Functioning, Role-Emotional, and Mental Health). Physical Functioning (PF), Role-Physical (RP), Bodily Pain (BP), and General Health (GH) contribute to the Physical Component Summary (PCS) score. Vitality (VT), Social Functioning (SF), Role-Emotional (RE), and Mental Health (MH) contribute to the Mental Component Summary (MCS) score (Maurish & Turner-Bowker, 2009). Meaning of the eight subscales is presented in Table 2.

Table 2

*Interpretation of SF-36v2® Eight Subscales*

Subscale	Interpretation
Physical Functioning (PF; items 3a–3j)	Degree of physical limitation (e.g., lifting, walking, climbing stairs, and kneeling)
Role-Physical (RP; items 4a–4d)	Degree in which physical limitations interfere with role at work or other activities
Bodily Pain (BP; items 7 and 8)	Degree in which bodily pain interferes with work activities
General Health (GH; items 1 and 11a–11d)	Evaluation of health on a continuum from poor to favorable
Vitality (VT; items 9a, 9e, 9g, 9i)	Degree in perception of energy for life
Social Functioning (SF; items 6 and 10)	Degree in which mental or physical problems interferes with social activities
Role-Emotional (RE; items 5a–5c)	Degree in which mental health interferes with roles related to work and other activities
Mental Health (MH; items 9b–9d, 9f, 9h)	Degree of mental health and psychological well-being

*Note.* Low scores represent significant impairment and high scores represent little to no impairment. Adapted from *A Guide to the Development of Certified Modes of Short Form Survey Administration* (pp. 12–13), by M. E. Maruish and D. M. Turner-Bowker, 2009, Lincoln, RI: QualityMetric Incorporated. Copyright 2009 by QualityMetric Incorporated. Adapted with Permission.

On a 5-item Likert scale ranging from all of the time to none of the time, respondents were asked such questions as, “How much of the time during the past 4 weeks did you feel full of life?” (Ware et al., 2007). There were also true or false statements that ranged from 1 = definitely true to 5 = definitely false, and statements that

assessed degree of functioning via a rating scale of 1 = Yes, limited a lot; 2 = Yes, limited a little; and 3 = No, not limited at all (Ware et al., 2007). The SF-36v2® was estimated to take between 5 and 10 minutes to complete.

**Reliability and validity.** Cronbach's alpha for the PCS was .95 and .93 for the MCS (QualityMetric, 2009). Alpha coefficients for the eight subscales ranged from .83 to .95 (QualityMetric, 2009). Internal consistency exceeded .70 for all subscales, PCS, and MCS for five studies using samples from the Sweden, United Kingdom, and Korea and patients with subclinical hypothyroidism (QualityMetric, 2014). High internal consistency was found in over 200 additional studies (QualityMetric, 2014). Test-retest reliability of SF-36v2® on a sample of Chinese patients with drug addiction ranged from .72 to .87 on the subscales (Zhou et al., 2013). The content, criterion, concurrent, construct, and predictive evidence of validity were strong (QualityMetric, 2009). For instance, construct validity for the SF-36v2® demonstrated PF, RP, and BP loaded entirely on the PCS, and MH, RE, and SF loaded entirely on the MCS (QualityMetric, 2009).

**Scoring.** Data was entered into the QualityMetric Scoring Software. For each respondent, the software provided eight scores for each of the eight subscales and for each of the component summary scores. The Scoring Software used a non-based scoring (NBS) algorithm in order to ensure compatibility between the SF-36® and SF-12® (QualityMetric, 2009; Maurish & DeRosa, 2009). Specifically, each raw score from the subscales were transformed into a score ranging from 0 to 100 with a mean of 50 and a standard deviation of 10 (QualityMetric, 2009; Maurish & DeRosa, 2009). High scores

represented better mental and physical health, well-being, and functioning, and low scores represented poor mental and physical well-being and functioning (Carlson, Grzywacs, Ferguson, Hunter, Clinch, & Arcury, 2011).

## **Data Analysis Plan**

### **Software and Data Cleaning and Screening**

Data collected from SurveyMonkey and QualityMetric Scoring Software for SF-36v2® were manually entered into IBM Statistical Package for the Social Sciences (SPSS) Version 21.0 for data analyses. Data cleaning and screening was conducted to minimize data abnormalities and erroneous findings (Van den Broeck, Cunningham, Eackels, & Herbst, 2005). Van den Broeck, Cunningham, Eackels, and Herbst (2005) recommended implementing a plan for detecting data errors as opposed to stumbling across them accidentally. The data cleaning process should entail diagnosis of missing data, true extreme and normal scores, screening of outliers, and abnormal patterns in the data (Van den Broeck et al., 2005). Rules regarding leaving the missing data or deleting the entire case should be established prior to the data cleaning process (Van den Broeck et al., 2005). Descriptive tools such as frequency tables are useful in detecting abnormal patterns or data points that fall outside of the minimum and maximum range for that particular instrument (Van den Broeck et al., 2005). A cut off point such as a standard value of 3.29 can also be used in order to identify extreme outliers (Tabachnick & Fidell, 2012). After missing values, abnormal patterns, and outliers have been identified, the treatment phase is limited to either correcting or deleting the errors or leaving the errors

unchanged; however, erroneous values should always be deleted or changed to the correct value (Van den Broeck et al., 2005).

### **Research Questions and Hypotheses**

As noted in Chapter 1, four research questions and hypotheses were used to guide the research study. The research questions and hypotheses are as follows:

RQ1: What is the relationship between working mothers' frequency in daily hassles (as measured by the DHS) and health outcomes (as measured by the SF-36v2®)?

*H*<sub>0</sub>1: There is no statistically significant relationship between working mothers' frequency in daily hassles and health outcomes.

*H*<sub>1</sub>1: There is a statistically significant relationship between working mothers' frequency in daily hassles and health outcomes.

RQ2: What is the relationship between working mothers' frequency in daily hassles (as measured by the DHS) and coping self-efficacy (as measured by the CSES)?

*H*<sub>0</sub>2: There is no statistically significant relationship between working mothers' frequency in daily hassles and coping self-efficacy.

*H*<sub>1</sub>2: There is a statistically significant relationship between working mothers' frequency in daily hassles and coping self-efficacy.

RQ3: What is the relationship between working mothers' coping self-efficacy (as measured by CSES) and health outcomes (as measured by the SF-36v2®)?

*H*<sub>0</sub>3: There is no statistically significant relationship between working mothers' coping self-efficacy and health outcomes.

*H<sub>13</sub>*: There is a statistically significant relationship between working mothers' coping self-efficacy and health outcomes.

RQ4: To what extent does coping self-efficacy (as measured by the CSES) mediate between working mothers' frequency in daily hassles (as measured by the DHS) and health outcomes (SF-36v2®)?

*H<sub>04</sub>*: Coping self-efficacy will not mediate between working mothers' frequency in daily hassles and health outcomes.

*H<sub>14</sub>*: Coping self-efficacy will mediate between working mothers' frequency in daily hassles and health outcomes.

### **Analysis Plan**

**Descriptive analysis.** Descriptive statistics were conducted on the sample demographics. Means and standard deviations were computed for continuous data including age, range of income and years of education, and discrete data including number of children in the home. Frequencies were used for categorical data including highest level of education, gender, employment status, marital status, and ethnicity/race. Normality testing was used to assess the distribution of the data by examining the histograms, Q-Q plots, descriptive statistics for skewness and kurtosis, and Shapiro-Wilk's test for all of the dependent variables (Laerd Statistics, 2013). Cronbach's alpha were used to assess the internal reliability for DHS, CSES, and SF-36v2®.

**Inferential analyses.** In order to answer the research questions, Baron and Kenney’s (1986) approach to testing mediation with regression analysis was utilized. Baron and Kenny’s approach consists of four steps and the determination for significance of the coefficients at each step. Steps 1–4 are shown in Table 3.

Table 3

*Baron and Kenney’s Steps to Mediation with Regression Analyses*

Steps	Analysis
Step 1	Conduct a simple regression analysis with X predicting Y to test for path <i>c</i> alone
Step 2	Conduct a simple regression analysis with X predicting M to test for path <i>a</i>
Step 3	Conduct a simple regression analysis with M predicting Y to test the significance of path <i>b</i>
Step 4	Conduct a multiple regression analysis with X and M predicting Y

*Note.* *X* = causal or predictor variable, *Y* = outcome or criterion variable, *M* = mediating variable, *a* = the path between X and M, *b* = the path between M and Y, and *c* = the path between X and Y. Adapted from *The four steps*, by D. A. Kenney, May 22, 2016, Retrieved from <http://www.davidakenny.net/cm/mediate.htm>-Mediation.

**Step 1.** To test the hypotheses associated with “RQ1: What is the relationship between working mothers’ frequency in daily hassles (as measured by the DHS) and health outcomes (as measured by the SF-36v2®)?” a Pearson correlation coefficient was used to measure the strength and direction of the relationship between daily hassles and each of the eight health outcomes after assumptions were met (Gardner & Nefeld, 2013). The null hypothesis was rejected when the relationship between frequency in daily hassles and each of the health outcomes were significant at  $p < .05$ .

**Step 2.** To test the hypotheses associated with “RQ2: What is the relationship between working mothers’ frequency in daily hassles (as measured by the DHS) and coping self-efficacy (as measured by the CSES)?” a Pearson correlation was conducted to show the magnitude and direction of the relationship between daily hassles and each of the coping self-efficacy measures (Gardner & Neufeld, 2013). The null hypothesis was rejected when the relationship between frequency in daily hassles and each of the coping self-efficacy measures were significant at  $p < .05$ .

**Step 3.** To test the hypotheses associated with “RQ3: What is the relationship between working mothers’ coping self-efficacy (as measured by CSES) and health outcomes (as measured by the SF-36v2®)?” a Pearson correlation was conducted to determine the strength and direction of the relationship between each of the coping self-efficacy measures and eight health outcomes (Gardner & Neufeld, 2013). The null hypothesis was rejected when the relationship between coping self-efficacy measures and health outcomes were significant at  $p < .05$ .

**Step 4.** Step 4 was initiated as a result of finding significant relationships from Steps 1 through 3 (Baron & Kenney, 1986). Therefore, to test the hypotheses associated with “RQ4: To what extent does coping self-efficacy (as measured by the CSES) mediate between working mothers’ frequency in daily hassles (as measured by the DHS) and health outcomes (SF-36v2®)?” a multiple linear regression analysis was conducted with daily hassles and coping self-efficacy measures predicting health outcome after most of the assumptions were met. Assumptions included normality, linearity, independence of residuals, homoscedasticity, and absence of multicollinearity (Laerd Statistics, 2013).



