

1-1-2016

Parental Stress With Homeschooling K-6th Grade Children in a South Florida District

Jennifer Myers

Nova Southeastern University, myersjennifer@me.com

This document is a product of extensive research conducted at the Nova Southeastern University [Abraham S. Fischler College of Education](#). For more information on research and degree programs at the NSU Abraham S. Fischler College of Education, please click [here](#).

Follow this and additional works at: http://nsuworks.nova.edu/fse_etd



Part of the [Education Commons](#)

Share Feedback About This Item

NSUWorks Citation

Jennifer Myers. 2016. *Parental Stress With Homeschooling K-6th Grade Children in a South Florida District*. Doctoral dissertation. Nova Southeastern University. Retrieved from NSUWorks, Abraham S. Fischler College of Education. (67)
http://nsuworks.nova.edu/fse_etd/67.

This Dissertation is brought to you by the Abraham S. Fischler College of Education at NSUWorks. It has been accepted for inclusion in Fischler College of Education: Theses and Dissertations by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.

Parental Stress With Homeschooling K-6th Grade Children in a South Florida District

by
Jennifer A. Myers

An Applied Dissertation Submitted to the
Abraham S. Fischler College of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Nova Southeastern University
2015

Approval Page

This applied dissertation was submitted by Jennifer A. Myers under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

Linda Simunek, PhD
Committee Chair

Date

Faith Bird, EdD
Committee Member

Date

Lynne R. Schrum, PhD
Dean

Date

Abstract

Parental Stress With Homeschooling K-6th Grade Children in a South Florida District. Jennifer A. Myers, 2015: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education. ERIC Descriptors: Homeschooling, Stress, Stress Management, Coping

This applied dissertation study was designed to inform and advance knowledge by using a quantitative approach to determine if perceived parental stress in homeschooling parents varies as a function of age, income, education, and ethnicity. Previous research in the field of homeschooling has primarily been qualitative in nature, thus, leaving a gap in the research.

Home schooling parents of K-6 grade children in South Florida districts were specified as the sample for the study. A perceived Stress Survey and demographic questionnaire were administered to 102 participants. Parental participants were male and female, all ethnicity, and ages 18 and older, who were homeschooling K-6th grade children in South Florida.

Inferential statistics were used to draw conclusions from the sample tested. The Statistical Package for the Social Sciences (SPSS) 23.0 was used to code and tabulate scores collected from the survey and provide summarized values where applicable. Logistic regression analyses of variance (ANOVA) were used to evaluate the two Research Questions and hypotheses. Analysis of the primary data indicated that age, income, level of education, ethnicity and number of children homeschooled had no significant effect on perceived stress. Implication from findings suggests that behavioral characteristics of the child may mediate the relationship between stress and parental characteristics. The study is a valuable addition to the homeschooling research community as it aligns with and extends findings from previous research.

Table of Contents

	Page
Chapter 1: Introduction.....	1
Background and Justification.....	2
The Research Problem.....	4
Audience.....	4
Definition of Terms.....	5
Purpose of the Study.....	6
Chapter 2: Literature Review.....	7
Introduction and Background.....	7
Transactional Model of Stress and Coping.....	10
Teacher Stress and Burnout.....	18
Demographics and Motivations of Homeschoolers.....	28
Homeschool Teaching Styles and Strategies.....	34
Academic Achievement of Homeschooled Children.....	38
Experiences of Homeschooling Families.....	41
Conclusion.....	57
Research Questions.....	58
Chapter 3: Methodology.....	60
Participants.....	60
Instruments.....	61
Procedures.....	63
Research Questions.....	64
Data Analysis.....	65
Limitations.....	65
Chapter 4: Results.....	67
Introduction.....	67
Data Analysis Procedure.....	67
Summary of Variables and Statistical Tests Used to Evaluate Research Questions 1 and 2.....	69
Demographics.....	69
Frequency and Percent Statistics of Participants' Gender, South Florida County of Residence, and Age Groups.....	70
Frequency and Percent Statistics of Participants' Ethnicity.....	71
Frequency and Percent Statistics of Participants' Yearly Income and Level of Education.....	72
Frequency and Percent Statistics of Participants' Number of Children Taught and Length of Homeschool.....	73
Frequency and Percent Statistics of Participants' Relationship Status and Primary Language Spoken.....	74
Analysis of Research Questions 1 and 2.....	74
Data Cleaning.....	75

Descriptive Statistics of Participants' Level of Perceived Stress by Age Groups, Yearly Income, Level of Education, Ethnicity, and Number of Children That Were Homeschooled.....	76
Reliability Analysis.....	77
Normality	77
Skewness and Kurtosis Statistics of Participants' Level of Perceived Stress by Age Groups, Yearly Income, Level of Education, Ethnicity, and Number of Children That Were Homeschooled.....	78
Homogeneity of Variance	78
Summary of Levene's Tests for Research Question 2a-2e.....	79
Results of Logistic Regression Analyses 1a-1e.....	79
Model Summary of Logistic Regression Analyses for Research Question 1	80
Results of ANOVA Analyses for Research Question 2.....	80
Summary of Multivariate Tests of the ANOVA Analyses Used to Evaluate Research Questions 2a-2e.....	81
Summary	81
Summary of Results for Research Questions 1 and 2.....	82
 Chapter 5: Discussion	 84
Introduction.....	84
Summary of Findings.....	84
Interpretation of Findings	85
Context of Findings	86
Implications of Findings	87
Professional Field.....	88
Limitations	88
Future Directions	89
 References.....	 91
 Appendices	
A Demographic Survey.....	97
B Percieved Stress Survey	102
C Tables	104
 Tables	
1 Summary of Variables and Statistical Tests Used to Evaluate Research Questions 1a-2e.....	69
2 Frequency and Percent Statistics of Participants' Gender, South Florida County of Residence, and Age Groups.....	70
3 Frequency and Percent Statistics of Participants' Ethnicity	71
4 Frequency and Percent Statistics of Participants' Yearly Income and Level of Education	72
5 Frequency and Percent Statistics of Participants' Number of Children Taught and Length of Homeschool.....	73

6 Frequency and Percent Statistics of Participants' Relationship Status and Primary Language Spoken.....	74
7 Descriptive Statistics of Participants' Level of Perceived Stress by Age Groups, Yearly Income, Level of Education, Ethnicity, and Number of Children That Were Homeschooled.....	76
8 Skewness and Kurtosis Statistics of Participants' Level of Perceived Stress by Age Groups, Yearly Income, Level of Education, Ethnicity, and Number of Children That Were Homeschooled.....	78
9 Summary of Levene's Tests for Research Question 2a-2e.....	79
10 Model Summary of Logistic Regression Analysis for Research Question 1...	80
11 Summary of Multivariate Tests of the ANOVA Analyses Used to Evaluate Research Questions 2a-2c	81
12 Summary of Results for Research Questions 1 and 2.....	82

Chapter 1: Introduction

Home education is a growing phenomenon, domestically and internationally, although the United States leads in research and practice (Kunzman & Gaither, 2013). The history of homeschooling in contemporary America follows an interesting pattern. In the wake of the Industrial Revolution, the U.S. established large-scale systems of public and private schools, with laws mandating the compulsory education of children and youth (Kunzman & Gaither, 2013). As a result, virtually all children received their formal education in the school setting. The landscape began to change in the 1960s and 1970s, amidst a background of radical social upheaval, and a burgeoning movement by parents to have more control over their children's education.

John Holt, a noted educator and humanist, is credited with giving momentum to parents seeking educational alternatives (Snyder, 2013; Taylor-Hough, 2010). In the early 1960s, Holt authored *How Children Fail and How Children Learn*, in which he emphasized children learned best by being allowed to pursue their own interests and curiosity rather than being constrained by an impersonal, formal curriculum that ignored their unique learning preferences. If homeschooling later came to be associated with conservative Christians, Holt's ardent supporters were members of the counterculture liberal left. By the 1970s, Holt was contacted by a number of families who were educating their children at home, under the radar of the formal education system (Taylor-Hough, 2010). Long before the advent of the Internet, these families lived largely in isolation. In response to their interest, and as a means of connecting them, Holt began publishing *Growing Without Schooling*, the first newsletter dedicated exclusively to homeschoolers (or more appropriately, "unschoolers"). *Growing Without Schooling*

emerged in 1977 as a guiding force for a movement that operated off the grid, and in defiance of compulsory education laws. Homeschooling did not become legal in all 50 states until 1993, nearly two decades later.

In the interim, interest in homeschooling began shifting from the liberal unschoolers to Fundamentalist Christians, who sought alternatives to the public schools they deemed excessively liberal. During the same time, Holt became acquainted with Raymond and Dorothy Moore, educational researchers whose work showed that contrary to the traditional practice of beginning formal instruction by first grade, if not even earlier, children learn best when their formal education does not begin before age eight (Snyder, 2013; Taylor-Hough, 2010). The Moores began meeting with homeschooling families and eventually they became regular contributors to Holt's newsletter. As religious Christians, the Moores drew a sizable following among conservative Christians, who became synonymous with homeschooling in the 1990s.

Background and Justification

In the second decade of the 21st century, homeschooling is neither the province of the liberal left nor the religious right, but is regarded as a legitimate and mainstream alternative to public or private school. Homeschooling stands with inter- and intra-district school choice plans, charter schools, magnet schools, and secular or parochial private schools as a valid option in the expanding array of school choice alternatives (Grady & Bielick, 2010). Recent studies reveal a wide variety of motives among families that have chosen to educate their children at home (Burgess, 2013; Kunzman & Gaither, 2013; Noel, Stark, & Redford, 2010; Ray, 2014; Spiegler, 2010). Similarly, the choice of curricular approach varies, from a "boxed" curriculum that lays out a structured lesson

plan, to the unschooling that is Holt's legacy. A common pattern for homeschooling parents is to begin with a structured curriculum and shift to a more flexible and eclectic approach over time (Kunzman & Gaither, 2013). In response to the upsurge in homeschooling, some schools and districts have formed partnerships with homeschoolers, resulting in hybrid programs where schools provide resources and some degree of academic oversight, while parents remain the primary educators (Kunzman & Gaither, 2013). Online courses figure prominently in these partnerships.

According to the National Survey of Children's Health, 13% of U.S. children reside in households where at least one parent experiences high levels of parenting stress (Raphael, Zhang, Liu, Giardino, 2010). Parental stress affects children's physical, emotional, behavioral, and social development, directly and indirectly (Bakoula, Kolaitis, Veltsista, Gika, & Chrousos, 2009; Raphael et al., 2010). While most studies focus on children and young adolescents, recent research shows parents' behavior influences their children's stress and cognitions into young adulthood (Donnelly, Renk, & McKinney, 2013). Parents serve as role models for their children (Bandura, 1986). Indeed, that is one reason why many parents choose home education (Rathmell, 2012; Ray, 2002, 2014). Parents' adaptive or maladaptive responses to stress may be transmitted to their children (Bandura, 1986; Santiago, Etter, Wadsworth, & Raviv, 2012). This effect may be intensified in homeschooling families, where the homeschooling parent spends far more time with the child or children than teachers or parents whose children attend traditional schools (Rathmell, 2012).

Statistical analysis of perceived stress among homeschooling parents can provide useful information to inform homeschool practice. The findings of this study serve as a

guide for parents, and assist administrators in developing programs to manage or prevent parental stress among homeschool populations.

The Research Problem

As the number of homeschooled children in south Florida rises, the need for resources to help parents cope with stress related to performing extra parental/teacher tasks will likely increase. This study informs and advances knowledge by using statistical research to determine the levels of perceived parental stress in homeschooling parents, and gain insight to information for developing improved strategies for homeschooling.

Deficiencies in the evidence. Kunzman and Gaither (2013) point out most of the homeschool literature is qualitative in nature. One study by Rathmel (2012) sought to determine the kinds of stress incurred by homeschooling parents, and the data revealed five primary unique home education stressors, including (a) overwhelming responsibility, (b) dealing with behavior and discipline, (c) choosing curriculum, (d) stereotypes and stigmas, and (e) distractions and extracurricular activities. Missing in the literature is the statistical evidence of levels of perceived stress among home schooling parents.

Audience

The stakeholders are parents, teachers, administrators, school district decision makers and health practitioners who work with stress reduction. Assessing stress levels among home schooling parents helps educators and administrators develop effective coping strategies for parents who are teaching at home.

Definition of Terms

For the purposes of this study, the following terms are defined.

Homeschool. The definition of homeschooling for this study is a “system of parent-led home-based education” (Ray, 2014, p. 1). In legal terms, homeschooling is defined in the state of Florida as “sequentially progressive instruction of a student directed by his or her parent or guardian in order to satisfy the requirements of Statute 10003.21 and 1002.41” (“About Homeschooling Requirements,” 2014, p. 1).

Parent. The definition of “parent” for this study and in Florida Statute 1000.21(5) “is either or both parents of a student, any guardian of a student, or any person in a parental relationship to a student, or any person exercising supervisory authority over a student in place of the parent” (“About Homeschooling Requirements,” 2014, p. 1).

Stress. The definition of stress as it relates to this study involves psychological stress as opposed to physical or mechanical stress, and is defined as “a condition that results when person/environment transactions lead the individual to perceive a discrepancy between the demands of a situation and his/her resources or ability to cope with those demands” (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruin, 1986, p. 30).

Coping. The definition of coping as it relates to this study is to successfully manage something perceived as difficult or challenging, as defined by the relationship between the person and the environment (Folkman & Lazarus, 1986). According to Folkman and Lazarus (1986), the ability to cope will depend on subjective well-being, social functioning and somatic health, as well as the relevance placed on these by the individual at any given time.

Purpose of the Study

The purpose of the study was to investigate the relationship between levels of perceived stress and demographic characteristics among homeschooling K-6th grade children in a South Florida district. This study aimed to provide insight and add to the homeschool body of research. A quantitative picture of perceived stress among homeschooling parents may help health professionals, educators, and school administrators determine and develop methods for preventing or managing this stress.

Chapter 2: Literature Review

The literature presented in this review is drawn from the following EBSCO databases: Academic Search Premier, MasterFILE Premier, ERIC, PsycINFO, and PsycARTICLES. Keywords used either individually or in conjunction include, (a) homeschooling, (b) home education, (c) home learning, (d) home environment, (e) school choice, (f) parents, (g) children, (h) families, (i) stress, (j) coping, (k) resources, (l) motivation, (m) support, (n) networks, (o) teaching, (p) learning, (q) parent involvement, (r) child development, (s) social development, (t) curriculum, (u) individualization, and (v) academic achievement.

Introduction and Background

The growing popularity of homeschooling has generated a large body of literature, but the existing research is fraught with gaps. Fields-Smith and Williams (2009), who conducted a unique exploration of the motivations and challenges of African American parents who chose to homeschool their children observed, “Despite increasing trends toward home education, empirical research on the benefits and challenges of home schooling remains limited” (p. 370). The research is not only sparse, but it relies predominately on White, middle-class families. Kunzman and Gaither (2013) point out most of the literature is qualitative in nature, imbuing the body of homeschooling research with “an anecdotal quality it has yet to transcend” (p. 5).

A review of the literature produced only one study that dealt directly with the stress experienced by homeschooling parents, Rathmell’s (2012) study of nine homeschooling Christian mothers. Fields-Smith and Williams (2009) provided excellent insight into the experiences of African American homeschooling mothers, and Kidd and

Kaczmarek (2010) provided similar insight into the experiences of mothers involved in homeschooling their children with autism spectrum disorders (ASD). Notably, each of these studies involved small sample sizes and distinct subgroups of homeschool families. Taken together, they reveal commonalities, as well as differences in the challenges and benefits experienced by homeschooling mothers. Within group differences, which were especially apparent in Rathmell's (2012) study, illustrate the individual nature of people's reactions to stress. Underlying Lazarus and Folkman's (1984) transactional model of stress and coping (alternately known as the cognitive theory of stress and coping), which was selected as the framework for this study, is recognition that individual stress appraisals, and hence stress responses, are highly subjective, involving a complex interplay of internal and external factors (Lazarus & Folkman, 1987; Lazarus, 1995).

Due to the miniscule body of research on stress and coping among homeschool parents, it is necessary to draw from other streams of literature. Much of the research on parental stress is focused on families living with identified stressors, such as poverty (Santiago, et al., 2012) and raising children with developmental, behavioral, intellectual, or physical disabilities (Dabroska & Pisula, 2010; Hall & Graff, 2012; Lloyd & Hastings, 2009; Trute, Benzies, Worthington, Reddon, & Moore, 2010). This second line of research may be especially relevant to the topic of homeschooling, as children with special educational needs represent a growing segment of the homeschool population (Cook, Bennett, Lane, & Mataras, 2013). In particular, children with ASD are often poorly served in inclusive school settings, causing dissatisfied parents to undertake home education (Hurlbutt, 2012; Kidd & Kaczmarek, 2010). The increasing diversity of

homeschool families heightens the importance of understanding the stressors

homeschooling parents experience and the strategies they use to mitigate them.

Teaching is widely recognized as a stressful profession and there is a substantial body of research on teachers' stress and burnout. Studies of teachers' stress often focus on the competing effects of resources and demands (Betoret, 2009; Lambert, McCarthy, O'Donnell, & Wang, 2009). Internal and external resources and demands are central to how a person appraises and responds to a potentially stressful situation (Lazarus & Folkman, 1984; Folkman & Moskowitz, 2004; Schneider, 2008). Despite the marked difference in the environment where teaching and learning take place, empirical models of resources and demands derived from research with professional educators may prove valuable for understanding the process of stress and coping in homeschooling parents.

Self-efficacy is an indisputable resource for managing stress (Bandura, 1986, 1997). Self-efficacy is a central facet of models of teachers' stress, coping, and burnout (Betoret, 2009; Lambert et al., 2009; Nizielski, Hallum, Schutz, & Lopes, 2013), as well as models of parents' involvement in their children's education (Green, Walker, Hoover-Dempsey, & Sandler, 2007; Walker, Shenker, & Hoover-Dempsey, 2010). Self-efficacy influences both primary and secondary appraisals of stress (Lazarus, 1995). Qualitative accounts suggest while many parents embark on homeschooling with the belief they can provide their children with a better quality education than a public or private school, they are typically fraught with doubts and insecurities about their ability to accomplish this (Rathmell, 2012). According to self-efficacy theory, mastery experiences, vicarious learning and social support from other homeschooling parents, and a safe, non-threatening environment should promote self-efficacy in homeschooling parents and

hence reduce perceived stress (Bandura, 1997). Whether or not this pattern evolves in homeschooling parents can only be determined by studying stress and coping in homeschooling families.

