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Walden University

College of Social and Behavioral Sciences

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Teresa LoarSage

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> > Walden University 2016

Abstract

Parental Beliefs About Maladaptive Eating Behaviors in Adolescents

by

Teresa Loar Sage

MS, Walden University, 2013

BA, San Diego State University, 1988

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

March 2016

Abstract

Over 25 million people in the United States are affected by eating disorders, and understanding children's eating style can help determine maladaptive eating behaviors. This study was an investigation of parents' beliefs about their children's eating behaviors in relation to parental work status. Two theoretical frameworks were used to guide the study. Symbolic interactionism focused on communication between parents and children. Social learning theory focused on adolescents possibly learning their eating behaviors from observing their parents' eating habits. The research questions and hypotheses examined if there was a relationship between the work status of parents and their beliefs about maladaptive eating behaviors in their adolescents. This study used the parentreport measure, Children's Eating Behaviour Questionnaire (CEBQ). A nonexperimental causal-comparative quantitative research method was used. The participants included parents who have children between the ages of 6 and 12, and the sample size for this study was 126. A link between parental beliefs and early precursors of disordered eating in adolescents was not established. If patterns of a relationship between parents' work status and beliefs about children's maladaptive eating behaviors had been found, the patterns may have provided the possibility of serving as a factor of early intervention programs. The social change aspect obtained from this study may be that parents can work outside the home or not, and there may be other variables (such as family time, closeness, communication, stress) that may provide more information on how parents perceive children's eating behaviors.

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Dedication

This work is dedicated to my husband, Troy Sage, my mother, Pat Loar, and my father, Dennis Loar Sr. My mother and father's passion for education and the ability to provide patience, understanding, and support throughout my life has provided me the ability to overcome many obstacles and succeed where I never thought possible. They have given me a foundation and an example of love and commitment to life. My husband's constant belief in me and the love he provides knows no bounds.

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My journey began when I met a woman, Joan D., who showed me what could be obtained with hard work and dedication. Your story inspires me today, tomorrow, and always. I sincerely thank you for being the inspiration for my journey back to education.

To my daughter, Brittney Loar, although much of this topic came from our personal struggle, I am forever grateful for the ability to call you my daughter. My love for you will continue to be present each day that I share my experience, strength, and hope to other mothers. Having you was the best thing I have ever done and I wouldn't change a thing. I love you.

To my family and friends who have listened to me talk for endless hours about this topic, the struggles, the successes, and through the tears, I am eternally grateful. Mom and Dad–you are the best parents a girl could ask for–could not have done it without the two of you by my side. I am proud to be your daughter. To Dennis Jr., Doug, Kerry, and Katelyn, thank you for always being a blessing in my life. I love you all. To the YaYas – you know who you are – without your continued support, encouragement, and praise through these years I would not have made it. You are all angel friends that inspire me to be the best I can be. I will forever be grateful that our paths crossed.

To my husband, Troy Sage, I couldn't have done it without you. I can never thank you enough for your faith, your support, and your continued love for me. This may have seemed like a long journey but for us it seems like another beginning. I love you to the moon and back.

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Chapter 1: Introduction to the Study

Background of the Study

The literature review provides research relating to family relations, parental beliefs, parental work status, children's maladaptive eating behaviors, and early precursors of eating disorders. Back (2011), Canals, Sancho, and Arija (2009), and Wilksch and Wade (2010) discussed that family plays an important role in the risk of children developing eating disorders. Factors that may contribute to the growth of clinically significant importance of shape and weight are temperament, attitudes toward shape and weight, life events, and family (Wilksch & Wade, 2010). Research has shown that family relationships, as well as parent practices, play a role in the development of eating disturbances and in understanding the etiology of eating pathologies (Blodgett Salafia et al., 2007). One consideration is the parental work status of the parents. Further, the quality of the relationship with parents may impact the understanding of maladaptive eating behaviors. It is important to consider each contributing factor as a separate piece of information to increase understanding of the etiology of such problems. Brown and Ogden (2004) and Cottee-Lane, Pistrang, and Bryant-Waugh (2004) focused on the importance of understanding children's eating attitudes and behaviors and that habits created when young persist through adulthood. Despite noticing changes in their child's eating habits or general behaviors, parents did not initially associate them with anorexia nervosa (Brown & Ogden, 2004; Cottee-Lane et al., 2004). Nicholls and Yi (2012) provided insight that early intervention and parental concern about changes in eating behaviors and/or weight loss is necessary. Therefore, this study was necessary to

initiate earlier intervention and treatment of children at risk. Additionally, Nicholls and Yi (2012) theorized that the timing of onset of symptoms and determination of disordered eating is critical. The potential implication for positive social change is that recognizing the importance of parental beliefs about maladaptive eating attitudes and behaviors when their children are at a young age can assist in better therapeutic interventions (DeLeel, Hughes, Miller, Hipwell, & Theodore, 2009).

Problem Statement

Over 25 million people in the United States are affected by eating disorders, which can have significant and sustained impact on their health as evidenced by being labeled one of the deadliest of all mental illnesses (Eating Disorder Coalition [EDC], 2014; National Association of Anorexia Nervosa and Associated Disorders [ANAD], 2015). Eating disorders frequently appear during childhood or teen years, with little explanation how they are triggered, and with 90% of the individuals being female (EDC, 2014; National Institute of Mental Health [NIMH], 2014). However, research is lacking in the awareness of parents about their adolescent children's eating behaviors. There are many physical and psychological consequences involved with eating disorders; consequently, awareness and prevention is needed before individuals become resistant to treatment (Shisslak, Crago, Neal, & Swain, 1987). Conditions such as anxiety and depression are often comorbid diagnoses in individuals suffering from eating disorders (ANAD, 2015). Psychological factors that are part of patterns associated with disordered eating include fear of growing up, perfectionism, need for control or attention, lack of self-esteem, high family expectations, need to please or be liked, and teasing from peers

about weight and body shape (ANAD, 2015).

Eating disorders do not discriminate. There are many beliefs that the people suffering from eating disorders may range in gender, culture, and age or that they are individuals who may have been abused. In fact, eating disorders can affect males and females, any age group, varying economic status, race, or political orientation (EDC, 2014). Some of these factors play a role in individuals with eating disorders; however, there is not an exact description of factors that might contribute to this disorder. One of the reasons that parental beliefs need to be addressed is that inaccurate beliefs about eating disorders are common. For example, the beliefs that eating disorders are a choice and that people with eating disorders have more control of their disorder than other mental disorders is inaccurate (Gold, 2012). Understanding that the eating disorder is not the patient's fault is critical (EDC, 2014). There are also factors such as genetics, environment, dieting, and societal emphasis on appearance that help create views of adolescents of the ideal for beauty and thinness (ANAD, 2015; EDC, 2014). Our society focuses on appearance and the fantasy of being thin; this may promote dangerous eating behaviors and confuses those who need treatment (EDC, 2014). Individuals who are diagnosed with eating disorders tend to view themselves as not good enough and are focused on perfectionism. Parents should be looking for these characteristics to determine if their child is developing disordered eating attitudes and behaviors or possibly suffering from an eating disorder. In addition, parents may ignore or minimize maladaptive eating behaviors based on their work status. Studies have indicated that fulltime employment for mothers and fathers may create a less healthful family food

environment and the inability to realize the development of poor eating habits in their children (Bauer, Hearst, Escoto, Berge, & Neumark-Sztainer, 2012). Further, unemployed parents' beliefs may vary depending on whether it is the mother or father and their role in the family dynamic (Bacikova-Sleskova, Madarasova Geckova, van Dijk, Groothoff, & Reijneveld, 2011). Unemployed mothers tend to provide more hours of food preparation than unemployed fathers and may indicate a better family food environment and more awareness of children's eating behaviors (Bauer et al., 2012; Johnson et al., 2013).

Due to lack of adolescents' perceived inability to report they have a problem, it is necessary for parents to recognize the problem and seek help (Thomson et al., 2014). Thus, parental beliefs and understanding of what leads adolescents to develop disordered eating attitudes and behaviors are fundamental in formulating a concrete action plan. Parents who gain an awareness of adolescent eating behaviors can help to mitigate the increase of disordered eating in young people. Those parents who work outside the home may have differing beliefs about their children's eating behaviors versus those that do not. The present study was needed to explore the work status of the parents in relationship to their children's eating behaviors of eating disorders (Cawley & Liu, 2012).

Purpose of the Study

The purpose of this study was to identify if working outside of the home relates to the parental beliefs about their adolescent child's maladaptive eating behaviors and if it plays a role in their understanding of the early precursors of eating disorders in their adolescents. Work status (e.g., work outside the home full-time/work outside the home part-time/work from home/stay at home or unemployed) was examined to determine whether there is a difference in beliefs about eating behaviors between those who work outside the home and those who stay at home based on the parental beliefs about their children's eating behaviors. In this quantitative study, a survey was administered to identify if working outside of the home relates to the parental beliefs and plays a role in their understanding of the early precursors of eating disorders in adolescents. There has been little research based on the family's relevance in the course and development of an eating disorder (Herzog, Kronmuller, Hartmann, Bergmann, & Kroger, 2000). Therefore, understanding parental beliefs about their children's maladaptive eating behaviors based on their work status needed to be researched. Inaccurate beliefs about eating disorders are common, such as the belief that eating disorders are a choice (Gold, 2012). The understanding from parents of their children's eating behaviors can provide awareness and may help prevent the onset of eating disorders and point out early precursors to the development of eating disorders.

Advancing awareness may help prevent the onset of eating disorders for adolescents and may be more effective than intervening only after the eating disordered behaviors have become established (Arehart-Treichel, 2011). Parental beliefs about their children's eating habits may help to assess aspects of the development of eating disorders. This information can be used to provide parents with awareness and education needed to intervene at an earlier stage. Whether or not parents work outside the home (full or part time) versus staying at home/unemployed or work from home to raise the children was examined in connection with the maladaptive eating behaviors. The independent variable in this study was parents' work status. This was defined within four groups: work outside the home full-time (40 hrs or more) /work outside the home part-time (20 hrs or less)/work from home/stay at home or unemployed. The dependent variable was parental beliefs about adolescent eating behaviors.

Parental beliefs about their children's eating habits was assessed using the CEBQ. This survey is a widely used parent report measure that may be useful in investigating eating styles and the early precursors of eating disorders including obesity (Wardle et al., 2001). The CEBQ was designed to investigate individual differences in variation of eating styles of children that may contribute to being both underweight and overweight (Carnell & Wardle, 2007). The assessment is comprised of eight subscales: Enjoyment of Food, Responsiveness to Food, Satiety Responsiveness, Slowness in Eating, Fussiness, Emotional Overeating, Emotional Undereating, and Desire for Drinks (Wardle et al., 2001). Understanding children's eating style can help parents determine if their child has maladaptive eating behaviors and is at risk for disturbed eating.

Research Questions and Hypotheses

Following are the research questions and hypotheses for this study:

RQ1: Is there a difference between parents who work outside the home full time and those parents who work part time outside the home, work from home, or stay at home/unemployed, and their beliefs about maladaptive eating behaviors in their adolescents? $H1_0$: There will be no difference in Enjoyment of Food scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H1_a$: Parents who work full time outside the home will demonstrate lower scores on Enjoyment of Food scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2\neq} 0$; $\beta_1 - \beta_{3\neq} 0$; $\beta_1 - \beta_{4\neq} 0$).

 $H2_0$: There will be no difference in Food Responsiveness scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

*H*2_a: Parents who work full time outside the home will demonstrate lower scores on Food Responsiveness scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

 $H3_0$: There will be no difference in Emotional Overeating scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H3_a$: Parents who work full time outside the home will demonstrate lower scores on Emotional Overeating scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2 \neq} 0$; $\beta_1 - \beta_{3 \neq} 0$; $\beta_1 - \beta_{4 \neq} 0$).

 $H4_0$: There will be no difference in Desire to Drink scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H4_a$: Parents who work full time outside the home will demonstrate lower scores on Desire to Drink scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2 \neq} 0$; $\beta_1 - \beta_{3 \neq} 0$; $\beta_1 - \beta_{4 \neq} 0$).

*H5*₀: There will be no difference in Satiety Responsiveness scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$). *H5*_a: Parents who work full time outside the home will demonstrate lower scores on Satiety Responsiveness scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

 $H6_0$: There will be no difference in Slowness in Eating scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

*H*6_a: Parents who work full time outside the home will demonstrate lower scores on Slowness in Eating scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

 $H7_0$: There will be no difference in Emotional Undereating scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H7_a$: Parents who work full time outside the home will demonstrate lower scores on Emotional Undereating scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

 $H8_0$: There will be no difference in Food Fussiness scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

*H*8_a: Parents who work full time outside the home will demonstrate lower scores on Food Fussiness scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

Theoretical Framework

In this study, I used the theoretical frameworks of symbolic interactionism and social learning theory. Two key theorists, Mead and Cooley originated symbolic interactionism (Blumer, 1969). Blumer, a student of George Mead coined the term symbolic interaction, which is summarized by three core principles of meaning, language, and thought (Blumer, 1969). The first core principle of meaning is defined by human interaction and how individuals act towards those around them based on how meaning is assigned to different things; they are not fixed or unalterable (Blumer, 1969). Symbolic interactionism sees meaning as the interaction between people; creations that are developed within activities while people interact (Blumer, 1969). Meaning includes the situations that one encounters in daily life, the focus being on the behavior, and the factors creating it (Blumer, 1969). How the parent interprets these meanings are disclosed in the parent report measure being used in this study. The second core principle is language and is derived from social interactions; it indicates that humans talk to each other or themselves and identify meaning, then communicate it to others verbally (Blumer, 1969). The principle of language provides the understanding that observation and representation of existing realities is knowledge (Blumer, 1969). This may provide the connection to parental beliefs of their children's eating behaviors with determining the significant gestures of the child that become language (i.e., eating styles such as fussiness). The final core principle of thought is considered to be an interpretative process in how the meaning will be handled by the persons participating in the objects, events, and behaviors they encounter (Blumer, 1969). Parental beliefs may be seen in

how their responses of the assessment indicate their reaction/interpretation of their children's eating behaviors.