The null hypothesis was rejected when the relationship between frequency in daily hassles, coping self-efficacy measures, and health outcomes measures were significant at  $p < .05$ .

**Covariates.** Similar to Stuart and Garrison's (2002) use of the socio-demographic variables, a three-step hierarchical regression procedure was conducted in order to control for potential covariates such as age, number of children, education, and employment status. A hierarchical regression was conducted to test the effects of the demographic and predictor variables on the outcome variable. The first step included the demographic variables being regressed on health outcomes. Second, the demographic variables and frequency in daily hassles was regressed on health outcomes. Third, socio-demographic variables, frequency in daily hassles, and coping self-efficacy were regressed on health outcomes.

### **Threats to Validity**

#### **External Validity**

Generalizability of the findings to the population is needed in order to bridge the gap between what is observed in the findings and what is actually occurring within the population (Calder, Phillips, & Tybout, 1982; Grimes & Schulz, 2002; Persuad & Mamdani, 2006). In order to appropriately draw inferences to the population, potential threats to external validity must be identified (Persuad & Mamdani, 2006). The selection procedure for the current study was the most significant threat to external validity. The study was limited to adult women who were older than 18, U.S. citizens, fluent in reading and speaking English, had at least once child at home younger than 18, and worked at

least 20 hours a week. Secondary to the narrow characteristics of the respondents, external validity was maintained by not generalizing the findings beyond the inclusion criteria.

The study was also limited to working mothers who had access to the internet. Internet users with high accessibility to the internet tend to have different characteristics in comparison to individuals who have minimal to no access to the internet (U.S. Census, 2013). Those who have high internet accessibility tend to be White, well-educated, and have a high household income of \$100,000 or more; and those with low to no access to the internet tend to be African American and Hispanic, have less than a high school education, and have a household income of less than \$25,000 (U.S. Census, 2013). Limiting generalizations of the findings to internet users minimized threat to external validity.

### **Internal Validity**

Internal validity describes the extent to which the causal relationships between variables are not the result of other variables such as socio-demographic characteristics (Calder et al., 1982). A threat to internal validity for a cross-sectional study includes selection bias of the respondents and mortality or dropout rate (Grimes & Schulz, 2002). As described earlier in this chapter, the respondents were self-selected to participate in the study as opposed being randomly selected. Respondents who select themselves to participate in research studies tend to be high on altruism and select studies that interests them (Andrews et al., 2007). Attracting a large audience can be obtained by selecting a topic that will interest the targeted audience and, therefore, minimize threat to internal

validity (Eysenbach & Wyatt, 2002). Interest in the research topic was evident by the large number of respondents who participated in the study within a short period in time.

An additional threat to internal validity included the socio-demographic characteristics of the respondents. The majority of the respondents were healthy and of a high socioeconomic status (employed full time with high education and household income), suggesting a predisposition to score higher on sense of control, self-efficacy, accessibility to resources, and health status in comparison to those of low socioeconomic status who have less control, self-efficacy, access to resources, and poorer health status (Bell et al., 2004). Probability sampling and stratification of health status may be prudent in minimizing threats to internal validity in future studies (Grimes & Schulz, 2002).

Mortality or dropout rate also posed a risk to internal validity for the current study. The reason for why participants dropped out of the study or partially completed the survey is unknown. Respondents tend to skim items or not read all of the options on a survey, especially when the instructions are lengthy and complicated (Galesic, Tourangeau, Couper, & Conrad, 2008). To minimize the dropout rate, I selected a template on SurveyMonkey that was visually appealing and easy to click from one page to the next.

### **Construct Validity**

Threats to external validity can be minimized by making sure the construct validity of the measurements accurately measure what they tended to measure based on the theoretical concepts (Calder et al., 1982). Inadequate construct validity can result in erroneous inferences when the operational definitions are insufficient and not in

alignment with the theoretical concept (Calder et al., 1982). Threats to construct validity were minimized for the current study by selecting peer-reviewed research articles and measurements that clearly operationally defined the variables.

### **Ethical Procedures**

In accordance with the American Psychological Association's (2010b) Ethical Principles of Psychologists and Code of Conduct, Walden University's Institutional Review Board (IRB) approved the integrity of the research study and safeguards put in place to protect the respondents from harm (Walden IRB approval code: 14-15-0242919). The informed consent was written in English and at an eighth grade level in order to ensure comprehension by prospective participants (APA, 2010). Names and other identifying information were not required on any part of the online survey. An anonymous survey consent form was used so respondents could feel comfortable enough to answer honestly (Eysenbach & Wyatt, 2002; Schmidt, 1997). Per Walden University's IRB guidelines, the participants were informed about the purpose and voluntary nature of the study. Although the potential for harm was minimal, the respondents were informed about their right to discontinue their participation from the study if, at any point, they began to experience discomfort from reflecting on their daily hassles, abilities to cope, and health outcomes (APA, 2010). Each of the questions on the demographic questionnaire had an option not to respond ("Would rather not say") in order to protect their rights to withhold information (APA, 2010). Respondents were allowed to discontinue their participation in the study at any time. Discontinuation required only for the respondent to close out from the study (SurveyMonkey, 2016). Partially completed

surveys were stored on SurveyMonkey, however (SurveyMonkey, 2016). The survey concluded with a gratitude for participating in the study. There was no deception involved. They were informed about lack of compensation for their time (APA, 2010). The respondents were given my contact information, as well as IRB's contact information, in the event of questions and concerns regarding the study (APA, 2010). The respondents gave their consent to participate in the online survey by clicking on the word "Next" at the bottom of the screen (SurveyMonkey, 2016). In accordance with Walden University's IRB, data will be kept secure and protected by a passcode and stored for at least 5 years.

### **Summary**

A descriptive, cross-sectional, self-administered, online, non-probability research design was used to determine the role coping self-efficacy had on the relationship between daily hassles and health outcomes among a sample of U.S. working mothers. IRB approval was granted prior to the collection of data. The instruments selected for the study were selected based on their high reliability and good validity. Baron and Kenny's mediation with multiple regression was determined to be appropriate in answering the research questions and determining the extent of the relationships between the variables. Findings from the descriptive and inferential analyses are presented in Chapter 4.

## Chapter 4: Results

### **Introduction**

The main purpose of this study was to determine whether coping self-efficacy mediated the effect that daily hassles have on working mothers' health outcomes. Three of the research questions pertained to determining the extent of the relationship between frequency in daily hassles and health outcomes, frequency in daily hassles and coping self-efficacy, and coping self-efficacy and health outcomes. I hypothesized that there would be a significant relationship between frequency in daily hassles and health outcomes, frequency in daily hassles and coping self-efficacy, and coping self-efficacy and health outcomes. The fourth research question pertained to assessing the extent to which coping self-efficacy mediated between frequency in daily hassles and health outcomes. I hypothesized that coping self-efficacy would mediate between frequency in daily hassles and health outcomes. Chapter 4 begins with a description of the preliminary analyses followed by a description of the participants. I answered the research questions using inferential analyses, which is described in length, following the description of the participants. The chapter ends with a summary of the findings and the transition to the final chapter.

## Data Collection

### Data Cleaning

Data collection took place from July to September 2015. The data were screened for accuracy, inclusion criteria, missing data, and outliers. Accuracy was assessed by looking at the Frequency Tables to identify data points that did not fit within the minimal and maximum range of scoring. An initial sample size of 266 was obtained; however, 24 participants were not included in the data set due to completing less than 50% of the survey. An additional seven were not included secondary to not meeting full inclusion criteria. The presence of outliers was identified and removed by using the standard value of 3.29 (i.e., standardized value of 3.29 represents the number of standardized deviations the value is from the mean) as the cutoff point (Tabachnick & Fidell, 2012). Based off the Tabachnick and Fidell approach to using 3.29 as the cutoff, 11 total outliers for the dependent variables were removed. More specifically, nine data sets from the dependent variables were identified as outliers and removed. Physical functioning (PF), role physical (RP), role-emotional (RE); and mental health (MH) were subscales on the SF-36v2® affected by the outliers. Two additional outliers were removed from analysis due to a filter command on SPSS identifying one case as missing 10 and a second case missing 16 data sets on the SF-36v2®. No outliers were removed for the independent variables or mediating variables.

### Normality Testing

Normality testing was used to assess the distribution of the data by examining the histograms, Q-Q plots, descriptive statistics for skewness and kurtosis, and Shapiro-Wilk's test for all of the dependent variables. Table 4 shows the skewness, kurtosis, and the results of the Shapiro-Wilk's test for each dependent variable. Together, the results of the normality tests showed that all the dependent variables were negatively skewed (all Shapiro-Wilk's  $p$  values  $< .05$ ). To correct the skewed distributions, a log transformation was applied to each of the dependent variables; however, all of the log-transformed variables were still significantly skewed. Therefore, the main analyses were conducted using the nontransformed original scores.

Table 4

#### *Skewness, Kurtosis, and Shapiro-Wilk's Tests for Dependent Variables*

Variable	Skewness	Kurtosis	S-W Statistic	Shapiro-Wilk Test	
				$df$	$p$
PF	-2.24	5.32	0.70	228	<.001
RP	-1.50	2.46	0.73	232	<.001
BP	-0.85	0.37	0.90	235	<.001
GH	-0.57	-0.24	0.96	235	<.001
VT	-0.25	-0.20	0.98	235	.006
SF	-1.23	0.86	0.82	235	<.001
RE	-1.16	0.44	0.81	234	<.001
MH	-0.76	-0.02	0.94	234	<.001

*Note.* PF = physical functioning, RP = role physical, BP = bodily pain, GH = general health, VT = vitality, SF = social function, RE = role-emotional, and MH = mental health.



### Analysis of Missing Data

Potential correlations between missing data and demographic information were assessed. First, the variables for each of the research question sections (daily hassles, coping self-efficacy, and health outcomes) were calculated into a “missing” variable that was classified as either missing or not missing for each section. Second, the missing variables were then correlated with the demographic variables. Table 5 shows the results of the correlations. There were no statistically significant correlations, suggesting there was not a statistically significant relationship between the demographic information and the missing values on the daily hassles, coping self-efficacy, and health outcomes.