Jennens (2011) declares, “Home education challenges the understanding that education can be defined in terms of the respective roles of teachers and pupils engaged in an organized program of purposeful activity” (p. 145). By implication, home educators are charting a novel course, that is exciting on one hand, and perhaps intimidating on the other. Notably, Rathmell (2012) used Lazarus and Folkman’s (1984) transactional theory as part of the framework for her research. Indeed, there are few studies of stress that do not invoke the transactional theory, which is discussed in the following section.

Transactional Model of Stress and Coping

Lazarus and Folkman’s (1984) transactional model is the most widely used framework for studying stress and coping. The model is based on two types of cognitive appraisal: primary and secondary. In primary appraisal, the person decides whether the stimulus is personally relevant. There are three types of primary appraisal, including (a) harm, referring to something already experienced, (b) threat, signifying anticipated harm, and (c) challenge, which holds the potential for mastery or reward. Challenge is considered a stress appraisal because it prompts the mobilization of resources to produce a desired outcome and it may involve some degree of risk. As defined by Lazarus (1995), challenge is “a condition of high demand in which the emphasis is on mastering the demands, overcoming obstacles, and growing and expanding as an individual” (p. 6). Unlike a threat, which triggers feelings of vulnerability, defensiveness, and self-protection, a challenge can be stimulating and inspirational, generating feelings of

enthusiasm, engagement, and the prospect of a positive outcome. Those individuals who feel more capable of dealing with a given situation are more inclined to view it as challenging rather than threatening (Bandura, 1997).

According to Lazarus and Folkman (1987), a generalized belief about one's personal competence for dealing with situations is an antecedent of secondary appraisal. In secondary appraisal, the person weighs strategies for coping with harm, threat, or challenge. Coping serves two critical purposes, including regulating stressful emotions through emotion-focused coping, and modifying the conditions causing the stress via problem-focused coping (Lazarus & Folkman, 1984). The interactions between the person and the environment in the process of stress and coping are highly subjective, dynamic and variable (Lazarus, 1995; Lazarus & Folkman, 1987). Individual psychological and personality characteristics, the nature of the stressful situation, and the social and cultural environment are all essential components of the cognitive appraisal process.

While problem-focused coping is usually thought to be more effective than emotion-focused coping, the pivotal factor lies in matching the coping strategy to the specific situation, and requires an accurate appraisal of the controllability of the situation (Lazarus & Folkman, 1984, 1987). If a situation is realistically beyond one's control, an emotion-focused technique such as distraction may be the most effective way to reduce stress and negative emotions. Attempting to change an unalterable situation only produces more stress. On the other hand, in a controllable situation, problem-focused coping techniques such as using problem-solving skills to plan a course of action, seeking assistance from others, and acting boldly are most effective.

As they developed their model, Lazarus and Folkman (1987) found the coping process to be more complex than they originally envisioned. Seeking social support was initially conceived as distinct from problem-focused coping, and was classified as an emotion-focused strategy. However, support seeking may be construed as a type of problem-focused coping strategy (Folkman & Moskowitz, 2004). Social support can be an important source of resources such as information and practical help that may be essential to successfully executing a plan of action.

In the case of home education, homeschooling families rely heavily on networks for help with their educational activities (Kunzman & Gaither, 2013). These networks occupy a continuum of formality ranging from in-person or online “support groups” to groups that meet regularly in a common space to pool resources, to “mom schools,” where experienced homeschooling mothers share their expertise, to homeschooling co-ops where families meet in a space where their children take classes or engage in structured activities led by a parent, or in some cases, hired teachers or coaches (Kunzman & Gaither, 2013; Rathmell, 2012). The support of other homeschooling parents can be invaluable for novice homeschoolers facing the often daunting challenge of choosing the best curriculum for their child (Rathmell, 2012). Broadly, problem-focused coping and support seeking represent *active* coping strategies, which are typically more effective in controllable situations.

Lazarus’s work was instrumental in advancing a dramatic shift in thinking about adaptation to stress that occurred in the 1970s. At that point, attention began moving from stress per se. to coping as the key factor in adaptive outcomes such as subjective well-being, health, and social functioning (Lazarus & Folkman, 1987). The transactional

model of stress and coping has evolved over time, but primary and secondary appraisals remain at the center.

Understanding the appraisal process. Whether individuals feel challenged or threatened by a particular stressor, has a significant impact on their physiological, psychological, and behavioral responses (Lazarus, 1995; Schneider, 2008). Dissatisfied with the typical two-item assessments of appraisals, Schneider (2008) examined the predictive validity of an expanded instrument, adding eight new items derived from theory and research to form the 10-item Stressor Appraisal Scale (SAS). The SAS was tested using a sample of 59 university students, who were given a mathematical task and assessed for positive and negative state affect and physiological reactivity, as well as stress appraisal.

The SAS proved to be useful for distinguishing between those participants who perceived the tasks demands as within the scope of their coping resources (the challenged group), and those who perceived the tasked demands as exceeding their coping resources (the threatened group). In essence, the challenged group appraised the stressor as personally manageable, while the threatened group felt they were incapable of managing the stressor (Schneider, 2008). A notable finding was the connection between primary and secondary appraisals. The more important the participants perceived the task the more they assessed it as manageable and within their coping ability. This finding may have important implications for homeschooling parents. That is, those parents who view homeschooling as more important for their children's education may appraise the related stressors as more personally manageable. Awarding more importance to home education may enhance motivation to overcome potential obstacles. This appeared to be the case for

the African American mothers interviewed by Fields-Smith and Williams (2009).

Expanding the coping repertoire. A large international body of research attests to the ubiquity of stress in contemporary society, along with its negative physical, psychological, social, and economic consequences. With increasing emphasis on the coping process, and recognition of its complexity, researchers have been exploring the efficacy of a variety of coping strategies beyond the traditional labels of problem-focused coping and emotion-focused coping. Several such strategies may be especially relevant to the situation of homeschooling parents. In particular, the role of *positive* emotions in the stress process has gained recognition (Folkman, 2008; Folkman & Moskowitz, 2004).

Positive emotions are not absent from Lazarus and Folkman's (1984) original model of stress and coping. Appraising a situation as challenging (rather than threatening or harmful) prompts positive emotions such as excitement, enthusiasm, and confidence. Positive emotions such as happiness, pride, or relief also arise from the successful resolution of a stress-inducing situation. A recent trend in research is examining the role of positive emotions in the face of chronic stressors, with emphasis on fostering resilience (Folkman, 2008; Folkman & Moskowitz, 2004). Positive emotions can play a significant role in parenting children with disabilities (Lloyd & Hastings, 2009). Hope has shown promise as a protective factor against stress and depression in mothers of children with intellectual disabilities (Lloyd & Hastings, 2009). Mothers' positive appraisals of the effects of a child's disability on the family have been linked with family adjustment (Trute et al., 2010). Positive appraisals may imply living with a child with a disability has had a positive impact on the family's values, spirituality, sensitivity to others, or other aspects of life that may contribute to greater family adjustment.

Based on this line of research, understanding positive emotions in the stress and coping process may have important implications for the increasing numbers of parents of children with disabilities who are choosing to educate them at home. Often these parents have had frustrating experiences with school personnel, who were unable or unwilling to provide the child (especially children with ASD) with appropriate services, supports, and accommodations (Cook et al., 2013). In many cases, the children were the targets of bullying. Yet despite the perceived benefits of home education, parents who choose this option for children with ASD face the task of managing maladaptive behaviors that may exceed their coping resources (Hall & Graff, 2012). Positive emotions may buffer against this stress and bolster the parents' belief that by homeschooling the child, they have made the best choice.

Emotion regulation is described as the process by which people influence the emotions they experience, when they experience these emotions, and how they experience and express those emotions (Folkman & Moskowitz, 2004). Coping aimed at alleviating negative emotions or promoting positive emotions falls under the heading of emotion regulation, but emotion regulation also encompasses non-conscious processes. Two types of emotion regulation have been identified: one which involves regulating the internal feeling states and related physiological processes (emotion regulation), and a second involving the regulation of associated behaviors (emotion-related behavioral regulation). Another perspective delineates two types of emotion regulation contingent on where they occur in the process of emotion generation. Antecedent-focused regulation encompasses "situation selection, situation modification, attentional deployment, and cognitive change" (Folkman & Moskowitz, p. 763). Response-focused regulation

includes “response modulation.”

Emotion regulation may be significant for dealing with children’s behavior and discipline, one of the key stressors that emerged in Rathmell’s (2012) study of homeschooling mothers. One mother admitted to “snapping” in response to the stress of having to deal with her children’s behavior problems all day, as both mother and teacher. Distractions were also cited as a major source of stress. Cognitive reappraisal, an antecedent-focused mode of emotion regulation, has been linked with more positive cognitive, emotional, physiological, and behavioral responses to stress (Folkman & Moskowitz, 2004). Whereas an active coping strategy such as social problem-solving is useful for devising ways to address and alter children’s problem behaviors, cognitive reappraisal may be valuable for helping homeschoolers cope with stressors related to homeschooling that are less conducive to modification.

Over the last decade, religious coping has emerged as a popular research topic (Folkman & Moskowitz, 2004). Evidence shows religion can influence all facets of the stress process, from the ways events are appraised to people’s physical and psychological responses to those events. Religion or spirituality can also play a more direct role in the coping process, as illustrated by the use of prayer or meditation as a coping technique. In view of the large proportion of families whose choice of homeschooling is driven by their religious beliefs, the role of religious coping merits further attention. Some conservative Christians explicitly “view the raising and education their children as a sacred responsibility given to them by God” (Kunzman & Gaither, 2013, p. 10). At least theoretically, this belief may lead homeschooling parents to view stressors as challenges from which they derive meaning and purpose in the struggle to overcome them.

Meaning-focused coping, often conceptualized as positive reinterpretation or positive reframing coping, refers to “changing the appraised meaning of a situation to be more consistent with individuals’ beliefs and goals” (Riley & Park, 2014, p. 589). Meaning-focused coping has been found to be especially valuable for adjusting to uncontrollable circumstances such as bereavement or chronic illness. At the same time, meaning-focused coping may also be useful for coping with ongoing stress. Riley and Park (2014) noted while meaning-focused coping and problem-focused coping may both be useful for coping with ongoing stress, no study had ever compared the two in that context. The researchers examined this issue in a study of 181 college students who were assessed at three time points, roughly one month apart. The participants were asked to describe the worst ongoing event they were currently dealing with and to report their appraisals and reactions, as well as their coping techniques and adjustment, at each time point.

Problem-focused coping proved more effective than meaning-focused coping in terms of appraisals and adjustment (Riley & Park, 2014). Appraisals of control generated more active coping, which in turn was linked with lower psychological distress. This pattern is consistent with the original cognitive model of stress appraisal (Lazarus & Folkman, 1984). Riley and Park (2014) noted the participants’ major concern was academic stress, for which active coping is typically the most effective approach. They proposed that meaning-focused coping may be more valuable for dealing with interpersonal stressors.

Homeschooling parents face both academic and interpersonal stressors on a daily basis. Based on previous research, Riley and Park (2014) suggested meaning-focused

coping might be a precursor to problem-focused coping, which directly impacts adjustment. This model might explain why meaning-focused coping and problem-focused coping are closely associated, though only problem-focused coping affects adjustment. It is possible homeschooling parents who effectively cope with stress employ some combination of problem-focused and meaning-focused coping strategies. In order to explore this question, it is first necessary to gain insight into the cognitive appraisal process as it is carried out in the context of home education.

Teacher Stress and Burnout

In 1977, a review of research on teacher stress by Kyriacou (2001) marked the first time the term “teacher stress” appeared in the title of an academic journal article. Over the next decades, the topic of teacher stress generated a tremendous body of theoretical and empirical literature. Whether coincidentally or not, the scholarly interest in teacher stress followed the evolution of Lazarus and Folkman’s (1984, 1987) transactional model of stress and coping and Bandura’s (1986, 1997) social cognitive theory. Separately or in conjunction, both cognitive theories offer a useful framework for examining stress across various settings and contexts.

Despite the different settings, there are parallels between the stress experienced by professional educators and home educators. Based on the existing literature, Kyriacou (2001) identified 10 major causes of teachers’ stress, including (a) teaching students who lack motivation, (b) maintaining classroom discipline, (c) time pressures and workload, (d) coping with change, (e) being evaluated, (f) dealing with colleagues, (g) self-esteem and status, (h) management and administration, (i) role conflict and role ambiguity, and (j) unfavorable working conditions. Compare these stressors with the five leading home

education stressors identified by Rathmell (2012), include (a) overwhelming responsibility, (b) dealing with behavior and discipline, (c) choosing curriculum, (d) stereotypes and stigmas, and (e) distractions and extracurricular activities.

Rathmell (2012) categorized children's poor motivation under the heading of dealing with behavior and discipline, noting this was one of the most frustrating issues for homeschoolers. Dealing with stereotypes and stigma would fall under the heading of self-esteem and status issues identified by Kyriacou (2001). Overwhelming responsibility covers time pressures and workload, roles conflict, and role ambiguity. Indeed, role overload is a ubiquitous source of stress for homeschooling mothers, who typically assume the bulk of household and childrearing tasks, as well as educational responsibilities. Distractions and extracurricular activities could be classified as aspects of unfavorable working conditions. For teachers, stress related to choosing a curriculum typically arises from limitations imposed on their professional autonomy. In sharp contrast, the stress experienced by homeschooling parents arises from their lack of training and expertise in this endeavor. Rather than being constrained by school regulations, they face a dizzying array of curriculum options, entrusted with the daunting task of choosing the most appropriate one for their child (Kunzman & Gaither, 2013; Rathmell, 2012). Some parents eagerly explore different options, while others try to mitigate stress by choosing a boxed curriculum.

Consistent with the transactional model (Lazarus & Folkman, 1984, 1987), Kyriacou (2001) recognized the main sources of stress differ substantially among individuals and "will depend on the precise complex interaction between their personality, values, skills, and circumstances" (p. 29). This interplay of internal and

external factors influences stress appraisals regardless of context. Three studies of teacher stress and burnout were selected as particularly relevant for understanding stress and coping in homeschooling parents.

Betoret (2009) investigated the relationships between internal and external coping resources, occupational stress, and burnout in primary and secondary school teachers. External, or school, resources covered a full spectrum of material and human resources that contribute to a productive learning environment in which teachers feel they can teach successfully. Teachers' perceived self-efficacy, encompassing teaching self-efficacy and self-efficacy in classroom management, was the internal coping resource. Five school stressors were examined, chosen to represent classroom, school, and parent involvement factors.

Notably, for both groups of teachers, high self-efficacy in teaching and classroom management decreased or neutralized the adverse impact of school stressors, though this effect was more pronounced for the secondary school teachers. In contrast, school resources reduced stress only for the primary school teachers. Teaching secondary school students is generally rated more stressful than teaching young learners, which could account for the stronger impact of self-efficacy on stress among the secondary educators.

Parent involvement in children's education generally declines as the children mature and progress through grades (Wiseman, 2009). One reason is that as children reach preadolescence and adolescence, they seek more independence and the influence of the peer group increases while that of parents' declines. Indeed, some homeschooling parents cite potential negative peer influences as a motive for removing their child from

school (Ray, 2014). At the same time, older homeschooled children may feel socially isolated from their peers (Kunzman & Gaither, 2013).

The question of whether homeschooled children are protected from negative peer influences, as parents claim, or are hindered in the development of social skills and positive peer relationships is a perennial source of debate. In comparing friendships and peer victimization between homeschooled children and children attending a traditional school, Reavis and Zabriski (2005) found the home educated children were not immune to peer victimization; both groups of children were exposed to equivalent levels of bullying, both as victims and as bystanders. However, the homeschooled children seemed more capable of distancing themselves from the experience, thus decreasing their vulnerability to potentially negative effects.

One way in which the homeschooled children were disadvantaged was in their relatively limited access to peer networks. According to Reavis and Zabriski (2005), given the “universal need for peer acceptance and support in the developing child” (p. 5), homeschooled children, especially preadolescents and early adolescents, might be more dependent on the success of their close friendships, and more susceptible to distress if those friendships break down. In response, they recommended that homeschool parents actively foster friendships for their children. This endeavor might be classified under the heading of extracurricular activities, which add extra stress to the experiences of homeschooling mothers, who must locate and travel to activities that are part of the traditional school experience (Rathmell, 2012). Fostering children’s social development per se, did not emerge as a major stressor for the homeschooling mothers, though it seems a potential source of stress for at least some homeschooling parents.

A second and more significant reason for parents' decreasing involvement in their children's learning over time is that as children progress through grades, the lessons become more difficult and complex (Kunzman & Gaither, 2013). Evidence suggests as children advance in grade, parents rely heavily on external resources such as homeschool co-ops and Internet resources. In many cases, even these resources are insufficient. One study cited by Kunzman and Gaither found only 48% of religious families and 15% of secular families continued home education for more than six years. Even among highly educated, affluent families, homeschooling grows less prevalent as children mature. Although speculative, the pattern disclosed by Betoret (2009) for teachers, namely that resources reduced stress only for teachers of younger children while the effect of self-efficacy was stronger for teachers of older children, may be applicable to some degree for homeschooling parents.

Emotions and burnout. Another reason why parents may discontinue homeschooling over time is burnout. In interviews with homeschooling London mothers in the popular press, one mother related that after eight years of homeschooling, she was sending her children back to school because "she was longing to have time to herself" (Russell, 2005, p. 26). Betoret's (2009) findings confirmed that emotional exhaustion is the central element in burnout for teachers. Kunzman and Gaither (2013) noted one stereotype about homeschooling that seems to be true across demographic groups is that mothers assume most of the responsibility for home education. Hence, the "overwhelming responsibility" that arose as a key theme in Rathmell's (2012) is shouldered primarily by mothers. Based on the interviews with London mothers, Russell (2005) cited the "huge responsibility" as one of the drawbacks of homeschooling, along

with “spending so much time together,” which can “end up feeling repetitive and too intense” (p. 26). The potential for burnout is implicit in this description.

