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Parental Self-Efficacy, Feeding Practices and Styles, and Obesity in Mexican American Children

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Walden University
2017

Abstract

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by

Maria del Carmen Goodwin

BS, University of the Incarnate Word, 1990

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Childhood obesity rates among Mexican Americans have risen along with the concerns of public health professionals. The purpose of this cross-sectional study, based on social cognitive theory, was to investigate the relationships among parental self-efficacy, parental feeding practices and styles, and childhood obesity, as measured by the parental perception of child weight, among Mexican Americans in Texas. Mothers and fathers (n=83; 33 males, 64 females), with at least 1 child between 8 and10 years, formed the sample. Relationships were assessed using the Tool to Measure Parenting Self-Efficacy questionnaire, the Parental Feeding Practices Questionnaire for Mexican American parents, the Parenting Dimensions Inventory – Short Version, and a figure rating scale of child's weight. Data were collected through SurveyMonkey and analyzed by gender using linear regression. Feeding styles of reasoning [β = -.065, 95% C.I. (-.124, -.007), p < .05] and greater parental control [β = -.158, 95% C.I. (-.294, -.023), p < .05] decreased parents' perceptions of their male child's weight; feeding styles of letting situations go [β = .049, 95% C.I. (.005, .093), p < .05] increased parents' perceptions of their male child's weight. Feeding practice of the use of food to control behavior [β= .029, 95% C.I. (.009, .049), p < .05] and restriction of food [β= .041, 95% C.I. (.016, .065), p < .05] increased parents' perception of their male child's weight. There were no significant results for female children or parental self-efficacy. This study has implications for positive social change: changes in feeding practices and styles for Mexican American parents could improve the effectiveness of obesity interventions for PH staff and thus decrease morbidity and mortality among Mexican American children, especially boys in Texas.

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Dedication

I dedicate this accomplishment to my almighty God and Savior. I do not have a doubt that without Him I would have been able to accomplish this goal. *This is only a mountain.*

To my husband, Ty, you have supported me through an incredibly long journey. Your patience and understanding, which could not have always been easy, allowed me to complete my dissertation. I am indebted to you for all your sacrifices. I thank God every day for you.

To my son, Riley, you encouraged me even when it meant you, too, had to sacrifice… time with your mother. You have been a blessing in my life. Thank you for calling me your "homework buddy". You are an inspiration beyond words.

To my Mom, you are my strongest female role model. Thank you for instilling in me a belief that I could accomplish anything. You have supported me in my entire educational path. You helped me to strengthen my faith, and I will always be grateful to you for helping me to see beyond the written words.

Dad, you are with my heavenly Father but I know you are proud of me. I miss you! Thank you for listening… when I reached out during the many moments I struggled with this feat. You were there, as always.

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Chapter 1: Introduction to the Study

Introduction

Childhood overweight and obesity affect Hispanics more than any other race or ethnic group (Barkin, Gesell, Póe, & Ip, 2011; Branscum & Sharma, 2011; Elder et al., 2010; Lind, Mirchandani, Castrucci, Chavez, Handler, & Hoelscher, 2012). According to the U.S. Census Bureau's 2013 population estimates (2014), there were 54 million (17% of the U.S. population) Hispanics, more than any other minority group. Of the 2.3 million individuals who became part of the population between 2012 and 2013, 1.1 million were Hispanic (USCB, 2014). By 2060, the population estimate for Hispanics living in the United States is expected to double (USCB, 2014). Based on the National Health and Nutrition Examination Survey (1999-2012), the prevalence of overweight and obesity for Hispanic children was 37.7 % and 20.9 % respectively, compared to 35.1% and 20.3% for Black children and 28.7% and 14.3% for White children (Skinner & Skelton, 2014). This study needed to be conducted because Mexican American children are among the most obese children in the United States (Centrella-Nigro, 2009). Children are not self-reliant and need their parents, with respect to their nutritional intake (de Lauzon-Guillain et al., 2012; Faith et al., 2012; Hoerr et al., 2009; Lindsay et al., 2012; Sosa, 2012; Vaughn, Tabak, Bryant, & Ward et al., 2013); thus, parents have an effect on weight status (Faith et al., 2012; Hoerr et al., 2009; Vaughn et al., 2013; Zhang & McIntosh, 2011) and ultimately obesity (Sosa, 2012). Parental self-efficacy (Faith et al., 2012; Grossklaus & Marvicsin, 2014; Sosa, 2012) and parental feeding practices and styles (Chaidez, Townsend, & Kaiser, 2011; Patrick, 2013) and their relationship to childhood

obesity (Chaidez et al., 2011; Faith et al., 2012; Grossklaus & Marvicsin, 2014; Patrick, 2013; Sosa, 2012) need to be researched. The study has implications for positive social change: parental self-efficacy and parental feeding practices and styles could alter disease and premature death among obese children of Mexican American origin, and could allow for longer and healthier lives for the Hispanic community.

This chapter covers the following topics: background, problem statement, purpose of the study, research question and hypotheses, theoretical foundation, nature of the study, definitions, assumptions, scope and delimitations, limitations, and significance of the study.

Background

Rates of obesity among Hispanic children are 21%; among Black children, they are 20%, among White children, they are 15% (Thompson, 2010). Since 1980, rates of obesity for children ages 6 to 11 have increased more than threefold (Elder et al., 2010). According to Tschann et al. (2013), in 2007 and 2008, obesity for Mexican American females, ages 6 to 11, was 22% and for males 27%; but White females were at 17% and males were at 21%. For Hispanic children, the effects of obesity are often coupled with diabetes mellitus (Branscum & Sharma, 2011; Kornides, Kitsanas, Yang & Villarruel, 2011), asthma, (Flores, Maldonado & Duran, 2012; Kornides et al., 2011; Perreira & Ornelas, 2011), and psychosocial disorders (Branscum & Sharma, 2011; Kornides et al., 2011). Branscum and Sharma (2011) affirmed that Hispanic children suffer from lack of insurance 50% more than White children and receive referrals to medical specialists 50% less than White children. Thus, reversal of obesity in children, specifically Mexican

American children (Aguirre et al., 2012; Tschann et al., 2013) is crucial, so known risk factors should be addressed **(**Aguirre et al., 2012; Thompson, 2010; Tschann et al., 2013). Two risk factors are prominent with childhood obesity: (a) a lack of parental self-efficacy (Faith et al., 2012; Grossklaus & Marvicsin, 2014; Sosa, 2012) because behavior change cannot occur without self-efficacy (Taveras, Mitchell, & Gortmaker. 2009) and (b) unhealthy parental feeding practices and feeding styles (Chaidez et al., 2011; Patrick, 2013).

Research on parental feeding practices and styles has been conducted predominantly among White, middle-class populations (Hennessey, Hughes, Goldberg, Hyatt, & Economos, 2011**;** Hoerr et al., 2009; Thompson, 2010). Little research has been done to explore this relationship among Hispanics (Tschann et al., 2013). Feeding practices have been primary parenting behaviors that have been investigated in light of childhood obesity; however, information on feeding styles have typically been drawn from feeding practices (Hennessey et al., 2011; Patrick, 2013). Research on feeding practices (Khandpur, Blaine, Fischer, & Davison, 2014; Tschann et al., 2013; Zhang & McIntosh, 2011), feeding styles (Zhang & McIntosh, 2011), and efficacy (Sosa, 2012) have been conducted on maternal and not paternal effects (Khandpur et al., 2014; Sosa, 2012; Tschann et al., 2013; Zhang & McIntosh, 2011). The current study is needed because, according to the 2011-2012 National Health and Nutrition Examination Survey, obesity among Hispanics exceeds the numbers for all other minorities, as reported by Fryer, Carroll, and Ogden (2014). Data on feeding practices and styles could offer insight into the parental impact on this populations' weight status (Hennessey et al., 2011).

Lastly, research on paternal feeding practices may provide information that has otherwise been limited in childhood obesity research (Zhang & McIntosh, 2011).

Problem Statement

The prevalence of obesity in children in the United States continues to rise (Grossklaus & Marvicsin, 2014; Moore, Harris, & Bradlyn, 2012), with Black and Hispanic children having the highest rates (Chaidez et al., 2011; Muscher-Eizenman & Kiefner, 2013; Thompson, 2010). Childhood obesity has been a public health concern and the rates among Hispanics have escalated the concerns for professionals working with the Hispanic community (Barkin et al., 2011; Branscum & Sharma, 2011; Elder et al., 2010; D'Alonzo, Johnson, & Fanfan, 2012; Flores et al., 2012; Kornides et al., 2011; Lindsay et al., 2012). The 2013 USCB population estimates (54 million) for Hispanics confirm the significance of continued investigation of this group (USCB, 2014). The increase in the Hispanic population, coupled with the rise in obesity in children, will create an upsurge in comorbidities (Lindsay et al., 2012). To reduce the obesity rates in children, parents should be included as part of the solution because they contribute to many of the known risk factors (Sosa, 2012), such as lack of parental self-efficacy (Faith et al., 2012; Grossklaus & Marvicsin, 2014; Sosa, 2012) and unhealthy feeding practices and feeding styles (Chaidez et al., 2011; Patrick, 2013). This study is expected to help close the knowledge gap in the relationship among these risk factors and obesity (Grossklaus & Marvicsin, 2014; Patrick, 2013; Sosa, 2012) among Mexican American children (Sosa, 2012).