Table 5

#### *Correlations Between Demographic Variables and Missing Values*

	Age	Ethnicity	Marital Status	Education	Children	Income
DHS	.07	.06	-.01	-.01	-.07	-.03
CSES	-.03	.02	-.00	.02	-.06	-.11
SF-36v2	.05	.10	.10	.09	.06	-.13

*Note.* All correlations were non-significant. DHS = Daily Hassles Scale, CSES = Coping Self-Efficacy Scale, and SF-36v2 = Short Form-36 version 2®.

### Descriptive and Demographic Characteristics of the Sample

#### Demographics

Data from the Demographic Questionnaire described the characteristics of the 235 working mothers. The data were obtained from working mothers who finished the surveys on SurveyMonkey. All of the participants were U.S. citizens (100%). The study population consisted of all female (100%) participants who were predominately White (59.6%) and Black or African American (33.2%). The ages of the participants were more

spread out with 32.3% in the 40 to 44-age range, 21.7% in the 35 to 39 range, 20.9% in the 45 or older range, and 18.7% in the 30 to 34 range. The majority of participants were married (71.6%), had one (39.6%) or two (44.3%) children, and had either a bachelor's degree (39.1%) or a master's degree (31.9%). Most of the participants were also employed and working 40 to 49 hours a week (65.1%). Average income was at \$100,000 or more (47.7%) for most of the participants. Frequencies and percentages are displayed in Table 6. The demographic characteristics of the current sample were similar to the 2013 U.S. Census of internet users in terms of ethnic makeup, education level, employment status, and household income. Marital status of internet users was not documented in the U.S. Census. Internet users tend to be White, have at least a bachelor's degree, work full-time, and have a household greater than \$100,000. Seventy five percent of women (n = 93,988) in the U.S. have access to a smartphone or have home internet access (U.S Census, 2013). Mothers who use the internet tend to be between the ages of 35 and 44 and employed full-time (Arbitron & Edison Research, 2013).

Table 6

*Demographic Frequencies and Percentages*

Demographic	<i>N</i>	%
Gender		
Female	235	100.0
Ethnicity		
White	140	59.6
Black or African American	78	33.2
American Indian or Alaska Native	2	0.9
Asian	2	0.9
Native American or Pacific Islander	1	0.4
Latino or Hispanic	6	2.6
Multiracial	5	2.1
Would rather not say	1	0.4
Age		
24 or younger	5	2.1
25 – 29	9	3.8
30 – 34	44	18.7
35 – 39	51	21.7
40 – 44	76	32.3
45 or older	49	20.9
Would rather not say	1	0.4
Marital Status		
Divorced	25	10.8
Living with another	6	2.6
Married	166	71.6
Separated	8	3.4
Single	25	10.8
Widowed	1	0.4
Would rather not say	1	0.4

(Table 6 continued)

Demographic	<i>N</i>	%
Children		
One	93	39.6
Two	104	44.3
Three	26	11.1
Four or more	10	4.3
Would rather not say	2	0.9
Education		
Less than High School	1	0.4
High School or equivalent	8	3.4
Vocation/technical school	6	2.6
Some college, but no degree	13	5.5
Associates Degree	16	6.8
Bachelor's Degree	92	39.1
Master's Degree	75	31.9
Doctoral Degree	11	4.7
Professional Degree (MD, JD)	13	5.5
Employment Status		
Employed (20 or less hours)	7	3.0
Employed (21 to 29 hours)	13	5.5
Employed (30 to 39 hours)	30	12.8
Employed (40 to 49 hours)	153	65.1
Employed (50 or more hours)	32	13.6
Income		
Under \$10,000	1	0.4
\$10,000 - \$19,999	5	2.1
\$20,000 - \$29,999	10	4.3
\$30,000 - \$39,999	13	5.5
\$40,000 - \$49,999	16	6.8
\$50,000 - \$74,999	33	14.0
\$75,000 - \$99,999	36	15.3
\$100,000 or more	112	47.7
Would rather not say	9	3.8

### **Predictor Variable**

The DHS measured perceptions of daily hassles. DHS had a high level of internal consistency as determined by a Cronbach's alpha of .97. The DHS yielded two scores, Frequency score and Severity score. A histogram and Q-Q plot showed that frequency scores were approximately normally distributed, although the Shapiro-Wilk's test was significant ( $p < .05$ ). Items were identified as being a hassle if participants scored a "1" or greater on the item. Items marked a "0" meant the item was not identified as a hassle. Number of hassles ranged from 4 to 98. The frequency mean for the participants was 44.32 ( $n = 235$ ,  $SD = 20.25$ ) with a median score of 45. The frequency in daily hassles for the current study was not surprising because Alpert and Culbertson found dual-earner women had more hassles pertaining to family, work, achievement, and individual concerns ( $M = 42.45$ ,  $SD = 24.23$ ) than non-dual-earner women ( $M = 28.11$ ,  $SD = 11.68$ ). The five most frequently endorsed items were planning meals, not getting enough sleep, too many responsibilities, not enough time, and too many things to do. The list of hassles can be found in Appendix B.

A Daily Hassles Severity score was also obtained from the data. Summing the scores and dividing by the number of items endorsed as a hassle obtained the severity score. The Severity score was positively skewed as determined by the Shapiro-Wilk's Test ( $p < .05$ ). The severity scores ranged from .30 to 2.72 on a Likert scale ranging from 0 to 3 (none or did not occur, somewhat severe, moderately severe, or extremely severe). The mean severity score was 1.44 ( $SD = 0.34$ ), suggesting moderately severe. Too many things to do ( $M = 1.54$ ,  $SD = 1.03$ ), not enough time ( $M = 1.47$ ,  $SD = 1.04$ ), too many

responsibilities ( $M = 1.45$ ,  $SD = 0.95$ ), concerns about losing weight ( $M = 1.39$ ,  $SD = 1.01$ ), and not getting enough sleep ( $M = 1.38$ ,  $SD = 0.99$ ) were rated as the most severe hassle items. The most severe hassles were not the same as the most frequently endorsed items.

### **Mediator Variable**

The CSES measured confidence in ability to cope with life challenges (Chesney et al., 2006). The subscales and overall scores were negatively skewed as determined by Shapiro-Wilk's test ( $p < .05$ ). The scale had a high level of internal consistency as determined by a Cronbach's alpha of .95. The Likert scale for CSES ranged from 0 cannot do at all, 5 moderately certain can do, and 10 certain can do. Overall CSES scores ranged from 0.46 to 10.00 with a mean score of 6.70 ( $SD = 1.64$ ), suggesting moderately certain can do. Table 7 shows means, standard deviations, and medians for all CSES subscales and overall score.

Table 7

#### *Means, Standard Deviations, and Medians for Coping Self-Efficacy Scale*

	<i>N</i>	<i>M</i>	<i>SD</i>	Median
CSE	235	6.70	1.64	6.96
PFC	235	6.92	1.58	7.17
SUET	235	6.56	1.91	6.89
SFF	235	6.42	2.11	6.80

*Note.* CSE = coping self-efficacy, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family.

### Outcome Variable

Health outcome was measured using the SF-36v2®. Cronbach's alpha for each of the health outcome subscales ranged from .76 to .82, suggesting adequate internal consistency. The instrument consists of eight subscales. The SF-36v2® does not yield an overall total score. All subscale scores were negatively skewed as determined by the Shapiro-Wilk's Test ( $p < .05$ ). Scores range from 0 to 100 with a mean of 50 and a standard deviation of 10 (Maruish & Turner-Bowker, 2009). Norm-based scores between 47 and 53 are considered "normal" for the general population (Maruish & Turner-Bowker, 2009). For all means, standard deviations, and medians see Table 8. All subscales for the current study fell within the "normal" range in comparison to the general population in the United States, suggesting a basically healthy sample of participants.

Table 8

*Means, Standard Deviations, and Medians for SF-36v2®*

SF-36v2® Subscales	<i>N</i>	<i>M</i>	<i>SD</i>	Median
PF	228	54.30	4.74	55.63
RP	232	52.81	6.91	57.16
BP	235	51.98	8.55	51.61
GH	235	52.73	8.84	55.56
VT	235	47.45	9.71	46.66
SF	235	48.96	9.77	52.33
RE	234	48.75	9.07	52.69
MH	234	47.78	9.13	48.25

*Note.* PF = physical functioning, RP = role physical, BP = bodily pain, GH = general health, VT = vitality, SF = social function, RE = role-emotional, and MH = mental health. Values reflect norm-based scores (NBS) ranging from 0 (worse health) to 100 (better health) with a mean = 50 and SD = 10.

In addition to the scoring software, QualityMetric also provided an aggregate report for the Mental Component Summary score and Physical Component Summary score, which utilized normative data from the QualityMetric 2009 general population sample. However, comparison of the current findings to the general population of women could not be analyzed gender-by-age because the aggregate report required the sample participants' date of birth and not age range. Therefore, the current sample was compared to the general population of women as a whole and, subsequently, caution should be used when interpreting the findings from the aggregate report. High scores represented better mental/physical health and low scores represented worse mental/physical health. The Mental Component Summary (MCS) score (VT, SF, RE, and MH subscales) yielded a mean of 46.01, which is below what is considered normal for the general population of women ( $M = 49.06$ ). The Physical Component Summary (PCS) score (PF, RP, BP, and GH subscales) yielded a mean of 54.33, which was higher than the general population of women with an average PCS score of 49.19. The findings suggested the sample participants were more concerned about their mental health than their physical health. In terms of MCS, a pie chart showed 24% of the participants were above, 41% were at, and 35% were below the normal range ( $M = 49.06$ ) for their profile. According to the aggregated report, 29% of the women were at risk for depression in comparison to the 19% of the female general population. The aggregated report also showed a pie chart with the following findings for PCS: 59% of the participants were above, 32% were at, and 9% were below the normal range ( $M = 49.19$ ) for their profile, again reflecting a healthy population.



## Inferential Analyses

In order to assess the research questions, the Baron and Kenney method of mediation was used to see if coping self-efficacy mediated the effect of daily hassles on health outcomes. In these analyses, the outcome variable was the eight subscales (physical functioning, role physical, bodily pain, general health, vitality, social function, role-emotional, and mental health) of the SF-36v2®. The predictor variable was frequency score for daily hassles. The mediators were overall coping self-efficacy scores, problem focused coping scores, stop unpleasant emotions and thoughts scores, and support from friends and family scores.