Symbolic interactionism has been used to study interactions in society by addressing the subjective meanings that people impose on objects, events, and behaviors. Further, symbolic interactionism is the study of the relationship between self and society. It focuses on the symbolic processes of communication between participants (Blumer, 1969). The goal of these interactions is to be able to create a meaning that is shared. Symbolic interactionism provides the basis for understanding the development of eating disorders from the perspective of seeing the activities of the whole that are formed through the process of interpretation (Blumer, 1969).

Bandura (1971) introduced the social learning theory. This theory complements Blumer's theory of symbolic interactionism by placing the emphasis on the roles of "vicarious, symbolic, and self-regulatory processes" (Bandura, 1971, p. 2). The three core concepts of social learning theory are observation (those observed called models), cognitive processing (internal mental states, information processors), and reinforcements (although something is learned this does not indicate a result of change in behavior; Bandura, 1971). The adolescents may learn their eating behaviors from direct observation of their parents and learn the consequences assigned to them (Bandura, 1971). The indication that behavior is learned via modeling, cognitive processing, and reinforcements may substantiate my study's main focus by identifying if working outside of the home relates to the parental beliefs about their children's eating behaviors, and if it plays a role in their understanding of the early precursors of eating disorders in their adolescents.

Nature of the Study

The nature of the study was a quantitative survey design (Creswell, 2014). The type of approach was a nonexperimental causal-comparative quantitative method. The causal-comparative research is defined as the researcher comparing two or more groups in terms of a cause (or independent variable) that has already happened (Creswell, 2014). The purpose of using this type of design is to generalize from a sample. It has advantages because of the quick turnaround time in data collection, the data are collected at one time, and survey is administered via the Internet, which is cost effective and convenient (Creswell, 2014).

The use of the CEBQ provided an objective rating of parents about their children's maladaptive eating behaviors. This survey is a parent report measure used in research investigating the early precursors of eating disorders or obesity. It includes the following eight subscales: Enjoyment of Food, Responsiveness to Food, Satiety Responsiveness, Slowness in Eating, Fussiness, Emotional Overeating, Emotional Undereating, and Desire for Drinks (Wardle et al., 2001). Whether or not parents work outside the home (full or part time) versus staying at home/unemployed or work from home to raise their children was examined in connection with the maladaptive eating behaviors. The independent variable in this study was parents' work status. This was defined within four groups: work outside the home full-time (40 hrs. or more) /work outside the home part-time (20 hrs. or less)/work from home/stay at home or unemployed. The dependent variable was parental beliefs about adolescent eating behaviors. Participants for this study included parents (mother, father) who have children between the ages of 6 and 12. The study was available on the Internet to obtain participants and to collect data.

Definitions

Anorexia (AN): An emotional disorder characterized by an obsessive fear of gaining weight, characterized by weight loss in refusing to eat, preoccupation of thinness with body, shape, and size, including over exercising or employing other ways to remove food from their body (ANAD, 2015).

Binge eating disorder (BED): This is characterized by compulsive overeating in which people consume huge amounts of food while feeling out of control and powerless to stop (ANAD, 2015).

Bulimia (BN): This is characterized by when a person binges on food or has regular episodes of overeating and feels a loss of control. The person then uses methods to prevent weight gain (e.g., vomiting, use of laxatives; ANAD, 2015).

Child Eating Behaviour Questionnaire (CEBQ): This was designed to be a parent-report instrument used to assess dimensions of eating style for research in the early precursors of eating disorders in children including eight subscales: Enjoyment of Food, Responsiveness to Food, Satiety Responsiveness, Slowness in Eating, Fussiness, Emotional Overeating, Emotional Undereating, and Desire for Drinks (Wardle, Guthrie, Sanderson, & Rapoport, 2001).

Eating disorders (ED): Disturbances in eating behavior (Erguner-Tekinalp & Gillespie, 2010).

Eating disorder not otherwise specified (EDNOS): A residual diagnostic category reserved for those eating disorders of clinical severity other than anorexia nervosa and bulimia nervosa (Cooper & Fairburn, 2003).

School age: A young person between the ages of 6 and 12.

Work status: Work outside the home full-time (40 hrs. or more) /work outside the home part-time (20 hrs. or less)/work from home/stay at home or unemployed.

Assumptions

When conducting a survey of children based on parents' viewpoint, there is the assumption that parents will answer truthfully about their beliefs. I also made the assumption that the measure (CEBQ) accurately assessed the relevant construct. Further, the assumption is made that the participants answered the demographic questionnaire (Appendix A) honestly. Another assumption is that the parent taking the survey would have an account or access to Facebook, LinkedIn, Yahoo Focus Groups, Survey Monkey Audience, or the Walden Participant Pool via the Internet. Assumptions based on the parents' work status were based on them completing the aspect of hours worked honestly. Additionally, I assumed that the child lives with the parent.

Scope and Delimitations

I did not include other surveys outside of the CEBQ. Based on previous research, the parent-report measure provided effective results to the study being investigated. I did not include parents who have children outside the age range of 6 to 12. Adolescents were the focus of the research study. In order to identify maladaptive eating behaviors at earlier ages, children 6 to 12 were included to possibly provide prevention, education, and intervention.

Limitations

Due to a small sample size the results may not be conducive to generalization across larger populations. Another limitation may be that the parent was unable to be objective on the parent-report survey. The parent might not have wanted to admit that the child has an eating problem and may make the results inaccurate if the parent was untruthful in his/her responses. Those individuals who do not have Internet access and the medium to which access was provided to the survey (e.g., Facebook/ Yahoo Focus Groups/Survey Monkey Audience/Walden Participant Pool/LinkedIn) is also another limitation.

Significance of the Study

There is little research based on the family's relevance in the course and development of an eating disorder (Herzog et al., 2000). This study was conducted to identify if working outside of the home relates to the parents' beliefs that might be related to the development of maladaptive eating behaviors in their adolescents. Advancing awareness may help prevent the onset of eating disorders for adolescents and may be more effective than intervening only after the eating disordered behaviors have become established (Arehart-Treichel, 2011). Parental beliefs about their children's eating behaviors may help to identify areas of eating behaviors that are problematic and provide a link to the early precursors of eating disorders.

Findings may furnish pertinent information to psychologists who provide therapy to parents. This may increase parents' awareness of children's maladaptive eating behaviors and can provide an opportunity for education and prevention. Increased awareness of maladaptive eating behaviors and prevention programs may impact the number of individuals developing eating disorders. The lessening of maladaptive eating behaviors can provide positive social change.

Implications for Positive Social Change

The results of this study may provide an understanding of why children of parents who work outside the home may have more maladaptive eating behaviors. Parental employment plays a significant role in the family and may be an indicator to disruptive eating behaviors (Ziol-Guest, Dunifon, & Kalil, 2013). This study on maladaptive eating behaviors using parent-report measures may provide a link between parental beliefs and early precursors of disordered eating in adolescents. The parents' beliefs may indicate the child has maladaptive eating behaviors and may provide the necessary information for parents to seek help. The measures being used provide the information of children's eating styles/habits/behaviors from the parental standpoint. The results may contribute to a better understanding of what eating behaviors are implicit in the early precursors of eating disorders. Family relations may constitute a risk for eating disorders, and modeling self-esteem and positive body image can help those that show signs of maladaptive eating behaviors. Parents, brothers/sisters, and friends can play a significant role in supporting those struggling with an eating disorder (National Eating Disorders Association [NEDA], 2014). Researchers have shown that family relationships, as well

as parent practices, play a role in development of eating disturbances and in understanding the etiology of eating pathologies (Blodgett Salafia et al., 2007).

This research may offer solutions to understanding the early precursors of eating disorders based on the parents' beliefs about their children's eating behaviors at a young age. There are many important aspects of this research. It offers the possibility of early intervention, increased understanding of maladaptive eating behaviors, prevention programs, and education. It may also provide early intervention for at risk teens. It may provide an increased understanding of maladaptive eating behaviors to parents/teachers by use of the collected data and the information needed to seek assistance. The research could be used in prevention programs that include information about maladaptive eating behaviors and signs of the early precursors of eating disorders that will help educators to facilitate these programs and to give them insight as to what should be included. Teachers will have a basis for developing education programs to fit their particular situation. All of these can provide the tools for helping to prevent eating disorder development.

Parents need education and information in order to help their children. Further, based on the results, several aspects of children's eating behaviors will be evaluated. These eating styles and behaviors measured have been implicated in the development of eating disorders (Wardle et al., 2001). This information will help parents understand their children's eating behaviors and their impact. Understanding the differences of parental beliefs with relation to work status may provide the opportunity to target individual groups that show higher scores on maladaptive eating behaviors. Recognizing the importance of parental beliefs about maladaptive eating attitudes and behaviors when their children are at a young age can assist in better therapeutic interventions (DeLeel et al., 2009).

Summary and Transition

Over 25 million people in the United States are affected by eating disorders (ANAD, 2015; EDC, 2014). The purpose of this study was to examine parents' work status in relation to parental beliefs about their children's eating behavior. Parental neglect or indifference can increase the likelihood of disordered eating (Tetley, Moghaddam, Dawson & Rennoldson, 2014). Canals et al. (2009) and Haycraft, Goodwin, and Meyer (2014) indicated that data supported the hypothesis that mothers and fathers influence eating disorders in early adolescents. Understanding the factors that contribute to maladaptive eating behaviors and the early precursors of eating disorders in children is challenging. The research question that guided the study asked if work status relates to parents' beliefs about their children's eating behaviors. The results may help to assess the early precursors of eating disorders. With the use of the CEBQ, I may find that there are key factors within work status that relate to maladaptive eating behaviors and are implicated in the early precursors of eating disorders in adolescents. An advancing understanding may help prevent the onset of eating disorders for adolescents and may be more effective than intervening only after the eating disordered behaviors have become established (Arehart-Treichel, 2011). Further, this study on research for maladaptive eating behaviors using parent-report measures may provide a link between parents' beliefs and early precursors of disordered eating in adolescents.

Chapter 2 includes the search strategy, theoretical foundation, and provides a broad view of eating disorders, and what the current literature deems influential in the development of maladaptive eating behaviors and eating disorders. Chapter 3 includes the research design, participants, rationale, and methodology.

Chapter 2: Literature Review

Introduction

Over 25 million people in the United States are affected by eating disorders, which can have significant and sustained impact on their health as evidenced by being labeled one of the deadliest of all mental illnesses (ANAD, 2015; EDC, 2014; NEDA, 2014). Eating disorders frequently appear during childhood or teen years, with little explanation of how they are triggered and with 90% of the individuals being female (EDC, 2014; NIMH, 2014). Additionally, many cases are unlikely to be reported (ANAD, 2015; NEDA, 2014). I have not found any recent studies in the United States regarding parents' beliefs and the development of eating disorders.

The purpose of this study was to identify if working outside of the home relates to the parental beliefs about their adolescent child's maladaptive eating behaviors and if it plays a role in their understanding of the early precursors of eating disorders in their adolescents. This study was conducted to identify if working outside of the home relates to the parents' beliefs that might be related to the development of maladaptive eating behaviors in adolescents. One of the reasons that parental understanding needs to be addressed is that inaccurate beliefs about eating disorders are common (Gold, 2012). Some researchers have indicated that eating disorders are a choice and that individuals with eating disorders are considered conceited, self-absorbed, or seeking attention (Gold, 2012). The literature review includes research relating to family relations, parental beliefs, parental work status, children's maladaptive eating behaviors, and the development of eating disorders.

Literature Search Strategy

The literature search for this paper was conducted through all major databases via EBSCO (Academic Search Complete, CINAHLPlus, ERIC, MedlinePlus, PsycInfo, PsycArticles, PsycExtra, Sage Premier, Science Direct, SocINDEX, and Thoreau), including articles from the 1990s through 2014, with a more thorough focus on articles and studies published between 2010 through 2014. Words used for the search included *eating disorders, eating disorders and adolescent, eating disorders and parent beliefs, anorexia nervosa and adolescent, bulimia nervosa and adolescent, binge eating disorder and adolescent, eating disorders, and symbolic interactionism. Other key words and phrases associated were used alone and in combination in the search and included <i>school age, adolescence, middle school, parent*, measurement, parental care, eating attitudes, eating behaviors, adolescent development,* and symbolic interactionism.

Further research was procured with the use of major Internet search engines and the use of websites including Google Scholar, NIMH, American Psychological Association (APA), NEDA, ANAD, and EDC.

Theoretical Framework

The study used the theoretical frameworks of symbolic interactionism and social learning theory. Two key theorists, Mead and Cooley, originated symbolic interactionism. Blumer, a student of Mead, coined the term *symbolic interaction*

summarized by the three core principles of meaning, language, and thought (Blumer, 1969). Symbolic interactionism has been used to study interactions in society by addressing the subjective meanings that people impose on objects, events, and behaviors. The goal of these interactions is to be able to create a meaning that is shared. The first core principle of meaning is defined by human interaction and how individuals act towards those around them based on how we assign meaning to different things; they are not fixed or unalterable (Blumer, 1969). The second core principle is language and is derived from social interaction; it indicates that humans talk to each other or themselves and identify meaning, then communicate it to others verbally (Blumer, 1969). The final core principle of thought is considered to be an interpretative process in how the meaning will be handled by the persons participating in the objects, events, and behaviors they encounter (Blumer, 1969).