Purpose of the Study

This quantitative, correlational study used self-reported data on Mexican American children in Texas to investigate the relationships among parental self-efficacy, parental feeding practices and styles, and obesity, as measured by the parental perception of child weight. Parental self-efficacy is defined as the level of confidence that a parent has about primary child rearing skills (Marvicsin & Danford, 2013). Parental feeding practice is defined as the amount of control a parent has concerning food (Tschann et al., 2013), including portions (Chaidez et al., 2011; Hoerr et al., 2009; Vaughn et al., 2013). Parental feeding style is defined as how parents relate to their child's food consumption (Hoerr et al., 2009), concerning appetite (Chaidez et al., 2011). More specifics will be provided in Chapter 3.

Research Question and Hypotheses

The following research question guided the study: What is the relationship between parental self-efficacy and parental feeding practices and styles on obesity, as measured by the parental perception of child weight, in Mexican American children in Texas, after controlling for parental weight, socioeconomic status (SES), gender, and years in the country? The childhood obesity model is illustrated in Figure 1. Parental weight—as reported in the demographic questionnaire—is defined as a participant's perception of her or his current weight: overweight, underweight, or about the right weight (Villanueva, 2001). SES is defined as income, education, and occupational measures that determine an individual's economic, social and work standing, respectively (CDC, 2014). Gender is defined as the manner of acting concerning male and female

expectations (APA Council of Representatives, 2011). Years in the country is defined by way of Mexican American parents' level of acculturation: 0 - 8 years in the country; 9 - 17 years in the country; 18 + years in the country; born in the country (Mansfield, Peugh, Torres, & Wells, 2010).

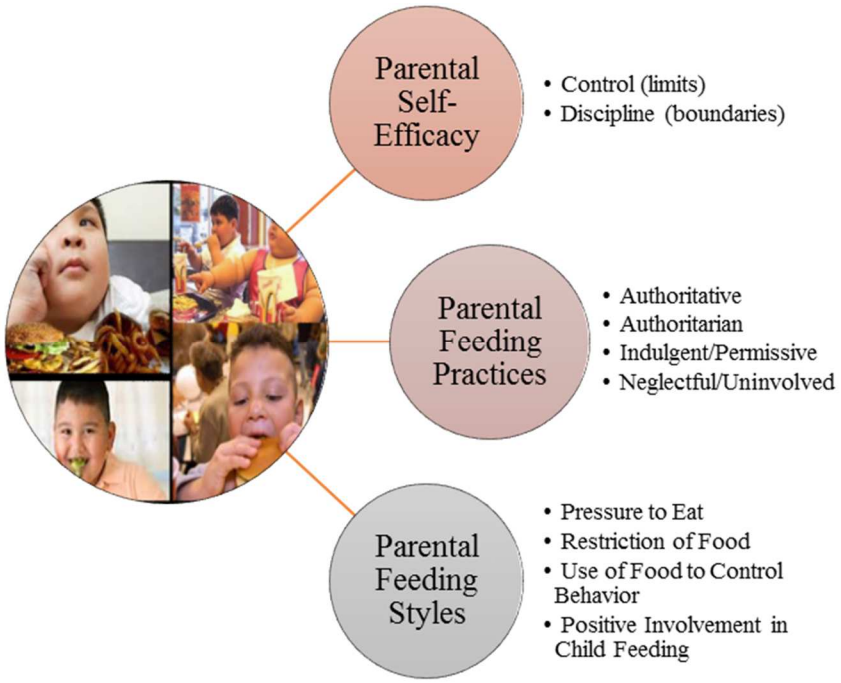

Figure 1. Childhood obesity model illustrating parental self-efficacy, parental feeding practices, and styles relationships.

H_1: There is no relationship between parental self-efficacy and parental feeding practices and styles to obesity, as measured by the parental perception of child weight, in Mexican American children residing in Texas, after controlling for parental weight, SES, gender, and years in the country.

H_A: There is a relationship between parental self-efficacy and parental feeding practices and styles to obesity, as measured by the parental perception of

child weight, in Mexican American children residing in Texas, after controlling for parental weight, SES, gender, and years in the country.

To measure parental self-efficacy, the following questionnaire was used: Tool to Measure Parenting Self-Efficacy (TOPSE, Kendall & Bloomfield, 2005). To measure parental feeding practices of Mexican American parents, the Parental Feeding Practices (PFP) Questionnaire was used (Tschann et al., 2013). To measure parental feeding styles, the Parenting Dimension Inventory–Short Form (PDI-S, Power, 2002) was used. A figure rating scale (Lombardo, Battagliese, Pezzuti, & Lucidi, 2014) was used to measure parental perception of child weight.

Theoretical Framework for the Study

This research was based on Bandura's social cognitive theory (SCT), which originated from the social learning theory (Stone, 2009). Principle components of SCT hypotheses involve behavior and learning (Denler, Wolters, & Benzon, 2014). According to Denler et al. (2014), behavioral, environmental, and personal interactions have an impact on an individual's decisions and form one of the SCT hypotheses. Another hypothesis is that individuals have some control over their actions, despite environmental obstacles. Denler et al. affirmed the hypothesis that learning may have occurred even if behavior change is not always apparent.

Self-efficacy is one of the SCT constructs that has been used in childhood obesity research (Sosa, 2012; Vaughn et al., 2013), particularly with parental feeding practices (Vaughn et al., 2013). Parental self-efficacy influences parental feeding practices (Faith et al., 2012). Self-efficacy is needed for an individual to understand how to begin to

change (Decker, 2012). It is also needed if a parent is going to attempt obesogenic behavior changes. Self-efficacy is needed so that when the parent faces impediments (SCT construct), the parent will be able to conquer the problem and achieve the behavior change (Decker, 2012; Sosa, 2012; Taveras et al., 2009). Thus, parental self-efficacy should be fostered through the progression of change (Bohman, Nyberg, Sundblom, & Elinder. 2013; Faith et al., 2012; Grossklaus & Marvicsin, 2014). In Chapter 2, more detailed explanation of additional SCT constructs, such as outcome expectancies, outcome expectations, and impediments (Sosa, 2012) will be discussed.

Nature of the Study

This quantitative study examined the relationship between (a) parental self-efficacy and (b) parental feeding practices and styles on obesity in Mexican American children in Texas. The SCT hypotheses further explained the potential parental influence on childhood obesity. Three assessments were used to determine parental impact in this minority population, as measured by parental perception of child weight: the TOPSE questionnaire (Kendall & Bloomfield, 2005), the PFQ for Mexican American parents (Tschann et al., 2013), and the PDI-S (Power, 2002). A figure rating scale (Lombardo et al., 2014) was used to measure parental perception of child weight. This quantitative investigation allowed for important factors to be considered in the design of future interventions for this at-risk and underserved minority population. It is anticipated that these interventions will support a more preventative approach.

Definitions

Acculturation: When the culture of a group of people is gradually accepted by a group of people that are new to the environment (D'Alonzo et al., 2012; Lind et al., 2012; Singh, Kogan & Yu, 2009; Van Hook, Baker, Altman & Frisco, 2012; Wojcicki, Schwartz, Jime'nez-Cruz, Bacardi-Gascon, & Heyman, 2012).

Authoritarian feeding style: Demonstration of high demandingness level but low responsiveness level [favoring strict eating rules (de Lauzon-Guillain et al., 2012)] (Berge, 2009). The tool that was used to measure this feeding style was the PDI-S designed by Power (2002).

Authoritative feeding style: Demonstration of high demandingness and responsiveness levels [offering eating guidelines but not by domineering (de Lauzon-Guillain et al., 2012)] (Berge, 2009). The tool that was used to measure this feeding style was the PDI-S designed by Power (2002).

Body Mass Index (BMI): Based on gender, a child's (between the ages of 2 and 19) weight measured in pounds and divided by height measured in inches, squared and then multiplied by 703 (CDC, 2015; Knowlden & Sharma, 2013).

Demandingness: The extent of parental support or opposition concerning the child's dietary intake (Hoerr et al., 2009; Musher-Eizenman & Kiefner, 2013).

Hispanic: An individual of Spanish descent such as from Central America, Cuba, México, Puerto Rico, or South America (Centrella-Nigro, 2009).

Indulgent/Permissive feeding style: Demonstration of low demandingness level and high responsiveness level [tolerating eating behavior (de Lauzon-Guillain et al.,

2012)] (Berge, 2009). The tool that was used to measure this feeding style was the PDI-S designed by Power (2002).

Mexican American: An individual of Mexican origin residing in the United States ("Mexican-American", 2015).

Neglectful/Uninvolved feeding style: Demonstration of low demandingness and responsiveness levels [lacking attention concerning eating (de Lauzon-Guillain et al., 2012)] (Berge, 2009). The tool that was used to measure this feeding style was the PDI-S designed by Power (2002).

Obesogenic: The likely reason for unhealthy BMI (Centrella-Nigro, 2009; "Obesogenic", 2015).

Overweight or Obese: A BMI - for age and sex that is greater or equal to the 85th or 95th percentile, respectively, as plotted on the 2000 Centers for Disease Control and Prevention (CDC) growth charts (Centrella-Nigro, 2009; Hernandez-Valero, 2012; Knowlden & Sharma 2013; Kornides et al., 2011).

Parental feeding practice: The amount of control a parent has concerning food (Tschann et al., 2013), including portions (Chaidez et al., 2011; Hoerr et al., 2009; Vaughn et al., 2013).

Parental feeding style: How parents relate to their child's food consumption (Hoerr et al., 2009), concerning appetite (Chaidez et al., 2011).

Parental self-efficacy: The level of confidence that a parent has about basic child rearing skills (Marvicsin & Danford, 2013). The tool that was used to measure self-efficacy was the TOPSE questionnaire designed by Kendall and Bloomfield (2005).