### Hypothesis 1

*Null Hypothesis (H<sub>01</sub>):* There is no statistically significant relationship between working mothers' frequency in daily hassles and health outcomes.

*Alternative Hypothesis (H<sub>11</sub>):* There is a statistically significant relationship between working mothers' frequency in daily hassles and health outcomes.

Pearson's correlations were used to test the relationship between daily hassles frequency and the eight health outcomes. Table 9 shows the correlations between daily hassles frequency and each of the health outcome measures. The results showed statistically significant negative relationships between daily hassles frequency and each of the health outcomes (all  $p$ 's < .01). The magnitude of the correlation coefficients ranged from  $-0.29$  to  $-0.55$  and the  $R^2$  (i.e., variance explained) ranged from 0.08 to 0.30, indicating the effect sizes ranged from small to large (Cohen, 1988). The results of

these correlations mean that all of the variables for daily hassles and health outcomes can be used for the mediation analysis, and the null hypothesis was rejected.

Table 9

*Correlations Between Daily Hassles and Health Outcomes*

Sf-36v2®	Daily Hassles Frequency
PF	-0.32*
RP	-0.30*
BP	-0.29*
GH	-0.29*
VT	-0.43*
SF	-0.51*
RE	-0.46*
MH	-0.55*

*Note.* \* $p$  is < .01. PF = physical functioning, RP = role physical, BP = bodily pain, GH = general health, VT = vitality, SF = social function, RE = role-emotional, and MH = mental health.

## Hypothesis 2

*Null Hypothesis (H<sub>02</sub>):* There is no statistically significant relationship between working mothers' frequency in daily hassles and coping self-efficacy.

*Alternative Hypothesis (H<sub>12</sub>):* There is a statistically significant relationship between working mothers' frequency in daily hassles and coping self-efficacy.

Pearson's correlation was used to test the relationship between daily hassles frequency and the four coping self-efficacy measures (overall self-efficacy scores, problem focused coping scores, stop unpleasant emotions and thoughts scores, and support from friends and family scores). Table 10 shows the correlations between daily

hassles frequency and each of the coping self-efficacy measures. The results showed statistically significant negative relationships between daily hassles frequency and each of the coping self-efficacy measures (all  $p$ 's < .01). The magnitude of the correlation coefficients ranged from  $-0.33$  to  $-0.46$  and the  $R^2$  ranged from  $0.11$  to  $0.21$ , indicating the effect size was in the medium range (Cohen, 1988). This second correlation analysis means that the predictor and mediator variables can both be used in the final mediation analysis, and the null hypothesis can be rejected.

Table 10

*Correlations Between Daily Hassles and Coping Self-Efficacy*

	Daily Hassles Frequency
CSE	$-0.46^*$
PFC	$-0.45^*$
SUET	$-0.44^*$
SFF	$-0.33^*$

*Note.* \* $p$  is < .01. CSE = coping self-efficacy, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family.

### Hypothesis 3

*Null Hypothesis (H03):* There is no statistically significant relationship between working mothers' coping self-efficacy and health outcomes.

*Alternative Hypothesis (H13):* There is statistically significant relationship between working mothers' coping self-efficacy and health outcomes.

Pearson's correlation was used to test the relationship between the four coping self-efficacy measures and the eight health outcomes. Table 11 shows the correlations between each of the coping self-efficacy measures and each of the health outcome

measures. All of the correlations were statistically significant (all  $p$ 's < .05), except for the correlation between physical functioning and stop unpleasant emotions and thoughts, ( $p = .059$ ). The magnitude of correlation coefficients ranged from 0.14 to 0.56 and the  $R^2$  ranged from 0.02 to 0.31, indicating the effect sizes ranged from small to large (Cohen, 1988). These results suggest that all of the variables can be used in the final mediation analysis, and the null hypothesis can be rejected.

Table 11

*Correlations Between Coping Self-Efficacy and Health Outcomes*

	CSE Score	PFC Score	SUET Score	SFF Score
PF	0.17*	0.15*	0.13	0.24**
RP	0.32**	0.29**	0.30**	0.30**
BP	0.18*	0.16*	0.14*	0.22*
GH	0.28**	0.23**	0.26**	0.30**
VT	0.56**	0.52**	0.52**	0.47**
SF	0.45**	0.46**	0.41**	0.31**
RE	0.48**	0.49**	0.45**	0.32**
MH	0.57**	0.54**	0.55**	0.42**

*Note.* \* $p$  is < .05. \*\* $p$  is < .01. Otherwise  $p$  is > .05. CSE = coping self-efficacy, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, SFF = support from friends and family, PF = physical functioning, RP = role physical, BP = bodily pain, GH = general health, VT = vitality, SF = social function, RE = role-emotional, and MH = mental health.

#### **Hypothesis 4**

*Null Hypothesis (H<sub>04</sub>):* Coping self-efficacy will not mediate between working mothers' perception of daily hassles and health outcomes.

*Alternative Hypothesis (H<sub>14</sub>):* Coping self-efficacy will mediate between working mothers' perception of daily hassles and health outcomes.

Multiple linear regressions were run to test if coping self-efficacy mediated the relationship of daily hassles and health outcomes. Prior to the analyses, the assumptions of multiple linear regression were tested. These assumptions include normality, linearity, independence of residuals, homoscedasticity, and absence of multicollinearity. Normality of the dependent variables was previously assessed using histograms, Q-Q plots, and Shapiro-Wilk's tests. These tests showed that the dependent variables were not normally distributed (all Shapiro-Wilk's  $p$ -values  $< .05$ ). Although the normality assumption was not met, the analyses were still conducted because the  $F$  and  $t$  statistics are considered robust to violations of normality when sample sizes are greater than 30 (Green & Salkind, 2011). Linearity was tested using scatterplots and partial regression plots for each regression. The assumption of linearity was met for all of the regressions. Independence of residuals was tested using the Durbin-Watson test, and the assumption was met for each regression. Homoscedasticity was tested using scatterplots of standardized residuals versus standardized predicted values, and the assumption was met for each regression. Absence of multicollinearity was tested using variance inflation factor (value of 10; Tabachnick & Fidell, 2012) and tolerance values (value less than 0.1; Tabachnick & Fidell, 2012). These multiple linear regression tests showed that the overall coping self-efficacy score could not be entered into the models due to high multicollinearity with the other predictors; therefore, this variable was excluded from the models. The assumption of absence of multicollinearity was met for the final regressions.

Table 12 shows the results of each regression before the mediators were entered. The results of the regression showed that daily hassles frequency significantly predicted all of the health outcomes variables (all  $p$ 's < .001). Table 13 shows the results of each regression model with the mediator variables included. After adding the mediator variables for coping self-efficacy, the magnitude of the beta coefficients for daily hassles frequency decreased in the regression models for role physical, general health, vitality, social function, role emotion, and mental health. This suggests that the coping self-efficacy measures partially mediated the relationship between daily hassles frequency and these health outcome measures. Because the relationship between daily hassles frequency and health outcomes remained significant in all of the regression models, there was no evidence of complete (or "full") mediation. For physical functioning, the support from friends and family mediator variable was significant ( $B = 0.59, t = 2.97, p = .003$ ). For bodily pain, the support from friends and family mediator variable was significant ( $B = 0.85, t = 2.42, p = .016$ ). For general health, the support from friends and family mediator variable was significant ( $B = 0.96, t = 2.67, p = .002$ ). For vitality, the support from friends and family mediator variable was significant ( $B = 0.81, t = 2.36, p = .019$ ). For social function, the problem focused coping mediator variable was significant ( $B = 1.75, t = 2.79, p = .006$ ). For role emotional, the problem focused coping mediator variable was significant ( $B = 1.70, t = 2.88, p = .004$ ). For mental health, the stop unpleasant emotions and thoughts mediator variable was significant ( $B = 1.16, t = 2.50, p = .013$ ).

Table 12

*Regressions Between Daily Hassles and Health Outcomes Before Mediation*

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>T</i>	<i>p</i>
Regression PF					
Daily Hassles Frequency	-0.08	0.02	-0.32	-5.07	<.001
Regression RP					
Daily Hassles Frequency	-0.10	0.02	-0.30	-4.75	<.001
Regression BP					
Daily Hassles Frequency	-0.12	0.03	-0.29	-4.58	<.001
Regression GH					
Daily Hassles Frequency	-0.13	0.03	-0.29	-4.67	<.001
Regression VT					
Daily Hassles Frequency	-0.21	0.03	-0.43	-7.21	<.001
Regression SF					
Daily Hassles Frequency	-0.25	0.03	-0.51	-9.10	<.001
Regression RE					
Daily Hassles Frequency	-0.21	0.03	-0.46	-7.87	<.001
Regression MH					
Daily Hassles Frequency	-0.25	0.03	-0.55	-9.97	<.001

*Note.* PF = physical functioning, RP = role physical, BP = bodily pain, GH = general health, VT = vitality, SF = social function, RE = role-emotional, MH = mental health. Regression PF:  $F(1, 226) = 25.75, p < .001, R^2 = .10$ ; regression RP:  $F(1, 230) = 22.55, p < .001, R^2 = .09$ ; regression BP:  $F(1, 233) = 20.94, p < .001, R^2 = .08$ ; regression GH:  $F(1, 233) = 21.87, p < .001, R^2 = .09$ ; regression VT:  $F(1, 233) = 51.99, p < .001, R^2 = .18$ ; regression SF:  $F(1, 233) = 82.81, p < .001, R^2 = .26$ ; regression RE:  $F(1, 232) = 61.87, p < .001, R^2 = .21$ ; and regression MH:  $F(1, 232) = 99.46, p < .001, R^2 = .30$ .