Hutchison (2012) argues the term “parent involvement,” used extensively in the educational literature, ignores the “largely gendered and potentially stressful nature of ‘parent involvement’” (p. 195). Hutchison analyzed mothers’ involvement in their children’s homework through the lens of emotional capital. Using a critical feminist ethnographic approach, she presented the case studies of three mothers, two middle-class and one working class, demonstrating that helping children with learning at home has emotional, pedagogical, and cultural dimensions. Hutchison acknowledged for the child, the mother’s investment in emotional capital combines with other forms of capital (such as social and cultural capital) to bestow the child with an educational advantage. At the same time, the educational benefits of mothers’ investment in emotional capital may be diminished “by the depletion of women’s emotional resources as they perform this form of ‘love’s labor’” (Hutchison, p. 211).

This effect, namely the diminishing to women’s emotional resources, may be magnified for homeschooling mothers. Lois (2013) has conducted a series of ethnographic studies of homeschooling mothers. She uses the term “temporal-emotional conflict” to denote the specific type of stress experienced by homeschooling mothers who make a tremendous emotional and time investment in homeschooling, which is intertwined with their identities as “good mothers.” They attempt to manage temporal-emotional conflict by sacrificing more time and devoting even more of themselves to their good mother identities. Homeschooling is stay-at-home mothering intensified. These mothers, according to Lois, set increasingly higher ideals that they cannot possibly

live up to. One of the consequences is tremendous role strain that can lead to emotional burnout.

The homeschooling mothers respond to accusations of being relationally enmeshed and socially overprotective by taking a self-protective stance and criticizing contemporary American culture for devaluing nurturing and protective family relationships (Lois, 2013). Conservative Christian mothers who homeschool their children are generally critical of contemporary cultural values and seek to imbue their children with their own values, belief systems, and biblical worldview (Rathmell, 2012). For conservative Christian families, homeschooling takes place within a value system that bestows males with authority and expects women to assume a submissive or helpmeet role. For many observers, this raises questions of gender oppression (Kunzman & Gaither, 2013).

One of the women in Rathmell's (2012) study had not planned or chosen to homeschool her children, but rather had the decision imposed upon her by her husband. This homeschooling mother was continually frustrated and resentful. Rathmell described a positive side for each of the stressors. The positive side of responsibility was control; the control they had over their children's learning experiences. For a homeschooling mother who has not freely chosen that role, there may be no sense of control to mitigate stress. Numerous studies of occupational stress document the protective effect of job autonomy on burnout. Conversely, lack of control, especially in an endeavor that demands intensive emotional investment, may make burnout a virtually inevitable consequence.

In a study of appraisal, coping, and burnout in teachers, Nizielski et al. (2013) drew on emotional intelligence (EI), which is thought to have a protective effect against burnout. EI encompasses “the ability to perceive, understand, use, and regulate emotions” (p. 363). Some previous research had found that teachers who have high perceived abilities to appraise emotions tend to be less predisposed to burnout. Nizielski et al. sought to examine the process underpinning this effect, proposing that teachers’ ability to appraise their own emotions and the emotions of others would trigger proactive coping and attending to students’ needs, which in turn, would help the teachers manage the emotional demands of their work.

The findings, from a study of 300 teachers, confirmed the researchers’ assumptions. Specifically, the teachers who gave high ratings to their ability to perceive emotions were less prone to burnout; this relationship was mediated by proactive coping and attending to students’ needs (Nizielski et al., 2013). The association between emotion appraisal and the two behavioral responses is important because it enabled the teachers to engage in adaptive coping early on in the stress and coping process “before problems fester and negative emotions become difficult to manage” (p. 366). Problem-focused coping and emotion regulation are two adaptive coping strategies that might be deployed. Additionally, Nizielski et al. noted that attending to learners’ needs may also promote self-regulation by “helping teachers to solve problems effectively and to prevent excessive self-preoccupation or dysphoric self-focused rumination” (p. 367).

The same processes Nizielski et al. (2013) observed in the professional educators may similarly come into play in the homeschool classroom. It is possible homeschooling parents may have an advantage in this regard, as they may be uniquely equipped to

appraise their children's emotions, even apart from their particular degree of EI.

Examining emotion appraisal or EI more generally, may be a productive channel of research for better understanding the stress appraisal and coping processes of homeschooling parents.

The Classroom Appraisal of Resources and Demands. The Classroom Appraisal of Resources and Demands (CARD) is designed to capture the unique nature of stressors experienced by teachers based on the work of experts on teachers' stress (Lambert et al., 2009). The stressors identified by Kyriacou (2001) are included in the design. Using the framework of resources and demands, the CARD could be adapted to fit the stressors experienced by homeschooling parents. A "Homeschooling Appraisal of Resources and Demands" would be a useful tool for expanding empirical research into the homeschooling experiences beyond the qualitative studies that currently predominate.

The CARD has two scales covering demands and resources (Lambert et al., 2009). The 35 items on the Demands scale fall under the headings of Children with Problem Behaviors, Other Student Related Demands, Administrative Demands, and Lack of Instructional Resources. The items are rated on a 5-point Likert scale ranging from "Not Demanding" to "Extremely Demanding." The Resources scale includes 30 items categorized under Instructional Resources, Additional Adults in the Classroom, Support Personnel, and Specialized Resources, which are added to calculate the Classroom Resources Total Score. The teachers are asked to rate the helpfulness of each item. Stress is derived from the difference between the scores on the Resources and Demands scales.

Lambert et al. (2009) investigated the validity of the CARD in a study of 521 elementary school teachers, using several instruments common in research on teacher

stress. An interesting pattern emerged with respect to self-efficacy. The relationships suggested that learners' problem behaviors could decrease teachers' sense of self-efficacy and make them more self-critical of their teaching behavior. There is some indication from Rathmell's (2012) study that a similar effect may occur in the homeschool environment.

The findings demonstrated higher stress levels according to the CARD were associated with the dimensions of burnout (Lambert et al., 2009). Specifically, teachers who were more stressed displayed higher levels of emotional exhaustion, disposition toward depersonalization, and detaching themselves from their students, and feelings of diminished personal accomplishment. The high stress teachers also reported experience more problem behaviors from their students and less support from their colleagues, school parents, and the community. Substitute spouses and family members, other homeschool parents, and the homeschool community for colleagues, school parents, and the community, and parallels may be found with the situation of homeschool parents.

Lambert et al. (2009) proposed using the CARD to assess the sources and degrees of stress experienced by elementary educators may provide important insight about the nature of teachers' stress to school psychologists and administrators. As homeschooling expands, there are numerous online support groups and communities, homeschooling co-ops are proliferating, and schools and school districts are forming collaborative partnerships with homeschoolers (Kunzman & Gaither, 2013). Some districts that have lost students to homeschooling are reaching out to homeschool families to offer guidance and resources that match their concerns, as well as expand the children's course options (Demski, 2010). There is overall consensus that collaboration

between homeschoolers and school systems would be advantageous for children with disabilities (Cook et al., 2013).

While many homeschool parents prefer to find support within the homeschool community, there may be others who are amenable to the idea of collaborating with local schools. Based on assessment uniquely suited to capture the home school experience, school psychologists may bring expert knowledge to helping homeschool parents cope with stress. Some homeschoolers have degrees and experience in teaching and educational psychology. Analogous to the way parents with expert knowledge teach classes or coach sports in homeschooling co-ops, parents with experience in the realms of education and educational psychology may apply that expertise to helping other homeschooling parents manage stress.

Demographics and Motivations of Homeschoolers

According to the National Center for Education Statistics (NCES) report *The Condition of Education*, in 2012 roughly 93% of 5 to 6-year old children and 98% of 7 to 13-year old children were enrolled in public or private elementary and secondary schools (Kena, 2014). Overall, enrollment rates remained steady between 2011 and 2012, with the exception of 5 and 6-year old children whose enrollment rate dropped by 2%. While changes in the prevalence of homeschooling is one of several factors affecting enrollment rates, it may be the dominant one for those age groups.

The NCES bases its figures on homeschooling on a consistent definition that defines the homeschool population as children ranging from 5 to 17-years of age with a grade equivalent of kindergarten through 12th grade (Grady et al., 2010). Figures on homeschooling come from the National Household Education Surveys (NHES). Data

from 2007 showed 2.9% of children in that age group were homeschooled, most on a full-time basis. Only 14% of homeschooled children attended school part-time and were educated at home part-time. Although Ray (2014) claims homeschooling has experienced an estimated 2% to 8% increase per year over the last few years, data from the 2011-2012 school year place the proportion of homeschooled children at approximately 3% (Noel et al., 2013); thus any increase is scant. The NCES emphasizes data on homeschooling is based on estimates, some of which should be interpreted cautiously due to small sample sizes (Grady et al., 2010). Beyond demographic data, small sample sizes, methodological weaknesses, and methodological variations predominate in homeschooling research, often making it difficult to draw accurate conclusions or draw valid comparisons (Kunzman & Gaither, 2013; Spiegler, 2010).

White children represent slightly more than two-thirds of the homeschool population (68%), with Latino children representing 15%, Black children accounting for 8%, and Asian or Pacific Islander children accounting for 4% (Noel et al., 2013). Most homeschooled children live in two-parent families with parents who have at least some college or a bachelor's degree (Grady et al., 2010; Kunzman & Gaither, 2013; Noel et al., 2013). Kunzman and Gaither (2013) note that a disproportionate number of homeschooled children live in two-parent families, and with only one parent in the workforce than is typical for the overall U.S. population. An overwhelming 89% of homeschooled children live in two-parent homes and slightly more than half (54%) have only one employed parent. The figures for the general U.S. population of school-age children are 73% and 21%, respectively.

More homeschool families live in suburban or rural communities than in cities (Noel et al., 2013). However, as the homeschool population becomes more diverse, there is a growing population of urban homeschoolers (Perlstein, 2012). Urban home educators are often secular, highly educated, and affluent, and dissatisfied with the type of education provided by public or private schools. Ironically, while the original unschoolers typically lived off the grid in remote locations, many of today's urban homeschoolers could be classified as unschoolers. Many urban homeschooling mothers fit Lois's (2013) profile of intense emotional investment and hyper-attachment, though it is probable that many would reject that label.

A survey of Virginia parents on school choice disclosed an interesting dichotomy between the preferences expressed by parents and their children's actual learning environment (DiPerna, 2009). This discrepancy was not unique to homeschooling, but rather covered all school choice options. Notably, less than half the parents (40%) preferred that their child attend a regular public school, yet the overwhelming majority of the state's K-12 children (90%) were attending a regular public school. Private school was preferred by 39% of the parents, but only about 9% of Virginia children attend private school. The proportion of parents who expressed a preference for homeschooling was 11%, far exceeding the proportion of Virginia homeschoolers, who comprise just under 2% of the K-12 population, as well as the proportion of homeschooled children nationwide (Noel et al., 2013). Eight percent of the parents would have preferred a charter school, but there are only three in the state of Virginia (DiPerna, 2009).

The overall pattern indicates widespread dissatisfaction with local schools, but also constraints on parents' ability to pursue the school of their choice. The gaps between

parents' preferences for private and charter schools can easily be explained, as the cost of a private school is prohibitive for most families, and charter schools are scarce in the state. However, the gap between parents' expressed preferences for homeschooling and their actual use raises the question of what obstacles might prevent parents from homeschooling. Pragmatically, homeschooling is difficult for single parent families in which both parents are employed full-time. However, there may be other barriers such as lack of support or not knowing how to begin that could be addressed through access to homeschool support networks or collaborative partnerships between homeschoolers and schools.

The dominant reason for making the decision to homeschool in the 2012 NHES was a concern about the environment of other schools, cited by 91% of the parents as important, and by 25% as the most important reason for their choice (Noel et al., 2013). As presented to the respondents, concerns about the school environment included concerns about safety, drugs, and negative peer pressure. In descending order, other reasons parents gave as their foremost reason for homeschooling were: dissatisfaction with academic instruction at other schools (19%), and desire to provide religious instruction (16%). A desire to provide a nontraditional approach to the child's education, a desire to provide moral instruction, and having a child with a physical or mental health problem were all cited by 5% of the respondents. An additional 21% other reasons as their primary motives; in many cases these were unique to the situation of that particular family.

The most striking finding is the dramatic decline of religious motives for homeschooling children. In 2007, 36% of the parents surveyed cited "religious or moral

instruction” as their main reason for homeschooling, compared to the much lower figures for 2012 (Burgess, 2013). Some scholars are skeptical of the methods used to classify parents’ motives for homeschooling their children. Spiegler (2010) argues some categories are too general to be useful; for example, a “poor learning environment” could mean virtually anything. It could overlap substantially with concerns about the school environment related to safety or drugs, or it could even denote the absence of religious or moral instruction among parents for whom moral or religious concerns figure prominently in the decision to home school. Some researchers argue that the motives for homeschooling children in countries like the U.S. or U.K. are so diverse that they defy useful classification (Jennens, 2011).

Ethnic minorities are largely ignored in the homeschooling literature. Hence there is almost no attention to the potential role of cultural motives for homeschooling. Some parents choose homeschooling to preserve their cultural heritage (Carlson, 2009; Kunzman & Gaither, 2013). Issues related to race, including prejudice, discrimination, and institutionalized racism, and the inequitable treatment of Black children (boys in particular) in public schools played an important role in the decisions of Black mothers to homeschool their children (Fields-Smith & Williams, 2009).

Carlson (2009) and his wife chose homeschooling because they wanted their daughter to have a bilingual education that assured she grew up with two languages and two cultures. Carlson’s wife is Japanese and he and his wife are fluent in both English and Japanese. When they first contemplated homeschooling, they could find no literature on home-based bilingual education. Fifteen years later, and with tremendous growth in homeschooling, there still appears to be no research on bilingual homeschool. One

positive change Carlson observed is there are now a number of international online discussions about bilingual homeschooling, along with country-specific and even language combination-specific forums. Bilingual homeschooling has yet to become a topic in the scholarly literature.

Jennens (2011) finds it useful to distinguish between parents who decided from the beginning to homeschool their children and those who withdrew the child from school at some point. He suggests the first group may be motivated primarily by religious, moral, or ideological convictions, while the second group made their decision in response to a situation at school such as bullying, a child's unhappiness at school, a child's unique learning needs, inadequate school resources, or excessive emphasis on standardized tests. The list of reasons a parent may withdraw a child from school may be virtually limitedness. One mother decided to homeschool her son when she realized he needed a more active and hands-on approach to learning than the typical classroom offers (Burgess, 2013). Her decision could be classified as resulting from recognition of the child's particular learning styles. John Edelson, founder and president of Time4Learning, a homeschool curriculum provider, refers to such parents as "accidental homeschoolers," namely those who realize their children are underperforming in the traditional classroom environment and seek to provide them with a learning environment in which they can flourish (Burgess, 2013, p. 17). In Edelson's experience, most homeschool decisions are driven by dissatisfaction with schools. Other homeschool curriculum providers observe an upsurge in parents seeking a secular, mainstream curriculum, as opposed to the religious Christian homeschooling programs that have dominated the market.

Homeschool Teaching Styles and Strategies

Curriculum vendor Edelson divides homeschoolers into three general categories: those with religious motives; the “free spirits” or unschoolers, who find traditional schools unduly regimented; and the accidental homeschoolers, seeking a better learning environment for their child (Burgess, 2013). The reasons that underpin the decision to homeschool also affect the choice of curriculum and learning methods. In attempting to categorize the various approaches to homeschooling, many authors invoke the seminal work of Van Galen, who divided homeschoolers into two groups: *ideologues* and *pedagogues* (Fields-Smith & Williams, 2009; Kunzman & Gaither, 2013; McKeon, 2007; Taylor-Hough, 2010).

The term ideologues refers to the conservative Christians who typically chose a structured curriculum, followed a fixed learning schedule, and used didactic instruction in much the same way as a traditional classroom. The key distinction is that the curriculum is designed to present a biblical worldview and the lessons are infused with religious and moral themes. The pedagogues are more aligned with Holt’s humanistic perspective on learning. They rejected the formalism of the traditional classroom; thus they are likely to use a variety of approaches to learning. Unschoolers fall into the pedagogical category, but “true” unschoolers who reject structure completely represent only a small proportion of homeschoolers.

As homeschoolers have become more diverse in their reasons for homeschooling, Van Galen’s dualistic classification system is insufficient for capturing the complex and dynamic homeschool landscape. At the same time, Kunzman and Geither (2013) find the basic distinction between homeschoolers whose goal is to inculcate their children with

the values and beliefs of their religious conservatism and those who aspire to a “more liberatory pedagogy” to be “remarkably resilient” (p. 13).

Regardless of whether they reflect the characteristics of ideologues, pedagogues, a combination of both, or neither one, homeschoolers have a wide variety of curricular options to choose from. Vendors such as Time4Learning expand and adapt their offerings in response to consumer demand (Burgess, 2013). Homeschool curricula occupy a continuum ranging from a prepackaged, rigidly structured “box” curriculum, to the unschooling that aspires to be entirely child-centered (Kunzman & Gaither, 2013; Taylor-Hough, 2010). The pedagogical approaches used by most homeschoolers fall somewhere in the middle and typically change over time in response to a child’s developmental level or learning needs, a parent’s increasing confidence in making educational decisions, or in many cases, simply trial and error: discarding a curriculum that fails to meet the child’s needs and selecting a more appropriate one.

Two curriculum approaches that have attracted research attention are the “classical” curriculum, which relies heavily on rote learning, and the Charlotte Mason method, whose primary aim is to instill in children a love of learning through authentic engagement with literature, nature, science, history, music, and art (Kunzman & Gaither, 2013; Taylor-Hough, 2010). Taylor-Hough (2010) also cites John Taylor Gatto, whose philosophy of education is similar to Mason’s. Gatto favors a humanities curriculum that covers literature, history, music, art, philosophy, theology, and economics, and fosters inquiry, critical and independent thinking, social development, leadership, experimentation and resilience. Gatto and Mason both rebel against a rigidly structured curriculum that impinges on children’s natural curiosity and desire for learning.