Pressure to eat: Parental use of control through pressure of children's food intake (Aguirre et al. 2012; Cachelin & Thompson, 2013). The tool that was used to measure this feeding practice was the PFP Questionnaire for Mexican American parents designed by Tschann (2013).

Responsiveness: Regard for the child's dietary input, further supporting self-regulation concerning their food intake (Pinquart, 2014; Vollmer & Mobley, 2013).

Restriction: Parental use of control through the limitation of children's food intake (Aguirre et al., 2012; Cachelin & Thompson, 2013). The tool that was used to measure this feeding practice was the PFP Questionnaire for Mexican American parents designed by Tschann (2013).

Self-efficacy: Self-assurance in succeeding at change (Bohman et al., 2013; Faith et al. 2012; Sosa, 2012).

Socioeconomic status: Income, education, and occupation measures that define an individual's economic, social and work standing, respectively (CDC, 2014).

Assumptions

In this study, it was assumed that participants were made aware that the research of parental self-efficacy, feeding practices and styles and the relationship of obesity, as measured by the parental perception of child weight, were specific to Mexican American children. Therefore, it was assumed that parents would be able to self-identify as Mexican American. Parents were informed that their responses would remain anonymous, and as participants, there would not be consequences if they chose not to complete the study. Consequently, it was assumed that parents would understand

the survey questions, answer truthfully and without bias. Parents were asked to select a body image silhouette by viewing each silhouette individually. For that reason, it was assumed that parents would be able to see the body image silhouettes and choose the body shape silhouette most accurately depicting their child's weight status.

Scope and Delimitations

The specific focus was chosen because a literature review on parental feeding practices and styles and its effect on obesity in children revealed that middle-class Whites have largely been the target of inquiry (Hennessey et al., 2011**;** Hoerr et al., 2009; Thompson, 2010). Mexican American mothers and fathers were researched because Mexican American children have the highest rates of obesity (Centrella-Nigro, 2009). Fathers were included because most of the research on parental feeding practices (Khandpur et al., 2014; Zhang & McIntosh, 2011) styles (Vollmer & Mobley, 2013; Zhang & McIntosh, 2011), and efficacy (Decker, 2012; Taveras et al., 2009) have been conducted on mothers (Decker, 2012; Khandpur et al., 2014; Taveras et al., 2009; Zhang & McIntosh, 2011). Finally, evidence of the impact of parental feeding styles on childhood obesity has been tested in other populations, separate from parental feeding practices (Chaidez et al., 2011; Hennessey et al., 2011; Patrick, 2013). Therefore, feeding styles and feeding practices were chosen to individually assess the impact of each parental behavior on obesity, as measured by the parental perception of child weight. Populations included Mexican American families living in Corpus Christi, Texas. Texas is among 22 states where there are more Hispanics than any other minority group (USCB, 2014). Fifty-five percent live in 3 of these 22 states; Texas is ranked second among them

(USCB, 2014). In 2012, among the Hispanic subgroups, 64% of the population was Mexican American (USCB, 2014). Excluded populations were children outside the range of 8–10 years, and individuals who had any health conditions that interfered with their diet. The PFP Questionnaire for Mexican American parents developed by Tschann et al. (2013) was designed for parents of children between ages of 8 and 10. This range was chosen because, according to Tschann et al., feeding practices can change depending on the age of the child. Although Tschann et al. stated that the PFP questionnaire should be used with a larger age span, Cachelin and Thompson (2013) contended that too large of an age range does not allow for changes in feeding practices to be assessed. Also, Muscher-Eizenman and Kiefner (2013) asserted that future childhood obesity research about parental feeding practice measurement and proximity of age is warranted.

SCT was the theoretical framework selected because self-efficacy, which is a construct of SCT (Sosa, 2012; Vaughn et al., 2013) affects parental feeding practices (Faith et al., 2012). Lack of self-efficacy makes behavior change difficult (Decker, 2012). Self-efficacy also empowers a parent's ability to handle impediments; another SCT construct that a parent will face in the process of change (Decker, 2012; Sosa, 2012; Taveras et al., 2009). This investigation further advanced information in the gap between parental self-efficacy (Grossklaus & Marvicsin, 2014; Patrick, 2013; Sosa, 2012), feeding practices and styles (Patrick, 2013; Sosa, 2012) on obesity (Grossklaus & Marvicsin, 2014; Patrick, 2013; Sosa, 2012) in Mexican American children (Sosa, 2012). Theoretical frameworks most related to the area of study that were not investigated were family

systems theory (Berge, 2009), self-determination theory, systems science (Patrick, 2013), and the social ecological framework (Vaughn et al., 2013).

Factors contributing to overweight, such as acculturation, were examined as a likely confounding variable (Branscum & Sharma, 2011; Kornides et al., 2011). According to Hoerr et al. (2009), parental BMI may confound parental feeding style and the child's dietary intake. However, no studies have focused on parental weight (Berge, 2009; Hennessey et al., 2010, Thompson, 2010; Zhang & McIntosh, 2011). SES was also examined (Kornides et al., 2011; Zhang & McIntosh, 2011). According to Elder et al. (2010), children from low-income families had elevated BMIs in comparison to children from higher income families, because parents typically cannot afford costlier nutritious foods. Poverty and food insecurity, according to Lind et al. (2012) play a part in unhealthy BMI and its comorbidities. Three other factors were also examined: education (Berge, 2009; Thompson, 2010; Zhang & McIntosh, 2011), gender, (Berge, 2009; Thompson, 2010) and years in the country (Berge, 2009). However, language was not examined as a measure of acculturation because the instruments were made available only in English. Generalizability was limited to populations of Mexican American children between the ages of 8 and 10. Generalizations for populations other than Mexican Americans also could not be considered.

Limitations

Limitations of the study related to the use of a cross-sectional design prevented the conclusion of causality. Self-reported data constituted a methodological weakness. (Reporting bias could influence study outcomes because the parental data was based on

self-report.). Given the survey-based design, participants may have given socially desirable responses. The representativeness of the sample size could not be assessed. The surveys targeted Mexican American mothers and fathers of children ages 8 to 10 in Corpus Christi, Texas.

Kendall and Bloomfield (2005) established construct validity and reliability for the TOPSE questionnaire, used to measure parental self-efficacy. Tschann et al. (2013) established validity and reliability for the PFP questionnaire for Mexican American parents used to measure parental feeding practices. Power (2002) established reliability and validity for the PDI-S used to measure parental feeding styles. Lombardo et al. (2014) established reliability and validity for the figure rating scale used to measure parental perception of child body size.

Views of body size can become biased simply by figural drawing placement (Gardner & Brown, 2010). However, Lombardo et al. (2014) reported that children 11 years of age and younger might not have the ability to differentiate among seven or more silhouettes placed side by side correctly. To address this issue, less than seven figures were used, allowing for adjacent placement. The self-report responses will remain anonymous and will be kept confidential. Gardner and Brown (2010) stated that figural line drawings that do not include details, such as a face or garments, allow for the participants to concentrate on the size of the figure (Gardner & Brown, 2010).

Significance

This study is original because it focused on an issue of childhood obesity that has lacked investigation regarding the relationship of parental self-efficacy (Grossklaus &

Marvicsin, 2014; Sosa, 2012) and parental feeding practices and styles (Patrick, 2013; Sosa, 2012) on obesity (Grossklaus & Marvicsin, 2014; Patrick, 2013; Sosa, 2012) in Mexican American children (Sosa, 2012) in Texas. This research addressed and decreased the information gap in the relationship of parental self-efficacy (Grossklaus & Marvicsin, 2014; Sosa, 2012) and parental feeding practices and styles (Patrick, 2013; Sosa, 2012) on obesity (Grossklaus & Marvicsin, 2014; Patrick, 2013; Sosa, 2012) in Mexican American children (Sosa, 2012). The findings from this investigation could help clarify the impact of parental practices and styles on the effectiveness of obesity interventions among Mexican American children (Sosa, 2012; Tschann et al., 2013) in Texas. The findings could also promote further understanding among healthcare professionals of the impact of parental self-efficacy on parental feeding behavior education, perhaps encourage culturally competent strategies for preventing adult obesity (Grossklaus & Marvicsin, 2014).

Strengthening such prevention strategies requires addressing the role of the environment on individuals' behaviors. As illustrated in Figure 2, parental health behaviors are impacted by interpersonal, institutions and organizations, the community, and structures and systems (CDC, 2013). Individual relationships, support groups, social networks, and culture context are part of the interpersonal circle, so for the obesity prevention strategy to be successful, attention should be given to culture (CDC, 2013) for this Mexican American population. These steps establish cultural competence (CDC, 2013). The implication for positive social change is the influence of parental self-efficacy

and feeding practices and styles on reducing obesity and its morbidity and mortality in Mexican Americans.