Table 13

*Regressions Between Daily Hassles and Health Outcomes After Mediation*

	<i>B</i>	<i>SE</i>	$\beta$	<i>T</i>	<i>p</i>
Regression PF					
Daily Hassles Frequency	-0.08	0.02	-0.32	-4.50	<.001
SFF	0.59	0.20	0.26	2.97	.003
SUET	-0.45	0.30	-0.18	-1.51	.131
PFC	-0.06	0.35	-0.02	-0.17	.865
Regression RP					
Daily Hassles Frequency	-0.07	0.02	-0.20	-2.87	.004
SFF	0.52	0.28	0.16	1.84	.067
SUET	0.25	0.43	0.07	0.58	.563
PFC	0.15	0.50	0.03	0.29	.771
Regression BP					
Daily Hassles Frequency	-0.12	0.03	-0.27	-3.88	<.001
SFF	0.85	0.35	0.21	2.42	.016
SUET	-0.57	0.54	-0.13	-1.06	.291
PFC	0.02	0.63	0.00	0.04	.972
Regression GH					
Daily Hassles Frequency	-0.10	0.03	-0.22	-3.19	.002
SFF	0.96	0.36	0.23	2.67	.008
SUET	0.31	0.55	0.07	0.56	.578
PFC	-0.39	0.64	-0.07	-0.61	.541
Regression VT					
Daily Hassles Frequency	-0.11	0.03	-0.22	-3.70	<.001
SFF	0.81	0.34	0.18	2.36	.019
SUET	0.72	0.52	0.14	1.37	.173
PFC	1.18	0.61	0.19	1.93	.055
Regression SF					
Daily Hassles Frequency	-0.19	0.03	-0.38	-6.28	<.001
SFF	-0.01	0.35	0.00	-0.03	.975
SUET	0.03	0.54	0.01	0.05	.958
PFC	1.75	0.63	0.28	2.79	.006



Regression RE					
Daily Hassles Frequency	-0.13	0.03	-0.29	-4.76	< .001
SFF	-0.22	0.34	-0.05	-0.65	.517
SUET	0.56	0.51	0.12	1.12	.265
PFC	1.70	0.59	0.29	2.88	.004
Regression MH					
Daily Hassles Frequency	-0.16	0.03	-0.36	-6.42	< .001
SFF	0.05	0.31	0.01	0.17	.869
SUET	1.16	0.46	0.24	2.50	.013
PFC	1.02	0.54	0.18	1.88	.061

*Note.* PF = physical functioning, RP = role physical, BP = bodily pain, GH = general health, VT = vitality, SF = social function, RE = role-emotional, MH = mental health, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family. Regression PF:  $F(4, 223) = 8.88, p < .001, R^2 = .14$ ; regression RP:  $F(4, 227) = 9.00, p < .001, R^2 = .14$ ; regression BP:  $F(4, 230) = 6.85, p < .001, R^2 = .11$ ; regression GH:  $F(4, 230) = 8.91, p < .001, R^2 = .13$ ; regression VT:  $F(4, 230) = 30.89, p < .001, R^2 = .35$ ; regression SF:  $F(4, 230) = 27.97, p < .001, R^2 = .33$ ; regression RE:  $F(4, 229) = 26.30, p < .001, R^2 = .32$ ; and regression MH:  $F(4, 229) = 43.18, p < .001, R^2 = .43$ .

### Covariates

For the final part of the analyses, three-step hierarchical regressions were run to control for the effects of covariates (age, number of children, level of education, and employment status) on the relationships between daily hassles, coping self-efficacy, and health outcomes. Because health outcomes were measured by eight different variables, eight different regressions were run. Prior to the analyses, the assumptions of multiple linear regression were tested. These assumptions were the same as the previous analyses (i.e., normality, linearity, independence of residuals, homoscedasticity, and absence of multicollinearity). All of the assumptions were met except for normality and absence of multicollinearity. As noted above, despite not meeting two of the assumptions for multiple linear regression, the analyses were conducted because  $F$  and  $t$  statistics are considered robust to violations of normality when sample sizes are greater than 30 (Green & Salkind, 2011). Provisionally, this researcher attempted to run the models with all

predictor variables included; however, the high multicollinearity of the entered variables, with the variable overall coping self-efficacy, score necessitated removing this variable from the model. The assumption of absence of multicollinearity was met for the final regression (all VIF values < 10).

Tables 14 through 21 show the results of the regression analyses for each of the health outcomes. In the first regression, the models became increasingly better after daily hassles frequency ( $R^2 = .13$ ) and mediator variables ( $R^2 = .16$ ) were added. In the regression for role physical, the models again were significantly better than the original model after adding daily hassles frequency ( $R^2 = .11$ ) and the mediator variables ( $R^2 = .15$ ) were added. In the regression for bodily pain, the models again were significantly better than the original model after adding the daily hassles frequency ( $R^2 = .13$ ) and the mediator variables ( $R^2 = .15$ ) were added. In the regression for general health, the models again were significantly better than the original model after adding the daily hassles frequency ( $R^2 = .09$ ) and the mediator variables ( $R^2 = .14$ ) were added. In the regression for vitality, the models again were significantly better than the original model after adding the daily hassles frequency ( $R^2 = .23$ ) and the mediator variables ( $R^2 = .38$ ) were added. In the regression for social function, the models again were significantly better than the original model after adding the independent variables ( $R^2 = .27$ ) and the mediator variables ( $R^2 = .34$ ) were added. In the regression for role emotion, the models again were significantly better than the original model after adding the daily hassles frequency ( $R^2 = .22$ ) and the mediator variables ( $R^2 = .32$ ) were added. In the final regression for mental health, the models again were significantly better than the original model after adding the

daily hassles frequency ( $R^2 = .30$ ) and the mediator variables ( $R^2 = .43$ ) were added.

Overall, the results of the hierarchical regressions suggest that controlling for the demographic variables (age, number of children, level of education, and employment status) did not affect the relationships between daily hassles frequency and the coping self-efficacy measures and health outcomes.

Table 14

*Hierarchical Regression Predicting Physical Functioning*

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>T</i>	<i>P</i>
<b>Model 1</b>					
Age	0.19	0.26	0.05	0.74	.459
Children	-0.39	0.37	-0.07	-1.06	.292
Education	-0.05	0.22	-0.02	-0.24	.813
Employment	0.69	0.37	0.13	1.86	.064
<b>Model 2</b>					
Age	0.01	0.25	0.00	0.03	.978
Children	-0.31	0.35	-0.06	-0.88	.382
Education	-0.14	0.21	-0.04	-0.66	.508
Employment	0.75	0.35	0.14	2.13	.034
DHS Frequency	-0.08	0.02	-0.32	-5.06	< .001
<b>Model 3</b>					
Age	0.02	0.24	0.00	0.07	.947
Children	-0.18	0.35	-0.03	-0.51	.614
Education	-0.14	0.21	-0.04	-0.68	.496
Employment	0.78	0.35	0.14	2.24	.026
DHS Frequency	-0.08	0.02	-0.32	-4.48	< .001
PFC	-0.05	0.35	-0.02	-0.15	.882
SUET	-0.44	0.30	-0.17	-1.44	.152
SFF	0.58	0.20	0.26	2.93	.004

*Note.* DHS Frequency = Daily Hassles Scale frequency, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family. Model 1:  $F(4,223) = 1.49$ ,  $p = .206$ ,  $R^2 = .01$ . Model 2:  $F(5,222) = 6.44$ ,  $p < .001$ ,  $R^2 = .13$ . Model 3:  $F(8,219) = 5.23$ ,  $p < .001$ ,  $R^2 = .16$ .

Table 15

*Hierarchical Regression Predicting Role Physical*

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>T</i>	<i>P</i>
<b>Model 1</b>					
Age	0.27	0.37	0.05	0.74	.459
Children	0.11	0.55	0.01	0.20	.844
Education	0.12	0.31	0.03	0.37	.713
Employment	0.98	0.57	0.12	1.72	.086
<b>Model 2</b>					
Age	0.03	0.36	0.01	0.09	.927
Children	0.17	0.52	0.02	0.33	.744
Education	-0.03	0.30	-0.01	-0.10	.922
Employment	1.15	0.54	0.14	2.13	.034
DHS Frequency	-0.10	0.02	-0.31	-4.77	< .001
<b>Model 3</b>					
Age	-0.12	0.35	-0.02	-0.34	.734
Children	0.11	0.53	0.01	0.22	.830
Education	-0.07	0.30	-0.01	-0.23	.821
Employment	1.14	0.53	0.13	2.14	.033
DHS Frequency	-0.07	0.02	-0.21	-3.02	.003
PFC	0.14	0.51	0.03	0.27	.790
SUET	0.25	0.44	0.07	0.57	.569
SFF	0.53	0.29	0.16	1.85	.065

*Note.* DHS Frequency = Daily Hassles Scale frequency, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family. Model 1:  $F(4,227) = 1.01$ ,  $p = .404$ ,  $R^2 = .02$ . Model 2:  $F(5,226) = 5.44$ ,  $p < .001$ ,  $R^2 = .11$  and Model 3:  $F(8,223) = 5.09$ ,  $p < .001$ ,  $R^2 = .15$ .

Table 16

*Hierarchical Regression Predicting Bodily Pain*

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>T</i>	<i>P</i>
<b>Model 1</b>					
Age	0.29	0.45	0.04	0.64	.523
Children	-1.65	0.65	-0.16	-2.52	.012
Education	0.22	0.38	0.04	0.57	.567
Employment	1.22	0.66	0.12	1.87	.063
<b>Model 2</b>					
Age	0.03	0.43	0.00	0.06	.951
Children	-1.55	0.63	-0.16	-2.48	.014
Education	0.06	0.37	0.01	0.16	.877
Employment	1.34	0.63	0.13	2.13	.034
DHS Frequency	-0.12	0.03	-0.28	-4.52	< .001
<b>Model 3</b>					
Age	-0.03	0.43	0.00	-0.06	.950
Children	-1.41	0.64	-0.14	-2.22	.028
Education	0.05	0.37	0.01	0.13	.901
Employment	1.39	0.63	0.14	2.22	.028
DHS Frequency	-0.11	0.03	-0.27	-3.79	< .001
PFC	-0.03	0.63	-0.01	-0.05	.957
SUET	-0.39	0.54	-0.09	-0.72	.472
SFF	0.77	0.35	0.19	2.20	.029

*Note.* DHS Frequency = Daily Hassles Scale frequency, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family. Model 1:  $F(4,230) = 3.13$ ,  $p = .016$ ,  $R^2 = .05$ . Model 2:  $F(5,229) = 6.80$ ,  $p < .001$ ,  $R^2 = .13$  and Model 3:  $F(8,226) = 4.95$ ,  $p < .001$ ,  $R^2 = .15$ .