A common pattern is that parents, faced with the daunting task of taking on educational responsibilities for which they are not formally trained, begin with a structured curriculum and become more flexible and experimental over time (Kunzman & Gaither, 2013; Ray, 2002). Kunzman and Gaither (2013) argue this flexibility is essential for preventing burnout. Tailoring pedagogical strategies to fit the child's unique learning needs is especially valuable for the children with special learning needs and gifted children who are not well served in the conventional classroom (Cook et al., 2013; Ray, 2002).

The child-centered approach to learning is illustrated by homeschooling parents who defy the conventional wisdom that young children need structured, formal instruction in order to learn to read (Keys & Crain, 2009). Reading experts argue children who lack formal early instruction in reading will never catch up with their peers, and in fact, will fall farther behind with advancing grades. The approach recommended by experts involves “structured, systematic, and explicit [original emphasis] instruction” (Keys & Crain, 2009, p. 6).

In sharp contrast, advocates of child-centered learning espouse the view the child will learn to read when he or she is ready (Keys & Crain, 2009). Keys and Crain explored the relative effectiveness of the two contrasting approaches in interviews with two groups of parents, including 10 mothers' homeschooling 19 children between the ages of 9 and 16, and 10 mothers whose 11 children had learned to read “late,” at age 8 or later. The mothers were predominately middle class and well-educated, residing on the East and West coasts.

The parents' primary goal was to instill a love of reading in their children, and they read to their children constantly; in fact, Keys and Crain (2009) were surprised at the amount of time the mothers spend reading with their children, typically sharing high quality books. The vast majority of the parents expressed the importance of following their children's reading readiness. Even when they provided formal instruction they were always attuned to the children's responses.

Twelve of the 18 children whose homeschooling mothers provided sufficient information on their reading development were reading at or above grade level by age 8, and 9 learned to read with minimal or no instruction (Keys & Crain, 2009). Most of the late readers ultimately became highly successful readers. Keys and Crain observed that regardless of the level of reading proficiency, all the children displayed the love of reading that was their parents' primary goal. One mother whose child resisted learning to read at age six described how she gave up in frustration. By age 10, the child had developed her own effective reading strategies; at the time of the study she had graduated from Harvard and was teaching with Teach for America. To be sure most late readers do not have such successful academic outcomes, but nonetheless, almost all the late readers came to enjoy reading and caught up with their peers.

Interpreting Keys and Crain's (2009) findings from the perspective of stress and coping, the mothers seemed to minimize stress for both themselves and their children by following the child's natural reading development. The literature is replete with descriptions of "struggling readers" for whom the experience of learning to read is fraught with stress and frustration, and too often failure. The mothers' depictions of the

reading instruction they gave their children suggests they were adept at appraising their own and their children's emotions (Nizielski et al., 2013).

Academic Achievement of Homeschooled Children

Studies consistently find homeschooled children perform well academically compared to their traditionally educated peers. Ray (2014) reports homeschooled children typically outscore public school students by 15 to 30 percentile points on standardized academic achievement assessments, and perform above average on the SAT and ACT tests. On achievement tests at all grade levels, the national average for homeschooled children is far above the national norm (Ray, 2009). The high ACT and SAT scores make home educated learners attractive to college admission officials, and once in college they continue to earn high GPASs (Cogan, 2010; Snyder, 2013).

The findings are impressive, but Kunzman and Gaither (2013) criticize most of the research for serious methodological flaws. The states vary widely on the documentation of academic achievement required of homeschool parents. Consequently, there are no nationally representative studies of the academic achievement of homeschooled learners as there are for public school students. The existing studies rely on volunteers who submit academic and demographic data knowing it will be used for the purpose of homeschool advocacy. This recruitment technique likely attracts homeschool parents who endorse standardizing testing. Moreover, the tests are typically proctored in the learners' homes and compared with national averages. The results consistently show homeschooled children scoring at or above the 80th percentile, which is improbable for any sample other than a self-selected group.

In addition to not reflecting a representative sample of homeschoolers, the studies do not control for important sociodemographic variables known to affect academic outcomes when the results are compared to the national average. Research conducted by the Home School Legal Defense Association (HSLDA) claims that sociodemographic factors such as parental educational attainment and family impact have negligible impact on the performance of homeschooled children (Ray, 2009). However, the sociodemographic profiles of homeschool families are comparable to those of higher achieving public school students. Furthermore, parent involvement, which is built into the home school model, is associated with higher academic achievement. No difference in academic performance has been found between homeschooled students and public school students who enjoy high levels of parent involvement (Barwegen, Falciani, Putnam, & Stair, 2004). Notably, the study controlled for family background.

Kunzman and Geither (2013) cited several studies, including research by Kunzman (2012), concluding that family background characteristics definitely have a significant impact on the academic achievement of homeschooled students. Kunzman (2010), for example found pronounced differences in the quality of instruction of Christian homeschool parents based on their educational background. In Rathmell's (2012) study, a participant with only a high degree found the selection of a curriculum to be unduly stressful. To be fair, she was also new to homeschooling, but it is possible that her educational level exacerbated her stress.

One study praised by Kunzman and Gaither (2013) for attempting to overcome design flaws in examining homeschoolers' academic achievement is the research of Martin-Chang, Gould, and Meuse (2011). Rather than comparing a self-selected sample

to a national database, the researchers recruited both homeschooled students and public school students and administered the tests to both groups of students. The study involved 37 homeschoolers and 37 from the Canadian provinces of New Brunswick and Nova Scotia. Ranging in age from 5 to 10 years, each homeschooled student was carefully matched with a public school age peer.

For the purpose of analysis, Martin-Chang et al. (2011) divided the homeschoolers into subgroups based on whether they were taught from formal lesson plans (structured homeschoolers) or were not taught from organized lesson plans (unstructured homeschoolers). The findings favored the structured homeschoolers, who outperformed both the unstructured homeschoolers and the public school students. Martin-Chang et al. proposed “structured homeschooling may offer opportunities for academic performance beyond those typically experienced in public school” (p. 200). Furthermore, the matching design minimized any prospective influence for family income and maternal education level.

The unstructured homeschoolers performed below both their public school peers and those who learned from a structured homeschool curriculum (Martin-Chang et al., 2011). Because the test was administered on site, the lower performance cannot be attributed to differences in preparation for standardized tests. Organized lesson plans were rarely or never utilized by the mothers of the unstructured homeschoolers and nine of the mothers described themselves as unschoolers. Because unschoolers largely eschew assessments, very little is actually known about how unschooled children fare academically. Martin-Chang et al. provide preliminary evidence for the superiority of a structured approach to homeschooling. The small sample size is a limitation, and Martin-

Chang et al. might have included other factors such as the length of time the students had been homeschooled or the degree that a structured curriculum was individualized.

Nevertheless, Kunzman and Gaither (2013) suggest the research of Martin-Chang et al. symbolizes a future direction for homeschooling research and declare that “the design itself represents real progress” (Kunzman & Gaither, 2013, p. 19).

Experiences of Homeschooling Families

As Kunzman and Gaither (2013), qualitative studies predominate in the research on homeschool families. Shepherd’s (2010) in-depth qualitative case study focused on three relatively homogeneous families. All three were White, Midwestern, middle-class, and conservative Christian. They did vary, however, on the number of children and fathers’ occupations. One mother held both a bachelor’s and master’s degree in education and had experience teaching in a private Christian school.

The dominant motive for choosing homeschooling was religious (Shepherd, 2010). In fact, the families explicitly described public schools as “anti-Bible”; they opposed the teaching of evolution and claimed that many scientists endorsed creationism. Consistent with their strong religious beliefs, they felt that public school exposed their children to negative social influences. At the same time, religious and moral reasons were not their only reason for educating their children at home. One family decried what they perceived as a lack of academic rigor in the public school curriculum. Homeschooling was viewed as the most natural mode for fostering children’s academic and social growth, and was perceived as ordained by God.

Shepherd (2010) conducted a rare study that included fathers, and the fathers seemed to play more of a role in the educational process than is typically recognized for

homeschool families, especially those with conservative Christian values. It may be relevant that two of the fathers taught at the adjunct level at a local college, though they did not have formal credentials in education. The mother who had taught at a Christian school applied her teaching expertise to homeschooling; she viewed teaching at home as similar to teaching at school, but with one student, her son, for whom she carefully individualized the learning experience. Of the three fathers, her husband took the most active role in the educational process. He felt it was his responsibility, especially, to ensure that their son had the knowledge and skills to prepare him for a future career.

The families preferred classical and traditional methods for teaching (Shepherd, 2010). For assessment purposes they used the Iowa Test of Basic Skills administered through Bob Jones University, a common practice among Christian homeschooling families (Kunzman & Gaither, 2013). The children's scores varied, with some showing performance in the 80th percentile or above, as reported in the HSLDA research (Ray, 2009, 2014), while other children displayed a more inconsistent profile with high schools in some subject areas and mediocre performance in others. The son of one mother who worked part-time exhibited this academic profile, and she expressed concern. Her need to justify the mixed performance suggested some guilt over the fact that she did not invest all her time to teaching her son. In fact, her description of trying to balance work, homemaking, and instrumental responsibilities showed evidence of role stress and role overload.

Although Rathmell (2012) examined role stress, which was common among the nine homeschooling mothers, it did not emerge as one of the major themes. The experiences of homeschooling mothers who work outside the home, part-time or full-

time, are not generally captured by the reliance on small and fairly homogenous samples. The experiences of homeschoolers who occupy multiple roles are essential to a literature on stress and coping in homeschooling parents.

Reading comprehension was a strongpoint for the homeschooled children (Shepherd, 2010). Family literacy programs are gaining in popularity and are recognized as an effective way of advancing students' literacy development (Wiseman, 2009). The families favored structured reading instruction and actively worked to promote their children's reading development (Shepherd, 2010). While they would likely not have endorsed the child-centered approach where a child's love of reading is the paramount goal, younger children's interest in reading arose spontaneously in response to their older siblings' reading activities. The younger children desired to read the books their older sisters or brothers were reading. Though in some cases the books were realistically beyond their level of comprehension, their siblings' enjoyment of reading inspired the younger children to build their own reading skills. Thus even in families that espouse a heavily structured curriculum, learning occurs naturally.

The three families expressed a strong commitment to home education, driven by their religious beliefs (Shepherd, 2010). In light of recent research on coping, the deeply embedded religious and moral values of homeschooling Christian families probably serve as an important coping resource (Folkman & Moskowitz, 2004). While the findings for three families precludes generalized, Shepherd (2010) provided important insights into the experiences of families who religious and moral beliefs are the driving force in their decision to educated their children at home.

African American families. Black families make up less than 10% of the homeschool population (Noel et al., 2013). Though their numbers are probably growing as homeschooling gains popularity across sociodemographic groups, the voices of Black parents are essentially absent from the homeschooling literature. In a unique study, Fields-Smith and Williams (2009) explored the motivations, sacrifices, and challenges of African American families who made the decision to homeschool their children. Parents' role constructions figure prominently in the models of parent involvement developed by Hoover-Dempsey and her colleagues (Green et al., 2007; Walker et al., 2010). Fields-Smith and Williams (2009) drew on their work for part of their theoretical framework.

The participants represented 24 African American families residing in a Southeastern metropolitan area, who provided detailed information via interviews, focus groups, and surveys (Fields-Smith & Williams, 2009). The mothers assumed most of the homeschooling responsibilities, but the fathers participated as well, often in a specific area or by providing reinforcement. Most of the participants held baccalaureate degrees, although the group included two high school graduates and two associate degree holders, as well as two parents with a master's degree and one with a law degree. The mothers abandoned various careers to educate their children at home. Two of the mothers had previously been teaching professionally. Four of the parents continued to operate their own businesses or pursue part-time employment while they homeschooled.

Several parents had decided to homeschool from the time of the child's birth, expressing religious or parental role beliefs as the main reason for their choice (Fields-Smith & Williams, 2009). Most parents, however, made the decision to homeschool while their children were in the primary grades (K-2) at a public or private school due to

pedagogical concerns. This pattern follows Jennens' (2011) distinctions for understanding the motives of homeschool parents.

Testing pressures that deprived the children of play and authentic learning experiences, a lack of individualized learning experiences, and negative special education experiences were the dominant reasons for choosing home education (Fields-Smith & Williams, 2009). Three additional families decided to homeschool when their children reached middle school, citing negative peer pressures and a non-nurturing school environment. While superficially, the parents could be divided into Van Galen's categories of ideological or pedagogical motives, their narratives revealed much greater complexity than can be captured by a dichotomous model.

The challenges inherent in the homeschooling venture were captured by one mother of three children who commented, "Sometimes it gets kind of frustrating because you're not only a homeschooler, but you're a Black homeschooler" (Fields-Smith & Williams, 2009, p. 375). Ethnicity played an important role in the decision to homeschool. Institutional racism was a prominent concern, with 19 of the home educators citing experiences with inequities, prejudice, discrimination, or racism as a driving force in their educational decision. In particular, the parents of boys expressed concerns that negative stereotypical attitudes toward African American boys would be detrimental to their sons' academic and social development.

Fields-Smith and Williams (2009) noted eight, or one-third of the families, had at least one child who received special education services while in school and three more families disclosed that school staff had proposed special education referrals for their children. One mother acknowledged that her oldest child was "very active," but rejected

the hyperactivity attention deficit disorder (ADHD) label he was given by teachers. From the mother's perspective, "what has been nice [with home schooling] is that the boys have been able to achieve, without the negativity associated with our race" (p. 377). Other mothers expressed similar perceptions. They attributed their children's attention or behavioral problems in school to schoolwork that failed to challenge them academically due to teachers' low expectations and failure to provide differentiated instruction. In the home setting, they could tailor the learning experience to their children's unique learning styles, needs, and preferences, thereby allowing them to flourish.

Labels can be a double edge for parents of children who display behavioral, emotional, and/or social difficulties (BESD) at school. Some parents welcome a child's formal diagnosis of ADHD or other disorder because it signifies a neurobiological cause of problem behaviors that school professionals often ascribe to poor parenting (Broomhead, 2013). Without downplaying the documented inequitable treatment of Black children in U.S. schools, the parents in Broomhead's British study of parents of children with special educational needs reported that teachers and other school professionals routinely blamed parents (mothers, especially) for children's BESD. In the case of the U.K. families, class rather than race was a key factor in the attribution of blame.

Homeschooling enabled the children not only to have an enriching learning experience, but also to socialize with diverse peers ((Fields-Smith & Williams, 2009). The families were heavily involved in home school co-ops where the children were taught by other parents, and also in homeschool schools where they enjoyed classes in subjects such as advanced science and mathematics, English, and art taught by

professional educators. Their activities also included field trips and recreational and competitive sports. Such an array of activities provides far more opportunities for children's intellectual, social, physical, and creative development than most public schools have to offer.

Nineteen of the families reported suffusing the homeschool curriculum with an afrocentric or Black American focus (Fields-Smith & Williams, 2009). Religious beliefs played a role in the homeschool decisions of 21 families, but few invoked God in their choice of homeschooling as many White conservative Christians do. Religion was perceived as more of an empowering force and a source of strength in their lives and homeschool practice.

The women detailed several sacrifices and challenges and challenges they were forced to deal with as homeschoolers. Most of the women had prior work experience, often in professional fields, and sacrificing their income to stay at home entailed "creative and strategic budgeting" (Fields-Smith & Williams, 2009, p. 180). For many participants, the decision to abandon a professional career provoked negative reactions from family and friends. In fact, *all* of the women had to deal with negative reactions. Rathmell (2012) classified this problem as dealing with stereotypes and stigma.

One mother described how the grandmother who sacrificed to ensure she had a good education and a promising future in business felt she had wasted her education. From this perspective, the transition from professional woman to stay-at-home-mom "became the abandonment of hopes and dreams of two generations" (Fields-Smith & Williams, p. 381).

Further, from a woman's rights perspective, Black home educators decisions to home school might appear to be an abandonment of the rewards obtained from a long struggle toward equality in the workplace. But for these Black home educators, the role of race justified the sacrifices made in order to secure a better future for their children. (p. 381)

Gender is a focus of many studies of homeschooling mothers (Kunzman & Gaither, 2013; Lois, 2013).

What is absent from the existing literature is the intersection of gender and race in the homeschooling experience. With respect to the role of appraisals in managing stress, Fields-Smith and Williams (2009) noted "Sacrifice played a critical role in assessing the dilemmas associated with home schooling and intricately weaved in the participants' perceptions of education and future expectations" (p. 381).

Fields-Smith and Williams (2009) categorized the challenges faced by the home educators as systemic issues, lifestyle changes, logistical issues, and home educator praxis. Systemic issues centered on the families' efforts to access services provided by public schools such as special education services, athletic activities, and extracurricular activities. There are numerous calls for homeschool and public school partnerships to provide homeschool families with access to these services (Cook et al., 2013; Kunzman & Gaither, 2013). Extracurricular activities emerged as one of the major stressors in Rathmell's (2012) study.

Managing the demands of multiple roles was a prominent lifestyle change issue (Fields-Smith & Williams, 2009). Striving to balance the needs of children of different ages was another important issue, which was typically resolved by resourceful problem-

focused coping. Challenges directly related to the educational process included accommodating the learning needs of children of different ages and grade levels, understanding their children's learning styles and tailoring instruction accordingly, and imbuing their children with a love of learning. Keeping the learning process fun and exciting became more challenging as the children progressed in grade. One strategy was making the material in subjects such as science relevant to the children's everyday lives: something that was typically absent from their own education.

Fostering a lifelong love of learning challenged the mothers' ability to be patient with themselves and their children (Fields-Smith & Williams, 2009). They often felt overwhelmed by the tasks they had taken on; perhaps the foremost stressor for homeschooling parents (Rathmell, 2012). Overall, the women experienced challenges that are routinely described in the literature as well as unique challenges related to being a Black home educator. From their perspective, the powerful belief that they were doing the best thing for their children's future outweighed the sacrificed and challenges they faced.

Mothers of children with autism spectrum disorders. Children with ASD present a major challenge for teachers of inclusive classrooms, and many parents are concerned that their children do not receive individualized attention or sufficient supports (Kidd & Kaczmarek, 2010). Homeschooling offers a potentially beneficial alternative to a learning environment that is not equipped to deal with the child's needs. Similar to the U.S., Australia is experiencing an increase in both the number of children diagnosed with ASD and the families that are choosing homeschooling for various reasons. Kidd and

Kaczmarek's phenomenological study was conducted with 10 Australian homeschooling mothers of children with ASD.