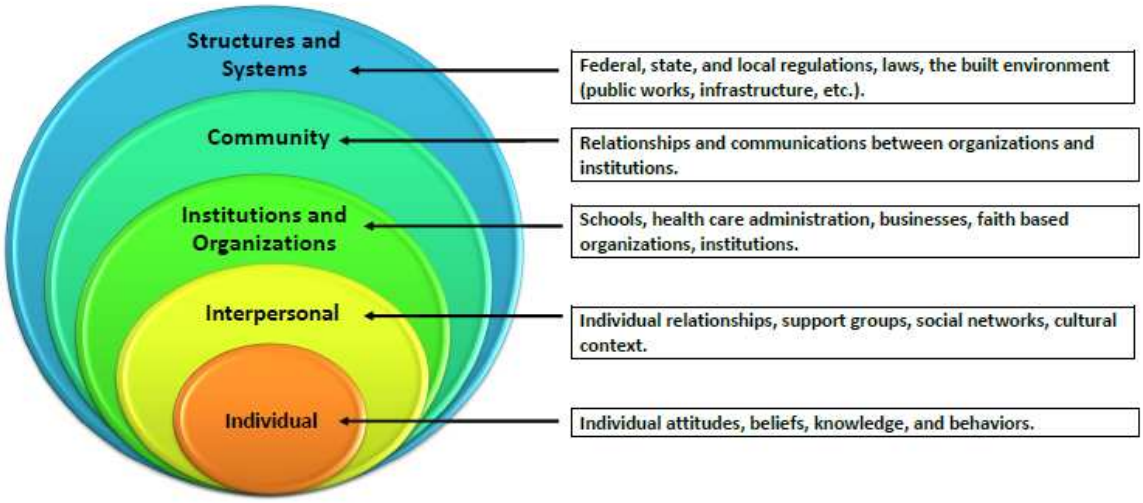

Figure 2. Social ecological model illustrating culture context as part of the interpersonal circle to satisfy cultural competence. From "Addressing obesity disparities: Cultural competence," by Centers for Disease Control and Prevention, 2013. Retrieved from http://www.cdc.gov/obesity/health_equity/culturalRelevance.html

Summary

Fryer et al. (2014) affirmed the rise in obesity among Hispanic children to be more than any other population. Mexican American children, according to Centrella-Nigro (2009), are of concern regarding obesity rates. Hoerr et al. (2009) asserted that investigation of risk factors such as parental feeding practices and styles have not focused on Hispanics. Furthermore, parental self-efficacy (Sosa, 2012), feeding practices (Khandpur et al., 2014; Tschann et al. 2013; Zhang & McIntosh, 2011), and styles (Vollmer & Mobley, 2013; Zhang & McIntosh, 2011) research on childhood obesity has concentrated on maternal effects as opposed to paternal effects (Khandpur et al., 2014; Sosa, 2012; Tschann et al., 2013; Zhang & McIntosh, 2011). And concerning parental

feeding styles, findings have been based on feeding practice studies (Hennessey et al. 2010; Patrick, 2013).

An investigation of paternal efficacy and parental feeding practices and styles on obesity in Mexican American children, as measured by the parental perception of child weight, was conducted to address the limited research on this Hispanic population and because the impact of the father's involvement has previously been excluded. The PFP and the PDI-S were used to measure each parent's feeding practices and parental feeding styles, respectively. This measure was taken to assess each parental feeding behavior correctly. By investigating these relationships, professionals in the field may gain an understanding that will allow them to educate parents about the culturally healthy behaviors needed to support children's healthy weight.

In Chapter 2, the following topics are covered: literature search strategy, a detailed description of the study, the theoretical framework, and the literature review related to key variables, and concluding with the summary and conclusions.

Chapter 2: Literature Review

Introduction

As of 2012, according to the USCB (2013), the Hispanic population had the highest increase in obesity among minorities, further adding to the significance of research on this group (Liu, Probst, Harun, Bennett, & Torres, 2009). Continued investigation of parental self-efficacy and parental feeding practices and styles in relation to childhood obesity of Hispanics is warranted, particularly among Mexican Americans (Chaidez et al., 2011; Grossklaus & Marvicsin, 2014; Patrick, 2013; Sosa, 2012). Parental feeding practices research has been limited among the Hispanic population (Chaidez et al., 2011; Sosa, 2012; Tschann et al., 2013). Also, parental self-efficacy and parental feeding practice studies have usually focused on mothers; however, fathers also have an impact on child weight (Grossklaus & Marvicsin, 2014; Sosa, 2012; Tschann et al., 2013). Therefore, the purpose of this study was to investigate the gap in the research literature on the relationship of parental self-efficacy and parental feeding practices and styles on obesity, as measured by parental perception of child weight, in Mexican American children (Grossklaus & Marvicsin, 2014; Patrick, 2013; Sosa, 2012) in Texas. In the first section, I will review the literature search strategy, followed by a detailed description of the study's theoretical framework, and a review related to key variables.

Literature Search Strategy

The following databases were accessed to identify relevant literature: Academic Education Research Complete, Academic Search Complete, Business Source Complete, CINAHL Plus with full text, CINAHL & MEDLINE Simultaneous Search, ProQuest

Central New Platform, PubMed, SocINDEX with full text, EBSCO host, Google Scholar, Science Direct, and Elsevier SD Health Sciences. Reviewing references from Bohman et al. (2013); Musher-Eizenman & Kiefner (2013); Vaughn et al. (2013); Chaidez et al. (2011); Sosa (2012); Thompson (2010), and Tschann et al. (2013) as a search strategy allowed for the following references, respectively, Bandura (2012); Baranowski et al. (2013); Hendy, Williams, Camise, Eckman, & Hedenann (2009); Hughes, Power, Orlet, Fisher, Mueller, & Nicklas (2005); Arredondo, Elder, Ayala, Campbell, Baquero, & Duerksen (2006); O'Conner et al. (2010); de Lauzon-Guillain et al., 2012, and Hennessy et al. (2010). Search terms singularly and in combination were *BMI, childhood, children, father, feeding, Hispanic, Latino, Mexican American, obese, obesity, overweight, parent, parental, parenting, practices, self-efficacy*, and *styles*.

Stevens (2010) asserted that the prevalence of childhood obesity among ethnic minorities began increasing in 1998. Kornides et al. (2011) searched the literature between 1998 and 2010 for their review, about factors related to Latino childhood obesity. In a literature review conducted by Sosa (2012) of Mexican American mother's perceptions of obesity in children, years searched were between 2000 and 2009. In a review of father's child feeding practices, Khandpur et al. (2014) literature search began in 2005 and concluded in 2013. Berge (2009) stated that the investigation of familial variables such as parenting style as a risk factor for obesity in children began at the end of the1990s. Thompson (2010) concurred concerning the lack of literature and parental feeding and childhood obesity risk until the research of Birch and Fisher in 1998. The years searched were between 1998 and 2014. Sources searched were American Journal of

Public Health, Appetite, Behavior Research Methods, BMC Public Health, Biological Research for Nursing, British Journal of Educational Technology, Child Development, Childhood Obesity, Circulation, Clinical Pediatrics, Developmental Psychology Monograph, Ethnicity & Health, Future of Children, Health Education & Behavior, Health Education Research, Hispanic Health Care International, International Journal of Adolescent Medicine and Health, International Journal of Behavioral Nutrition and Physical Activity, International Journal of Eating Disorders, Issues in Comprehensive Pediatric Nursing, JAMA Pediatrics, Journal of Advanced Nursing, Journal of the Academy of Nutrition & Dietetics, Journal of the American Dietetic Association, Journal of Applied Research on Children: Informing Policy for Children at Risk, Journal of Child Health Care, Journal of Community Health, Journal of Continuing Education in the Health Professions, Journal of Health Care for the Poor and Underserved, Journal of Immigrant and Minority Health, Journal of Management, Journal of Manual and Manipulative Therapy, Journal of Pediatric Nursing, Journal of Pediatric Psychology, Journal of School Health, Journal for Specialists in Pediatric Nursing, Maternal and Child Health Journal, Obesity, Obesity Research, Pediatrics, Pediatric Clinics of North America, Pediatric Nursing, Personality and Individual Differences, Public Health Nutrition, and Social Science & Medicine. Seminal literature searched were Baumrind (1971); Baumrind and Black (1971); Birch and Fisher (1998); Birch and Krahnstoever-Davison (2001); Faith and Kerns (2005); Faith, Scanlon, Birch, Francis, and Sherry (2004); Maccoby and Martin (1983); and Rhee, Lumeng, Appugliese, Kaciroti, &

Bradley (2006). The number of relevant articles located was 55; 20 articles were included in the review.

Theoretical Foundation

The source of the social cognitive theory (SCT) was Bandura and it originated from the social learning theory (Stone, 2009). The book, Social Foundations of Thought and Action: A social cognitive theory, introduced SCT in 1986 (Stone, 2009). According to Denler et al. (2014), behavior and learning form the foundation for SCT assumptions. One assumption of SCT is that the result of an individual's daily actions is based on personal, behavioral, and environmental relationships. A second assumption is that an individual has the capability through careful consideration, and self-regulatory processes to affect their behavior because of their environment. A third assumption stated by Denler et al. is that even if behavior change in an individual takes time to occur, it does not imply that learning has not taken place. Denler et al. asserted that learning is not exhibited solely by behavior change other cognitive constructs are also part of the learning process. And, an individual may not express that learning has occurred until the individual has an interest in displaying the behavioral change.

Hendy et al. (2009) indicated that SCT, specifically the self-efficacy construct, concerning healthy food selection by parents during meals affected children's ability to do the same. Self-efficacy is a SCT construct and is defined as self-assurance in succeeding at change (Bohman et al., 2013; Faith et al., 2012; Sosa, 2012). In a review of father's feeding practices, Khandpur (2014) stated that the self-efficacy of the father concerning healthy food choices affected food selection for the child. Parents understood

food and its effect on health; however, applying the information was a struggle because of low self-efficacy (Decker; 2012; Lindsay et al., 2012). Parents' perceptions of good health, such as healthy weight is also affected by self-efficacy (Grossklaus & Marvicsin, 2014; Sosa, 2012).