This theory indicates that meaning, language, and thought will create a person's self (Nelson, 1998). Blumer (1969) indicated that humans have the ability to find new meaning and varying perspectives throughout social interaction and individuals and are able to take the role of the other. Constructing this self helps create who people are and how humans see things and how meaning is applied to a person's self and that person's role within that society. The symbolic interaction, according to Blumer, indicated individuals act towards themselves as a way to face and cope with the world around them. The aspects and principles defined here and the ability of humans to guide and interpret their significance may provide the necessary thought to apply this theory to the topic indicated.

Including its components and relationships, symbolic interactionism may provide a logical argument to the application of this theory. Symbolic interactionism provides the basis for understanding the development of eating disorders from the perspective of seeing the activities of the whole that are formed through the process of interpretation (Blumer, 1969). Meaning includes the situations that one encounters in daily life, the focus being on the behavior, and the factors creating it (Blumer, 1969). If this is true, the application of meaning towards which human beings act is not needed (Blumer, 1969). Symbolic interactionism sees meaning as the interaction between people, creations that are developed within activities while people interact (Blumer, 1969). This application of meaning and interaction may suggest that there will be a correlation between parents who stay at home to raise children versus those parents who work outside the home and their beliefs about their children's eating behaviors. Eating behaviors may be influenced by others' behaviors or responses and how one interprets them as well as parents' behaviors and actions (Honey & Halse, 2006; van der Spuy, de Klerk, Vogel, & Wenhold, 2014).

The principle of language provides the understanding that observation and representation of existing realities is knowledge (Blumer, 1969). Language is the vehicle by which parents communicate to their children their views on eating behaviors. Parents discussing dieting, weight, or good foods provide this view. This type of communication contributes to the development of their children's beliefs and eating behaviors (Haworth-Hoeppner, 2000). Children are influenced by the principle of language within the context of the family, and this contributes to the development of their self-image (Haworth-Hoeppner, 2000). Parental beliefs are affected by significant gestures that their children make. This is a form of nonverbal communication. The child may refuse to eat certain foods or fuss at mealtimes. These instances become the nonspoken language by which parents understand their children's eating behaviors.

The stay at home parents might be more aware of maladaptive eating behaviors or the development of eating disorders in their adolescent children. It was expected that the stay at home parents better understand the meaning of actions, the definition of the situation itself, and the process by which their children construct their situation through interaction (Grinnell Education, 2000). This is due to the perceived close contact and immersion in the everyday lives of their children. This theoretical framework might provide an understanding, an explanation, and a possible prediction of the correlation between parents who stay at home versus those parents who work outside the home. Studies have indicated that full-time employment for mothers and fathers may create a less healthful family food environment and the inability to realize the development of poor eating habits in their children (Bauer et al., 2012). Further, for those parents who do not work outside the home, beliefs may vary based on whether mother or father is staying at home and his or her role with the children (Bacikova-Sleskova et al., 2011). The mother staying at home tends to be more supportive with her children regarding a healthy family food environment. Some research has indicated that the father is more concerned with work-related and financial events and is not as aware of his children's eating behaviors (Backikova-Sleskova et al., 2011).

Bandura (1971) introduced the social learning theory. There are three core concepts of social learning theory that include modeling (observation), cognitive

processing, and reinforcements (Bandura, 1971). Social learning theory may provide a further understanding of the development of eating disorders from these perspectives. The process is formed by mutual influence of these pieces of information (Bandura, 1971). The first core concept is modeling and is defined by the ability of a human to learn behaviors and emotions by observation (Bandura, 1971). The second core concept of cognitive processing is defined by not only how the person will be affected by the experiences but also the direction his or her actions will take in the future (Bandura, 1971). The final core concept is reinforcement and is based on people expecting certain outcomes created by their prior experiences and actions (Bandura, 1971). This theory complements Blumer's theory of symbolic interactionism by placing the emphasis on the roles of "vicarious, symbolic, and self-regulatory processes" (Bandura, 1971, p.2).

Salvy, de la Haye, Bowker, and Hermans (2012) indicated that people directly adjust their behavior of eating based on others (modeling). The ability to have someone to eat with may provide the ability to better observe the eating behaviors of children; however, this theory suggests that modeling is not the only process that affects eating behaviors (Salvy et al., 2012). Another example of modeling, according to Harrison and Cantor (1997), is that the mass media may provide young children with the ideal of a thin body and how to achieve it (e.g., extreme dieting). Based on this example of modeling, parents working outside the home may not monitor their children's television intake on a regular basis. This can be seen via the media as well in describing the dieting behaviors to be followed; the more the child sees this, the more he/she wants to model the behavior (Harrison & Cantor, 1997). The cognitive process takes place when an instruction is given on how to engage in the behavior. The individuals perform the behavior and begin to form ideas of the consequences of their actions. They may act on the ideas and learn to predict and judge the results from their thoughts (Bandura, 1999). This thought process could define for a child the eating behaviors of those around them. One example is when a child observes his or her parent enjoying a healthy meal. This may encourage the child to develop positive thoughts about food and guide their actions in future meals (Bandura, 1971). It may also provide a guide for the reasoning behind their eating behaviors and the ability to apply the actions (Bandura, 1999).

The other role in learning is reinforcement. Once the child has viewed the behavior (direct experience), the process of remembering it and viewing it multiple times reinforces the behavior (Bandura, 1971, 1999). The ability to observe allows one to build patterns without having to experience the consequences that have already been viewed. Based on Bandura's theory, he indicated that individuals can then create "self-regulative influences" (Bandura, 1971). This is what allows one to control his or her own behavior. For children, their learned eating behaviors come from the direct experience in watching parents, family, and peers, and based on their definition of the experience, this may influence their repetition of good or bad eating behaviors. Bauer et al. (2012) confirmed that parents who work outside the home and their children consume more take out food on a regular basis. This may create maladaptive eating behaviors for their children.

The indication that behavior is learned via modeling, cognitive processing, and reinforcements may substantiate this study's main focus by identifying if working outside

of the home relates to the parental beliefs about their children's eating behaviors, and if it plays a role in their understanding of the early precursors of eating disorders in their adolescents. The aspect of modeling is important for parents who work outside the home to recognize. Their children may follow the parents' actions, which could lead to maladaptive eating behaviors. The thought processes of children can be learned from the behaviors observed around them. Parents who work outside the home may not recognize that children form ideas about their actions based on the learning of the consequences of their actions. Further, parents who work outside the home may reinforce unhealthy eating habits based on regular use of take out food (Bauer et al., 2012).

Family Relations/Factors in Eating Behaviors/Development of Eating Disorders

Family plays an important role in the risk of children developing eating disorders (Back, 2011; Canals et al., 2009; Wilksch & Wade, 2010). There are many facets to eating disorders, and it is difficult to pinpoint specific causal relations; however, the adolescent years are very vulnerable for the development of maladaptive eating patterns (Back, 2011; Blodgett et al., 2007; Swanson et al., 2010). Parental neglect or indifference can increase the likelihood of disordered eating (Tetley et al., 2014). Further, research has shown that family relationships, as well as parent practices, play a role in development of eating disturbances and in understanding the etiology of eating pathologies (Blodgett Salafia et al., 2007).

Canals et al. (2009) and Haycraft et al. (2014) indicated that data supported the hypothesis that mothers and fathers influence eating disorders in early adolescents. Brown and Ogden (2004) hypothesized that control and influence of significant others can impact children's eating behaviors and attitudes, and that parents' body dissatisfaction and eating related attitudes influence children's eating attitudes and behaviors. The healthy or unhealthy parents' diet was associated with a similar diet of their child (Brown & Ogden, 2004; Canals et al., 2009; Haycraft et al., 2014). The research supported the idea that parental influence, parents' eating behaviors, and attitudes closely corresponded to those of their children (Brown & Ogden, 2004; Canals et al., 2009). Linking parents and children's eating behaviors can help to better understand the development of maladaptive eating behaviors and eating disorders (Elfhag, Tynelius, & Rasmussen, 2010).

Some factors I reviewed in the research are that greater acceptance and emotional support from mothers and fathers can have an impact in lowering instances of maladaptive eating behaviors (Blodgett Salafia et al., 2007). Researchers have focused on the importance of clinically significant habits including understanding children's temperament, eating attitudes, and behaviors toward shape and weight, life events, and family factors (Brown & Ogden, 2004; Wilksch & Wade, 2010). These habits created when young may persist through adulthood (Brown & Ogden, 2004; Wilksch & Wade, 2010). Despite noticing changes in their child's eating habits or general behaviors, and thinking about the possible reasons for these changes, some parents did not initially associate them with anorexia nervosa (or any eating disorder; Brown & Ogden, 2004; Cottee-Lane et al., 2004). Thus, it is important to consider each contributing factor as a separate piece of information to increase understanding of the etiology of such problems (Back, 2011; Swanson et al., 2010).

Additional risk factors associated with maladaptive eating behaviors are quality of family functioning, problem solving, communications, and affective responsiveness and involvement (Lyke & Matsen, 2013). The overall health of the family and how it functions can influence eating behaviors (Lyke & Matsen, 2013). Family mealtimes are an important aspect of family functioning and engaging in these has shown to be associated with lower levels of disordered eating (Haycraft et al., 2014); therefore, family problem solving is necessary to maintain family functioning. The inability to resolve stressful life events may exacerbate undesired eating behaviors (Lyke & Matsen, 2013). Communication is another critical factor in the functioning of family and open communication provides the necessary outlet to discuss the family and to provide an avenue to discuss issues (Lyke & Matsen, 2013). The lack of communication and parental bonding can contribute to avoidance of discussions and development of eating disorder symptomatology and possible onset of eating disorders (Tetley et al., 2014). Affective responsiveness is when the family is able to express feeling or emotion among its members appropriately; those with greater difficulty in expressing affect have an increased likelihood of disordered eating (Lyke & Matsen, 2013). One example of affective involvement is when family members take interest in one another's activities and concerns (Lyke & Matsen, 2013; Tetley et al., 2014). This involvement can go both ways-uninvolved to over-involved (Johnson et al., 2013; Lyke & Matsen, 2013). The relationships of the family are critical to understanding the correlation of maladaptive eating behaviors and the development of eating disorders. The inability of the family to have effective communication, problem solving skills, affective responsiveness, and

involvement may provide risk factors that increase the likelihood of maladaptive eating behaviors and the development of eating disorders (Lyke & Matsen, 2013).

Working Status of Parents and Maladaptive Eating Behaviors/ Eating Disorders

Parental employment plays a significant role in the family and may be an indicator to disruptive eating behaviors (Ziol-Guest, Dunifon, & Kalil, 2013). Both maternal and paternal employment may have a link to maladaptive eating behaviors and the development of eating disorders in their children (Jauregui-Lobera, Ruiz-Prieto, Bolanos-Rios, & Garrido-Casals, 2013). Studies have indicated that full-time employment for mothers and fathers may create a less healthful family food environment and the inability to realize the development of poor eating habits in their children (Bauer, Hearst, Escoto, Berge, & Neumark-Sztainer, 2012). Children's healthy eating may suffer based on mothers that work outside the home more so than fathers because of the women's role in providing meal planning, shopping and cooking (Bauer et al., 2012). The ability to devote time to work and to family can create stress, shortness of time, and parents are unable to accomplish both roles successfully (Jauregui-Lobera et al., 2013). Further, researchers have shown increased maternal employment is related to increased body mass index (BMI) in children (Ziol-Guest et al., 2013). This is one aspect of maladaptive eating behaviors that needs to be considered.

Most food choices of children are not adequate for healthy eating habits, and without parent modeling this can increase the likelihood of development of maladaptive eating behaviors (Jauregui-Lobera et al., 2013). Due to lack of time parents have, they have turned to restaurant meals, fast food, and meals from cafeterias; these food choices are important in the development of unhealthy eating habits and increase of eating disorders (Jauregui-Lobera et al., 2013; Johnson et al., 2013). When parents choose these avenues for family meals the whole family is affected; eating habits may be compromised, and these choices for family meals may not be good choices for children struggling with weight issues (Bauer et al., 2012; Jauregui-Lobera et al., 2013). Learning new eating patterns is necessary for parents who have children with maladaptive eating behaviors or an eating disorder (Jauregui-Lobera et al., 2013).

There are conflicting views in relation to maternal employment versus paternal employment and if one or the other has an effect on children in the development of maladaptive eating behaviors or the development of eating disorders (Johnson, Li, Kendall, Strazdins, & Jacoby, 2013). Research has shown that maternal employment may create a greater influence on children and their healthy eating habits (Ziol-Guest et al., 2013). Further, research has suggested that paternal employment has less impact on children and their eating habits (Johnson et al., 2013). This suggests that eating difficulties in childhood might be affected by maternal employment and can impact the development of maladaptive eating behaviors (Blissett, Meyer, & Haycraft, 2010). Inconsistent parenting is important to consider in explaining the relationship of parental employment and development of maladaptive eating behaviors (Blissett et al., 2010). Parents spending less time modeling healthy eating and choosing to eat outside the home are key factors in the debate of parental employment with regards to maladaptive eating behaviors and the development of eating disorders (Blissett et al., 2010; Jauregui-Lobera et al., 2013; Johnson et al., 2013; Ziol-Guest et al., 2013). This lack of quality time may

be a concern and may be related to dysfunctional eating behaviors (Johnson et al., 2013). This lack of time may contribute to the parents' beliefs about their children's maladaptive eating behaviors and the development of eating disorders. Parents who work long hours may limit their overall time spent with the child and are less likely to participate with their children in helping them overcome social and learning difficulties as well as monitoring their eating behaviors (Johnson et al., 2013). To date, there are no research studies that investigate parental employment and their beliefs of maladaptive eating behaviors and development of eating disorders in their children.