Table 17

*Hierarchical Regression Predicting General Health*

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>T</i>	<i>P</i>
<b>Model 1</b>					
Age	0.66	0.47	0.09	1.40	.164
Children	0.12	0.69	0.01	0.18	.860
Education	0.15	0.40	0.03	0.37	.710
Employment	0.64	0.69	0.06	0.93	.355
<b>Model 2</b>					
Age	0.39	0.46	0.05	0.85	.399
Children	0.22	0.66	0.02	0.34	.738
Education	-0.02	0.39	0.00	-0.05	.959
Employment	0.77	0.66	0.07	1.15	.250
DHS Frequency	-0.13	0.03	-0.29	-4.51	< .001
<b>Model 3</b>					
Age	0.22	0.45	0.03	0.50	.621
Children	0.26	0.66	0.03	0.39	.699
Education	-0.02	0.38	0.00	-0.05	.959
Employment	0.82	0.65	0.08	1.26	.208
DHS Frequency	-0.10	0.03	-0.22	-3.19	.002
PFC	-0.43	0.65	-0.08	-0.66	.510
SUET	0.28	0.56	0.06	0.49	.622
SFF	0.98	0.36	0.23	2.70	.007

*Note.* DHS Frequency = Daily Hassles Scale frequency, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family. Model 1:  $F(4,230) = .81, p = .521, R^2 = .01$ ; Model 2:  $F(5,229) = 4.76, p = .001, R^2 = .09$ ; and Model 3:  $F(9,225) = 4.65, p < .001, R^2 = .14$ .

Table 18

*Hierarchical Regression Predicting Vitality*

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>t</i>	<i>P</i>
<b>Model 1</b>					
Age	1.74	0.50	0.22	3.47	.001
Children	-1.26	0.73	-0.11	-1.72	.086
Education	0.47	0.43	0.07	1.09	.275
Employment	-0.03	0.73	0.00	-0.04	.970
<b>Model 2</b>					
Age	1.33	0.46	0.17	2.87	.005
Children	-1.11	0.67	-0.10	-1.66	.099
Education	0.21	0.39	0.03	0.54	.591
Employment	0.16	0.67	0.01	0.24	.809
DHS Frequency	-0.19	0.03	-0.40	-6.69	< .001
<b>Model 3</b>					
Age	0.88	0.42	0.11	2.09	.038
Children	-1.48	0.62	-0.13	-2.41	.017
Education	0.04	0.36	0.01	0.12	.901
Employment	0.15	0.61	0.01	0.25	.802
DHS Frequency	-0.10	0.03	-0.20	-3.40	.001
PFC	1.11	0.61	0.18	1.83	.069
SUET	0.86	0.52	0.17	1.64	.103
SFF	0.68	0.34	0.15	2.01	.046

*Note.* DHS Frequency = Daily Hassles Scale frequency, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family. Model 1:  $F(4,230) = 4.61$ ,  $p = .001$ ,  $R^2 = .07$ ; Model 2:  $F(5,229) = 13.35$ ,  $p < .001$ ,  $R^2 = .23$ ; and Model 3:  $F(8,226) = 17.42$ ,  $p < .001$ ,  $R^2 = .38$ .

Table 19

*Hierarchical Regression Predicting Social Function*

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>t</i>	<i>P</i>
<b>Model 1</b>					
Age	0.79	0.52	0.10	1.52	.131
Children	-0.49	0.76	-0.04	-0.65	.519
Education	0.13	0.44	0.02	0.29	.772
Employment	0.45	0.76	0.04	0.59	.558
<b>Model 2</b>					
Age	0.25	0.45	0.03	0.56	.575
Children	-0.30	0.66	-0.03	-0.45	.653
Education	-0.20	0.38	-0.03	-0.53	.597
Employment	0.70	0.66	0.06	1.06	.292
DHS Frequency	-0.25	0.03	-0.51	-8.90	< .001
<b>Model 3</b>					
Age	-0.02	0.44	0.00	-0.04	.968
Children	-0.59	0.64	-0.05	-0.92	.359
Education	-0.39	0.37	-0.06	-1.05	.294
Employment	0.64	0.63	0.06	1.02	.309
DHS Frequency	-0.19	0.03	-0.38	-6.23	< .001
PFC	1.82	0.63	0.30	2.87	.004
SUET	0.07	0.54	0.01	0.12	.905
SFF	-0.05	0.35	-0.01	-0.15	.878

*Note.* DHS Frequency = Daily Hassles Scale frequency, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family. Model 1:  $F(4,230) = 0.92$ ,  $p = .455$ ,  $R^2 = .02$ , Model 2:  $F(5,229) = 16.82$ ,  $p < .001$ ,  $R^2 = .27$ , and Model 3:  $F(8,226) = 14.34$ ,  $p < .001$ ,  $R^2 = .34$ .



Table 20

*Hierarchical Regression Predicting Role-Emotional*

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>t</i>	<i>P</i>
<b>Model 1</b>					
Age	0.27	0.49	0.04	0.56	.576
Children	0.42	0.71	0.04	0.59	.558
Education	0.22	0.41	0.04	0.53	.594
Employment	0.38	0.71	0.04	0.53	.599
<b>Model 2</b>					
Age	-0.16	0.44	-0.02	-0.37	.710
Children	0.60	0.63	0.06	0.95	.344
Education	-0.07	0.37	-0.01	-0.18	.855
Employment	0.56	0.64	0.05	0.89	.377
DHS Frequency	-0.21	0.03	-0.47	-7.83	< .001
<b>Model 3</b>					
Age	-0.46	0.41	-0.06	-1.12	.263
Children	0.22	0.60	0.02	0.37	.715
Education	-0.28	0.35	-0.05	-0.80	.425
Employment	0.45	0.60	0.04	0.75	.454
DHS Frequency	-0.14	0.03	-0.30	-4.88	< .001
PFC	1.78	0.60	0.31	2.96	.003
SUET	0.53	0.51	0.11	1.04	.301
SFF	-0.19	0.34	-0.04	-0.55	.584

*Note.* DHS Frequency = Daily Hassles Scale frequency, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family. Model 1:  $F(4,229) = 0.32$ ,  $p = .862$ ,  $R^2 = .01$ ; Model 2:  $F(5,228) = 12.60$ ,  $p < .001$ ,  $R^2 = .22$ ; Model 3:  $F(8,225) = 13.41$ ,  $p < .001$ ,  $R^2 = .32$ .

Table 21

*Hierarchical Regression Predicting Mental Health*

	<i>B</i>	<i>SE</i>	<i>B</i>	<i>t</i>	<i>p</i>
<b>Model 1</b>					
Age	0.85	0.49	0.12	1.76	.080
Children	-0.42	0.71	-0.04	-0.59	.554
Education	0.47	0.41	0.08	1.15	.250
Employment	-0.23	0.71	-0.02	-0.32	.752
<b>Model 2</b>					
Age	0.35	0.41	0.05	0.84	.402
Children	-0.21	0.60	-0.02	-0.35	.730
Education	0.14	0.35	0.02	0.40	.687
Employment	-0.01	0.60	0.00	-0.01	.989
DHS Frequency	-0.24	0.03	-0.54	-9.57	< .001
<b>Model 3</b>					
Age	-0.01	0.38	0.00	-0.04	.971
Children	-0.66	0.55	-0.06	-1.19	.235
Education	-0.02	0.32	0.00	-0.07	.946
Employment	-0.10	0.55	-0.01	-0.19	.849
DHS Frequency	-0.16	0.03	-0.36	-6.24	< .001
PFC	1.03	0.55	0.18	1.87	.063
SUET	1.23	0.47	0.26	2.61	.010
SFF	0.00	0.31	0.00	0.00	.997

*Note:* DHS Frequency = Daily Hassles Scale frequency, PFC = problem focused coping, SUET = stop unpleasant emotions and thoughts, and SFF = support from friends and family. Model 1:  $F(4,229) = 1.38$ ,  $p = .243$ ,  $R^2 = .02$ ; Model 2:  $F(5,228) = 19.87$ ,  $p < .001$ ,  $R^2 = .30$ ; Model 3:  $F(8,225) = 21.53$ ,  $p < .001$ ,  $R^2 = .43$ .

## Summary

Chapter 4 began with preliminary analyses and a description of the sample. Description of the sample was followed by a brief summary of the results and then a detailed description of the inferential analyses. The results from the analyses showed that the coping self-efficacy measures partially mediated daily hassles on almost all of the health outcomes. Hierarchical regressions showed the demographic variables (age, children in the home, level of education, and job status) did not significantly affect the relationships between daily hassles and the coping self-efficacy measures and health outcomes. In Chapter 5, these results will be related back to previous literature and discussed in terms of alignment with the theoretical framework of this study. Limitations, implications, and suggestions for future research will also be discussed in this chapter.

## Chapter 5: Discussion, Recommendations, and Conclusion

### Introduction

The health of working mothers (70.5%; BLS, 2013) is a concern in the United States because they experience frequent hassles related to their conflicting responsibilities. It is well supported in the literature that cumulative daily hassles are associated with increased risk for developing a stress-related illness such as cardiovascular disease (e.g., Bomhof-Roordink et al., 2015) and depression (e.g., Schönfeld et al., 2016). However, not all working mothers are at risk of developing a stress-related illness as a result of cumulative daily hassles. The protective psychosocial factors associated with the optimal health of working mothers are under-researched among U.S. women. Subsequently, the purpose of the quantitative study was to determine the extent to which coping self-efficacy mediated the effect that cumulative daily hassles had on working mothers' health outcomes.

Lazarus et al.'s daily hassles were used as an additional theoretical approach to measuring the relationship between stress and mental and physical health, well-being, and functioning. Bandura's social cognitive theory and Lazarus and Folkman's transaction model of stress and coping were used as the theoretical foundation for coping self-efficacy and, therefore, this study (Chesney et al., 2006). A total of 235 working mothers participated in the online study. Most of the respondents were White and African American, married, were between the ages of 40 and 44 years, were well educated, were employed full-time, had two children, and had a household income of \$100,000 or more. Pearson correlations were used to assess the significance of the relationships between

cumulative daily hassles and health outcomes, cumulative daily hassles and coping self-efficacy, and coping self-efficacy and health outcomes. Mediation with regression analyses was also used to investigate the influence coping self-efficacy had on the relationship between frequency in daily hassles and eight different aspects of health. The findings suggested the following: (a) health outcomes worsened as frequency in daily hassles increased, (b) coping self-efficacy decreased as frequency in daily hassles increased, (c), health outcomes improved as their coping self-efficacy increased, and (d) coping self-efficacy partially mediated the relationship between frequency in daily hassles and health outcomes.