Awareness of parent's perceptions of healthy weight according to Grossklaus & Marvicsin (2014) is essential. Comprehension of the underlying reasons for these perceptions and of the cognitive processes that are used with regards to feeding behaviors that are affected by their self-efficacy is key to preventative efforts (Grossklaus & Marvicsin, 2014). In a review of Mexican American mother's perceptions of obesity in children, Sosa (2012) stated that a mothers' self-efficacy in utilizing behaviors to support a healthy weight, depends on whether she can persevere through impediments such as children's fast food preferences, parent's confusion regarding nutrition, cultural food influences, food insecurity, lacking control over child's diet, lacking the knowledge to make healthy decisions for their children, and time constraints, to achieve behavior change.

Behavior change strategies that affect obesity in children, according to Faith et al. (2012), include but are not limited to motivation, promotion of self-efficacy, and outcome expectancy, for example, parents' expectations. Sosa (2012) further stated that the perception of obesity in children concerning health will determine whether a mother will commit to behaviors that affect weight and are dependent on whether the outcome is positive (recognize obesity and are inclined to assist in prevention efforts) or negative (do not recognize obesity as a health condition and time spent preparing healthy meals is a

burden). Grossklaus and Marvicsin (2014) stated that an individual's attempt at behavior change also requires self-assurance. Hypothetical implications asserted by Faith et al. were that if parents could rate their self-assurance on their ability to succeed in behavioral changes, perhaps childhood obesity could be positively affected (Faith et al., 2012).

The constructs of SCT that have been addressed are outcome expectancies, outcome expectations, self-efficacy, and impediments (Sosa, 2012). Bandura's use of such constructs has been popular in childhood obesity prevention efforts, on parental influences (Sosa, 2012; Vaughn et al., 2013). The outcome constructs allow for the value of behavior outcome to be weighed against the costs (Sosa, 2012). Self-efficacy denotes the person's self-assurance to accomplish the behavior (Branscum & Sharma, 2011; Sosa, 2012) and impediments are the hindrances that affect self-efficacy (Sosa, 2012). Taveras et al. (2009) stated that the degree of self-efficacy has a great influence on an individual's ability to achieve change because the individual will persevere through the impediments. Emphasizing prevention and educating parents on the outcomes of fostering such behaviors could allow for increased parental support against childhood obesity (Sosa, 2012).

Dietary guidelines are provided by the US Department of Agriculture to address healthy weight, for example, by way of MyPlate (Decker, 2012; USDA, 2014). MyPlate assists individuals concerning food group amounts, which also affect calories (USDA, 2014). However, many individuals state that they lack the self-efficacy to follow the USDA guidelines (Decker, 2012). If individuals have the self-efficacy to engage in a behavior, succeed in an outcome that is valuable, and conquer impediments, the

individual is more likely to act upon the behavior (Decker, 2012). Decker affirmed that the how to of behavior execution and the performance of the behavior required self-efficacy. According to Faith et al. (2012), parents feeding behaviors are affected by their perceived parental self-efficacy. To affect obesogenic behavior changes, parental self-efficacy is one of the skills that should be encouraged in the process of such changes (Bohman et al. 2013; Faith et al., 2012; Grossklaus & Marvicsin, 2014).

Literature Review Related to Key Variables

Parental Self-Efficacy

Parents have an impact on whether a child will become obese. This influence begins in the home environment which also has a crucial influence on children's' food habits (Hughes et al., 2011; Vaughn et al., 2013). Children between the ages of 2 and 12 (Vaughn et al., 2013) depend on their parents for their dietary intake (Decker, 2012; de Lauzon-Guillain et al., 2012; Elder et al., 2010; Faith et al., 2012; Hoerr et al., 2009; Lindsay et al., 2012; Marvicsin & Danford, 2013; Vaughn et al., 2013; Zhang & McIntosh, 2011), which is why children of this age group are important to address, concerning obesity. Marvicsin & Danford (2013) further added that parental self-efficacy is a factor that allows a parent to make healthy decisions regarding a child's dietary intake. Because parents have such a significant effect on the dietary intake of children, which can then affect obesity status, a discussion of parental self-efficacy and its relationship to childhood obesity is warranted.

Parental self-efficacy affects children's dietary intake which affects obesity status. Decker (2012) asserted that adults claim that they do not have the self-efficacy to follow

through with the USDA guidelines, which provide information on how to offer food for a healthy lifestyle. Parents are aware of the foods that are nutritious for a healthy way of life; however, they are ill-equipped to use the information in their family life because of poor self-efficacy skills (Decker, 2012; Lindsay et al., 2012). Self-efficacy allows an individual to be more assured in facilitating family behavior change (Faith et al., 2012). For parents to undergo behavior change concerning healthy eating for children, self-efficacy is a component that will empower parents to follow and adhere to healthy dietary guidelines in the home (Faith et al., 2012; Marvicsin & Danford, 2013). Without self-efficacy, behavior change is not only difficult to accomplish (Decker, 2012) but also difficult to maintain (Faith et al., 2012). To assess the relationship between parental self-efficacy, dietary intake, and obesity, proper instruments must be used.

Grossklaus and Marvicsin (2014) conducted a study on parental self-efficacy, children's eating behaviors and its relationship to childhood obesity, and scales available for measurement. Research conducted between 1978 and 2012 that had measured parental self-efficacy provided six parental self-efficacy scales that had been developed between 1961 and 2001; however, children's dietary behaviors had not been addressed**.** Therefore, the effects of obesity remained unexamined. The literature was again reviewed, and three articles were located, and parental self-efficacy, dietary behaviors, and obesity were assessed. Taveras et al. (2009) examined parental self-efficacy and the effect on childhood overweight and behavior change by interviewing parents and pediatric clinicians and asking closed-ended efficacy questions (six and five, respectively), concerning behavior change and obesity. Decker (2012) approached the

issue by developing and testing a parental self-efficacy questionnaire on a healthy diet about overweight and obesity in children. Marvicsin and Danford (2013) researched parent and child perceptions of parental self-efficacy and obesity in children. However, Marvicsin and Danford decided to return to the literature and use the TOPSE instrument, which according to Grossklaus & Marvicsin (2014) was not related to eating behaviors. To address the issue, Marvicsin and Danford focused on two of the nine scales in the TOPSE instrument, control (limits) and discipline (boundaries), which are parental characteristics that can support healthy eating. Parents skilled in areas of control, concerning limits and discipline and concerning boundaries may have an advantage over the child's diet (Marvicsin & Danford, 2013). Based on findings, Marvicsin and Danford reported that average parental self-efficacy, in control, in comparison to high parental self-efficacy according to children's perceptions, resulted in higher BMIs for the child. Conversely, Kahlor, Mackert, Junker, and Tyler (2011) asserted that control for Hispanics in comparison to Whites and Blacks resulted in unhealthy eating. Kahlor et al. investigated parental perceptions of a healthy child diet and the obstacles parents faced, concerning obesity. Faith et al. (2012) further added that a parental characteristic such as discipline that Marvicsin and Danford addressed with the TOPSE has been a gap in the literature concerning the effect on childhood obesity.

Instruments and Paternal Self-Efficacy

Parents play a role in childhood obesity. Because children rely on their parents for food (Decker, 2012; de Lauzon-Guillain et al., 2012; Elder et al., 2010; Faith et al., 2012; Hoerr et al., 2009; Lindsay et al., 2012; Marvicsin & Danford, 2013; Vaughn et al. 2013;

Zhang, & McIntosh, 2011), parental characteristics such as control/limits and discipline/boundaries are needed to support efficacy, regarding healthy food decisions (Marvicsin & Danford, 2013). The TOPSE was used to address parental self-efficacy, control/limits, discipline/boundaries, and expand the limited research on childhood obesity (Faith et al., 2012; Grossklaus & Marvicsin, 2014; Sosa, 2012), especially among Mexican Americans. A concern for Decker (2012) was the lack of environmental control, concerning the completion of the survey by the participant. Outside circumstances may have impacted responses (Decker, 2012). Decker affirmed that in the future the design would eliminate Internet-based surveys and revert to conduction of a paper survey. However, advantages of Internet-based surveys allow for more accurate coding and data entry (Olson, 2014). Availability of surveys by way of Internet will also enable participation from various sites (Teo, 2013), which will allow for an opportunity to target a greater segment of the population (Hewson, 2014). Furthermore, Hewson further stated that evidence in the literature has shown that Internet-based and paper-based survey data have both demonstrated sufficient reliability and validity. Therefore, the TOPSE was offered as an Internet-based survey.

A limitation for Taveras et al. (2009) was the reliance on parental and clinician-reported data. Decker (2012) was unable to use the self-reported height and weight data of the children that the parents submitted because of the large discrepancy in weight percentiles that did not correspond to existing norms. Therefore, parental perception of child weight was measured using a figure rating scale (Lombardo et al., 2014) in which participants selected from body silhouettes,

Mothers have also been the target and not fathers concerning parental self-efficacy (Grossklaus & Marvicsin, 2014). In a study conducted by Taveras et al. (2009), only 49 of the 446 parents that participated were fathers. Marvicsin and Danford (2013) reported 74% of the participants were mothers. Also, research on efficacy (Sosa, 2012) has been conducted on maternal and not paternal effects (Khandpur et al., 2014; Sosa, 2012; Tschann et al., 2013; Zhang & McIntosh, 2011). Therefore, fathers will be included as participants to close the knowledge gap on parental efficacy (Decker, 2012; Taveras et al., 2009). Parental self-efficacy, concerning control or limits and discipline and boundaries, behavior change, and a healthy diet are important in childhood overweight and obesity (Taveras et al., 2009); however, parental feeding styles also affect child weight (Vaughn et al., 2013).