Unemployed parents' beliefs may vary depending on whether it's the mother or father and their role in the family dynamic (Bacikova-Sleskova, Madarasova Geckova, van Dijk, Groothoff, & Reijneveld, 2011). Researchers have shown that child behavior may have a poorer outcome when fathers are unemployed rather than employed (Johnson et al., 2013). Although there is an assumption that parents who are unemployed/stay at home are able to build a better parent-child relationship, research has suggested that mothers spend more time overall with children regardless of their work status (Johnson et al., 2013). Further research has indicated that parents may select less healthy foods for themselves and their children if they work outside the home based on their demands and work and work-life stress (Bauer et al., 2012). Unemployed mothers tend to provide more hours of food preparation than unemployed fathers and may indicate a better family food environment and more awareness of children's eating behaviors (Bauer et al., 2012; Johnson et al., 2013). One aspect of this is the ability to limit or reduce "junk" food intake and limiting access to unhealthy foods (Ostbye et al., 2013). Unemployed fathers do not increase their home responsibilities and therefore may continue to know less about their children's eating behaviors (Bauer et al., 2012; Ziol-Guest et al., 2013). Unemployment can affect parents' behavior negatively, which will affect the attention given to their children (Bacikova-Sleskova et al, 2011). Based on this research this can be seen in decreased support in health-protective aspects from parents (Bacikova-Sleskova et al., 2011).

Education/Prevention/Intervention

Nicholls and Yi (2012) conducted a study researching the impact of a parent group approach to the early intervention of eating disorders. Researchers have suggested early intervention and parental concern about changes in eating behaviors and/or weight loss are necessary to mitigate the development of eating disorders (Nicholls & Yi, 2012). Early intervention is necessary to understand the risk factors and possible prevention and treatment strategies (Nicholls & Yi, 2012). The timing of onset of symptoms and diagnosis of disordered eating is critical; the delay between onset of symptoms and seeking help could cause the disordered eating to be well established (Nicholls & Yi, 2012). Nicholls and Yi's (2012) study signified the need for parental group intervention. Cottee-Lane et al. (2004) confirmed that parent involvement is necessary to the success of interventions. Future research could expand on this study to determine risk factors, possible interventions, and education for parents to increase their awareness and seek treatment earlier (Nicholls & Yi, 2012). The National Eating Disorder Association conducted a telephone survey in 2010 of 1000 adults, confirming the need for education, prevention, and intervention (NEDA, 2014.). The researchers found that 86% of the

1000 adults were in favor of schools providing information about eating disorders to students and parents (NEDA, 2014).

The Eating Disorders Coalition (EDC; 2014) and National Eating Disorder Association (NEDA; 2014) indicate awareness, prevention, and education are necessary to change the attitudes, behaviors, and awareness of eating disorders and their development. Education targets the reducing of negative risk factors and increasing protective factors. Negative risk factors to be addressed are body dissatisfaction, depression, and low self-esteem (NEDA, 2014). Arehart-Treichel (2011) confirmed that low body dissatisfaction and dieting are possible risk factors for developing an eating disorder. Protective risk factors include: replacing dieting, nutritional guidance, and learning about intuitive eating and how the body functions (NEDA, 2014). Awareness needs to be increased with both parents and children. This can be done with the help of teachers, school counselors, school administrators, and general practitioners (EDC, 2014). Further, parental involvement in interventions, awareness, and education is important for the success of recognizing risk factors (Cottee-Lane et al., 2004). The ability to train individuals who impact a child on a daily basis is essential in making eating disorder prevention and assistance methods effective (EDC, 2014).

NEDA (2014) suggests that there are two avenues to address for prevention: universal prevention and targeted prevention. Universal prevention is geared towards the general public (those that do not have eating disorder symptoms) and is aimed at promoting healthy development, understanding the complex symptoms of eating disorders and ceasing development before they begin (NEDA, 2014). Targeted prevention is for those who are showing signs of eating disorder symptoms. These individuals may have high levels of body dissatisfaction (NEDA, 2014). Prevention is critical to reduce the suffering associated with eating disorders (NEDA, 2014). Remedies include prevention programs that focus on the negative and protective factors (EDC, 2008; NEDA, 2014). Additionally, education efforts are imperative to the mitigation of eating disorder development (Arehart-Treichel, 2011; EDC, 2014; NEDA, 2014). Intervention or treatment plans vary with each type of eating disorder. One of the key factors in eating disorders is that individuals are often ambivalent about getting well (NEDA, 2014). Sometimes they may want to recover, and other times they prefer to stay in their world of safe and secure rituals (NEDA, 2014). There has been much progress with the development of treating eating disorders (Agras & Robinson, 2008).

Anorexia Nervosa (AN) is one of the most difficult types of eating disorders to treat (Agras & Robinson, 2008). Studies that have found successful treatment are limited (Agras & Robinson, 2008). The reason for this is most patients with AN do not want to volunteer to get better, and if they do, there is a large dropout rate due to the fear of weight gain (Agras & Robinson, 2008). Hope is placed on getting individuals with AN during early years to avoid advancement and reduce the severity and consequences of the AN in order to avoid a more chronic adult state (Agras & Robinson, 2008; Jones, Volker, Lock, Taylor, & Jacobi, 2012). There have not been any clear-cut strategies, either psychotherapeutic or pharmacological, that have been efficacious in the treatment of AN (Agras & Robinson, 2008). More success has been noted with addressing Bulimia Nervosa (BN).

Psychotherapy (Cognitive Behavioral Therapy (CBT)) has proven to be effective in leading to decreased binge eating and purging (Agras & Robinson, 2008). Another aspect, pharmacological, is more acceptable to individuals diagnosed with BN. The use of antidepressants and serotonin reuptake inhibitors (SSRI) has proven useful in a small group of individuals (Agras & Robinson, 2008). However, there is research that indicates there is a high probability that individuals will stop taking their medication and long-term maintenance cannot be guaranteed (Agras & Robinson, 2008). CBT is the treatment of choice for BN (Agras & Robinson, 2008).

Binge Eating Disorder (BED) is a newer diagnosis of eating disorder and is correlated with BN when focusing on treatment options. CBT has shown to be the most efficient treatment in reducing binge eating (Agras & Robinson, 2008). The use of pharmacological treatment in BED is effective (in reducing binge eating and weight), but the combination of CBT and pharmacological appears to provide the best combination and outcome (Agras & Robinson, 2008).

The need to develop intervention and treatment plans to best suit those with eating disorders is a critical aspect of future research. Helping individuals overcome the individual aspects of their eating disorder can help to overcome the increase of eating disorders and decrease mortality rates. This can be done by developing more potent treatments for all eating disorders, evaluating the effectiveness of intensive levels of care, and finding new methods to provide evidence- based treatments. These treatments can help clinicians to reduce the high rate of chronicity (Grave, 2011).

Importance of Parents in Prevention of ED in Their Children

Another important aspect of treatment and intervention is parents of children with maladaptive eating behaviors. Parents need to appreciate the seriousness of these behaviors, early warning signs, and act accordingly (Jones et al., 2012). Parents can play a crucial role in becoming more aware of maladaptive eating behaviors and the development of eating disorders (Mitchell, Farrow, Haycraft, & Meyer, 2013). These difficulties with food may be preventable with better parental awareness (Mitchell et al., 2013). Parents can increase their awareness by seeking out education literature, educational groups, emotional support groups, and increasing their knowledge and skills in understanding the factors that contribute to maladaptive eating behaviors (Mitchell et al., 2013). With this additional support parents can better understand and help to encourage healthy, varied, and balanced food choices for their child and mitigate the development of eating disorders (Mitchell et al., 2013).

Parents can play a key role in prevention of eating disorders in their children, especially during early adolescence. Early adolescence is a vulnerable time for development, and positive parental influence is critical (Blodgett Salafia, et al., 2009). Parents not only play a key role in prevention but in shaping children's healthy or unhealthy eating behaviors (Jones, Parkinson, Drewett, Hyland, Pearce, & Adamson, 2011). The influence of parents can be seen in both verbal communication and modeling (Abraczinskas, Fisak & Barnes, 2012; Golan & Crow, 2004; Hart et al., 2014; Kluck, 2010). Parents' communication includes behaviors such as discussion and encouragement/discouragement of eating and food (Abraczinskas et al., 2012). Criticism, overprotection, teasing, and control from parents have been noted to increase maladaptive eating behaviors and interfere with the children's ability to regulate their own development of healthy eating habits (Abraczinskas et al., 2012; Blodgett Salafia, et al., 2009; Kluck, 2010). Parental controlling contributes to the children being unable to selfregulate and act proficiently without their parents and may lead to low self-competence (Blodgett Salafia et al., 2009). Further, parents' negative feedback, verbal comments about size or appearance, and critical evaluation may contribute to maladaptive eating behaviors (Blodgett Salafia et al., 2009; Kluck, 2010).

Parents' modeling includes behaviors of dieting and expression of attitudes towards appearance and comments about body size (Abraczinskas et al., 2012; Kluck, 2010). Researchers have suggested that eating behaviors of children are shaped by parents' feeding strategies and should be monitored to lessen the likelihood of creating poor eating patterns (Golan & Crow, 2004). Parents may indirectly indicate that dieting and "thin ideal" are goals and reinforce the importance that may lead to weight concerns in their children and maladaptive eating behaviors (Abraczinskas et al., 2012). Modeling can consist of children eating foods that their parents eat, eat at similar times and like or dislike foods based on their parents' food preferences (Golan & Crow, 2004). Researchers have shown that the dimensions of parental communication and modeling are revealed in the development of disturbed eating behaviors and that parental communication may have a greater impact than modeling (Abraczinskas et al., 2012).

Children are more likely to have good eating patterns when parents provide acceptance and support (Van Ryzin & Nowicka, 2013). In addition, involvement of

parents has been linked to greater success of lessening maladaptive eating behaviors and the development of eating disorders (Van Ryzin & Nowicka, 2013).

Future Research

Because the causation of eating disorders is considered multi-factorial, small pieces of research must be put together in order to reach a better understanding. Future research could explore the predictors of eating disorder symptomology (Canals et al., 2009). In addition, because there are so many risk factors to consider, future research should also clarify the importance of identified risk factors and how they correlate with the development of eating disordered behaviors (Wilksch & Wade, 2010). The belief is that the parent-child relationship needs to be explored for quality to determine if it is a factor in the development of eating disorders (Back, 2011). Future research of the parent-child relationship, both positive and negative, could help to understand the correlation to eating disorders and confirm that parents who pay more attention to the development of their children can provide the needed impact to uncover disordered eating or maladaptive eating behaviors (Back, 2011; Blodgett Salafia et al., 2007). Further, information on the parental role, maternal care, and paternal care in the development of eating disordered behaviors should be reviewed (Swanson et al., 2010).

Coupled with understanding the parent-child relationship, future research could focus on the parents' awareness of their own eating habits and how their children respond. Creating the positive parent role model can be an effective method to facilitate increased awareness of disordered eating (Brown & Ogden, 2004). Most importantly, providing parents with tools to enhance their awareness of risk factors could be beneficial in lessening the development of eating disordered behaviors (Cottee-Lane et al., 2004).

Summary and Conclusions

The literature review provided research relating to family relations, parental beliefs, children's maladaptive eating behaviors, and the development of eating disorders, and working parents. Back (2011), Canals, Sancho, and Arija (2009), and Wilksch and Wade (2010) discussed that family plays an important role in the risk of children developing eating disorders. One role to consider is the quality of the relationship between children and their parents. It is important to consider each contributing factor as a separate piece of information to increase understanding of the etiology of such problems. Parental neglect or indifference can increase the likelihood of disordered eating (Tetley et al., 2014). The research did not reveal that parents who are more aware of their children's' eating behaviors would be able to mitigate the development of eating disorders.

Brown and Ogden (2004) and Cottee-Lane, Pistrang, and Bryant-Waugh (2004) focused on the importance of understanding children's eating attitudes and behaviors. These habits are created when young and may persist through adulthood (Brown & Ogden, 2004; Cottee-Lane et al., 2004). Further, they indicated that despite noticing changes in their child's eating habits or general behaviors, and thinking about the possible reasons for these changes, parents did not initially associate them with anorexia nervosa (Brown & Ogden, 2004; Cottee-Lane et al., 2004). One aspect of children's eating attitudes and behaviors is whether the parent has positive eating attitudes and behaviors. Parents who spend less time modeling healthy eating behaviors may be a key factor with regards to maladaptive eating behaviors and the development of eating disorders (Blissett et al., 2010; Jauregui-Lobera et al., 2013; Johnson et al., 2013; Ziol-Guest et al., 2013). This lack of modeling and awareness of their own eating habits may negatively impact their child's eating behaviors.

Nicholls and Yi (2012) provided insight that early intervention and parental concern about changes in eating behaviors and/or weight loss is necessary. Additionally, the authors theorized that the timing of onset of symptoms and determination of disordered eating is critical. Parental employment plays a significant role in the family and may be an indicator to disruptive eating behaviors (Ziol-Guest et al., 2013). Blissett et al. (2010) suggested that inconsistent parenting is important to consider in explaining the relationship of parental employment and development of maladaptive eating behaviors. Although eating disorders have been considered prominent in young, White, females, research has shown that they do not discriminate (NEDA, 2014). Eating disorders may be prevalent in all diverse groups but may differ across race and ethnicity (Franko, 2007).

Understanding the various aspects of the parent-child relationship, family relations, parental beliefs, children's eating behaviors and the development of eating disorders is paramount. However, investigative research must be done on whether working outside the home has an impact on parental beliefs about their children's eating behaviors. Information as to whether this may be correlated with maladaptive eating behaviors or the development of eating disorders is relatively sparse. The relationship of maladaptive eating behaviors and the development of eating disorders incorporated with the lack of parental awareness may help to determine if this is a factor in deterring these life-threatening illnesses. Using parental awareness as a factor in determining maladaptive eating behaviors in their children may provide an opportunity to increase support and provide education/intervention before the eating disorder takes hold. With this being a multi-faceted disease any factor that can assist in preventing its inception or reduce its impact becomes critical to research.