Three key themes emerged from the interviews: school experience, coming home, and mothers' experience as educators. According to Kidd and Kaczmarek (2010), a thread woven through the themes was that the home education experience was a shared "journey." The school experience induced stress in the mothers and children alike. Teachers were often unable or unwilling to alter the curriculum to suit the child's needs. Negative school experiences, including bullying as well as ineffective if not harmful instructional and behavior management techniques provoked stress and anxiety in the children, which in turn, heightened the stress of the mothers and other family members.

Many of the mothers felt teachers and other school professionals had poor understanding of ASD (Kidd & Kaczmarek, 2010). Highlighting the gap between parents and teachers, special education teachers underestimate the ability of parents to homeschool their children with ASD (Hurlbutt, 2012). Special educators question whether parents can provide the children with opportunities for academic and social development, yet parents are providing their children with stimulating opportunities for growth they were denied in the traditional school setting (Kidd & Kaczmarek, 2010). Homeschooling the children was a challenging endeavor but it also imbued the parents with a tremendous sense of relief. Many of the mothers observed immediate improvements in their children's confidence, academic progress, social skills, and general happiness. In short, they languished in the classroom but thrived in the homeschool setting where they received individualized and flexible instruction.

The mothers' experiences as home educators were less unique to the situation of homeschooling a child with ASD and more reflective of themes reported in other studies of homeschooling mothers (Fields-Smith & Williams, 2009; Kunzman & Gaither, 2013; Rathmell, 2012). These included juggling multiple roles, the extent that the mothers had educational, financial, and social support, and attitudes or perspectives about home education (Kidd & Kaczmarek, 2010). Eight of the women felt they had made the right decision in educating the child at home, while two felt they were pressured into homeschooling. One mother explicitly stated, "It's hard for me because I don't want to be at home" (p. 269). Another expressed regrets that she "could have had a life and had a job, or completed my studies" (p. 269).

In essence, the homeschool experience was construed as empowering by those who felt they had freely made the decision and disempowering by those who did not (Kidd & Kaczmarek, 2010). The critical factor was whether or not the mothers felt they had control over the decision. Those who felt in control expressed positive perceptions their personal journey and their role as a home educator, and many felt the experience brought the family closer together.

Perceptions of Stress. Rathmell (2012) conducted a mixed methods exploration of the stress experienced by nine mothers who were homeschooling their children. All were living in Okinawa, Japan, but came from a variety of geographical locales within the U.S. Six of the women were members of military families, who had selected homeschooling over other available options, and three were involved with a ministry to the U.S. military. These women had either past or present experience with Christian schools. Unlike the military mothers, they did not have the option to send their children to the base public

schools which were reserved for the children of military personnel. All had at least three children. Their experience as home educators ranged from two months to 10 years. Two participants had high school degrees, two had master's degrees, and the remaining participants had bachelor's degrees, including two with teacher education degrees.

Rathmell (2012), herself a homeschooling mother, regarded the women as her co-researchers. The in-depth inquiry revealed five major home education stressors, including (a) overwhelming responsibility, (b) dealing with behavior and discipline, (c) choosing curriculum, (d) stereotypes and stigmas, and (e) distractions and extracurricular activities. Reflecting the tenets of positive coping (Folkman, 2008; Folkman & Moskowitz, 2004), each of the stressors also contained what Rathmell (2012) labeled *flourishers*, denoting positive attributes of home education that can work to mitigate stress.

The women felt a tremendous sense of responsibility, knowing that it was up to them to ensure their children received a good education (Rathmell, 2012). At the same time they were educating children, fulfilling parent and household roles. One mother was concerned her teaching role impinged on her ability to be an effective parent. Insecurity over how effectively they were performing their roles, especially the educational role, was ubiquitous.

Rathmell (2012) believes dealing with children's misbehavior or poor motivation for schoolwork is "likely the most discouraging area in home education" (p. 137). Managing children's behavior is a major source of stress for teachers (Betoret, 2009; Lambert et al., 2009; Nizielski et al., 2013). However, unlike classroom educators, who spend a limited part of the day with their students, home educators are with their children

throughout the day and have to deal with behavioral problems in both their teaching and parenting role. As one mother commented:

And you know, if I only had the children home 3 hours a day, I could probably make it through most days and not snap...but, instead I'm with them 16 hours a day and sometimes I snap. (Rathmell, 2012, p. 138)

Rathmell (2012) speculates behavioral problems may be especially frustrating for homeschooling parents because it “reveals our own inadequacies” in dealing with children’s behavior with patience and discipline (p. 138). The family context endows discipline problems with much more personal meaning than a teacher experiences in a traditional classroom. Rathmell argues the underlying stress experienced by homeschooling parents is unique to the home education process.

Selecting an appropriate curriculum proved to be a dominant stressor (Rathmell, 2012). One participant, chosen for the study due to her status as a novice home educator (two months) described the difficulty she experienced in choosing a curriculum for her son. The study participant acknowledged that, “It was really hard deciding because I started looking up different things and I had no idea what I was looking for...I had no clue” (p. 104). Upon choosing the Sonlight Christian Homeschool Curriculum, she discovered the material was very different from what her son had learned in the first grade classroom; thus, rather than building on what he had learned, it was like they were starting anew. However, as they progressed through the homeschool curriculum, she felt a sense of accomplishment. This participant was one of the two mothers who had not gone beyond high school. Although all the participants expressed difficulty in selecting a

curriculum, it is possible that the mother's level of formal education might play some role in the stress of choosing a curriculum.

One participant avoided the stress involving in examining and choosing from a vast array of curriculum options by adopting a heavily structured "boxed" curriculum, where every lesson is planned according to subject and day (Rathmell, 2012). From her perspective, this enabled her to eliminate at least one source of stress. Interestingly, she had been homeschooling for four years and was homeschooling four children. Other participants reported choosing a structured curriculum in the beginning, but as they became more confident and comfortable with homeschooling, they espoused a more eclectic approach, a common practice among home educators (Kunzman & Gaither, 2013; Ray, 2002).

Several participants felt stereotypical notions about homeschooling families were a source of stress (Rathmell, 2012). In fact, two of the mothers tried to avoid situations where they would be identified as homeschoolers, though this could be difficult in a relatively small community. Despite strong convictions that they had made the right choice, Rathmell noted, "Unique to the homeschool experience, home educators feel the need to *justify* [original emphasis] why they have made the decision to homeschool, unlike parents who send their children to traditional school" (p. 142).

The various distractions that occur in the home environment presented an additional source of stress (Rathmell, 2012). Several participants had very young children and had to schedule their teaching time around their needs for care. The African American mothers were quite resourceful in dealing with this situation (Fields-Smith & Williams, 2009). Extracurricular activities could be stressful for both groups of mothers,

as they had to seek them out and travel to where the activities were located (Fields-Smith & Williams, 2009; Rathmell, 2012).

Each of the identified stressors was matched with a flourisher, or mitigating aspect. The positive side of responsibility was control, specifically, the freedom from the constraints of the traditional school setting and the ability to “do what they want” (Rathmell, 2012). However, this is liberating only if the home educator feels the decision was freely chosen (Kidd & Kaczmarek, 2010; Rathmell, 2012). As opposed to the sense of freedom and liberation reported by other participants, the mother who had the decision imposed by her husband perceived homeschooling as a burden and was frustrated and resentful (Rathmell, 2012).

The stress produced by children’s behavior problems could be transformed into teachable poignant moments, in which parents seized the opportunity to interact with their children and model desirable behavior (Bandura, 1997). Conceptualized as a learning experience for parents and children alike, these moments could ultimately bring the family closer together (Rathmell, 2012). This may be especially true for parents with ideological motives for homeschooling their children, as Rathmell views teachable moments as opportunities to “model a Biblical worldview,” instill values, and create harmony (p. 139). However, this phenomenon was also evident in the experiences of the mothers of children with ASD, who perceived the experience as a journey of personal growth and also felt that family bonds grew stronger (Kidd & Kaczmarek, 2010).

The positive side of struggling with curriculum choice was choosing the right curriculum (Rathmell, 2012). Once the appropriate choice is made, this stressor transforms into a flourisher. Even the mother who favored a structured curriculum and

largely eschewed surveying the various options reported changing her child's mathematics curriculum when it became apparent it was not working for her. She consulted other homeschooling parents whose children struggled with math and selected Math-U-See, which proved to be very successful. She noted that in a traditional school, her child would be forced to continue with an unsuitable curriculum: one reason that many parents choose homeschooling.

Rathmell (2012) framed the choice of curriculum within the context of stress appraisal (Lazarus & Folkman, 1984). Through primary appraisal, this participant evaluated the importance of the situation to the family's homeschooling experience (Rathmell, 2012). Through secondary appraisal, she assessed her ability to deal with the problem created by the inappropriate curriculum, and alleviated the stressor by selecting a different curriculum. Seeing a child who had been struggling respond positively to a new curriculum was exciting and satisfying.

Somewhat similar to the mitigating effect of the choosing the right curriculum, being validated by the right people buffered the stress of exposure to stereotypes and stigma (Rathmell, 2012). The most important person was an empathetic, supportive spouse; indeed, Rathmell declared that a spouse's support was essential to successful homeschooling and family unity. In addition, all of the women cited other home educators as an important source of inspiration and support. Being part of a welcoming, helpful, and reassuring community of others who shared the home education experience counteracted the negative attitudes of others.

The idea of the "right" people is not always applicable. The homeschooling Christian mothers protected against stress by distancing from their critics (Rathmell,

2012). For the African American mothers, criticism and disapproval came from family, friends, and community members (Fields-Smith & Williams, 2009). Many found themselves involved in an ongoing debate over their decision to home school, though they strongly felt they made the right choice.

The homeschool community was also a flourishing counterpart of stress related to distractions and extracurricular activities (Rathmell, 2012). Organized homeschool co-ops, online and in person-support groups, home education conferences, “mom schools,” homeschool schools, virtual schools, and various types of partnerships between homeschoolers and public schools are a hallmark of the changing landscape of home education.

Conclusion

Over the last four decades, homeschooling in the U.S. has moved from being the province of unschoolers, to the province of conservative Christians, to an attractive and viable option for families of all types. There has been a marked shift from religious and moral concerns as the dominant reason for choosing home education to pedagogical concerns driven by dissatisfaction with schools and the belief that home education allows the learning experience to be matched to children’s unique learning styles, interests, and needs to their advantage.

Most homeschool parents see ample benefits and rewards in homeschooling. At the same time, the experience can be fraught with stressors including overwhelming responsibility, choosing the best learning methods, juggling multiple roles, securing needed support, dealing with stigma and disapproval, managing distractions, and ensuring that the children have access to extracurricular activities and learning

experiences (Fields-Smith & Williams, 2009; Rathmell, 2012). As the vast majority of home educators are mothers, the role of gender cannot be ignored (Kunzman & Gaither, 2013; Lois, 2013).

Lazarus and Folkman's (1984, 1987) transactional model of stress and coping is the most extensively used framework for examining stress, and underpins numerous studies of teacher stress (Betoret, 2009; Lambert et al., 2009). In contrast to the limited body of research on the experiences of homeschooling parents, which relies primarily on qualitative accounts, there is a large body of theoretical and empirical literature on teacher stress. An assessment tool such as the CARD, which weighs resources and demands (Lambert et al., 2009) could be adapted to capture the themes that arise in the experiences of homeschooling parents. Having an instrument of that type would allow researchers to gain insight into the process of stress and coping beyond the narratives of a small sample of homeschooling parents.

Stress appraisals are highly individual, dynamic, and variable (Lazarus, 1995; Lazarus & Folkman, 1987). Individual psychological and personality attributes, the nature of the stressful situation, and the social and cultural environment are all key components of the cognitive appraisal process. To date, only Rathmell (2012) applied the transactional model to the experiences of homeschooling mothers, in a small homogenous sample. This line of research should be expanded in accordance with the burgeoning and increasingly diverse population of homeschooling families.

Research Questions

The following research questions were formulated to investigate the levels of stress among homeschooling parents in South Florida:

Research Question 1: What does the statistical evidence show about current perceived stress among home schooling parents, as reported by South Florida parents?

H1₀: There is no relationship between demographic characteristics of age, yearly income, education, ethnicity, and number of children that were homeschooled and parent's level of perceived stress (low, high).

H1_a: There is a significant relationship between demographic characteristics of age, yearly income, education, ethnicity, and number of children that were homeschooled and parent's level of perceived stress (low, high).

Research Question 2: What do the findings of this study's survey suggest as to the components of an effective program to prevent or manage stress among home schooling parents?

H2₀: There is no difference in participants' perceived stress between parent's age, yearly income, education, ethnicity, and number of children that were homeschooled.

H2_a: There is a significant difference in participants' perceived stress between parent's age, yearly income, education, ethnicity, and number of children that were homeschooled.

Chapter 3: Methodology

The methodology used in this research was a quantitative cross sectional survey design targeting the home schooling population of Palm Beach, Broward and Miami. The homeschooled student population in Florida in 2013-2014 is approximately 75,801, with Palm Beach and Broward counties ranking in the top five districts with the highest percentages of home education students (“Home Education in Florida,” 2014). According to the 2013-2014 annual report from the Office of Independent Education and Parental Choice in the Florida Department of Education, (“Home Education in Florida,” 2014) Palm Beach has a population of 6.5% homeschooled students and Broward has a population of 5.5% of homeschooled students.

Participants

The population for this study consisted of parents of homeschooled K-6th grade children in three south Florida school districts. Parental participants were male and female, all ethnicity, and ages 17 and up, as the main criteria for this study was homeschooling parents of K-6th grade children in South Florida. Computer-based research was conducted to find the following associations and organizations for specific grade level population of home schooling parents. The population surveyed was a convenience sample of members of Miami Dade Homeschool, Inc, a Meet-Up support group and virtual community, Palm Beach Homeschool, Inc; a home school support group and virtual community, the Miami Homeschoolers Organization, The Christian Homeschool Support and other social networking groups for home schooling parents at the time of the study. All members of these homeschooling groups were asked for voluntary and anonymous participation.

Instruments

For homeschooling parents in South Florida, an introduction and consent form, a demographic questionnaire and a survey instrument were used for this quantitative cross-sectional survey study. The methodology for this study was a quantitative cross sectional survey design. A demographical survey designed by the researcher with Survey Monkey software was administered in correlation with the Perceived Stress Survey (PSS) to identify personal and other characteristics of study respondents. Surveys are useful when a researcher plans to collect data on the behavior of populations that are not easily observed, such as perceptions and opinions.

Invitation to prospective participants. All prospective homeschool groups in the study were provided an online link to an introductory letter to the study containing notice of ethical protection and an informed consent form. The researcher's phone and e-mail contact information was included, and responses were requested within 7 days (Appendix A).

Demographic questionnaire. The demographic questionnaire for homeschooling parents was an online survey designed by the researcher using Survey Monkey software and guidelines for effective survey design ("Best Practices," 2014). The instrument included 10 items, (a) Florida district, (b) age, (c) gender, (d) primary language in home, (e) level of education completed, (f) ethnicity, (g) current marital status, (h) length of time homeschooling, (i) current household income, and (j) number of children currently homeschooled. These characteristics were chosen based on research questions and previous studies related to homeschooling and do not include a rating scale. Total time for completion was approximately 5 to 10 minutes (Appendix B).

The demographic information gathered in this study was used to report a demographic profile of participating homeschooling parents and to compare these with the demographic characteristics of homeschooling parents in previous studies. An exploration of relationships between demographic characteristics and stress variables may be used for future studies investigating such relationships.

Perceived Stress Scale (PSS) instrument. The Perceived Stress Scale (PSS) measures the degree to which situations are appraised as stressful (Cohen, Kamarck, & Mermelstein, 1983). This instrument measures ten domains of perceived stress and is proposed to make comparisons between individuals' perceived stress related to current, objective events. The responses of the ten questions on the PSS-10 varies from 0 to 4 for each item and ranging from never, almost never, sometimes, fairly often and very often respectively on the basis of their occurrence during one month. The PSS items were designed to assess the extent to which respondents find their lives unpredictable, uncontrollable, and overloaded; these three elements have been created to be key components of stress experience (Cohen & Williamson, 1988).

Items in the PSS scale were designed to estimate how unpredictable, uncontrollable, and overloaded respondents find their lives. PSS is a reliable and valid measure that can be put into different conditions, population, and designs but is particularly allocated for community-based population with at least high school education (Cohen, Kamarck, & Mermelstein, 1983). Permission for use of the PSS scale is not necessary when use is for academic research or educational purposes (Cohen, Kamarck, & Mermelstein, 1983). Total time for completion was be approximately 5 to 10 minutes (Appendix C).

Procedures

The procedures discussed include choice and explanation of study design and participants for the study. In addition, the design included pilot testing of the instruments. After feedback, adjustments to the instruments were made. Data collection was then conducted followed by data analysis.

Design. The research employed a quantitative cross sectional survey design. Preliminary emails were sent to the home school organizations and social media associations to introduce the study and provide a link to the survey. These organizations then provided the participants with a link to an on-line survey. The survey link included an introduction letter with informed consent (Appendix A), followed by the PSS and demographical survey. Participants were asked to complete the survey at their earliest convenience and were able to contact the researcher by email or phone for any reason throughout the duration of the study. The research was collected within a one-month time frame (Creswell, 2009).

Sample size. All members of the Miami Dade Homeschool, Inc. a Meet-Up support group and virtual community, Palm Beach Homeschool, Inc.; a home school support group and virtual community, the Christian Homeschool Support and members of the Miami Homeschoolers Organization were given the opportunity to participate in the study. All members of these homeschooling groups residing in the South Florida region were recruited for as large a response as possible. As large a sample as possible was sought for a representation of the population. The sample size was 102.

Administration of instruments. For administration of the instruments to homeschooling parents of South Florida K-6th grade students and promote greater

response rates, the researcher made arrangements with a staff member or administrator of the population groups to provide a link to the survey to the members. The researcher, in collaboration with group administrator or staff, conducted the online administration of the instruments. Following completion of the online surveys, the researcher thanked the participants for their contribution.