Parental Feeding Styles

Parental feeding styles affect dietary intake and self-regulation. Feeding styles are grounded in dimensions of demandingness and responsiveness (Musher-Eizenman & Kiefner, 2013; Vaughn et al., 2013). Demandingness is the extent of parental support or opposition concerning the child's dietary intake (Hoerr et al., 2009; Musher-Eizenman & Kiefner, 2013; Vollmer & Mobley, 2013). Responsiveness is regard for the child's dietary input, as it could further support self-regulation concerning their food intake (Pinquart, 2014; Vollmer & Mobley, 2013). The parental feeding styles reviewed in the literature are authoritative (Berge, 2009; Musher-Eizenman & Kiefner, 2013; Olvera & Power, 2010; Vollmer & Mobley, 2013), authoritarian (Berge, 2009; Musher-Eizenman & Kiefner, 2013; Olvera & Power, 2010), indulgent (Musher-Eizenman & Kiefner, 2013;

Olvera & Power, 2010) also referred to as permissive (Berge, 2009; Musher-Eizenman & Kiefner, 2013), and neglectful (Berge, 2009) also referred to as uninvolved (Musher-Eizenman & Kiefner, 2013; Olvera & Power, 2010). Parental feeding styles refer to authoritative, authoritarian, indulgent/permissive or neglectful/uninvolved feeding styles that affect children's food intake (Berge, 2009; Hoerr et al., 2009).

Authoritative feeding style. An authoritative feeding style is the only one of four feeding styles that has a positive effect on self-regulation of food and child weight status. Parental authoritative style demonstrates high demandingness and responsiveness levels [offering eating guidelines but not by domineering (de Lauzon-Guillain et al., 2012)] (Berge, 2009; Hughes et al., 2011). Authoritative feeding style**s** support self-regulation of food for children (Berge, 2009; Hoerr et al., 2009; Hughes et al., 2011). Also, authoritative feeding styles have supported nutritious eating and have been linked to healthy BMI percentiles (Berge, 2009; Hughes et al., 2011; Tschann et al., 2013). Although authoritative feeding styles have been reported to have a positive effect on a child's self-regulation of food (Berge, 2009; Hoerr et al., 2009), food habits, and weight (Berge, 2009; Tschann et al., 2013, Vollmer & Mobley, 2013), not all feeding styles have this effect.

Authoritarian feeding style. An authoritarian feeding style is a feeding style that can have a positive or negative impact on self-regulation of food and child weight status. Parental authoritarian style demonstrates a high demandingness level but low responsiveness level [favoring strict eating rules (de Lauzon-Guillain et al., 2012)] (Berge, 2009; Hughes et al., 2011). Authoritarian feeding styles are strict and negatively

affect children's self-regulation of food (Berge, 2009; Vollmer & Mobley, 2013). Furthermore, authoritarian feeding styles encourage obesogenic food habits (Berge, 2009; Vollmer & Mobley, 2013). However, some researchers have shown that authoritarian feeding styles have not affected the weight of a child (Hoerr et al., 2009; 2013 Vollmer & Mobley, 2013), on obesity (Muscher-Eizenman & Kiefner, 2013). In the study conducted by Hoerr et al. (2009), most Hispanics had an authoritarian feeding style. The children of Hispanic parents, with an authoritarian feeding style, had the lowest BMI Z-scores compared to Blacks and Whites (Hoerr et al., 2009). Researchers have reported mixed findings on authoritarian feeding styles regarding effect on a child's self-regulation of food (Berge, 2009; Hoerr et al., 2009), food habits, and weight (Berge, 2009; Hoerr et al., 2009), so it is important to continue reviewing the effects of feeding styles on child weight, such as indulgent/permissive feeding styles.

Indulgent/permissive feeding style. An indulgent/permissive feeding style is a feeding style that has had an adverse effect on self-regulation of food and child weight status. Parental indulgent/permissive style demonstrates low demandingness level and high responsiveness level [tolerating eating behavior (de Lauzon-Guillain et al., 2012)] (Berge, 2009; Hughes et al., 2011). Moreover, the weight of a child has also been affected by indulgent/permissive feeding styles (Hoerr et al., 2009; Vollmer & Mobley, 2013). Indulgent/permissive style**s** have also influenced unhealthy food consumption (Olvera & Power, 2010; Patrick, 2013) which has affected child BMI (Hoerr et al., 2009; Vollmer & Mobley, 2013) and resulted in increased risk for overweight and obesity (Olvera & Power, 2010; Patrick, 2013; Vollmer & Mobley, 2013). Indulgent/permissive

feeding styles have been common among Hispanic parents (Berge, 2009; Hennessey et al., 2010). Among Hispanic boys, Hughes et al. (2011) affirmed associations with indulgent/permissive feeding styles and elevated BMI, as confirmed by other researchers.

Another issue with an indulgent/permissive feeding style and child BMI is if the mother is Mexican American and has control over feeding. BMIs were of most concern among children who were reared with a maternal Mexican American indulgent/permissive feeding style (Olvera & Power, 2010). Olvera and Power (2010) affirmed that maternal indulgent/permissive feeding style placed Mexican American children at an increased risk of obesity in comparison to children reared with a maternal authoritative or authoritarian style. The lack of control concerning child feeding could be a reason because it leaves the child to struggle with decisions about what is considered healthy food (Olvera & Power, 2010). Another reason, according to Olvera and Power, may be that maternal indulgent/permissive feeding style in this population affected self-regulation because the child does not have a dietary role model to follow. Lastly, it may not be difficult for children to consume an unhealthy diet as a maternal Mexican American indulgent/permissive feeding style may be more supportive of it than a healthy diet (Olvera & Power, 2010). The negative effects that parental indulgent/permissive feeding styles have had on food consumption (Olvera & Power, 2010; Patrick, 2013), BMI (Hoerr et al., 2009), and ultimately overweight and obesity (Olvera & Power, 2010; Patrick, 2013) again offer rationale for continued inquiry into the effects of neglectful/uninvolved feeding styles on child weight.

Neglectful/uninvolved feeding style. A neglectful/uninvolved feeding style is another feeding style that has had a negative effect on self–regulation of food and child weight status. Parental neglectful/uninvolved style demonstrates low demandingness and responsiveness levels [lacking attention concerning eating (de Lauzon-Guillain et al., 2012)] (Berge, 2009; Hughes et al., 2011). Neglectful/uninvolved styles also influenced unhealthy food consumption (Patrick, 2013) which affected children's BMI (Berge, 2009; Hoerr et al., 2009), and resulted in increased risk for overweight and obesity (Patrick, 2013). However, Olvera and Power (2010) affirmed that although neglectful/uninvolved feeding styles predominated, overweight and obesity was highest among children reared with an indulgent/permissive feeding style. Feeding style dimensions of demandingness and responsiveness (Musher-Eizenman & Kiefner, 2013**;** Vaughn et al., 2013; Vollmer & Mobley, 2013) and parental feeding styles: authoritative (Berge, 2009; Musher-Eizenman & Kiefner, 2013; Olvera & Power, 2010), authoritarian (Berge, 2009; Musher-Eizenman & Kiefner, 2013; Olvera & Power, 2010), indulgent (Musher-Eizenman & Kiefner, 2013; Olvera & Power, 2010)/permissive (Berge, 2009; Musher-Eizenman &Kiefner, 2013), and neglectful (Berge, 2009)/uninvolved (Musher-Eizenman & Kiefner, 2013; Olvera & Power, 2010), (Musher-Eizenman & Kiefner, 2013) are depicted in Figure 3 (Hughes, Shewchuk, Baskin, Nicklas, & Qu, 2008). To assess the relationship between parental feeding styles, dietary intake, and obesity, again, proper instruments must be used.

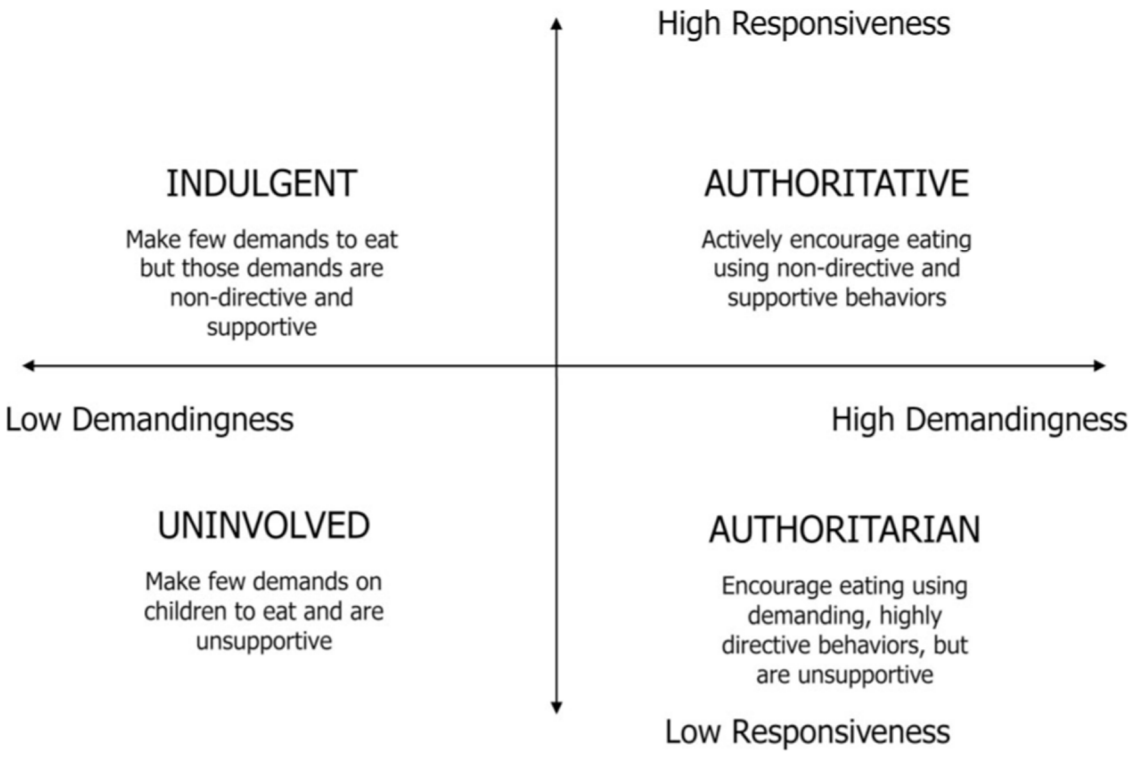

Figure 3. Typological approach to feeding depicting feeding style dimensions of demandingness and responsiveness and parental feeding styles. Reprinted from "Indulgent Feeding Style and Children's Weight Status in Preschool," by S. O. Hughes, R.M. Shewchuk, M.L., Baskin, T. A. Nicklas, & H. Qu, 2008, Journal of Developmental and Behavioral Pediatrics, 29(5), p. 12. Reprinted with permission.