In Chapter 3, the research design and methodology is presented. This literature review was used as a foundation to research variables of parental beliefs and the development of maladaptive eating behaviors and the precursors of eating disorders in their children. With the aforementioned research the next chapter aims to fill the gap previously established.

Chapter 3: Research Method

Introduction

The purpose of this study was to identify if working outside of the home relates to the parental beliefs about their children's eating behaviors, and if it plays a role in the their understanding of the early precursors of eating disorders in their adolescents. The family's attitudes towards food and eating and familial interaction in the course and development of an eating disorder had not been adequately researched (Herzog et al., 2000). Chapter 3 includes a discussion of the research design, sampling strategy, target population, a description of the instruments as well as their validity and reliability, and the intended evaluation of the data collection and analysis. I conclude this chapter with an explanation of the ethical procedures for the participants.

Research Design and Rationale

This was a quantitative nonexperimental research design (Creswell, 2014). A nonexperimental design is conducted to describe and measure the relationship between two or more variables (Campbell & Stanley, 1963; Creswell, 2014). The one-way ANOVA analysis was used to determine if there were any significant differences between the means of the four groups using the independent variable of work status (work outside the home full- time (40 hrs. or more)/work outside the home part-time (20 hrs. or less)/work from home/stay at home or unemployed) on the dependent variable (parental beliefs; Laerd Statistics, 2014).

The purpose or justification for using this type of design was to generalize from a sample. This design had advantages because of quick turn-around time in data collection.

The survey, which was cost effective and convenient, was administered via the Internet (Creswell, 2014). Survey research is often used in psychology and it allows the researcher to obtain beliefs, attitudes, or emotions about a behavior that can be shared privately by the participant (Trochim, 2006). This type of data collection may provide the information necessary to understand the relationship between parents who work at home versus those who do not, and their beliefs about their children's maladaptive eating behaviors.

Methodology

Population

Participants for this study included parents (mother, father) who had children between the ages of 6 and 12. The use of an Internet study using the measurement CEBQ was completed. With the use of Survey Monkey, the survey was administered online using the Walden participant pool, Facebook, Yahoo Focus Groups, Survey Monkey Audience, and LinkedIn to obtain parents as participants. The use of the Internet provided the opportunity to reach a larger sample, increase response rates, and limit missing or incorrect/incomplete data (Ahern, 2005). There are limitations to the use of the Internet and the methods that were used needed to be considered. Those individuals who do not have Internet access and the medium to which access was provided to the survey (e.g., Facebook/ Yahoo Focus Groups/ Survey Monkey Audience/Walden Participant Pool/LinkedIn) limited the potential sample. Sample bias can occur when it is not a random sample and may not accurately represent the group (Creswell, 2014). Minimizing the sample bias as best as possible was at the forefront.

Sampling and Sampling Procedures

There are a few sampling strategies that were recommended for a quantitative research study. Purposive sampling is defined as the ability of the researcher to attempt to select sampling units of the population that appear to be representative of the population that the researcher is interested in studying (Frankfort-Nachmias & Nachmias, 2008). Some of the reasons to use a purposive sampling are to focus on particular characteristics of the population of interest and that will best answer the research questions (Frankfort-Nachmias & Nachmias, 2008; Laerd Dissertation, 2014). Within purposive sampling, there are seven designs: maximum variation sampling, homogeneous sampling, typical case sampling, extreme or deviant case sampling, critical case sampling, total population sampling, and expert sampling (Frankfort-Nachmias & Nachmias, 2008; Laerd Dissertation, 2012).

For this study, usage of typical case sampling appeared appropriate. The use of typical case sampling gives the researcher normal/typical units (e.g., people) of interest (Frankfort-Nachmias & Nachmias, 2008, Laerd Dissertation, 2012). This sample cannot be used to make generalizations to the population but can be illustrative of other similar samples (Laerd Statistics, 2012). For this study, a sample included individuals who completed the survey who were part of the participant pool or through Facebook, Yahoo Focus Groups, Survey Monkey Audience, or LinkedIn.

Sample Size Analysis

Sample size is defined as the number of units in the sample (Frankfort-Nachmias & Nachmias, 2008; Laerd Dissertation, 2012). Determining sample size is critical to the

research study because the samples that are too large are ineffective and if too small can lead to inaccurate results (Frankfort-Nachmias & Nachmias, 2008). The sample size affects whether there is a difference between samples and whether results are considered significant or not (Field, 2013).

Various factors were necessary to determine sample size. These include standard error/confidence intervals, effect size, and statistical power. Standard error is an important aspect to sampling theory and in how to establish sample size (Frankfort-Nachmias & Nachmias, 2008). Confidence intervals were defined as the probability that the value will fall within a range of a measurement that will convey how precise the measurement was and are calculated based on the standard error (Frankfort-Nachmias & Nachmias, 2008). Standard errors and confidence intervals are used routinely in surveys (Frankfort-Nachmias & Nachmias, 2008). Effect size is an objective and standardized measure of the magnitude of the observed effect (Field, 2013). Each field of study may have different effect sizes. Having reviewed literature from previous studies using similar measures is another alternative (Field, 2013). Statistical power is the probability of detecting a real effect (Sheperis, n.d.).

In order to determine the sample size for my study, the following steps were taken. Using the *G*Power* application, I conducted a one-way ANOVA. To compute sample size for the one-way ANOVA, the use of *G*Power* based on 80% power and alpha level = .05 was applied. Based on the review of previous literature, an effect size of p = 0.3 (medium) was used for the study (Field, 2013). This size was considered to be

an acceptable value (Burkholder, n.d.; Cohen, 1992). Power analysis was conducted using the *G*Power* application for estimating power of one-way ANOVA (Buchner, Faul, & Erdfelder, n.d.). After completing the information in *G*Power* to determine sample size, for this study, the sample size should be 126. The sample size for each parents' work status group (work outside the home full-time [40 hrs. or more] /work outside the home part-time [20 hrs. or less]/work from home/stay at home or unemployed) was a minimum of 32.

Procedures of Recruitment and Participation

Participants were recruited via the Internet and provided a link to the survey. The participants were parents who had a child or children between the ages of 6 and 12. They were asked their age, race, gender, and work status through an online demographic survey included with the instruments. Informed consent was administered as the first document of the survey confirming they understood the scope of the study and agreed to participate. If they did not meet the criteria, they were sent to a thank you page and were not able to complete the survey. If they did meet the criteria of the study (being a parent of a child between the ages of 6-12), they were guided to complete informed consent, demographic data, and the instrument. The approximate time was 30 minutes.

Instrumentation and Materials

The CEBQ (Appendix B) was used to assess the hypotheses. In addition to this, instrument participants were asked to fill out a demographic form (Appendix A).

The Child Eating Behaviour Questionnaire (CEBQ)

The CEBQ (Appendix B) was designed to be a parent-report instrument used to

assess dimensions of eating style in children (Wardle et al., 2001). The measure includes a 35-item instrument with eight scales and scored from 1 to 5 (Wardle et al., 2001). Constructs that were included in the survey were obtained from existing literature (Wardle et al., 2001). The constructs that were being measured include responsiveness to food, enjoyment of food, satiety responsiveness, slowness in eating, food fussiness, emotional overeating, emotional undereating, and desire for drinks (Wardle et al., 2001). The first four constructs are subscales that indicate positive inclinations for eating (food approach), while the other four constructs are considered as subscales related to negative inclinations (food avoidance) to food intake (Santos et al., 2011). The 35-item instrument uses a 5-point Likert scale, where 1 is *never* and 5 represents *always* (Wardle et al., 2001).

This survey is a parent report measure used in research that may be useful in investigating eating styles and the early precursors of eating disorders or obesity (Wardle et al., 2001). The CEBQ was designed to investigate individual differences in variation of eating styles of children that may contribute to being both underweight and overweight (Carnell & Wardle, 2007). Research has been completed with the use of the CEBQ to examine relationships with BMI and appetite preferences and to determine continuity in children's eating behaviors (Sleddens, Kremers, & Thijs, 2008). Parents completed the CEBQ (Wardle et al., 2001) individually choosing a value from *never* to *always* via an Internet survey. Sample scale items included for example "Given the choice, my child would eat most of the time," and "My child eats more when s/he has nothing else to do" (Wardle et al., 2001). The time to complete the survey was estimated at approximately

20 minutes.

The CEBQ test-retest and internal reliability was established with the use of a pilot study using three samples (Wardle et al., 2001). The final sample was made up of 150 parents who responded to an advertisement to participate in research on children's eating behavior (Wardle et al., 2001). There were 308 questionnaires sent out, and 208 were completed for children 9 years or younger (Wardle et al., 2001). Mean scores and test-retest reliabilities (Pearson correlations) were calculated for each scale (construct; Wardle et al., 2001). A subset of the sample took the questionnaire again after two weeks. Test-retest reliability was adequate for all scales (correlation coefficients ranging from 0.52 to 0.87; Sleddens et al., 2008; Wardle et al., 2001). Emotional overeating (0.52) and emotional undereating (.64) garnished the least attention from parents; however the scales are being used based on parent observation that children did put off eating by being upset (i.e., most noticeably undereating vs. overeating; Wardle et al., 2001). The meaningfulness of the scales was confirmed through qualitative work with parents in determining eating styles of their children (Carnell & Wardle, 2007; Wardle et al., 2001).

The scales had the following reliabilities: food responsiveness (.83), enjoyment of food (.87), emotional overeating (.52), desire to drink (.85), satiety responsiveness (.85), slowness in eating (.83), emotional undereating (.64), and fussiness (.87; Wardle et al., 2001). Based on the study by Carnell and Wardle (2007), the CEBQ was validated against behavioral measures of eating. This study provided evidence that the subscales were valid based on the behavioral tests used as indicators of responsiveness to satiety

and food cues (Carnell & Wardle, 2007). The items showed good internal reliability between 0.72 to 0.91 with Cronbach's α (Loh, Moy, Zaharan & Mohamed, 2013; Viana, Sinde, & Saxton, 2008; Wardle et al., 2001). Further, Mallan et al. (2013) studied the validity of the CEBQ in culturally and ethnically diverse samples. This study indicated that the construct validity of the CEBQ was supported and did not have "limited cultural appropriateness" (Mallan et al., 2013, p. 53). The CEBQ may be used in studies to investigate relationships between eating styles and development of eating disorders or obesity (Wardle et al., 2001). The CEBQ is considered one of the most comprehensive assessment tools in evaluating eating behaviors of children and has been shown to have good reproducibility and high internal consistency (Santos et al., 2011; Sleddens et al., 2008).

Data Collection and Analysis

The Statistical Package for the Social Science (SPSS) software (v.21) was used to perform the analyses of the study with the alpha value set at .05. The data for this study were collected via the Internet with the use of Facebook, Yahoo Focus Groups, Survey Monkey Audience, LinkedIn, and the Walden Participant pool. The instrument being used for this study was CEBQ (Wardle et al., 2001). Information about the study and length of time was provided via informed consent (Appendix D). The statistical analysis was the one-way analysis of variance (ANOVA). The one-way ANOVA is most commonly used to measure the same dependent variable in three or more independent groups to find if there are differences in the groups (Field, 2013; Laerd Statistics, 2014). My independent variable was work status (e.g., work outside the home full-time [40 hrs. or more] /work outside the home part-time [20 hrs. or less]/work from home/stay at home or unemployed). The dependent variable was parental beliefs.

Research Questions and Hypotheses

Following are the research questions and hypotheses for this study:

RQ1: Is there a difference between parents who work outside the home full time and those parents who work part time outside the home, work from home, or stay at home/unemployed, and their beliefs about maladaptive eating behaviors in their adolescents?

 $H1_0$: There will be no difference in Enjoyment of Food scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

*H*1_a: Parents who work full time outside the home will demonstrate lower scores on Enjoyment of Food scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

 $H2_0$: There will be no difference in Food Responsiveness scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H2_a$: Parents who work full time outside the home will demonstrate lower scores on Food Responsiveness scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2 \neq} 0$; $\beta_1 - \beta_{3 \neq} 0$; $\beta_1 - \beta_{4 \neq} 0$).

 $H3_0$: There will be no difference in Emotional Overeating scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H3_a$: Parents who work full time outside the home will demonstrate lower scores on Emotional Overeating scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

*H*4₀: There will be no difference in Desire to Drink scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

*H*4_a: Parents who work full time outside the home will demonstrate lower scores on Desire to Drink scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

*H5*₀: There will be no difference in Satiety Responsiveness scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

*H5*_a: Parents who work full time outside the home will demonstrate lower scores on Satiety Responsiveness scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

 $H6_0$: There will be no difference in Slowness in Eating scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H6_a$: Parents who work full time outside the home will demonstrate lower scores on Slowness in Eating scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed (β_1 - $\beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

 $H7_0$: There will be no difference in Emotional Undereating scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

*H*7_a: Parents who work full time outside the home will demonstrate lower scores on Emotional Undereating scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2 \neq} 0$; $\beta_1 - \beta_{3 \neq} 0$; $\beta_1 - \beta_{4 \neq} 0$).

 $H8_0$: There will be no difference in Food Fussiness scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the

home and those parents who work part time outside the home, work from home, or stay at home/unemployed $(\beta_1 - \beta_2 = 0; \beta_1 - \beta_3 = 0; \beta_1 - \beta_4 = 0)$.