### **Interpretation of the Findings**

#### **Daily Hassles and Health Outcomes**

The findings from the current study suggest working mothers' mental and physical health, well-being, and functioning worsen as frequency in daily hassles increases. The findings are consistent with prior research that examined the negative influence of daily hassles on health outcome (e.g., Falconier, Nussbeck, Bodenmann, Schneider, & Bradbur, 2015; Kanner et al., 1981; Lazarus, 1986; Lazarus et al., 1985; Stuart & Garrison, 2006). More specifically, working mothers are annoyed by daily hassles because they disrupt or interfere with what they are trying to do at that time (Kanner et al., 1981). They are further annoyed by having to put forth effort, time, and energy to resolve the problem and return to the task at hand (Charles, Piazza, Mogle, Skuwubsum & Almeida, 2013). The influence frequent daily hassles have on their health

outcomes is direct through psychobiological systems and indirect through maladaptive coping behaviors (Charles et al., 2013).

It is likely mothers will continue to work while also caring for their home and children (Ammons, 2013; Cohany & Sok, 2007). This means working mothers are a subgroup of the population that is potentially at risk for persistent stress and poor health secondary to their repeated exposure to daily hassles. As a result, the identification of positive psychosocial factors is important in preventing ill-health. However, before working mothers can adequately change their relationship with daily hassles, it is important to examine specific daily hassles that are occurring most frequently in their lives and are causing them the most distress.

### **The Hassle of Planning Meals**

The working mothers in the current study were most frequently hassled by planning meals. Working mothers being hassled by household responsibilities such as planning meals was supported in the literature (e.g., Erlandsson, 2008; Erlandsson & Eklund, 2003a, 2003b, 2006). To understand the effect planning meals has on working mothers' health, it is important to understand the social context in which this particular hassle occurs. As stated in Chapter 2, one of the determinants of the relationship between daily hassles and stress is hassle importance (Kanner et al., 1981; McIntyre et al., 2008). Although speculative, it is assumed preparing meals was an important obligation for the women in maintaining the health of their families. Frequent family meals have been found to be associated with greater intake of fruits and vegetables and overall good health within the family (Berge, Hoppmann, Hanson, & Neumark-Sztainer, 2013; Martin-

Biggers, Spaccarotella, Berhaupt-Glickstein, Hongu, Worobey, & Byrd-Bredbenner, 2014). Despite the importance of frequency in family meals, providing a well-balanced meal throughout the week may be challenging for working mothers to accomplish because their first shift is spent engaged in paid work. Working mothers may identify meal preparation as a significant hassle due to the following barriers: getting home late from work, children's after school activities, picky eaters, interruptions from children while cooking, lack of meal planning, inconsistency in dinner time, and each family member wanting something different to eat (Martin-Biggers et al., 2014). Perceived control also influences the relationship between daily hassles and stress (Bandura, 1998; Kanner et al., 1981; Kwasky & Groh, 2014; Wiedenfeld et al., 1990). Therefore, meal preparation may be a hassle for working mothers as a result of the various uncontrollable events that occur during meal preparation such as, having to disrupt cooking in order to pick up a missing ingredient from the store, unexpected visitor at the door, and children not being still.

### **The Hassle of Not Enough Sleep**

The second most frequently identified daily hassle was not getting enough sleep. Once again, it can be assumed the women were aware of the importance of sleep because level of importance influences the relationship between daily hassles and stress (Kanner et al., 1981). The frequency in which working mothers are hassled by not getting enough sleep is a public health concern because it is well supported that less than 7 hours of sleep is related to decrease in accurate judgment, productivity, vitality, and increase in accidents, work absenteeism, and risk of developing a stress related illness (Allen &

Kiburz, 2012; Chatzitheochari & Arbrer, 2009; Maume, Sebastian, & Bardo, 2010; Venn, Arber, Meadows, & Hislop, 2008). As discussed in Chapters 1 and 2, although more mothers have entered the labor force over the past six decades (Cohaney & Sok, 2007), they continue to take on the primary responsibility of caring for the home and children (Chatzitheochari et al., 2009; Maume et al., 2010; Terrill et al., 2012). Consistent with the literature on women's health, working mothers are under a lot of stress due to too many things to do. After engaging in paid work during their first shift, working mothers quickly transition into their second shift upon returning home from work. Second shift may include such tasks as chores, preparing meals, and helping children with homework (Chatzitheochari & Arber, 2009). Tending to the needs of the spouse also adds an additional layer of responsibility (Venn et al., 2008). Addition to completing first and second shift, they are also engaged in third shift, which entails thinking and worrying about the needs of others (Venn et al., 2008). The need to get everything done within multiple shifts suggests working mothers are going to bed later and going to bed stressed. To further compound the issue, working mothers and nonworking mothers are more likely to experience disruptions during sleeping hours in comparison to fathers due to physical and emotional activity (Maume et al., 2010). Examples of interruptions from physical activity include being awakened by a child wetting in the bed, a snoring spouse, or child complaining of a nightmare (Chatzitheochari & Arber, 2009; Venn et al., 2008). Sleep can also be interrupted by emotional activity such as worrying about incomplete responsibilities and hearing an unusual cough coming from a child's room (Venn et al., 2008). Therefore, not only are working mothers going to bed stressed out, but they are



also waking up not feeling refreshed from a good night's rest (Maume et al., 2010). Their day then starts all over again by rushing in the morning to get themselves ready for work and the children ready for school (Hibel et al., 2012).

### **Coping Self-Efficacy**

The current respondents were moderately confident in their ability to initiate and orchestrate the necessary behaviors to manage daily hassles; however, efficacy declined as frequency in daily hassles increased. At low frequency in daily hassles, health outcomes improved as working mothers' confidence in ability to use problem focused coping, emotion focused coping, and social support increased. Conversely, confidence in their ability to cope and leverage social support waivered as their perception of daily hassles increased. Theoretically, working mothers' belief in their capabilities to initiate and orchestrate the necessary behaviors to either approach, tolerate, or avoid daily hassles is needed before an action can occur (Bandura, 1998). As reported elsewhere, confidence in ability to cope with daily hassles influences working mothers' motivation, effort, and persistence to minimize distress and maintain optimal health (Kwasky & Groh, 2014). Collectively, the findings of the present and previous studies suggest that low confidence in ability to manage and control their emotions, thoughts, and environment leads to low levels of motivation, effort, and persistence. These findings correspond to social cognitive theoretical predictions in that lack of confidence in ability to self-regulate mood, cognition, and environment can negatively effect working mothers' efforts and persistence to manage daily hassles and health (e.g., Bandura, 2006; Remien et al., 2006). If daily hassles such as planning meals and not enough sleep occur too frequently and are

appraised as being too much for effective coping, then working women may become doubtful of their capabilities to effect environmental change by lowering the source and frequency of hassles. In other words, working mothers with high cooking self-efficacy are more resourceful in finding solutions to environmental barriers and regulating their emotional activity; thus, reducing the saliency of planning meals (Woodruff & Kirby, 2013). As predicted by Bandura, Lazarus and Folkman, and Chesney et al., once the appraisal of coping self-efficacy has been made and coping behavior executed, reappraisal ensues in order to allow for modifications of cognitive processes, emotions, and coping behaviors.

### **Limitations of the Study**

The use of self-report measurements for online surveys are not exempt from limitations. Similar to other health related studies, self-report surveys can challenge the reliability and validity of the findings. The expectation of researchers is that participants will answer honestly and accurately to the surveys (Del Boca & Noll, 2000); however, full accuracy may be difficult to obtain when self-report surveys are lengthy. In the case of the current study, participants may have responded inconsistently secondary to fatigue associated with the length of the survey (10-item demographic questionnaire, 117-item DHS, 26-item CSES; and 36-item SF-36v2®); therefore, obscuring their "true" belief (Del Boca & Noll, 2000). Full accuracy in responses can also be difficult to obtain secondary to social desirability or image management to appear different from how they truly are (Del Boca & Noll, 2000; Schwartz, 1999). Thus, the participants from the current study could have exaggerated their responses or under-reported their responses to

present an image that was different from their true nature. Not being very introspective or aware of their beliefs can also challenge the accuracy of responses (Del Boca & Noll, 2000; Schwartz, 1999). Misunderstandings or misinterpretation of the survey items can also pose as a challenge to the accuracy of the responses, especially in online surveys where participants cannot ask the researcher for clarification (Del Boca & Noll, 2000; Schwartz, 1999). Another barrier to self-report surveys is response bias. Participants may have a bias to answer survey items in a particular fashion (e.g., selection of a number on a rating scale that tends to hover in the middle or either extremes); thus, giving an illusion that there is a correlation between variables when, in fact, the relationship is due to a bias in responses across the surveys (Schwartz, 1999). Recall bias is another challenge to self-report measures. Self-report measures are a challenge to researchers because of the reliance on respondents to reflect on beliefs and recall past behaviors to answer the questions (Kimberlin & Winterstein, 2008; Schwartz, 1999). In the current study, the respondents had to identify the frequency and intensity in which they were hassled by various stressors over the past 4 weeks. Respondents reportedly tend to over-estimate their emotions and perceptions when required to reflect on their experiences over a day (Schwarz, 1999).

An inability to control the makeup of the sample is also a challenge for online self-report surveys. Those who tend to self-select themselves to participate in online surveys tend to have particular characteristics and personalities; therefore, resulting in a sample with skewed demographic characteristics and responses (Grimes & Schulz, 2002). The current sample of participants were homogenous secondary to the nonprobability

nature of self-selection bias. Most of the working mothers who participated in the current study were between the ages of 40 and 44, employed 40 or more hours a week, married, had two children, were well-educated, and had a household income over \$100,000. There was also a high proportionate of the working mothers who were healthy and had moderate coping self-efficacy, which may have been attributed to the nature of having a convenient sample and not stratifying the sample based on health status. Overall, a vital limitation to the current study was selection bias and inability to generalize the findings to working mothers who did not fit the aforementioned demographics. Limiting the sample to U.S. citizens, fluency in reading and speaking English, and internet users also inhibited the generalizability of the findings to the general population of working mothers.