Analysis of Instruments, PFS, and Child Age

The Caregiver's Feeding Style Questionnaire (CFSQ) designed by Hughes et al. (2005) has been an instrument of choice for many researchers (Hennessy et al., 2010; Hoerr et al., 2009; Hughes et al., 2011; Hughes et al., 2012; Muscher-Eizenman & Kiefner, 2013; O'Conner et al., 2010). However, according to Tschann et al. (2013), the CFSQ does not represent control in parental feeding for Hispanics accurately. Although many researchers (Hennessy et al., 2010; Hoerr et al., 2009; Hughes et al., 2011; Hughes et al., 2012; Muscher-Eizenman & Kiefner, 2013; O'Conner et al., 2010) suggested the

CFSQ, Olvera and Power (2010) recommended the PDI designed by Slater & Power (1987) to assess parental styles and obesity in Mexican American children. Moreover, Olvera and Power asserted that as much as the assessment of authoritative, authoritarian, indulgent/permissive, and neglectful/uninvolved styles have been applied by researchers, parental styles have not been categorized by responsiveness and demandingness. And, although Hennessy et al. (2010) used the CFSQ even after Olvera and Power's approach, the authors did pair the questionnaire with the PDI-S, a short version of the PDI designed by Power (2002).

Parental feeding styles influence a child's diet which affects self-regulation and ultimately BMI. Mixed findings have been reported for authoritarian feeding styles (Hoerr et al., 2009; Muscher-Eizenman, 2013), regarding obesity. For Hispanic boys, indulgent/permissive feeding styles have resulted in BMIs at or above the 95th percentile in comparison to Hispanic girls, and Black boys and girls (Hughes et al., 2011). However, Olvera and Power (2010) reported that for Mexican American children, in which mothers were the dominant feeding figure, indulgent/permissive feeding style resulted in BMIs at or above the 85th percentile but below the 95th percentile.

Parents of infants and children, up to the age of 12, were participants in the Muscher-Eizenman and Kiefner (2013) study. The researchers recommended continued research of parental feeding; however, also recommending that the ages of the children must be narrowed so that as children age, parental feeding can be assessed accordingly. The children in the present study were between the ages of 8 and 10, to address parental feeding at a particular developmental stage.

In the Hennessey et al. (2010) study, of the 99 parent-child dyads, 87% were mothers, making it difficult for analysis between genders. Therefore, in my study parent-child dyads included two parent families. Maternal and paternal styles are not the same, and the influence on children's weight has not been evident in the literature (Hennessey; Vollmer & Mobley, 2013). This study proposed to offer knowledge in this area of research. And, by including both parents, the study addressed informant bias, which according to Berge (2009) has also been an issue. The effect of parental feeding styles on dietary intake and obesogenic behaviors cannot be complete without including the impact of parental feeding practices (Patrick, 2013).

Parental Feeding Practices

Pressure to eat and restriction of amount of food. The influence of parental feeding practices is important for the continued investigation of dietary habits and child weight. Parental feeding practices refer to control of children's food consumption (Hoerr et al., 2009; Vaughn et al., 2013). Parental feeding practices have an impact on child weight (Tschann et al., 2013; Vaughn et al., 2013), and may affect children's BMI through their dietary habits (Tschann et al., 2013). The following parental feeding practices have been referenced in the literature: pressure to eat (Berge, 2009; Hoerr et al., 2009; Khandpur et al., 2014; Muscher-Eizenman & Kiefner, 2013; Tschann et al., 2013; Vaughn et al., 2013); restriction of amount of food (Berge, 2009; Hoerr et al., 2009; Muscher-Eizenman & Kiefner, 2013; Thompson, 2010; Tschann et al., 2013; Vaughn et al., 2013); use of food to control behavior (Berge, 2009; Muscher-Eizenman & Kiefner, 2013; Tschann et al., 2013; Vaughn et al., 2013) and positive involvement in child eating

(Hoerr et al., 2009; Tschann et al., 2013; Vaughn et al., 2013). Pressure to eat (Berge, 2009; Hoerr et al., 2009; Khandpur et al. 2014; Muscher-Eizenman & Kiefner, 2013; Tschann et al., 2013; Vaughn et al., 2013) and restriction of amount of food (Berge, 2009; Hoerr et al., 2009; Muscher-Eizenman & Kiefner, 2013; Thompson, 2010; Tschann et al., 2013; Vaughn et al., 2013) are considered uses of control in child feeding (Berge, 2009; Muscher-Eizenman & Kiefner, 2013; Thompson, 2010; Tschann et al., 2013), and have been the primary parental feeding practices investigated by researchers (Tschann et al., 2013). Pressure to eat and restriction of amount of food interfere with children's self-regulation of food because the children neglect their internal hunger cues and are then led by parents' use of control (Baronowski et al., 2013; Hoerr et al., 2009; Khandpur et al., 2014; Musher-Eizenman & Kiefner, 2013; Thompson, 2010; Tschann et al., 2013). Pressure to eat makes the food choice less appealing for children and restriction of amount of food makes the food more appealing for children (Tschann et al., 2013; Vaughn et al., 2013). Parents' restriction of amount of food feeding practices resulted in higher BMIs for their children than parents with pressure to eat feeding practices (Hoerr et al., 2009; Musher-Eizenman & Kiefner, 2013; Tschann et al., 2013). Parental food practices affect dietary habits and child weight; however, use of control such as pressure to eat and restriction of amount of food have not had the same effect in every culture (Tschann et al., 2013; Vaughn et al., 2013).

Parental uses of control food practices such as pressure to eat can be affected by culture and personal views. Parental food practices have primarily targeted the White population (Hennessy et al., 2010; Hoerr et al., 2009; Thompson, 2010; Tschann et al.,

2013). Hispanic parents seem to favor feeding practices such as pressure to eat and restriction of amount of food (Tschann et al., 2013). Findings reported by Cachelin and Thompson (2013) further added to Vaughn et al. (2013) by affirming that pressure to eat for White mothers may be associated with personal views of low BMI in the child and for Hispanic mothers, pressure to eat may only be related to culture. In the Hispanic culture, parents tend to view weight status as a sign of health (Cachelin & Thompson, 2013; Centrella-Nigro, 2009; Elder et al., 2010; Vaughn et al., 2013) and strength (Cachelin & Thompson, 2013; Centrella-Nigro, 2009), so even if the child has a healthy BMI, the parent may pressure the child's dietary intake if the child does not have a full figure (Elder et, 2010; Vaughn et al., 2013). Hispanic mothers, according to Cachelin & Thompson would rather their children have a larger body frame. Children that appeared slim brought thoughts of illness (Centrella-Nigro, 2009; Sosa, 2012) and eventually death, for Mexican American mothers (Sosa, 2012). Also, Berge (2009) affirmed that maternal pressure to eat feeding practices have been linked to overweight or obesity; conversely, some studies where the maternal pressure to eat feeding practice was measured were not linked to overweight or obesity (Berge, 2009). Culture, concerning the use of control feeding practice such as pressure to eat, may affect overweight and obesity; however, the use of control feeding practice discussion is not complete without including the use of food to control behavior.

Use of food to control behavior. Use of food to control behavior is a parental feeding practice that also affects child diet and BMI. The use of food to control behavior parental feeding practices that also mirrors the use of control is the use of food as a

reward (Vaughn et al., 2013; Tschann et al., 2013). Using food as a reward has also been categorized as restriction of amount of food (Tschann et al., 2013). The aforementioned feeding practice, according to Tschann et al. (2013) decreased children's interest in food and resulted in reduced BMI. Restriction of amount of food has had the opposite effect on children's appetite and weight (Tschann et al., 2013). Results have indicated that restriction of amount of food and use of food to control behavior (reward) should not be confused and categorized as the same construct, and according to Tschann et al. should be measured individually. In a literature review by Berge (2009), parental use of food to control behavior, which included participants from various ethnic groups, resulted in increased BMI for children; conversely, Berge also affirmed that parental use of food to control behavior had not resulted in childhood overweight. Use of food to control behavior is a parental feeding practice that affects child diet and BMI; however, positive involvement in child feeding practice requires further discussion concerning the use of control feeding practice, child diet, and BMI.