*H*8_a: Parents who work full time outside the home will demonstrate lower scores on Food Fussiness scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

Threats to Validity

There are two types of threats to validity that need to be addressed in research, internal threats and external threats (Creswell, 2014). Internal validity is defined as research being done to say that one variable causes change in another variable and that more than one independent variable is not acting at the same time (Creswell, 2014). Internal validity was threatened by selection and instrumentation. Participants were selected to meet certain requirements. They must be a parent of a child between the ages of 6-12. This selection process may have predisposed the study to certain outcomes, since those who volunteered to participate in the study may have differed from the general population. The selection process may threaten internal validity based on the parents' enthusiasm, their interest, or preparation in taking the survey. For example, if a parent was enthusiastic about filling out the survey he/she may be more likely to not read the entire question or to answer more affirmatively. A less enthusiastic participant may not be forth coming with information and answer questions more negatively than positively. In either example the information gathered may not be representative or inclusive of the information sought. Variations in persons are expected; however, these

variations may impact the way survey questions are answered. Another example was a parent answering the question "My child eats more when she is happy." This answer could be different based on how the parent was feeling, as well as his/her interpretation of his/her child's feelings, and may make the results inaccurate if the parent is untruthful in his/her responses. Internal validity could also have been threatened by the instrumentation (length of the survey, type of items, phrasing of questions, etc.). The items expressed in the assessment could be considered sensitive because the parents are reporting about their child. For example, the parent answering the question "My child is always asking for food" may not want to answer honestly because he/she thinks this indicates his/her child has a problem with food.

External validity threats were minimal. External validity is defined as whether or not conclusions from my study would generalize to other persons in other places (Trochim, 2006). Results of the study will not be generalizable to all individuals; moreover, volunteer bias may be a threat to external validity. The volunteers may have differed from the general population.

Ethical Protection of Human Participants

Ethical Considerations

Ethics is a very important, challenging, and an extensive topic when it comes to research (Creswell, 2014). There were many considerations to take into account when conducting research, including: population you are researching, human rights, data collection, data analysis, respect for the research site and many more (Roberts, 2010). Participation was voluntary, and informed consent was used to ensure that the volunteers are aware of the surveys and what is expected of them. The use of informed consent was necessary, to confirm that individuals understand the aspect of the study and how their answers were used in my study. The study was reviewed and approved by the Walden University Internal Review Board (as per approval number 10-06-15-0311608) prior to its inception.

Being an ethical researcher is to be nonbiased, accurate, and honest throughout your research, collection of data, reporting of data, and your final written dissertation (Roberts, 2010). Ethical concerns for this study were minimal due to the anonymity of the online surveys being completed. Being in this type of study involves some risk of minor discomforts that can be encountered in daily life, such as fatigue from answering questions or stress related to the nature of the topic. Participants were not required to complete the surveys. The participants were able to withdraw from the study at any time. The participant could ask questions of the researcher via email or the provided Walden University representative. Further, I have completed the training in research ethical standards necessary to ensure ethical research.

Any information collected was kept confidential and anonymous. The use of personal information was not used for any purpose outside of this research project. The data were stored online via password-protected websites (e.g. Survey Monkey). Statistical data retrieved was stored on a password-protected computer with no identifying information entered into the program. Data were not shared with anyone outside my research team (e.g. Chair, Committee).

Summary

This study was designed to understand the relationship of work status on parental beliefs about children's eating behaviors. The survey study was provided online via Survey Monkey Audience, Walden Participant Pool, LinkedIn, Yahoo Focus Groups, and Facebook. With the results of this survey, a one-way ANOVA was performed to determine if there were any significant differences in parental beliefs between the means of the four groups (e.g. work outside the home full- time (40 hrs or more) /work outside the home part-time (20 hrs or less)/work from home/stay at home or unemployed). This chapter included a discussion of research design and rationale, methodology, instrumentation, data collection and analysis, and ethical considerations. Results of the analysis are presented in Chapter 4.

Chapter 4: Results

Introduction

The purpose of this study was to identify if working outside of the home relates to the parental beliefs about their adolescent children's maladaptive eating behaviors. Work status (e.g., work outside the home full-time/work outside the home part-time/work from home/stay at home or unemployed) was examined to determine whether there is a difference in parental beliefs about their children's eating behaviors between those who work outside the home and those who stay at home. In this research study, I used quantitative analysis and validated measures to answer the research question stated above. The data collected were entered into the SPSS software (v.22) for analysis and computation (IBM, 2013). In this chapter, I include the descriptive characteristics of the sample population, discussion of data collection, data analysis, and the results of the study relating to the research question and hypotheses.

Descriptive Characteristics

A total of 215 individuals responded to the online survey. The data included were reviewed for consent, demographics, and survey completion. Those who affirmatively consented totaled 190, while 17 indicated that they did not consent, and eight did not complete the consent questions. Of the 190 consenting respondents, 15 reported that they had zero children, and six did not answer the question regarding the number of children. Thus, a total of 169 participants met research design criteria and were included in the dataset. One of the participants who attempted the survey did not complete it and was excluded from analyses. Some missing data remained for several of the 169 participants, but those individuals remained in the dataset and were simply excluded from specific analyses related to their missing scores (Laerd Statistics, 2013). The overall sample of participants in this study consisted of 34 males and 134 females (see Table 1). The marital status of participants included 79.9% married, 8.3% single, and 11.3% separated or divorced. The majority of the participants' ethnicity was white (85.2%) with the remaining identifying as nonwhite (14.8%). The work status of participants consisted of employed full time (40 hrs. or more per week) for wages (n = 44, 26.2%), employed part time (20 hrs. or less per week) for wages (n = 41, 24.4%), stay at home/unemployed (n =53, 31.5%), and worked from home (n = 30, 17,9%). Table 1

Summary of Sample Characteristics (n = 169)

Characteristic	N	Percentage*
Gender		
Male	34	20%
Female	134	80%
Marital Status		
Single	14	8%
Married	135	81%
Separated/Divorced	19	11%
Ethnicity		
White	144	85%
Others	25	15%
Work Status		
Employed full time (40 hrs.		
per week or more) for wages	44	26%
Employed part time (20 hrs.		24%
per week or less) for wages	41	32%
Stay at Home/Unemployed	53	18%
Work from Home	30	
Gender of Child	94	
Male	74	56%
Female	/ -	44%
Age of Child		
6	16	10%
7	24	14%
8	26	15%
9	24	14%
10	21	12%
11	31	18%
12	27	16%
<u># of Children</u>		
1	95	56%
2	51	30%
2 3	17	10%
4	33	2%
5	3	2%

Data Collection

The data for this study were collected via the Internet with the use of Facebook, Yahoo Focus Groups, Survey Monkey Audience, LinkedIn, and the Walden Participant pool. The instrument used for this study was CEBQ (Wardle et al., 2001). Information about the study and length of time was provided via informed consent (Appendix D). The statistical analysis used for the proposed study is the ANOVA. The one-way ANOVA is most commonly used to measure the same dependent variable in three or more independent groups to find if there are differences in the groups (Field, 2013; Laerd Statistics, 2014). My independent variable was work status. This is defined with four groups: work outside the home full-time (40 hrs. or more) /work outside the home parttime (20 hrs. or less)/work from home/stay at home or unemployed. The dependent variable was parental beliefs about adolescent eating behaviors.

Data Analysis

Relationships Between Demographic Variables and CEBQ Scale Scores

Prior to beginning the analyses to test the hypotheses, the demographic variables were examined to determine if they were related to the main study variables (parental beliefs using the eight subscales of the CEBQ) to determine if any of the demographic variables should be included in the hypothesis tests relating to the CEBQ scales score. *T* tests for differences in the scale scores were performed based for parent gender, child gender, and ethnicity. The results indicated that there were differences between male and female parents with regard to the Emotional Over Eating, Food Fussiness, and Food Responsiveness scales on the CEBQ. Male parents reported significantly higher level scores associated with their beliefs of their child's eating behaviors on the Emotional Over Eating scale (M = 2.56; SD = .77) than female parents (M = 2.11; SD = .79). Results related to the Food Fussiness scale indicated that male parents reported significantly higher level scores associated with their beliefs of their child's eating behaviors (M = 3.39; SD = .66) than female parents (M = 2.95; SD = .95). Further, male parents reported significantly higher level scores associated with their beliefs of their child's eating behaviors on the Food Responsiveness scale (M = 2.82; SD = .79) than female parents (M = 2.48; SD = .87). Child gender was related to scores on the Slowness in Eating scale. Parents rated female children significantly higher (M = 2.80; SD = .71) on the Slowness in Eating scale than male children (M = 2.48; SD = .69). The *t* tests showed no difference in any of the CEBQ scale scores between the two ethnic groups, and one-way ANOVAs indicated that marital status was not related to mean differences in the scores on any of the CEBQ scales. As a result of these analyses, parent gender and child gender were included as additional factors in statistical tests of the hypotheses.

Since number of children and child age were both continuous variables, Pearson's correlation was calculated to examine the relationship between those demographic variables and the scales on the CEBQ. There were significant negative correlations between the number of children and Emotional Over Eating (r = -.28, n = 159, p = .004) and between number of children and Slowness in Eating (r = -.19, n = 159, p = .018). Additionally, younger children received higher ratings on the scales of Desire to Drink (r = -.17, n = 159, p = .036) and Slowness in Eating (r = -.21, n = 159, p = .009) by their participating parent. Thus, age was included as a covariate in subsequent analyses

involving Desire to Drink and Slowness in Eating, and number of children was included in analyses involving Emotional Over Eating and Slowness in Eating.

To summarize, when conducting the hypothesis tests, the demographics indicated above were included as covariates in the analyses. The demographic variables were included for analysis in the following scales: Food Responsiveness–parent gender, Emotional Overeating–number of children and parent gender, Desire to Drink–age of child, Slowness in Eating–number of children, age of child, gender of child, and Food Fussiness–parent gender.

Results of the Study

Research Questions and Hypotheses

Eight ANOVAs were conducted to determine if there were any significant differences in parental beliefs about eating behaviors for those who worked outside the home full time (40 hrs. or more), those who worked outside the home part time (20 hrs. or less), those who stayed at home or were unemployed, and those who work from home. The hypotheses were examined by conducting ANOVA tests, one each for the individual CEBQ scales. Originally, sample size calculations for the tests of the *a priori* hypotheses were done based on a one-way ANOVA with four groups representing the four work status categories. With a medium effect size, 80 percent power, and alpha of .05, the projected sample size was 126. Consequently, 32 participants per group were needed for the analysis. At the end of the study, the available dataset contained 44 participants who worked outside the home full time (40 hours or more), 41 participants who worked outside the home or were interval.

unemployed, and 30 who worked from home. A cell size of 30, however, was a smaller sample size than expected, if group size was determined by dividing the overall necessary sample size of 126 by four groups. Cohen (2013), however, suggested that approximately n = 30 is appropriate for a one-way or factorial ANOVA with the same power calculation parameters that was initially used. For those scales that related to parent gender or child gender, that variable was included as a second factor, creating 2-way ANOVAs with parent or child gender as one factor with two categories, and work status as another factor with four categories. For number of children and child age, those variables were included as covariates in one-way ANOVAs.

RQ1: Is there a difference between parents who work outside the home full time and those parents who work part time outside the home, work from home, or stay at home/unemployed and their beliefs about maladaptive eating behaviors in their adolescents?

Enjoyment of Food Scale

 $H1_0$: There will be no difference in Enjoyment of Food scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

*H*1_a: Parents who work full time outside the home will demonstrate lower scores on Enjoyment of Food scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$). A one-way ANOVA with number of children as a covariate and work status as the main factor was conducted to test the hypothesis about the Enjoyment of Food scale. The *F*-test was significant and is presented in Table 2. The number of children as a covariate was not significant, (F(1, 153) = .02, ns). The significant main effect of work status on parental perceptions of children's enjoyment of food, in the ANOVA that tested this hypothesis, led to the rejection of the null hypothesis in this case. In order to determine if the specific predictions regarding this hypothesis were supported, post hoc analyses were conducted on the means in the four work status' using a least squares test. The post hoc tests indicated a significant difference between the work full time (40 hrs. or more per week) for wages and the work part time (20 hrs. or less per week) for wages (mean difference = -.46, p = .002). Further, the tests indicated a significant difference between work full time (40 hrs. or more per week) for wages and stay at home/unemployed (mean difference = -.48, p = .001). The scores for Enjoyment of Food by parents who worked from home did not differ from any of the other three groups.

An examination of the actual means indicated that work full time outside the home (40 hrs. or more per week) group reported significantly lower Enjoyment of Food for their children than the work part time outside the home (20 hrs. or less per week) group. The means can be seen in Table 2. The comparison between work full time outside the home (40 hrs. or more per week) group and the stay at home/unemployed group was also significant (mean difference = -.48, p = .001). An examination of the means indicated that the work full time outside the home (40 hrs. or more per week) group also reported significantly lower ratings of Enjoyment of Food than the stay at

home/unemployed group. The work at home group did not differ from any of the other three groups. All the means for these analyses can be seen in Table 2.

Table 2

Means, Standard Deviations, and F Statistics: Enjoyment of Food Scale

Source	Gro	up 1	Gro	up 2	Gro	up 3	Gro	up 4	ANOVA test
	М	SD	М	SD	М	SD	М	SD	F (df)
Enjoyment of Food	3.30	.59	3.76	.71	3.78	.65	3.53	.69	4.75** (3,153)

Note. Group 1 - Works full time (n = 40); Group 2 - Works part time (n = 41); Group 3 – Stays at home/unemployed (n = 48); Group 4 – Works at home (n = 30). *F* test statistics are given for the main effect of parental work status groups, and for demographic factors, when they were included. Significance was indicated as follows: +p < .10; *p < .05; **p < .01.