In terms of methodology, the current study was limited by the questions asked on the demographic questionnaire. For instance, the respondents were not asked to identify if their children were younger than 6 or between the ages of 6 and 17. It is assumed age ranges of the children (infant versus having a 17-year-old) would influence frequency in daily hassles. The respondents were also not asked to identify if they were currently enrolled in post-secondary education. There were Walden University students who participated in the study, but there was no means to track how many successfully completed the online survey because they were directed from Walden's Participation Pool to SurveyMonkey. The respondents were also not asked about type of employment. Employment status influences perception of work stress, morbidity, and mortality, suggesting those of higher employment status (e.g., executive) perceive themselves as

having more control over their environment than those of low employment status (e.g., janitorial; Bell et al., 2004). They also tend to have more social support and have a better health outcome than those of low employment status (Bell et al., 2004).

Finally, in order to protect the privacy of the women, the women were not asked to provide their date of birth on the demographic questionnaire and SF-36v2®. One feature of the QualityMetric software is to make comparisons between the sample's overall Mental Component Summary Score and normative data from the general population. I was unable to take advantage of this feature because the participants were not asked to disclose their date of birth; instead, they were asked to identify their age range (e.g., "40 to 44"). Despite not having the participants' birthdays, I ran the aggregate report, which suggested the current sample was at risk for depression.

### **Recommendations for Future Research**

To improve the strength of the mediation, additional constructs could be added to the next study in order to obtain full mediation between the variables. For instance, the respondents were not asked to report on major life events. Working mothers may be effective in managing daily hassles, but lack confidence in ability to manage major life events (Kwasky & Groh, 2014). The study also tended to focus on challenging aspects of working mothers' lives as opposed to their perceptions of uplifts or activities that bring them pleasure and joy (e.g., playing with their children). Although the literature suggests uplifts influences women's mental health (Schönfeld et al., 2016), the influence uplifts had on the current respondents' health outcomes was not examined. Therefore, another study could include uplifts to have a more accurate picture of their daily experiences.

The current study also did not inquire about coping behaviors (proactive versus detrimental) used to manage cumulative daily hassles; instead, it focused on the working mothers' efficacy. Consequently, another study could include coping behaviors in an effort to assess the effect actual coping behavior have on frequency of daily hassles and health outcomes. Additional constructs to be added to the regression of future studies include the following: spousal support, psychological hardiness, internal locus of control, and workplace factors (e.g., flextime).

Future studies would also benefit from using a random sampling approach to improve the reliability, validity, and generalization of the findings. Random selection with stratifications of health status and socioeconomic status may contribute to a stronger mediator. International studies of working mothers would aid in the generalizability and validity of the findings. Non-internet users having access to the traditional paper-and-pencil method would be important in improving the external validity of the findings. Future research using a longitudinal approach would permit assessing the stability of coping self-efficacy, frequency in daily hassles, and perception of health over an extended period. The next study could also use a predictive model in order to assess risk factors that lead to optimal and poor health outcomes. A pretest and posttest research design could also be conducted in which frequency in daily hassles, coping self-efficacy, and health outcomes are measured before and after a coping self-efficacy training. The purpose would be to measure degree of change after completing the training. Finally, a future research study could compare single working mothers to those in dual-earner

households to investigate similarities and dissimilarities in frequency in daily hassles, coping self-efficacy, and health outcomes.

### **Implications for Positive Social Change**

Working mothers experience frequent daily hassles within their social responsibilities (Erlandsson, 2008; Erlandsson & Eklund, 2003a, 2003b, 2006). The findings suggest repeated exposure to daily hassles takes a toll on their mental and physical health, well-being, and functioning. Experiencing hassles throughout the paid and unpaid work shifts and not getting enough sleep leave working mothers feeling rundown, tired, and prone to stress related to illnesses such as heart disease (Terrill et al., 2012). There is a growing interest to understand how to improve their health outcomes by investigating positive psychosocial factors that contribute to why some working mothers are better able to maintain good health in comparison to others (e.g., Stuart & Garrison, 2002).

The findings from the current study support positive social change by adding to the understanding of positive psychosocial factors that provide protection from the deleterious effects high frequency in daily hassles has on working mothers' health. More precisely, the current study showed there is an inverse relationship between frequency in daily hassles and coping self-efficacy and a significant positive correlation between high coping self-efficacy and good health. Therefore, the findings suggest that working mothers can reduce their risks of developing a stress related illness by having an “I-can-do” it attitude. Daily hassles are unavoidable; however, having an “I-can-do” it attitude aids in the reduction of the saliency of daily hassles, as well as their severity. More

precisely, coping self-efficacy helps to reduce negative reactions to situations, and helps to motivate working mothers to rally together the resources necessary to avoid, minimize, or tolerate daily hassles when they occur. Such knowledge can have positive short-term implications on working mothers' health such as improved social functioning, vitality, and productivity. The findings from this study can also have positive long-term implications such as reduction in healthcare cost spent each year on stress related disorders such as depression, anxiety, diabetes, and cancer.

Knowledge from this study can be useful for psychologists and medical professionals who are searching for ways to lower working mothers' stress and improve their mental and physical well-being. Psychologists and medical professionals can use this information to ask questions that go beyond symptoms related to mental and physical health such as, "On average, how many times have you been annoyed by such responsibilities as planning meals, too many things to do, and not enough sleep over the past month?" and "On a scale from 1 to 10, how confident are you in your ability to cope with daily hassles?" Practitioners can also inquire about the effect daily hassles have had on various aspects of their health such as, vitality, mental health, social functioning, bodily pain, and general health. The information gained from their inquiry can then be used to educate the women on the benefits of coping self-efficacy in reducing frequency in daily hassles and improving their health.

Knowledge from this study can also encourage positive social change by providing information to working mothers who are seeking ways to lower their stress. They can use the information to improve their health outcomes by developing an "I-can-



do” it attitude. As discussed in Chapter 2, social cognitive theory suggests, awareness is important in setting the intention to have positive thoughts, as well as by gaining mastery through practicing positive thoughts in the environment. For instance, high coping self-efficacy may empower working mothers to reduce the saliency of preparing meals by planning meals ahead of time (Woodruff & Kirby, 2013). Working mothers may also use this information to improve their sleeping habits by having the confidence to negotiate with their spouses in terms of who will get up to tend to the needs of the children during the night (Venn et al., 2008). Working mothers may also find comfort from this study in knowing other working mothers are experiencing frequent daily hassles, as well. Finally, working mothers are a product of positive social change due to all they do to tend to the needs of others.

### **Conclusion**

The main objective of the current study was to investigate the role coping self-efficacy had on the relationship between cumulative daily hassles and health outcomes among a sample of U.S. working mothers. The psychosocial benefits of Bandura's self-efficacy is robust in the health promotion literature (Mailey & McAuley, 2014; Shen, 2009); however, the protective factors associated with coping self-efficacy on working mothers' health outcomes had not been examined prior to the current study. A total of 235 working mothers participated in the online survey at one point in time. Through various regression analyses, I found repeated exposure to daily hassles was significantly associated with poor health outcome, coping self-efficacy was positively associated with

good health outcome, and coping self-efficacy partially mediated the relationship between cumulative daily hassles and most of the health outcomes.

In light of the current findings, the study extended the literature on daily hassles, coping self-efficacy, and health among working mothers. Most importantly, it highlighted the positive impact an “I-can-do” attitude has on working mothers’ health. Efficacy beliefs are pivotal to health related behavior change (Bandura, 1998). Health related behavior change cannot occur if working mothers do not believe they can produce the desired outcome. They will also not feel motivated, willing, and empowered to put forth the effort to persevere in the face of daily hassles if they are not confident in their capabilities to exert control over internal and external factors. For those psychologists and medical professionals who are seeking to reduce working mothers risks for developing a stress related illness, it is important to continue to investigate the relationship between daily hassles, coping self-efficacy, and working mothers' health outcomes. It is clear further research is needed in this area, but findings from the current study suggests ongoing research in this area is needed to improve the mental and physical health, well-being, and functioning of working mothers.

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## Appendix A: Demographic Questionnaire

**DEMOGRAPHIC QUESTIONNAIRE**

**Directions:** Please read each question carefully and indicate the appropriate answer by clicking on the response that best answers each question. If you are given the option, “Would rather not say” then declining to answer is considered a response.

**1. Are you a United States citizen (born in the U.S or granted citizenship status)?**

- Yes
- No
- Would rather not say

**2. Are you fluent in speaking and reading English?**

- Yes
- No
- Would rather not say

**3. What is your gender?**

- Female
- Male
- Would rather not say

**4. How would you classify yourself?**

- White
- Black or African American
- American Indian or Alaskan Native
- Asian
- Native Hawaiian or other Pacific Islander
- Hispanic or Latino American
- Multiracial
- Other
- Would rather not say

**5. What is your current marital status?**

- Divorced
- Living with another
- Married
- Separated
- Single
- Widowed
- Would rather not say

**6. What is your age?**

- 24 or younger
- 25 – 29
- 30 – 34
- 35 – 39
- 40 – 44
- 45 or older
- Would rather not say

**7. How many children under 18 years old live in your household?**

- None
- 1
- 2
- 3
- 4 or more
- Would rather not say

**8. What is your current employment status?**

- Employed, working 20 or less hours per week
- Employed, working 21 to 29 hours per week
- Employed, working 30 to 39 hours per week
- Employed, working 40 to 49 hours per week
- Employed, working 50 or more hours per week
- Unemployed, looking for work
- Homemaker, not working for pay
- Retired
- Disabled, not able to work
- Would rather not say

**9. What was your total household income in 2014? Please do not subtract the amount you paid in taxes.**

- Under \$10,000
- \$10,000 - \$19,999
- \$20,000 – \$29,999
- \$30,000 - \$39,999
- \$40,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 – \$99,999
- \$100,000 or more
- Would rather not say

**10. What is the highest level of education you have completed or the highest degree you have received?**

- Less than high school degree
- High school or equivalent (e.g., GED)
- Vocational/technical school
- Some college, but no degree
- Associates degree
- Bachelor degree
- Master degree
- Doctoral degree
- Professional degree (MD, JD, etc.)
- Would rather not say



## Appendix B: Frequent Daily Hassles

*Daily Hassles Scale: Frequency of Response for items with Greater Than 50% of Respondents Indicating that the Item was a Hassle (N = 235)*

Item	No Hassle		Somewhat Severe		Moderately Severe		Extremely Severe	
	N	%	N	%	N	%	N	%
23. Planning meal	39	17	112	48	62	26	21	9
72. Not getting enough sleep	48	20	89	38	58	25	40	17
19. Too many responsibilities	40	17	86	37	71	30	37	16
92. Not enough time	49	21	74	32	64	27	47	20
79. Too many things to do	44	19	70	30	71	30	50	21