Research Questions

Research Question 1. What does the statistical evidence show about current perceived stress among home schooling parents, as reported by South Florida parents? The current level of stress was measured using the Perceived Stress Scale (PSS-10). This question was answered with the data analysis of the PSS-10 response and the demographic survey response. PSS-10 scores were obtained by summing across all PSS-10 scale items. The scale yields a single score with high scores indicating higher levels of stress and low scores indicating lower levels of stress. The PSS-10 is not a diagnostic instrument; it is used for comparisons between people within the sample. The PSS-10 data response will reveal higher scores for homeschooling parents who perceive high stress, and lower scores for homeschooling parents who perceive low stress. The PSS-10 data analyzed with the demographic survey data can determine correlations with levels of stress and factors such as gender, age and socioeconomic status, among others.

Research Question 2. What do the findings of this study's survey suggest as to the components of an effective program to prevent or manage stress among home schooling parents?

This question was answered with analysis of the PSS-10 and demographic survey data analysis. PSS scores were obtained by the sum across all PSS-10 scale items. The scale

yields a single score with high scores indicating higher levels of stress and low scores indicating lower levels of stress. A target market for stress prevention and management programs within the sample could be determined by analyzing the correlation between higher levels of stress and factors such as age, gender, education or socioeconomic status.

Data Analysis

PSS scores were obtained by reversing responses (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items. Items 4, 5, 6, 7 and 10 were the positively stated items. The scale yields a single score with high scores indicating higher levels of stress and low scores indicating lower levels of stress. Therefore, the scale can produce a range of scores from 0 to 56. Subsequent data analyses includes summary descriptive statistics and inferential statistical tests (e.g., independent or dependent *t* test, ANOVA, and chi-square).

The Statistical Package for the Social Sciences (SPSS) 23.0 was used to code and tabulate scores collected from the survey and provide summarized values where applicable including the mean, central tendency, variance, and standard deviation. Logistic regression analyses of variance (ANOVA) were used for evaluation.

Limitations

Since a convenience sampling methodology was used, generalization to the greater population may be affected. However, it is assumed the targeted sample was a representative sample of the population under study. Additionally, correlational designs naturally limit generalizability given the nature of the variables. That is, the independent and dependent variables in the study have been predefined by environmental course. Thus, only correlation rather than causation can be inferred from results.

Other limitations include difficulty enlisting cooperation, and lack of an interviewer involved in the study (Creswell, 2009). The predictive validity of the PSS is expected to fall off rapidly after four to eight weeks as a result of the influence of stress appraisal by daily hassles, major events, and changes in coping resources (Cohen, Kamarck, & Mermelstein, 1983)

Chapter 4: Results

Introduction

The purpose of the study was to determine the levels of perceived stress associated with homeschooling K-6th grade children in a South Florida district. The researcher aimed to provide insight and add to the homeschool body of research. A quantitative picture of perceived stress among homeschooling parents can help health professionals, educators and school administrators determine and develop methods for preventing or managing this stress. The following chapter provides a data analysis procedure, demographics and analysis of the two Research Questions.

Data Analysis Procedure

Inferential statistics were used to draw conclusions from the sample tested. The Statistical Package for the Social Sciences (SPSS) 23.0 was used to code and tabulate scores collected from the survey and provide summarized values where applicable including the mean, central tendency, variance, and standard deviation. Logistic regression analyses of variance (ANOVA) were used to evaluate the two research questions and hypotheses. The research questions and hypotheses were:

Research Question 1: What does the statistical evidence show about current perceived stress among home schooling parents, as reported by South Florida parents?

H₁₀: There is no relationship between demographic characteristics of age, yearly income, education, ethnicity, and number of children that were homeschooled and parent's level of perceived stress (low, high).

H_{1a}: There is a significant relationship between demographic characteristics of age, yearly income, education, ethnicity, and number of children that were homeschooled

and parent's level of perceived stress (low, high).

Research Question 2: What do the findings of this study's survey suggest as to the components of an effective program to prevent or manage stress among home schooling parents?

H2₀: There is no difference in participants' perceived stress between parent's age, yearly income, education, ethnicity, and number of children that were homeschooled.

H2_a: There is a significant difference in participants' perceived stress between parent's age, yearly income, education, ethnicity, and number of children that were homeschooled.

Prior to analyzing the research questions, data cleaning and data screening were undertaken to ensure the variables of interest met appropriate statistical assumptions. Thus, the following analyses were assessed using an analytic strategy in that the variables were first evaluated for missing data, univariate outliers, normality, linearity, and homogeneity of variance. Finally, five logistic regression analyses (RQ1a-1e) and five ANOVAs (RQ2a-2e) were run to test the research questions. Displayed in Table 1 are the variables and statistical tests used to evaluate the research questions.

Table 1

Summary of Variables and Statistical Tests Used to Evaluate Research Questions 1 and 2

Research Question	Dependent Variable	Independent Variable	Analysis
RQ1a	Perceived Stress	Age Group	Logistic Regression
RQ1b	Perceived Stress	Yearly Income	Logistic Regression
RQ1c	Perceived Stress	Level of Education	Logistic Regression
RQ1d	Perceived Stress	Ethnicity	Logistic Regression
RQ1e	Perceived Stress	Number of Children	Logistic Regression
RQ2a	Perceived Stress	Age Group	ANOVA
RQ2b	Perceived Stress	Yearly Income	ANOVA
RQ2c	Perceived Stress	Level of Education	ANOVA
RQ2d	Perceived Stress	Ethnicity	ANOVA
RQ2e	Perceived Stress	Number of Children	ANOVA

Demographics

Data were collected from a sample of 105 parents of homeschooled K-6th grade children in south Florida school districts. Parental participants were male and female, all ethnicity, with varying educational levels and ages 18 and older. However, three participants stated they were 17 years old or younger and were removed from all analyses; thus, a valid sample of 102 participants were used to evaluate the research question ($N = 102$). Specifically, the majority of participants were female (98.0%, $n = 100$) and 2 were male (2.0%, $n = 2$). Additionally, 36 participants were from Broward county (35.3%), 20 were from Dade county (19.6%), and 46 were from Palm Beach (45.1%). Lastly, 9.8% were 21-29 years old ($n = 10$), 52.0% were 30-39 years old ($n = 53$), 36.3% were 40-49 years old, ($n = 37$), and 2.0% were 50-59 years old ($n = 2$). Displayed in Table 2 are frequency and percent statistics of participants' gender, county of residence, and age groups.

Table 2 Frequency and Percent Statistics of Participants'

*Gender, South Florida County of Residence,
and Age Groups*

Demographic	Frequency (<i>n</i>)	Percent (%)
Gender		
Female	100	98.0
Male	2	2.0
Total	102	100.0
County		
Broward	36	35.3
Dade	20	19.6
Palm Beach	46	45.1
Total	102	100.0
Age		
21-29	10	9.8
30-39	53	52.0
40-49	37	36.3
50-59	2	2.0
Total	102	100.0

Note. Total *N* = 102

The sample of 102 participants were used to evaluate the Research Question (*N* = 102). Specifically, the majority of participants were White/Caucasian (67.6.0%, *n* = 69). Additionally, 22 participants were Hispanic (21.6%), six were Black or African American (21.6%), and five were multiple ethnicity (4.9%). Displayed in Table 3 are frequency and percent statistics of participants' ethnicity.

Table 3

Frequency and Percent Statistics of Participants' Ethnicity

Demographic	Frequency (n)	Percent (%)
Ethnicity		
Black or African American	6	5.9
Hispanic	22	21.6
White / Caucasian	69	67.6
Multiple ethnicities / Other (please specify)	5	4.9
Total	102	100.0
Multiple or other ethnicity		
Brazilian	1	1.0
Eritrean	1	1.0
Hawaiian	1	1.0
Hispanic, Asian, and Black	1	1.0
White/Caucasian and Hispanic	1	1.0

Note. Total $N = 102$

The sample of 102 participants were used to evaluate the Research Question ($N = 102$). Specifically, the majority of participants' yearly income was over 100,000 (39.0%, $n = 39.2$). Additionally, 20 participants' yearly income was between 75,000 and 99,999 (19.6%), 20 participants' yearly income was between 50,000 and 74,999 (19.6%) and 20 participants' yearly income was between 30,000 and 49,999 (19.6%). Lastly, two participants reported yearly income of 10,000- 29,999 (2.0%), and one reported a yearly income of under 10,000 (1.0%).

The majority of participants' level of education was equivalent to a Bachelor's degree (39.0%, $n = 38.2$). Additionally, 10 participants earned an Associates degree (9.8%), 25 reported some college (24.5%), 15 earned a High School diploma or GED® (14.7%) and 12 participants (11.8%) reported having earned a Graduate degree. Education level data is missing for one participant. Displayed in Table 4 are frequency and percent statistics of participants' yearly income and level of education.

Table 4

Frequency and Percent Statistics of Participants' Yearly Income and Level of Education

Demographic	Frequency (<i>n</i>)	Percent (%)
Yearly Income		
Under \$10,000	1	1.0
\$10,000- \$29,999	2	2.0
\$30,000-\$49,999	20	19.6
\$50,000-\$74,999	20	19.6
\$75,000 - \$99,999	20	19.6
Over \$100,000	39	38.2
Total	102	100.0
Level of Education		
High school degree or equivalent (e.g., GED)	15	14.7
Some college but no degree	25	24.5
Associate degree	10	9.8
Bachelor degree	39	38.2
Graduate degree	12	11.8
Missing	1	1.0
Total	102	100.0

Note. Total *N* = 102

The majority of participants' number of children currently homeschooled was 1 (41.2%, *n* = 42). 38 participants were homeschooling two children (9.8%), and 14 reported homeschooling three children (13.7%). Lastly, eight participants reported homeschooling four or more children (7.8%). The majority of parents reported homeschooling for over four years (39.2%, *n* = 40), followed by 37 participants homeschooling 1-3 years (36.3) and 24 participants homeschooling less than a year (23.5%). Displayed in Table 5 are frequency and percent statistics of participants' number of children taught and length of time homeschooling.

Table 5

Frequency and Percent Statistics of Participants' Number of Children Taught and Length of Homeschool

Demographic	Frequency (<i>n</i>)	Percent (%)
Number of Children		
1 child	42	41.2
2 children	38	37.3
3 children	14	13.7
4 or more children	8	7.8
Total	102	100.00
Length of Homeschool		
Less than 1 year	24	23.5
1-3 years	37	36.3
4 or more years	40	39.2
Missing	1	1.00
Total	102	100.0

Note. Total *N* = 102

The majority of participants' relationship status was married (91.2%, *n* = 93). Additionally, four participants reported single but cohabitation (3.9%), two reported single never married (2.0%), two reported separated (2.0%) and one in a domestic relationship or civil union (1.0%). The primary language spoken was English (93.1%, *n* = 95). Four participants reported the primary language as Spanish (3.9%) and one participant reported other/multiple language (1.0%). Displayed in Table 6 are frequency and percent statistics of participants' Relationship Status and Primary Language Spoken.

Table 6

Frequency and Percent Statistics of Participants' Relationship Status and Primary Language Spoken

Demographic	Frequency (<i>n</i>)	Percent (%)
Relationship Status		
Single, never married	2	2.0
Single, but cohabiting with a significant other	4	3.9
In a domestic partnership or civil union	1	1.0
Married	93	91.2
Separated	2	2.0
Total	102	100.0
Primary Language Spoken		
English	95	93.1
Spanish	4	3.9
Other/multiple languages (please specify)	1	1.0
Missing	2	2.0
Total	102	100.0
Other Languages Spoken		
Spanish and Sign Language	1	1.0

Note. Total *N* = 102

Analysis of Research Questions 1 and 2

Research Question 1 was evaluated using five logistic regression analyses and Research Question 2 was evaluated using five analyses of variance (ANOVA) to determine if any significant differences in participants' levels of perceived stress existed between age, yearly income, level of education, ethnicity, and number of children that were homeschooled. The independent variables for Research Questions 1 and 2 were age, yearly income, level of education, ethnicity, and number of children that were homeschooled. Due to low sample sizes, the independent variables were dichotomized (collapsed into two groups each). Specifically, age groups were categorized as 39 years old or younger and 40 years or older. Yearly income was categorized as less than \$75,000 per year and \$75,000+ per year. Participants' level of education was categorized into two

groups including less than Bachelor's degree and Bachelor's degree or greater. Ethnicity was categorized into White/Caucasian and all other ethnicities. For the independent variable, number of K-6th grade children being homeschooled participants were placed into two groups including those that taught one child and those that taught two or more children.

The dependent variable for Research Questions 1 and 2 were participants' level of perceived stress as measured by 10-items on the Perceived Stress Survey (PSS).

Response parameters were measured on a 5-point Likert-type scale where 1 = *strongly disagree*, 2 = *moderately disagree*, 3 = *undecided*, 4 = *moderately agree*, and 5 = *strongly agree*. Task engagement was measured by 80-items on the Learning and Study Strategies Inventory (LASSI). Response parameters were measured on a 5-point Likert-type scale where 1 = *never*, 2 = *almost never*, 3 = *sometimes*, 4 = *fairly often*, and 5 = *very often*.

Composite scores were calculated by summing scores across the ten items resulting in a possible range between 10 and 50 where higher scores indicated higher levels of perceived stress. For the logistic regression analyses of Research Question 1, participants were split into 2 groups including low stress and high stress. That is, those with scores less than the overall mean score ($M = 23.144$, $N = 90$) were placed into the low stress group and those with higher scores were placed into the high stress group. For the ANOVA analyses of Research Question 2, participants' summed scores were used.

Data Cleaning

A valid sample of 102 parents of homeschooled K-6th grade children in south Florida school districts. Before the data were evaluated, the data were screened for missing data, univariate outliers and multivariate outliers. Missing data were investigated

using frequency counts and 12 cases were found and were removed from the analyses. The data were screened for univariate outliers by transforming raw scores to z-scores and comparing z-scores to a critical range between < -3.29 and $> +3.29$, $p < .001$ (Tabachnick & Fidell, 2007). Z-scores that exceed this critical range are more than three standard deviations away from the mean and thus represent outliers. The distributions were evaluated and no cases with univariate outliers were found. Thus, 102 responses from participants were received and 90 were evaluated by the moderated ANOVA model for Research Questions 1 and 2 ($N = 90$). Descriptive statistics of participants' levels of perceived stress by age, yearly income, level of education, ethnicity, and number of children that were homeschooled in Table 7.

Table 7

Descriptive Statistics of Participants' Level of Perceived Stress by Age Groups, Yearly Income, Level of Education, Ethnicity, and Number of Children That Were Homeschooled

Level of Stress	<i>n</i>	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
Age Group							
39 years or younger	54	13	39	23.463	5.846	0.854	0.660
40+ years	36	15	36	22.667	5.441	0.513	-0.458
Yearly Income							
Less than \$75,000	38	13	39	23.658	6.626	0.628	-0.289
\$75,000+	52	15	36	22.769	4.889	0.723	0.777
Level of Education							
Less than Bachelor's	45	13	39	22.911	6.233	0.725	0.351
Bachelor's or greater	45	16	36	23.378	5.105	0.839	0.167
Ethnicity							
White/Caucasian	63	13	39	22.778	5.609	0.787	0.706
Other Ethnicities	27	16	38	24.000	5.824	0.675	-0.254
Number of Children							
1 child	40	13	39	23.850	5.536	0.712	1.101
2+ children	50	14	36	22.580	5.768	0.824	0.024

Note. Total $N = 90$

Reliability Analysis

Reliability analysis was run to determine if the dependent variable (level of perceived stress, 10-items) was sufficiently reliable. Reliability analysis allows the researcher to study the properties of measurement scales and the items that compose the scales (Tabachnick & Fidell, 2007). Cronbach's alpha (α) reliability analysis procedure calculates a reliability coefficient that ranges between 0 and 1. The reliability coefficient is based on the average inter-item correlation. Scale reliability is assumed if the coefficient is $\alpha \geq .70$. Results from the tests found that the variable constructs were sufficiently reliable, $\alpha = .882$, $N = 90$. Thus, the assumption of reliability was not violated.

Normality

Before the Research Question was analyzed, basic parametric assumptions were assessed. That is, for the dependent variable (level of perceived stress) assumptions of normality, linearity, and homogeneity of variance were tested. Linearity was tested using scatterplots and no violations were observed. To test if the distributions were normally distributed, the skew and kurtosis coefficients were divided by the skew/kurtosis standard errors, resulting in z-skew/z-kurtosis coefficients. This technique was recommended by Tabachnick and Fidell (2007). Specifically, z-skew/z-kurtosis coefficients exceeding the critical range between -3.29 and +3.29 ($p < .001$) may indicate non-normality. Thus, based on the evaluation of the z-skew/z-kurtosis coefficients, no distributions were found to be significantly skewed or kurtotic. Therefore, the distributions were assumed to be normally distributed. Skewness and kurtosis statistics of participants' level of perceived

stress by age, yearly income, education, ethnicity, and number of children that were homeschooled are displayed in Table 8.

Table 8

Skewness and Kurtosis Statistics of Participants' Level of Perceived Stress by Age Groups, Yearly Income, Level of Education, Ethnicity, and Number of Children That Were Homeschooled

Level of Stress	<i>n</i>	Skewness	Skew Std. Error	z-skew	Kurtosis	Kurtosis Std. Error	z-kurtosis
Age Group							
39 years or younger	54	0.854	0.325	2.628	0.660	0.639	1.033
40+ years	36	0.513	0.393	1.305	-0.458	0.768	-0.596
Yearly Income							
Less than \$75,000	38	0.628	0.383	1.640	-0.289	0.750	-0.385
\$75,000+	52	0.723	0.330	2.191	0.777	0.650	1.195
Level of Education							
Less than Bachelor's	45	0.725	0.354	2.048	0.351	0.695	0.505
Bachelor's or greater	45	0.839	0.354	2.370	0.167	0.695	0.240
Ethnicity							
White/Caucasian	63	0.787	0.302	2.606	0.706	0.595	1.187
Other Ethnicities	27	0.675	0.448	1.507	-0.254	0.872	-0.291
Number of Children							
1 child	40	0.712	0.374	1.904	1.101	0.733	1.502
2+ children	50	0.824	0.337	2.445	0.024	0.662	0.036

Note. Total *N* = 90

Homogeneity of Variance

Levene's Test of Equality of Error Variance was run to determine if the error variances of the dependent variables (level of perceived stress) were equal across levels of the independent variables (age groups, yearly income, level of education, ethnicity, and number of children that were homeschooled). Results indicated that the distributions did not violate the assumption of homogeneity of variance ($p > .05$). These results suggest the error variances were equally distributed across levels of the independent

variables. Displayed in Table 9 are summary details of the Levene's test for Research Questions 2a-2e.