Food Responsiveness Scale

 $H2_0$: There will be no difference in Food Responsiveness scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H2_a$: Parents who work full time outside the home will demonstrate lower scores on Food Responsiveness scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2 \neq} 0$; $\beta_1 - \beta_{3 \neq} 0$; $\beta_1 - \beta_{4 \neq} 0$). There were no statistically significant differences between group means as determined by one-way ANOVA (F(3,158) = .56, p = .64). No post hoc tests were performed because the overall F tests (ANOVAs) were not significant for the variables. In this case, findings did not allow a rejection of the null hypothesis. The means can be seen in Table 3.

Table 3

Source		Grou	up 1	Gro	up 2	Grou	ıp 3	Grou	up 4	ANOVA test
		М	SD	М	SD	М	SD	М	SD	F (df)
Food Responsiveness		2.41	.71	2.62	.99	2.56	.85	2.59	.86	.87 (3,150)
	Male Parent	2.66	.68	3.10	.71	2.48	.88	2.97	.96	3.49+ (1,150)
	Female Parent	2.29	.70	2.54	1.01	2.57	.86	2.46	.81	

Means, Standard Deviations, and F Statistics: Food Responsiveness Scale

Note. Group 1 - Works full time (n = 40); Group 2 - Works part time (n = 41); Group 3 – Stays at home/unemployed (n = 48); Group 4 – Works at home (n = 30). *F* test statistics are given for the main effect of parental work status groups, and for demographic factors, when they were included. Significance was indicated as follows: +p < .10; *p < .05; **p < .01.

Emotional Overeating Scale

 $H3_0$: There will be no difference in Emotional Overeating scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

*H*3_a: Parents who work full time outside the home will demonstrate lower scores on Emotional Overeating scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$). A one-way ANOVA with number of children as a covariate and work status as the main factor was conducted to test the hypothesis about the Emotional Overeating Scale. There were no statistically significant differences between group means as determined by one-way ANOVA (F(3,158) = .25, p = .86). Number of children included as a covariate was significant, (F(1,149) = 6.96, p = .009). No post hoc tests were performed because the overall F tests (ANOVAs) were not significant for the variables. For this dependent variable, I failed to reject the null hypothesis. The means can be seen in Table 4. Table 4

Means, Standard Deviations, and F Statistics: Emotional Overeating Scale

Source		Grou	ıp 1	Grou	up 2	Grou	up 3	Grou	up 4	ANOVA test
		М	SD	М	SD	М	SD	М	SD	F (df)
Emotional Overeating		2.21	.78	2.22	.90	2.03	.63	2.38	.91	.96 (3,149)
	Male Parent	2.46	.64	2.58	.93	2.15	.68	2.82	.86	4.45* (1,149)
	Female Parent	2.09	.82	2.16	.90	2.02	.63	2.24	.90	

Note. Group 1 - Works full time (n = 40); Group 2 - Works part time (n = 41); Group 3 – Stays at home/unemployed (n = 48); Group 4 – Works at home (n = 30). *F* test statistics are given for the main effect of parental work status groups, and for demographic factors, when they were included. Significance was indicated as follows: +p < .10; *p < .05; **p < .01.

Desire to Drink Scale

 $H4_0$: There will be no difference in Desire to Drink scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H4_a$: Parents who work full time outside the home will demonstrate lower scores on Desire to Drink scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2 \neq} 0$; $\beta_1 - \beta_{3 \neq} 0$; $\beta_1 - \beta_{4 \neq} 0$).

A one-way ANOVA with child age as a covariate and work status as the main factor was conducted to test the hypothesis about the Desire to Drink Scale. There were no statistically significant differences between group means as determined by one-way ANOVA (F(3,158) = .37, p = .77). Child age included as a covariate was significant, (F(1,153) = 5.21, p = .024). Child age was inversely related to scores on the Desire to Drink Scale. No post hoc tests were performed because the overall F tests (ANOVAs) were not significant for the variables. In this case, the findings did not allow a rejection of the null hypothesis. The means can be seen in Table 5. Table 5

Source	Gro	up 1	Gro	up 2	Gro	up 3	Gro	up 4	ANOVA test
	М	SD	М	SD	М	SD	М	SD	F (df)
Desire to Drink	2.50	.70	2.68	.90	2.67	.96	2.57	.80	.37 (3,153)

Means, Standard Deviations, and F Statistics: Desire to Drink Scale

Note. Group 1 - Works full time (n = 40); Group 2 - Works part time (n = 41); Group 3 – Stays at home/unemployed (n = 48); Group 4 – Works at home (n = 30). *F* test statistics are given for the main effect of parental work status groups, and for demographic factors, when they were included. Significance was indicated as follows: +p < .10; *p < .05; **p < .01.

Satiety Responsiveness Scale

*H5*₀: There will be no difference in Satiety Responsiveness scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$). *H5*_a: Parents who work full time outside the home will demonstrate lower scores on Satiety Responsiveness scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 \neq 0$; $\beta_1 - \beta_3 \neq 0$; $\beta_1 - \beta_4 \neq 0$).

There were no statistically significant differences between group means as determined by one-way ANOVA (F(3,158) = 1.52, p = .21). No post hoc tests were

performed because the overall *F* tests (ANOVAs) were not significant for the variables. For this dependent variable, I failed to reject the null hypothesis. The means can be seen in Table 6.

Table 6

Means, Standard Deviations, and F Statistics: Satiety Responsiveness Scale

Source	Gro	up 1	Gro	up 2	Gro	up 3	Gro	up 4	ANOVA test
	М	SD	М	SD	М	SD	М	SD	F (df)
Satiety Responsiveness	2.93	.66	2.99	.71	2.71	.57	2.85	.65	1.50 (3,154)

Note. Group 1 - Works full time (n = 40); Group 2 - Works part time (n = 41); Group 3 – Stays at home/unemployed (n = 48); Group 4 – Works at home (n = 30). *F* test statistics are given for the main effect of parental work status groups, and for demographic factors, when they were included. Significance was indicated as follows: +p < .10; *p < .05; **p < .01.

Slowness in Eating Scale

 $H6_0$: There will be no difference in Slowness in Eating scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H6_a$: Parents who work full time outside the home will demonstrate lower scores on Slowness in Eating scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2\neq} 0$; $\beta_1 - \beta_{3\neq} 0$; $\beta_1 - \beta_{4\neq} 0$).

A one-way ANOVA with number of children and child age as covariates and work status as the main factor was conducted to test the hypothesis about the Slowness of Eating Scale. There were no statistically significant differences between group means as determined by one-way ANOVA (F(3,158) = 1.07, p = .36). Number of children, included as a covariate, was significant (F(1,147) = 3.93, p = .049). Child age, included as a covariate, was also significant, (F(1,147) = 6.45, p = .012). Both number of children and child age variables were inversely related to Slowness of Eating scores. No post hoc tests were performed because the overall F tests (ANOVAs) were not significant for the variables. In this case, the findings did not allow a rejection of the null hypothesis. The means can be seen in Table 7.

Table 7

Source		Grou	up 1	Grou	up 2	Grou	up 3	Grou	up 4	ANOVA test
		М	SD	М	SD	М	SD	М	SD	$\frac{1000}{F}$
Slowness in Eating		2.62	.74	2.82	.79	2.51	.68	2.53	.60	(3,147)
	Male Child	2.54	.74	2.54	.72	2.49	.74	2.30	.45	8.36** (1,147)
	Female Child	2.73	.75	3.07	.76	2.53	.57	2.81	.66	

Means, Standard Deviations, and F Statistics: Slowness in Eating scale

Note. Group 1 - Works full time (n = 40); Group 2 - Works part time (n = 41); Group 3 – Stays at home/unemployed (n = 48); Group 4 – Works at home (n = 30). *F* test statistics are given for the main effect of parental work status groups, and for demographic factors, when they were included. Significance was indicated as follows: +p < .10; *p < .05; **p < .01.

Emotional Undereating Scale

 $H7_0$: There will be no difference in Emotional Undereating scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H7_{a}$: Parents who work full time outside the home will demonstrate lower scores on Emotional Undereating scale beliefs about maladaptive eating behaviors

versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2 \neq} 0$; $\beta_1 - \beta_{3 \neq} 0$; $\beta_1 - \beta_{4 \neq} 0$).

There were no statistically significant differences between group means as determined by one-way ANOVA (F(3,158) = .57, p = .64). No post hoc tests were performed because the overall F tests (ANOVAs) were not significant for the variables. In this case, the findings did not allow a rejection of the null hypothesis. The means can be seen in Table 8.

Table 8

Means, Standard Deviations, and F Statistics: Emotional Undereating Scale

Source	Gro	up 1	Gro	up 2	Gro	up 3	Gro	up 4	ANOVA test
	М	SD	М	SD	М	SD	М	SD	F (df)
Emotional Undereating	2.79	.76	2.86	.73	2.69	.76	2.66	.71	.57 (3,154)

Note. Group 1 - Works full time (n = 40); Group 2 - Works part time (n = 41); Group 3 – Stays at home/unemployed (n = 48); Group 4 – Works at home (n = 30). *F* test statistics are given for the main effect of parental work status groups, and for demographic factors, when they were included. Significance was indicated as follows: +p < .10; *p < .05; **p < .01.

Food Fussiness Scale

 $H8_0$: There will be no difference in Food Fussiness scale scores of parents' beliefs about maladaptive eating between parents who work full time outside the home and those parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_2 = 0$; $\beta_1 - \beta_3 = 0$; $\beta_1 - \beta_4 = 0$).

 $H8_a$: Parents who work full time outside the home will demonstrate lower scores on Food Fussiness scale beliefs about maladaptive eating behaviors versus parents who work part time outside the home, work from home, or stay at home/unemployed ($\beta_1 - \beta_{2\neq} 0$; $\beta_1 - \beta_{3\neq} 0$; $\beta_1 - \beta_{4\neq} 0$).

There were no statistically significant differences between group means as determined by one-way ANOVA (F(3,158) = .38, p = .77). No post hoc tests were performed because the overall F tests (ANOVAs) were not significant for the variables. For this dependent variable, the null hypothesis could not be rejected. The means can be seen in Table 9.

Table 9

Means, Stando	ard Deviations, and	F Statistics:	Food	<i>Fussiness Scale</i>
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Source		Gro	up 1	Grou	up 2	Grou	ıp 3	Grou	up 4	ANOVA test
		М	SD	М	SD	М	SD	М	SD	F (df)
Food Fussiness		3.26	.98	3.05	.88	2.82	.88	3.08	.88	.41 (3,150)
	Male Parent	3.47	.75	3.44	.64	3.4	.87	3.12	.42	3.79+ (1,150)
	Female Parent	3.15	1.07	2.98	.91	2.75	.87	3.06	.99	

Note. Group 1 - Works full time (n = 40); Group 2 - Works part time (n = 41); Group 3 – Stays at home/unemployed (n = 48); Group 4 – Works at home (n = 30). *F* test statistics are given for the main effect of parental work status groups, and for demographic factors, when they were included. Significance was indicated as follows: +p < .10; *p < .05; **p < .01.

Summary

The research question for this study was the following: "Is there a difference between parents who work outside the home full time and those parents who work outside the home part time, work from home, or stay at home/unemployed and their beliefs about maladaptive eating behaviors in their adolescents?" Additionally, parent gender, child gender, and children's age were associated with the parental beliefs about their children's eating behaviors. The data included and came from an Internet survey for parents with children between 6-12 years of age. The analyses indicated that a significant difference was found between the employed full time (40 hrs or more per week) for wages and the employed part time (20 hrs or less per week) for wages on the Enjoyment of Food Scale. Further, the tests indicated those employed full time (40 hrs or more per week) for wages had lower scores for Enjoyment of Food than those staying at home or unemployed, on the same scale. The average scores for Enjoyment of Food by those who worked from home did not differ from any of the other work groups. The full time outside the home group reported significantly lower Enjoyment of Food for their children than the part time outside the home group. An examination of the means indicated that the full time outside the home group also reported significantly lower ratings of Enjoyment of Food than the stay at home/unemployed group. The work at home group did not differ from any of the other three groups. When all other eating behavior scales were examined, no other significant differences were seen. The same analytic techniques were used for all scales.

Chapter 5 presents a summary of the results and findings of this study. It includes an interpretation of the findings and a discussion of the limitations of the study. Recommendations, along with implications for social change and multicultural practice, are also included. Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to examine the relationship between parents' work status and parental beliefs about their own children's eating behaviors. A quantitative approach was taken, and data collection was done using a survey instrument (CEBQ; Wardle et al., 2001). The data were analyzed, and in this chapter, an interpretation of the findings is presented, as well as recommendations for future studies. The limitations of the research design are also discussed.

Interpretation of Findings

The current study fills a gap in the literature by focusing on work status of parents with children between the ages of 6 and 12 and the beliefs they have about their children's eating behaviors. The statistical analyses in this study indicated that, for most domains of children's eating behavior on the CEBQ, parent beliefs did not differ based on work status. There were eight individual predictions for the different types of eating behaviors based on the scales of the CEBQ. Based on the research question and eight hypotheses, the findings were as follows.

Enjoyment of Food Scale

The hypotheses that parents who worked full time outside the home would perceive their children's enjoyment of food (Enjoyment of Food scale) differently than parents who did not work full time was supported by the data in this study. In this analysis, parents who worked outside the home full time believed their children to have significantly less enjoyment of food than parents who worked part-time outside the home. Parents working part time also reported lower impression of food enjoyment than the stay at home/unemployed parents.

The implications of this finding could be that children of parents who work full time have a greater chance of developing maladaptive eating behaviors. One aspect of full time work status in relationship to enjoyment of food is the amount of time spent with the children. Parents who work full time outside the home are likely to miss mealtimes with their children and be less involved in their children's daily activities overall (Haycraft et al., 2014). This may mean that parents may not be there to observe typical instances of food enjoyment and are underreporting that behavior. It is also possible that full time working parents are reporting on their children's food enjoyment accurately because children's enjoyment of food may have decreased. A high level of affective involvement, created in periods when family members have time to take interest in one another's activities and concerns (Lyke & Matsen, 2013; Tetley et al., 2014), is not only fostered by group meals, but the affective involvement itself can center on the family's enjoyment of food. Children may lose interest in the pleasurable part of the meals because they eat in front of the TV or computer, failing to pay attention to the pleasure of eating while not actively involved with their families. Research has shown that family mealtimes are an important aspect of family functioning, and engaging in these have shown to be associated with lower levels of disordered eating (Haycraft et al., 2014).

Desire to Drink Scale

The Desire to Drink scale did not show significant differences with regard to work status; however, there was a significant negative relationship between child age and parent perceptions of drink-related behavior, regardless of parental work status. Younger children were perceived as having greater problems related to a continual desire to drink than were older children. This finding may be attributed to access to continuous drinking of younger children who are often seen with sippy cups as they navigate throughout the day. Previous researchers have confirmed that children at younger ages prefer sweetened drinks and drink these more frequently (e.g., soda, fruit juice) than water or milk (Sweetman, Wardle, & Cooke, 2008). Earlier researchers have suggested that more frequent drinking of sugar-sweetened beverages is associated with parental employment (Bauer et al., 2012), but that connection was not confirmed in this study. Results from this study could have been different based on how work status (parental employment) was defined.

Slowness in Eating Scale

Scale scores for the Slowness in Eating scale did not differ based on work status, although it had been expected that full time working parents would show differences in their reports of this behavior in their children. Interestingly, parents' beliefs about the child's slowness in eating were negatively related to child age.

Based on earlier research, slowness in eating might be seen as ease of distractibility or perhaps be an indication of being more focused on family during mealtime; as children get older, they learn to eat faster (Passos, Gigante, Maciel, & Matijasevich, 2015). There could be many reasons for this slowness in eating. Researchers have indicated that parental feeding practices may be the reason for slower eating in younger children (Carnell & Wardle, 2009; Cooke, 2012). Parents are able to restrict children's access to unhealthy foods when younger, and this may contribute to the slowness in eating. For example, if parents are making their younger children eat broccoli versus a cookie or restricting foods, this may contribute to slowness in eating because it does not taste as good; children may be resistant to this type of control of food.

In addition to child age, the number of children in the family was related to parents' reports of more problems with their children's slowness in eating. Whether parents are employed full time, part time, or not at all, the demands of work-life responsibilities can interfere with the amount of time necessary to prepare family meals or the time to enjoy them together (Bauer et al., 2012). In the current study, although there was no relationship between parental work status and parent perceptions of slowness in eating, parents with bigger families did report fewer problems with slowness in eating. As suggested by Bauer's research (2012), the responsibilities of a large family could exacerbate any imbalance in work/life responsibilities, leaving parents less time to notice problems with slowness in eating.

Emotional Overeating Scale

Similar to the results presented for the Slowness in Eating scale, parents' ratings of children's emotional overeating were negatively related to number of children in the family; however, scores did not differ based on work status. Emotional overeating is often linked with negative emotions and eating in the absence of hunger (Braden et al., 2014). With that in mind, more children in the family may lead to less boredom and less anxiety, as there may be siblings both to support and entertain a child in a bigger family. The implication of this finding could be that parents with more children in the family may be less aware of their children's emotional overeating when working full time outside the home.

Food Responsiveness Scale

As with all the other scales measuring parents' beliefs about maladaptive eating behaviors (except for Enjoyment of Food), the Food Responsiveness scale scores did not differ significantly based on work status. Previous researchers have indicated that parent control or restriction of food may create restrained eating in children and would produce lower food responsiveness (Wardle et al., 2001), but this study does not provide evidence consistent with that suggestion. This result may have differed from previous literature because of the age of child used or the way work status was defined for this study.

Emotional Undereating Scale

The Emotional Undereating scales were consistent with the other scales–scores on this scale did not differ by parental work status. Previous researchers have indicated that parents play an important role in the development of their children's ability to selfregulate emotions (Frankel et al., 2014). This is also true, specifically, for eating habits (Frankel et al., 2014). In particular, emotional undereating may be a self-regulation issue (Martyn-Nemeth et al., 2009; Miller et al., 2012), but the potential relationship between self-regulation and work status was not measured in this study. Based on the current findings, and the existing literature (Martyn-Nemeth et al., 2009; Miller et al., 2012) that indicates a clear relationship between self-regulation and eating habits in children, it is suggested that this critical variable might serve as a moderator in the relationship between emotional undereating (and emotional overeating) and parental work status. Measures of child self-regulation should be included in future studies in this area.

Satiety Responsiveness Scale

Scores on the Satiety Responsiveness scale were being tested to understand if parents who worked full time outside the home believed their children's satiety responsiveness to be different (e.g., learning to reduce food intake after eating and being responsive to internal hunger cues) than parents with other work statuses; however, no differences were found. Although work status did not have a significant relationship with this scale, this finding could be related to the never-ending, readily accessible, processed foods available to children. Other researchers (Carnell & Wardle, 2007) have suggested that increased junk food intake may lower the ability to regulate internal hunger cues. Further, existing research suggests that mothers who work full-time outside the home provided fewer family meals, less encouragement of their adolescents' healthful eating, and lower fruit and vegetable intake (Bauer et al., 2012). The sum of these existing findings did suggest that work status, in this study, would be related to parents' reports of their children's satiety responsiveness, but the current findings stand in contrast to those aspects of the existing literature. The possibility that the hypotheses were not supported may be because of the age range defined or the parents' perceptions concerning their children's intake of junk food to not be problematic.

Food Fussiness Scale

Scores on the Food Fussiness scale did not differ based on parental work status groups. Food fussiness is defined as being highly selective about the range of foods that will be eaten (Wardle et al., 2001). Previous literature has indicated that this type of behavior is related to children's eating problems (Wardle et al., 2001). Further, researchers have indicated that based on parents' employment, the ability to restrict or pressure children to eat certain foods may create the continued selective range of foods (i.e., fast food) and promote food fussiness (Yekani et al., 2013). Although the existing literature supports the notion that work status is related to parental provision of a range of food for children, which suggests that children of full time working parents might differ in terms of food fussiness, the findings from this study do not support that interpretation of other researchers' findings. The findings may have been different based on definition of work status defined or the parents' perception of what they deemed food fussiness in their children.

Based on the findings in this study, I concluded that, for the most part, work status did not play a significant role in parents' beliefs about their children's eating behaviors. The study did not provide evidence for a strong relationship between parents' beliefs of different aspects of maladaptive eating behavior and the work status of the parents. Overall, the results did not make the case that working full time outside the home impacted parents' beliefs about their children's eating behaviors.

Limitations of the Study

Prior to the initiation of this study, potential limitations included sample size,

parent objectivity (the ability for parents to objectively report on their own children's behavior), and lack of Internet access, including the medium through which access was provided. The relatively small size limits the generalizability to larger populations. Another potential limitation was parent objectivity; however, there was no way of confirming this based on the data collected.

Additionally, those individuals who did not have Internet access or the medium to which access was provided to the survey (e.g. Facebook/ Yahoo Focus Groups/Survey Monkey Audience/Walden Participant Pool/LinkedIn) was a limitation. Online survey research has proven beneficial; however, the inaccessibility of some limited the potential sample. Researchers have indicated that Internet use is lower among people with lower income (Rasanen, 2006; Wong et al., 2009). The fact that socioeconomically challenged families may have limited access to the Internet could have impacted the findings of this study. Previous research has shown that less affluent people may have less food for their children and would be less concerned and perhaps less attentive to how slow or fast they eat (Jain et al., 2001; Patrick & Nicklas, 2005).

Recommendation for Further Research

One recommendation would be to pursue further research based on the age and number of children in the family. The results from three scales (Desire to Drink, Emotional Overeating, and Slowness in Eating) indicated that age and number of siblings might be relevant in discovering how eating behaviors are perceived or how they develop in children. A change in study design, for example, a longitudinal study, might allow a clearer understanding of the differences in eating behaviors based on developmental change throughout the years.

Beyond the extension of the study of child age and number of children in the family, it is recommended that some measure of self-regulation be included in future studies of parents' perceptions of children's maladaptive eating behavior. The known relationship between eating disorders and self-regulation (Miller et al., 2012) suggests that differences in children's ability to self-regulate or differences in parents' support for children's self-regulation are likely to be important to knowledge in this area.

These factors (age of child, number of children in family, and self-regulation) might contribute to further research and a better understanding of the eating behaviors that are implicit in the early precursors of eating disorders.

Implications for Social Change

In this study, I examined whether the relationship between parents' work status made a difference in their beliefs about their own children's eating behavior. In other words, would parents report differences in beliefs about their children's eating behaviors based on their type of work status? The piece of this study that was expected to present a direction for social change was the possibility of a connection between parents' work status and beliefs about their children's eating behaviors. If this connection were demonstrated, it would provide a platform to explore the role of parent perceptions in the development of maladaptive eating behaviors and in the early precursors of eating disorders.

The social change aspect obtained from this study may be that parents can work outside the home or not, and there may be other variables (such as family time, closeness, communication, and stress) that may provide more information on how parents perceive children's eating behaviors. Researchers have indicated the inability of the family to have effective communication, problem solving skills, affective responsiveness, and involvement may provide risk factors that increase the likelihood of maladaptive eating behaviors and the development of eating disorders (Lyke & Matsen, 2013). Further, a potential positive social change could occur with providing the results to parents (possibly via school/social media/community center).

The information gleaned from the study about children's enjoyment of food could be increased with more interaction from parents with their children, family meal times, and providing healthy foods. Previous researchers have confirmed that family mealtimes are an important aspect of family functioning and engaging in these have shown to be associated with lower levels of disordered eating (Haycraft et al., 2014). Future research built on the current findings could offer the possibility of early intervention, increased understanding of maladaptive eating behaviors, prevention programs, and education.

Conclusion

I conducted this study seeking to examine whether parents' work status made a difference in their beliefs about their children's eating behaviors. Results provided information that work status did not, for the most part, play a significant role in parents' beliefs about their children's eating behaviors. The study provided inconclusive data to make the case that working full time outside the home impacted parents' beliefs about

their children's eating behaviors. However, the data did reveal the possibility that age of child, number of children in the family, and parent gender may provide additional information about children's eating behaviors.

Findings from this study may be used to further research these aspects to provide additional knowledge in the difference of work statuses and the role of parental beliefs in the development of maladaptive eating behaviors. Further, the social change implications of this research have the potential to provide the opportunity to target individual groups that show lower scores on the eating behavior scales.

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Appendix A: Demographic Information Form

Instructions: Please provide a response for each of the following questions:

1. What is your gender? Female O Male O

2. What is your marital status?

	Single O	Married O	Separated O	Divorced O	Widowed O
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4. How many children/step-children do you have?

Age of each child:	O Male	O Female
C	O Male	O Female
	O Male	O Female

- 5. Work status:
 - O Employed Full Time
 - O Employed Part Time
 - O Stay at Home/Unemployed
 - O Work from Home
- 6. Your primary ethnic identity:
 - O Black or African American
 - O Asian
 - O White
 - O Hispanic or Latino
 - O Alaska Native or American Indian
 - O Native Hawaiian/ Pacific Islander
 - O Other: _____

Appendix B: Survey

Child Eating Behaviour Questionnaire (CEBQ) Please read the following statements and tick the boxes most appropriate to your child's eating behaviour.

	Never	Rarely	Some- times	Often	Always
My child loves food					
My child eats more when worried					
My child has a big appetite					
My child finishes his/her meal quickly					
My child is interested in food					
My child is always asking for a drink					
My child refuses new foods at first					
My child eats slowly					
My child eats less when angry					
My child enjoys tasting new foods					
My child eats less when s/he is tired					
My child is always asking for food					
My child eats more when annoyed					
If allowed to, my child would eat too much					
My child eats more when anxious					
My child enjoys a wide variety of foods					
My child leaves food on his/her plate at the end of a meal					
My child takes more than 30 minutes to finish a meal					

	Never	Rarely	Some- times	Often	Always
Given the choice, my child would eat most of the time					
My child looks forward to mealtimes					
My child gets full before his/her meal is finished					
My child enjoys eating					
My child eats more when she is happy					
My child is difficult to please with meals					
My child eats less when upset					
My child gets full up easily					
My child eats more when s/he has nothing else to do					
Even if my child is full up s/he finds room to eat his/her favourite food					
If given the chance, my child would drink continuously throughout the day					
My child cannot eat a meal if s/he has had a snack just before					
If given the chance, my child would always be having a drink					
My child is interested in tasting food s/he hasn't tasted before					
My child decides that s/he doesn't like a food, even without tasting it					
If given the chance, my child would always have food in his/her mouth					
My child eats more and more slowly during the course of a meal					

Appendix C: Letter of Permission

Heinrich, Maggie 🛛 🏲	June 16, 2014 at 1:35 AM	
To:	Cc: Wardle, Jane	(HM
Re: CEBQ usage		

Dear Teresa,

Thank you for your email. Professor Wardle is pleased to hear you are interested in the CEBQ measure and is happy for you to use it for the purpose of your research project.

Please note that you can access the 'Children's Eating Behaviour Questionnaire' (CEBQ) and scoring information on our website: (<u>http://www.ucl.ac.uk/hbrc/diet/resources.html</u>)

With best wishes,

Maggie Heinrich On behalf of Professor Jane Wardle

Dr Malgorzata Heinrich Chartered Psychologist and Research Associate