Table 9

Summary of Levene's Tests for Research Question 2a-2e

Analysis	Independent Variable	F	df1	df2	Sig. (<i>p</i>)
RQ2a	Age Group	0.022	1	88	0.883
RQ2b	Yearly Income	4.972	1	88	0.128
RQ2c	Level of Education	1.196	1	88	0.277
RQ2d	Ethnicity	0.470	1	88	0.495
RQ2e	Number of Children	0.486	1	88	0.488

Note. Total *N* = 90

Results of Logistic Regression Analyses 1a-1e

H1₀: There is no relationship between demographic characteristics of age, yearly income, education, ethnicity, and number of children that were homeschooled and parent's level of perceived stress (low, high).

H1_a: There is a significant relationship between demographic characteristics of age, yearly income, education, ethnicity, and number of children that were homeschooled and parent's level of perceived stress (low, high).

Using SPSS 23.0, 5 logistic regression analyses were conducted to determine if any significantly relationships existed between participants' level of perceived stress and their age, yearly income, education, ethnicity, and number of children that were homeschooled. Results indicated there were no significant relationships between participants' level of perceived stress and their age ($p = .794$), yearly income ($p = .818$), level of education ($p = .287$), ethnicity ($p = .889$), or number of children homeschooled ($p = .476$). Thus, the null hypothesis for Research Question 1 was retained. A model

summary of the logistic regression analyses is displayed in Table 10. Summary statistics of each logistic regression analysis is displayed in Appendix C, Tables 12-16.

Table 10

Model Summary of Logistic Regression Analyses for Research Question 1

Research Question	Independent Variable	Cox & Snell R^2	Nagelkerke R^2	χ^2	df	Sig. (p)
RQ1a	Age Groups	0.001	0.001	0.068	1	0.794
RQ1b	Yearly Income	0.001	0.001	0.053	1	0.818
RQ1c	Level of Education	0.013	0.017	1.134	1	0.287
RQ1d	Ethnicity	< .001	< .001	0.019	1	0.889
RQ1e	Number of Children	0.006	0.008	0.509	1	0.476

Note. Criterion variable = participants' level of perceived stress (reference group = low stress)
Total $N = 90$

Results of ANOVA Analyses for Research Question 2

H₂₀: There is no difference in participants' perceived stress between parent's age, yearly income, education, ethnicity, and number of children that were homeschooled.

H_{2a}: There is a significant difference in participants' perceived stress between parent's age, yearly income, education, ethnicity, and number of children that were homeschooled.

Using SPSS 23.0, 5 ANOVA analyses were used to determine if any significant differences in participants' perceived stress existed between age groups, yearly income, level of education, ethnicity, and number of children that were homeschooled. Results from the tests indicated there were no significant differences in participants' perceived stress between age groups ($p = .517$), yearly income ($p = .466$), level of education ($p = .699$), ethnicity ($p = .352$), and number of children that were homeschooled ($p = .294$). Thus, null hypothesis for Research Question 2 was retained. Displayed in Table 11 are summary statistics of the five ANOVA analyses. Summary statistics of the between-

subjects effects from the ANOVA analyses for Research Questions 2a-2e are displayed in Appendix C, Tables 17-21.

Table 11

Summary of Multivariate Tests of the ANOVA Analyses Used to Evaluate Research Questions 2a-2e

Analysis	Independent Variable	Mean Square	F	Sig. (<i>p</i>)	Partial Eta Squared (χ^2)
RQ2a	Age Group	13.696	0.423	0.517	0.005
RQ2b	Yearly Income	17.339	0.537	0.466	0.006
RQ2c	Education	4.900	0.151	0.699	0.002
RQ2d	Ethnicity	28.233	0.877	0.352	0.010
RQ2e	Number of Children	35.842	1.116	0.294	0.013

Note. Dependent variable = level of perceived stress; Total *N* = 90

Summary

Parents serve as role models for their children (Bandura, 1986). Indeed, that is one reason why many parents choose home education (Rathmell, 2012; Ray, 2002, 2014).

Parents' adaptive or maladaptive responses to stress may be transmitted to their children (Bandura, 1986; Santiago et al., 2012). This effect may be intensified in homeschooling families, where the homeschooling parent spends far more time with the child or children than teachers or parents whose children attend traditional schools (Rathmell, 2012).

As the number of homeschooled children in south Florida rises, the need for resources to help parents cope with stress related to performing extra parental/teacher tasks will likely increase. This study was designed to inform and advance knowledge by using statistical research to determine the levels of perceived parental stress in homeschooling parents, and gain insight to information for developing improved strategies for homeschooling.

The population for this study consisted of parents of homeschooled K-6th grade children in 3 south Florida school districts. Parental participants were male and female,

all ethnicity, and ages 18 and older, who were homeschooling K-6th grade children in South Florida. Chapter 4 represents an analysis of perceived levels of stress among homeschooling parents of K-6 children in South Florida. Inferential statistics were used to draw conclusions from the sample tested. The Statistical Package for the Social Sciences (SPSS) 23.0 was used to code and tabulate scores collected from the survey and provide summarized values where applicable including the mean, central tendency, variance, and standard deviation. Logistic regression analyses of variance (ANOVA) were used to evaluate the two Research Questions and hypotheses.

Logical regression analysis for RQ1 shows that age, income, level of education, ethnicity and number of children homeschooled have limited or no significant affect on perceived stress. ANOVA analysis for RQ2 also demonstrates age, income, level of education and ethnicity have limited or no significant effect on perceived stress.

Table 12

Summary of Results for Research Questions 1 and 2

Research Question	Dependent Variable	Independent Variable	Analysis	Sig. (<i>p</i>)
RQ1a	Perceived Stress	Age Group	Logistic Regression	0.794
RQ1b	Perceived Stress	Yearly Income	Logistic Regression	0.818
RQ1c	Perceived Stress	Level of Education	Logistic Regression	0.287
RQ1d	Perceived Stress	Ethnicity	Logistic Regression	0.889
RQ1e	Perceived Stress	Number of Children	Logistic Regression	0.476
RQ2a	Perceived Stress	Age Group	ANOVA	0.517
RQ2b	Perceived Stress	Yearly Income	ANOVA	0.466
RQ2c	Perceived Stress	Level of Education	ANOVA	0.699
RQ2d	Perceived Stress	Ethnicity	ANOVA	0.352
RQ2e	Perceived Stress	Number of Children	ANOVA	0.294

Note. Total *N* = 90

Chapter 5 is used to discuss summary of results relative to each research question and associated implications. Relevant research was identified and context of findings are

also discussed. Additionally, research limitations and recommendations for further research are provided.

Chapter 5: Discussion

Introduction

Parents serve as role models for their children throughout the course of their lives (Bandura, 1986). Accordingly, many parents choose to home school their children to capitalize on this unique relationship (Rathmell, 2012; Ray, 2002, 2014). However, parents' adaptive or maladaptive responses to stress may be transmitted to their children (Bandura, 1986; Santiago et al., 2012). This effect may be intensified in homeschooling families, where the homeschooling parent spends far more time with the child or children than teachers or parents whose children attend traditional schools (Rathmell, 2012).

As the numbers of homeschooled children in south Florida increase, the need for resources to help parents cope with stress related to performing extra parental/teacher tasks will likely increase. This study was designed to inform and advance knowledge by using statistics to determine levels of perceived parental stress in homeschooling parents, and assess if demographic characteristics affects level of stress.

Summary of Findings

The population for this study consisted of parents of homeschooled K-6th grade children who attended three south Florida school districts. Parental participants general profile were male and female, all ethnicity, and ages 18 and older, who were homeschooling K-6th grade children in South Florida.

Inferential statistics were used to draw conclusions from the sample tested. The Statistical Package for the Social Sciences (SPSS) 23.0 was used to code and tabulate scores collected from surveys and provide summarized values where applicable including

the mean and standard deviation. Logistic regression and analyses of variance (ANOVA) were used to evaluate two Research Questions and two hypotheses.

For $H1_0$: There is no relationship between demographic characteristics of age, yearly income, education, ethnicity, and number of children that were homeschooled and parent's level of perceived stress (low, high), age, income, level of education, ethnicity and number of children homeschooled was not related to perceived stress.

For $H2_0$: There is no difference in participants' perceived stress between parent's age, yearly income, education, ethnicity, and number of children that were homeschooled, age, income, level of education, and ethnicity did not have an effect on perceived stress.

Although it was expected that parental profile characteristics would be related to stress, statistical findings did not support this assumption. That is, the alternative hypotheses were not supported. Stress was not affected by age, income, level of education, and ethnicity.

Interpretation of Findings

Many factors are related to stress including both environmental and biological factors. Based on literature, it was expected that stress would be related to age, income, level of education, and ethnicity. However, unexpectedly, statistical findings did not support this assumption. Many factors could have contributed to the non-significant findings including type of participant, personality traits, or contextual conditions when the study was conducted. Although covariates or confounding variables could have likely affected results, a larger sample size would be needed to detect these affects. As such,

parent's demographic profile may be related to stress and should not be categorically rejected in future research studies.

Context of Findings

Little quantitative research has been conducted on homeschooling parents and only one study in particular specifically provided an analysis of stress among homeschooling parents (Rathmell, 2012). Most of the literature is qualitative in nature (Kunzman & Gaither, 2013), imbuing the body of homeschooling research with “an anecdotal quality it has yet to transcend” (p. 5). This study provided insight and adds to the homeschool body of knowledge via a quantitative analysis of home school parents.

Existing literature contradicts findings gleaned from this study (Ko, 1992). For example, a survey of 31 parents with an infant in NICU was conducted to investigate the relationships between age, gender, education, state anxiety, trait anxiety, and stress among 31 parents with an infant in NICU. Based on the published findings, a positive relationship was found between parental education and state anxiety.

Faye and Valadez (1993) measured levels of stress experienced by Hispanic and Anglo mothers of premature and full-term infants in the first two years after birth. Data collected from 100 mothers in the study did determine that two major predictors of stress were maternal education level and family income. In contrast, education and income were not predictors of parental stress in this study. The difference, of course, was in the sample, meaning that Faye and Valadez (1993) and Ko (1992) used parents of infants and this study targeted parents of school aged children. Perhaps, as the mother gains experience and acculturates self to the parental lifestyle, stress is reduced and no longer is directly affected by these factors.

The findings from this study did correlate with Mathews' (1987) research on industrial teachers in Florida wherein job-related stress were not found to be related to age and education level. Mathews used a survey battery to obtain personal data, perceived stress, and morale level among industrial teachers in Florida to identify perceived differences in job-related stress and morale. Analysis of the data determined that age and educational level had limited effect on stress levels (Mathews, 1987).

Implications of Findings

Based on the aforementioned studies associated with stress, one might theorize that the act of teaching may not be a stressful task, but rather the children may be inducing stress. That is, stress associated with teaching students at home may depend on characteristics of the child rather than the simple act of teaching. For example, children with behavioral issues may influence or mediate the relationship between stress and demographic characteristics.

This study advances understanding about the relationship between stress and parental demographic characteristics. The non-significant findings suggest confounding variables may be interacting with the predictor variables. Further, based on current literature, children's behavioral characteristics may be mediating the relationship between stress and age, education, income, and ethnicity.

Parents would be well served to review these findings and assess their parent-child relationship. If, for example, parents perceive their stress level is high while teaching, then they may consider examining their child's behavior before attributing the high stress to teaching. Parents should also consider, perhaps, the context in which they

are teaching their child. For example, stress may be elevated when a child is not rested or distracted by some familial event.

Professional Field

A quantitative picture of perceived stress among homeschooling parents can help health professionals, educators and school administrators determine and develop methods for preventing or managing this stress. Statistical findings of this study can help advance research methodology used in researching homeschooling parents and extend to future studies that may add to the understanding of homeschooling and relational stress.

Limitations

Weaknesses of the study include sampling technique, inferential statistics, and type of statistical analysis used. Since a convenience sampling methodology was used, generalization to the greater population may be affected. However, it was assumed the targeted sample was a representative sample of the population under study. In addition, since inferential statistics were used to draw conclusions, the possibility of committing a Type I error exists; that is, where a true null hypothesis is incorrectly rejected. However, to mitigate this concern, the confidence level to determine acceptance of the null hypothesis was set at .05. This means the probability of error in interpretation of findings was less than 5%. Finally, correlational designs naturally limit generalizability given the nature of the variables. That is, the independent and dependent variables in the study have been predefined by environmental course. Accordingly, a true experiment using random assignment cannot be used. Thus, only correlation rather than causation can be inferred from results.

The scope of the study has been limited to a specified district to reduce the effect of confounding variables. However, confounding variables were not controlled for, which may have affected interpretation. Further, the study design has been limited to a quantitative approach, which reduces the effect of researcher bias. This means the likelihood of researcher bias influencing findings was negligible. Finally, only a validated and reliable instrument was used in the study. This approach reduces the possibility of measuring latent constructs that are not part of the study variables. However, stress may be more complex in the context of this study than what was measured by the perceived stress inventory used. Thus, the complexities of the stress construct and limitations of the stress inventory used may have affected findings.

Future Directions

Researchers might expand the literature on the topic by investigating how child behavior may mediate or moderate the relationship between parental stress and demographic characteristics. For example: How do child's personality characteristics mediate the relationship between stress and age, income, education, or ethnicity? Further, researchers should consider examining stress at a more complex level. Stress at some level may serve to improve outcomes while stress at higher levels may serve to reduce outcomes. Thus, a non-linear relationship may exist between the variable of interest. For example, some parental stress may serve to improve homeschooling outcomes. Thus, researchers should investigate how parental stress is related to homeschooling outcomes and if the relationship is moderated by parental or child characteristics. Interestingly, Patenaude (2011) found that child characteristics impact caregivers' perceptions of stress and there are certain child variables that are significant

predictors of caregiver's perceived stress. Past research correlate with the findings (Calzada et al., 2004; Esdaile & Greenwood, 2007; Muhammad & Gagnon, 2009). Future research in to the field of homeschooling and parental stress should examine how the demographics of the child may relate to parental stress.

References

- About Homeschooling Requirements. (2014). Retrieved from <http://fpea.com/about-homeschooling/requirements>
- Bakoula, C., Kolaitis, G., Veltsista, A., Gika, A., & Chrousos, G. P. (2009). Parental stress affects the emotions and behavior of children up to adolescence: A Greek, prospective, longitudinal study. *Stress, 12*, 486-498. doi:10.3109/10253890802645041
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Barwegen, L. M., Falciani, N. K., Putnam, S. J., Reamer, M. B., & Stair, E. E. (2004). Academic achievement of homeschool and public school students and student perceptions of parent involvement. *School/Community Journal, 14*(1), 39-58.
- Best practices for every step of survey creation. (2014, October 12). Retrieved from <https://www.surveymonkey.com/mp/survey-guidelines/>
- Betoret, F.D. (2009). Self-efficacy, school resources, job stressors and burnout among Spanish primary and secondary school teachers: A structural equation approach. *Educational Psychology, 29*, 45-68. doi:10.1080/0144340802459234
- Broomhead, K. (2013). Blame, guilt and the need for “labels”: Insights from parents of children with special educational needs and educational practitioners. *British Journal of Special Education, 40*, 14-21. doi:10.1111/1467-8578.12012
- Burgess, K. (2013). Fewer homeschool parents cite faith as main motive. *Christian Century*, pp. 16-17.
- Calzada, E. J., Eyberg, S. M., Rich, B., & Querido, J. G. (2004). Parenting Disruptive Preschoolers: Experiences of Mothers and Fathers. *Journal of Abnormal Child Psychology: An official publication of the International Society for Research in Child and Adolescent Psychopathology, 32*(2), 203-213.
- Carlson, D. (2009). Homeschooling and bilingual education: A well-kept secret. *Encounter, 22*(4), 10-13.
- Cogan, M. F. (2010, Summer). Exploring academic outcomes of homeschooled students. *Journal of College Admission*, pp. 18-25.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). "A Global Measure of Perceived Stress," *Journal of Health and Social Behavior, 24* (1983), 385-396.

- Cook, K. B., Bennett, K. E., Lane, J. D., & Mataras, T. K. (2013). Beyond the brick walls: Homeschooling children with special needs. *Physical Disabilities: Education and Related Services*, 32(2), 90-103. doi:10.14434/pders.v32i2.12997
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage.
- Dabrowska, A., & Pisula, E. (2010). Parenting stress and coping styles in mothers and fathers of pre-school children with autism and Down syndrome. *Journal of Intellectual Disability Research*, 54, 266-280. doi:10.1111/j.1365-2788.2010.01258.x
- Demski, J. (2010). Winning back homeschoolers. *T.H.E. Journal*, 37(1), 20-21.
- DiPerna, P. (2009). *Virginia's opinion on K-12 education and school choice*. Retrieved from <http://files.eric.ed.gov/fulltext/ED508321.pdf>
- Donnelly, R., Renk, K., & McKinney, C. (2013). Emerging adults' stress and health: The role of parent behaviors and cognitions. *Child Psychiatry and Human Development*, 44, 19-38. doi:10.1007/s10578-012-0309-y
- Esdaille, S. A., & Greenwood, K. M. (1995). A survey of mothers' relationships with their preschoolers. *Occupational Therapy International*, 2(3), 204-219.
- Faye, W., & Valadez, W. (1993). *Relationship and importance of maternal and child variables to stress experienced by Anglo and Hispanic mothers of preterm and full-term infants*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9323588)
- Fields-Smith, C., & Williams, M. (2009). Motivations, sacrifices, and challenges: Black parents' decisions to home school. *Urban Review*, 41, 369-389. doi:10.1007/s11256-008-0114-x
- Folkman, S. (2008). The case for positive emotions in the stress process. *Anxiety, Stress, & Coping*, 21, 3-14. doi:10.1080/10615800701740457
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter. *Journal of Personality and Social Psychology*, 30, 992-1003.
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55, 745-774. doi:10.1146/annurev.psych.55.090902.141456
- Grady, S., & Bielick, S. (2010). *Trends in the use of school choice: 1993 to 2007* (NCES 2010-004). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved from <http://nces.ed.gov/pubsearch>

- Green, C. L., Walker, J. M. T., Hoover-Dempsey, K. V., & Sandler, H. M. (2007). Parents' motivations for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology, 99*, 532-544. doi:10.1037/0022-0663.99.3.532
- Hall, H. R., & Graff, J. C. (2012). Maladaptive behaviors of children with autism: Parent support, stress, and coping. *Issues in Comprehensive Pediatric Nursing, 35*, 194-214. doi:10.3109/01460862.2012.734210
- Home Education in Florida. (2014). Retrieved from http://www.floridaschoolchoice.org/information/home_education/files/1314_Annual_Report.pdf
- Hurlbutt, K. (2012). Special education teachers' perceptions and beliefs regarding homeschooling children with autism spectrum disorders. *Home School Researcher, 27*, 1-9.
- Hutchison, K. (2012). A labour of love: Mothers, emotional capital and homework. *Gender and Education, 24*, 195-212. doi:10.1080/09540253.2011.602329
- Jennens, R. (2011). Professional knowledge and practice in health, welfare and educational agencies in England in relation to children being educated at home: An exploratory review. *Child Care in Practice, 17*, 143-161. doi:10.1080/13575279.2011.541143
- Kena, G., Aud, S., Johnson, F., Wang, X., Zhang, J., Rathbun, A., & Kristapovich, P. (2014). *The condition of education 2014* (NCES 2014-083). U.S. Department of Education, National Center for Education Statistics. Washington, DC. Retrieved from <http://nces.ed.gov/pubsearch>
- Keys, K., & Crain, W. (2009). Parental patience and children's reading: A pilot study of homeschooled children. *Encounter, 22*(4), 5-9.
- Kidd, T., & Kaczmarek, E. (2010). The experiences of mothers home educating their children with autism spectrum disorder. *Issues in Educational Research, 20*, 257-275. Retrieved from <http://www.iier.org.au/iier20/kidd.pdf>
- Ko, Y. (1992). The relationship of age, gender, education, state trait anxiety, and stress among NICU parents. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 1350387)
- Kunzman, R., & Gaither, M. (2013). Homeschooling: A comprehensive survey of the research. *Other Education: The Journal of Educational Alternatives, 2*, 4-59.
- Kunzman, R. (2012). Education, schooling, and children's rights: The complexity of homeschooling. *Educational Theory, 62*(1), 75-89.

- Kunzman, R. (2010). Homeschooling and religious fundamentalism. *International Electronic Journal of Elementary Education*, 3(1), 17-28.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53, 27-35. doi:10.1080/001319012003362.
- Lambert, R.G., McCarthy, C., O'Donnell, M., & Wang, C. (2009). Measuring elementary teacher stress and coping in the classroom: Validity evidence for the Classroom Appraisal of Resources and Demands. *Psychology in the Schools*, 46, 973-988. doi:10.1002/pits.20438
- Lazarus, R. S. (1995). Psychological stress in the workplace. In R. Crandall & P.L. Perrewe (eds.), *Occupational stress: A handbook* (pp. 3-13). Washington, DC: Taylor & Francis.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1, 141-169. doi:10.1002/per.2410010304
- Lloyd, T. J., & Hastings, R. (2009). Hope as a psychological resilience factor in mothers and fathers of children with intellectual disabilities. *Journal of Intellectual Disability Research*, 53, 957-968. doi:10.1111/j.1365-2788.2009.001206.x
- Lois, J. (2013). *Home is where the school is: The logic of homeschooling and the emotional labor of mothering*. New York: New York University Press.
- Martin-Chang, S., Gould, O. N., & Meuse, R. E. (2011). The impact of homeschooling on academic achievement: Evidence from homeschool and traditionally schooled students. *Canadian Journal of Behavioral Science*, 43, 195-202. doi:10.1037/a0022697
- Mathews, K. (1987) *An investigation of the relationship of job-related stress, job-related morale, and selected instructor characteristics among Florida's industrial education teachers*. (Doctoral dissertation), Available from ProQuest Dissertations and Theses database. (UMI No. 8806194)
- McKeon, C. C. (2007). *A mixed methods nested analysis of homeschooling styles, instructional practices, and reading methodologies*. (Doctoral dissertation, Capella University) Retrieved from <http://files.eric.ed.gov/fulltext/ED504128.pdf>
- Muhammad, A., & Gagnon, A. (2010). Why should men and women marry and have children?: Parenthood, marital status and self-perceived stress among Canadians. *Journal of Health Psychology*, 15(3), 315-325.

- Nizielski, S., Hallum, S., Schutz, A., & Lopes, P. N. (2013). A note on emotion appraisal and burnout: The mediating role of antecedent-focused coping strategies. *Journal of Occupational Health Psychology, 18*, 363-369. doi:10.1037/a0033043
- Noel, A., Stark, P., & Redford, J. (2013). *Parent and family involvement in education, from the National Household Education Surveys Program of 2012* (NCES 2013-028), National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved Sept. 18, 2014 from <http://nces.ed.gov/pubsearch>
- Patenaude, A. H. (2011) An Examination of Demographic Variables and their Relationships with Perceived Stress Among Caregivers Beginning a Parent Training Program Graduate Theses and Dissertations. Retrieved from <http://scholarcommons.usf.edu/etd/3283>
- Perlstein, L. (2012). Do-it-(all)-yourself parents. *Newsweek*, pp. 46-51.
- Raphael, J. L., Zhang, Y., Liu, H., & Giardino, A. P. (2010). Parenting stress in US families: Implications for paediatric healthcare utilization. *Child: Care, Health and Development, 36*, 216-224. doi:10.1111/j.1365-2214.2009.01052.x
- Rathmell, J. L. (2012). *A heuristic inquiry into the stress that home educators experience*. (Doctoral dissertation, Liberty University) Retrieved from <http://digitalcommons.liberty.edu/doctoral/531/>
- Ray, B. D. (2002). Customization through homeschooling. *Educational Leadership*, pp. 50-54.
- Ray, B. D. (2009). *Homeschool Progress Report 2009: Academic achievement and demographics*. Salem, OR: National Home Education Research Institute. Retrieved from <http://files.eric.ed.gov/fulltext/ED535134.pdf>
- Ray, B. D. (2014). *Research facts on homeschooling*. Retrieved from <http://www.nheri.org>
- Reavis, R., & Zabriski, A. (2005). Are home-schooled children socially at-risk or socially protected? *Brown University Child and Adolescent Behavior Letter*, pp. 1, 4-5.
- Riley, K. E., & Park, C. L. (2014). Problem-focused vs. meaning-focused coping as mediators of the appraisal-adjustment relationship in chronic stressors. *Journal of Social and Clinical Psychology, 33*, 587-611. doi:10.1521/jscp.2014.33.7.587
- Russell, J. (2005). When parents are a child's best teacher. *New Statesman*, pp. 24-26.
- Santiago, C. D., Etter, E. M., Wadsworth, M. E., & Raviv, T. (2012). Predictors of responses to stress among families coping with poverty-related stress. *Anxiety, Stress, & Coping, 25*, 239-258. doi:10.1080/10615806.2011.583347

- Schneider, T. R. (2008). Evaluations of stressful transactions: What's in an appraisal? *Stress and Health, 24*, 151-158. doi:10.1002/smi.1176
- Shepherd, D. (2010). *Mommy is my teacher: Qualitative case studies of three families' homeschooling experience*. (Doctoral dissertation, Ball State University)
Retrieved from
https://cardinalscholar.bsu.edu/bitstream/123456789/193289/1/ShepherdD_2010-3_BODY.pdf
- Spiegler, T. (2010). Parents' motives for home education: The influence of methodological design and social context. *International Electronic Journal of Elementary Education, 3*(1), 57-70. Retrieved from <http://www.iejee.com>
- Snyder, M. (2013). An evaluative study of the academic achievement of homeschooled students versus traditionally schooled students attending a Catholic university. *Journal of Catholic Education, 16*, 288-308. Retrieved from <http://digitalcommons.lmu.edu/ce/vol16/iss2/7>
- Tabachnick, B., C. & Fidell, L., S. (2007). *Using Multivariate Statistics* (5th edition). Boston, MA: Pearson.
- The 2014 Florida Statutes. (2014). Retrieved from <http://www.leg.state.fl.us/Statutes/>
- Taylor-Hough, D. (2010). *Are all homeschooling methods created equal?* Retrieved from http://www.inreachinc.org/are_all_homeschooling_methods_created_equal.pdf
- Trute, B., Benzies, K. M., Worthington, C., Reddon, J. R., & Moore, M. (2010). Accentuate the positive to mitigate the negative: Mother psychological coping resources and family adjustment in childhood disability. *Journal of Intellectual & Developmental Disability, 35*, 36-43. doi:10.3109/13668250903496328
- Walker, J. M. T., Shenker, S. S., & Hoover-Dempsey, K. V. (2010). Why do parents become involved in their children's education? Implications for school counselors. *Professional School Counseling, 14*, 27-41.
- Wiseman, A. M. (2009). "When you do your best, there's someone to encourage you": Adolescents' views of family literacy. *Journal of Adolescent & Adult Literacy 53*, 132-142. doi:10.1598/JAAL.53.2.4

Appendix A
Demographical Survey

Demographical Survey

1. In what South Florida county do you primarily homeschool your child? (You must be homeschooling in one of these counties to participate in this survey)

Dade

Palm Beach

Broward

Monroe

Lee

Collier

2. What is your age?

17 or younger

18-20

21-29

30-39

40-49

50-59

60 or older

3. What is your gender?

Female

Male

4. How many K6 children are you homeschooling?

1

2

3

4 or more

5. What is the primary language you speak with your child currently? (Please choose only one.)

Chinese

English

French

German

Italian

Korean

Russian

Spanish

Tagalog

Vietnamese

Other/multiple languages (please specify)

6. How long have you been home schooling your child (children)?

Less than 1 year

1-3 years

4 or more years

7. What is your approximate average household income?

Under \$10,000

\$10,000- \$29,999

\$30,000-\$49,999

\$50,000-\$74,999

\$75,000 - \$99,999

Over \$100,00

8. What is the highest level of school you have completed or the highest degree you have received?

Less than high school degree

High school degree or equivalent (e.g., GED)

Some college but no degree

Associate degree

Bachelor degree

Graduate degree

9. Which of the following best describes your current relationship status?

Married

Widowed

Divorced

Separated

In a domestic partnership or civil union

Single, but cohabiting with a significant other

Single, never married

10. Which race/ethnicity best describes you? (Please choose only one.)

American Indian or Alaskan Native

Asian / Pacific Islander

Black or African American

Hispanic

White / Caucasian

Multiple ethnicity / Other (please specify)

Appendix B
Perceived Stress Scale

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way.

1. In the last month, how often have you been upset because of something that happened unexpectedly?

Never Almost Never Sometimes Fairly Often Very Often

2. In the last month, how often have you felt that you were unable to control the important things in your life?

Never Almost Never Sometimes Fairly Often Very Often

3. In the last month, how often have you felt nervous and “stressed”?

Never Almost Never Sometimes Fairly Often Very Often

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

Never Almost Never Sometimes Fairly Often Very Often

5. In the last month, how often have you felt that things were going your way?

Never Almost Never Sometimes Fairly Often Very Often

6. In the last month, how often have you found that you could not cope with all the things that you had to do?

Never Almost Never Sometimes Fairly Often Very Often

7. In the last month, how often have you been able to control irritations in your life?

Never Almost Never Sometimes Fairly Often Very Often

8. In the last month, how often have you felt that you were on top of things?

Never Almost Never Sometimes Fairly Often Very Often

9. In the last month, how often have you been angered because of things that were outside of your control?

Never Almost Never Sometimes Fairly Often Very Often

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Never Almost Never Sometimes Fairly Often Very Often

Appendix C

Tables

Tables

Results of Research Question 1 (a-e)

Table 12

Model Summary of the Logistic Regression Analysis for Research Question 1a

Source	Cox & Snell R^2	Nagelkerke R^2	χ^2	df	Sig. (p)	Classification		
						Low Stress	High Stress	Total
Omnibus	0.001	0.001	0.068	1	0.794	100.00%	0.00%	56.70%
						95% C.I. for Exp.(B)		
Predictor Variable	B	S.E.	Wald	df	Sig. (p)	Exp.(B)	Lower	Upper
Age Group	-0.113	0.435	0.068	1	0.794	0.893	0.381	2.095
(Constant)	-0.223	0.274	0.664	1	0.415	0.800		

Note. Total $N = 90$

Table 13

Model Summary of the Logistic Regression Analysis for Research Question 1b

Source	Cox & Snell R^2	Nagelkerke R^2	χ^2	df	Sig. (p)	Classification		
						Low Stress	High Stress	Total
Omnibus	0.001	0.001	0.053	1	0.818	100.00%	0.00%	56.70%
						95% C.I. for Exp.(B)		
Predictor Variable	B	S.E.	Wald	df	Sig. (p)	Exp.(B)	Lower	Upper
Yearly Income	-0.009	0.430	0.053	1	0.818	0.906	0.390	2.106
(Constant)	-0.211	0.326	0.419	1	0.517	0.810		

Note. Total $N = 90$

Table 14

Model Summary of the Logistic Regression Analysis for Research Question 1c

Source	Cox & Snell R^2	Nagelkerke R^2	χ^2	df	Sig. (p)	Classification		
						Low Stress	High Stress	Total
Omnibus	0.013	0.017	1.134	1	0.287	100.00%	0.00%	56.70%
Predictor Variable	B	S.E.	Wald	df	Sig. (p)	Exp.(B)	95% C.I. for Exp.(B)	
							Lower	Upper
Level of Education	-0.455	0.428	1.126	1	0.289	0.635	0.274	1.470
(Constant)	-0.044	0.298	0.022	1	0.882	0.957		

Note. Total $N = 90$

Table 15

Model Summary of the Logistic Regression Analysis for Research Question 1d

Source	Cox & Snell R^2	Nagelkerke R^2	χ^2	df	Sig. (p)	Classification		
						Low Stress	High Stress	Total
Omnibus	< .001	< .001	0.019	1	0.889	100.00%	0.00%	56.70%
Predictor Variable	B	S.E.	Wald	df	Sig. (p)	Exp.(B)	95% C.I. for Exp.(B)	
							Lower	Upper
Ethnicity	-0.065	0.463	0.019	1	0.889	0.938	0.378	2.325
(Constant)	-0.223	0.387	0.332	1	0.565	0.800		

Note. Total $N = 90$

Table 16

Model Summary of the Logistic Regression Analysis for Research Question 1e

Source	Cox & Snell R^2	Nagelkerke R^2	χ^2	df	Sig. (p)	Classification		
						Low Stress	High Stress	Total
Omnibus	0.006	0.008	0.509	1	0.476	100.00%	0.00%	56.70%
Predictor Variable	B	S.E.	Wald	df	Sig. (p)	Exp.(B)	95% C.I. for EXP(B)	
							Lower	Upper
Number of Children	-0.305	0.428	0.508	1	0.476	0.737	0.318	1.706
(Constant)	-0.100	0.317	0.100	1	0.752	0.905		

Note. Total $N = 90$

Results of Research Question 2 (a-e)

Table 17

Model Summary of the Between-Subjects Effects From the ANOVA Analysis for Research Question 2a

Source	Type III Sum of Squares	df	Mean Square	F	Sig. (<i>p</i>)	Partial Eta-Squared (χ^2)
Corrected Model	13.696	1	13.696	0.423	0.517	0.005
Intercept	45963.563	1	45963.563	1420.509	< .001	0.942
Age	13.696	1	13.696	0.423	0.517	0.005
Error	2847.426	88	32.357			
Total	51071.000	90				
Corrected Total	2861.122	89				

Note. Total *N* = 90

Table 18

Model Summary of the Between- Subjects Effects From the ANOVA Analysis for Research Question 2b

Source	Type III Sum of Squares	df	Mean Square	F	Sig. (<i>p</i>)	Partial Eta-Squared (χ^2)
Corrected Model	17.339	1	17.339	0.537	0.466	0.006
Intercept	47324.717	1	47324.717	1464.449	< .001	0.943
Yearly Income	17.339	1	17.339	0.537	0.466	0.006
Error	2843.783	88	32.316			
Total	51071.000	90				
Corrected Total	2861.122	89				

Note. Total *N* = 90

Table 19

Model Summary of the Between-Subjects Effects From the ANOVA Analysis for Research Question 2c

Source	Type III Sum of Squares	df	Mean Square	F	Sig. (<i>p</i>)	Partial Eta-Squared (χ^2)
Corrected Model	4.900	1	4.900	0.151	0.699	0.002
Intercept	48209.878	1	48209.878	1485.343	< .001	0.944
Level of Education	4.900	1	4.900	0.151	0.699	0.002
Error	2856.222	88	32.457			
Total	51071.000	90				
Corrected Total	2861.122	89				

Note. Total *N* = 90

Table 20

Model Summary of the Between-Subjects Effects From the ANOVA Analysis for Research Question 2d

Source	Type III Sum of Squares	df	Mean Square	F	Sig. (<i>p</i>)	Partial Eta-Squared (χ^2)
Corrected Model	28.233	1	28.233	0.877	0.352	0.010
Intercept	41356.233	1	41356.233	1284.677	< .001	0.936
Ethnicity	28.233	1	28.233	0.877	0.352	0.010
Error	2832.889	88	32.192			
Total	51071.000	90				
Corrected Total	2861.122	89				

Note. Total *N* = 90

Table 21

Model Summary of the Between-Subjects Effects From the ANOVA Analysis for Research Question 2e

Source	Type III Sum of Squares	df	Mean Square	F	Sig. (<i>p</i>)	Partial Eta-Squared (χ^2)
Corrected Model	35.842	1	35.842	1.116	0.294	0.013
Intercept	47905.442	1	47905.442	1492.128	< .001	0.944
Number of Children	35.842	1	35.842	1.116	0.294	0.013
Error	2825.280	88	32.105			
Total	51071.000	90				
Corrected Total	2861.122	89				

Note. Total *N* = 90