Positive involvement in child feeding. Parental involvement in child feeding also affects diet and BMI. Positive involvement in child feeding has been termed as a use of control feeding practice by some researchers (Hoerr et al., 2009); Nonetheless, Tschann et al. (2013) affirmed that this feeding practice supports child diet and weight perhaps by fostering self-regulation. Parental food monitoring and limiting of high-calorie food were referred to as positive involvement by Tschann et al. Parental food monitoring (Hoerr et al., 2009; Tschann et al., 2013; Vaughn et al., 2013) and limiting of high-calorie food have also been categorized as restriction of amount of food (Tschann et

al., 2013). However, results have indicated that restriction of amount of food and parental food monitoring and limiting of high-calorie food should also not be confused and categorized as the same construct. Parental food monitoring and limiting of high-calorie food was reflective of positive involvement feeding practice and not a restriction of amount of food for Mexican Americans. Parental food monitoring/limiting of high-calorie food and restriction of amount of food should be further investigated. To assess the relationship between parental feeding practices, dietary intake, and obesity, proper instruments must again be used.

Analysis of Instruments, PFP, and Child Age

The Child Feeding Questionnaire (CFQ, Birch et al., 2001) has been a questionnaire of choice for assessment of feeding practices such as pressure to eat and restriction of amount of food (Muscher-Eizenman, 2013; Tschann et al., 2013). According to Tschann et al. (2013) factor analysis categorized using food as a reward as restriction of amount of food, and for Hispanics it is not the same construct. Furthermore, questions were not gathered from Hispanic feedback. Lastly, Tschann et al. affirmed that, again, it does not represent control in parental feeding for Hispanics accurately. Therefore, Tschann et al. developed and tested the PFP Questionnaire for use with Mexican American parents.

Parental feeding practices affect dietary habits and child weight. Hispanic parents tend to pressure children to eat and restrict the amount of food (Tschann et al., 2013). However, there have been mixed findings in the literature, about maternal effects on childhood overweight and obesity (Berge, 2009). Therefore, this study investigated

Hispanic paternal effects, pressure to eat and restriction of amount of food on child weight status. In Khandpur's et al. (2014) review of the literature, parental feeding practices were measured with a self-report survey in 80% of the articles. Therefore, this study will use a self-report survey. And, although the CFQ has been a survey that has been used for the measurement of uses of control, such as pressure to eat, restriction of amount of food, and using food as a reward (Muscher-Eizenman, 2013; Tschann et al., 2013), the using food as a reward subscale has been ambiguous with regard to measurement of restriction of amount of food (Muscher-Eizenman and Kiefner, 2013), and using food as a reward and restriction of amount of food are not the same construct for Hispanics (Tschann et al., 2013). Tschann et al. (2013) further added that Hispanic feedback was not used in the development of the CFQ. Validity and reliability of the CFQ have also not been reported for fathers (Khandpur et al., 2014). Thus, this study used the PFP questionnaire developed by Tschann et al., which measured restriction of amount of food and using food as a reward separately, and has been tested with fathers.

Khandpur et al. (2014) also added that based on recent evidence, mothers should not be considered the sole targets for parental feeding practice research on child weight. Therefore, this study will include both mothers and fathers. However, in the Hennessey et al. (2010) study, inadequate sample size did not allow for maternal and paternal data to be analyzed individually. Berge (2009) also affirmed that data which included fathers were not equivalent to maternal data. Data had only been reported as parental (Berge, 2009). Berge stated that reporting combined data is open to doubt. Paternal feeding practices are not the same as maternal feeding practices, on the effects of overweight and

obesity in children (Berge, 2009). Maternal and paternal data cannot be treated as independent, according to Berge, because it affects statistical test assumptions. So, the fact that parent-child dyads included two parent families addressed the analysis issues. In support of Khandpur's et al. research, Zhang and McIntosh (2011) stated that measurement of both mothers and fathers feeding practices would also offer a more comprehensive view of the effect on child BMI.

Khandpur et al. (2014) asserted that researchers have typically investigated children younger than 6 years of age. This study addressed the recommendations of Khandpur et al. for future research on children 6 years of age and older. And, for Mexican American children between the ages of 6 and 11, obesity rates are higher than for White children (Tschann et al., 2013). The narrowed age range also aligned with Cachelin and Thompson (2013) affirmation that too large of an age range does not allow for changes in feeding practices to be assessed.

Covariate Variables

Parental Weight

According to Berge (2009), researchers have typically not controlled for parental weight in childhood obesity studies (Berge, 2009). A significantly positive effect on children's BMI is parental obesity (Elder et al., 2010; Kornides et al., 2011; Thompson, 2010; Zhang & McIntosh, 2011). When Taveras et al. (2009) examined the effects of parental characteristics on efficacy and overweight-related behavior changes for the child, results showed that normal parental BMI increased parental self-efficacy compared with overweight or obese parental BMI status which reduced parental self-efficacy, on

overweight related behavior changes. Marvicsin and Danford (2013) reported that average parental self-efficacy, in control, in comparison to high parental self-efficacy according to children's perceptions, resulted in higher BMIs for the child, overweight or obese status existed in 75% of the parents.

Parental BMI may confound parental feeding style and the child's dietary intake (Hoerr et al., 2009; Vollmer & Mobley, 2013). For Hennessy et al. (2010), there was a positive association between parental BMI and child BMI Z-score. Zhang and McIntosh (2011) reported that with every numeric increment in parental BMI, overweight status in children increases by 14%.

SES

Parental income. According to Zhang and McIntosh (2011), low income is a factor in childhood obesity. Elder et al. (2010) asserted that children from low-income families had elevated BMIs, in comparison to children from higher income families, because nutritious foods are costlier, and parents cannot typically provide such foods. The participants in the Hennessey et al. (2011) research stated that family income did not allow for too much more than food, this further supported why indulgent/permissive feeding style was related to higher BMI in this population. Lower parental occupational status (skilled worker), in Tschann's et al. (2013) study resulted in children with elevated BMIs. Centrella-Negro (2009) asserted that among Hispanic children between the ages of 6 and 11, low parental income and education influenced an overweight status.

Parental education. Parental education has also been used to measure SES (Balesteri & Van Hook, 2009; Kornides et al., 2011). According to Berge (2009),

researchers have not typically controlled for parental education in childhood obesity studies (Berge, 2009; Thompson, 2010). Taveras et al. (2009) affirmed that parental education of less than or equivalent to a high school diploma reduced parental self-efficacy, on overweight related behavior changes. Patrick (2013) further added that parental education affected parental feeding styles and practices. Balesteri and Van Hook (2009) reported that regardless of parental educational status, there was an increase in BMI among Hispanic children in comparison to White children.

Gender

An assumption in the literature has been that mothers have been viewed as the dominant feeding figure concerning their children's dietary intake in comparison to fathers (Khandpur et al., 2014; Tschann et al., 2013; Zhang & McIntosh, 2011). However, Khandpur et al. (2014) reported that since 1975, mothers have had to return to the workforce, thereby spending less time with their children, especially during feedings. Also, it has been documented in the literature that fathers have begun to participate more during mealtime with their children (Khandpur et al., 2014).

Zhang and McIntosh (2011) confirmed that both maternal and paternal feeding practices impacted children's BMI. Tschann et al. (2013) reported results consistent with findings in Zhang and McIntosh's study. If fathers exhibited use of food to control behavior feeding practices and if mothers exhibited positive involvement feeding practices, children's BMI was lower, (Tschann et al., 2013). Children's BMI was also lower if fathers and mothers exhibited pressure to eat feeding practices; however,

children's BMI was higher if fathers and mothers exhibited restriction of amount of food feeding practices.

Years in the Country

Factors that contribute to overweight, such as acculturation should be examined as a likely confounding variable (Branscum & Sharma, 2011; Kornides et al., 2011). Years in the country allow Hispanics to become more acculturated, which then leads to unhealthy BMI (Lind et al., 2012). Berge (2009) affirmed that years in the country should be used in childhood obesity research. The diet of Mexican Americans deteriorates with years in the country (Lind et al. 2012; Sofianou, Fung, and Tucker, 2011).

Summary and Conclusions

Rates of obesity for Hispanics are the highest among minority groups (US Census Bureau, 2012). Hispanics do not have the same perception of child weight as the White population (Cachelin & Thompson, 2013; Centrella-Nigro, 2009). Parental feeding practices such as pressure to eat (Hoerr et al., 2009; Khandpur et al., 2014; Tschann et al., 2013; Vaughn et al., 2013) and restriction of amount of food (Hoerr et al., 2009; Thompson, 2010; Tschann et al., 2013; Vaughn et al., 2013) have been the focus of prior research (Tschann et al., 2013).

The influence of maternal and paternal feeding styles on child weight has yet to be confirmed because most of the research has been on mother's feeding styles and childhood obesity (Vollmer & Mobley, 2013; Zhang & McIntosh, 2011). The lack of research, including mothers and fathers feeding styles on childhood obesity, has not allowed for differences in father's feeding styles to be documented (Hennessey et al.,

2010; Vollmer & Mobley, 2913; Zhang & McIntosh, 2011). Additional evidence is needed regarding whether constructs such as monitoring/limiting high-calorie foods and restrictions are gendered constructs (Tschann et al., 2013).

Parental feeding practices and styles research has predominantly been among middle-class, White populations (Hoerr et al., 2009). There is a lack of research on parental feeding styles of Hispanic parents (Olvera & Power, 2010). There is a lack of research on parental feeding practices in Mexican American children (Tschann et al., 2013). Parental feeding styles and parental feeding practices are not the same, and this has been another gap in research regarding measurement (Hennessey et al., 2010). A similar gap exists regarding parental self-efficacy which allows for behavior change to occur even as individuals encounter impediments (Taveras et al., 2009). I explored each of these noted gaps in my research.

In Chapter 3, I will review the research design and rationale, followed by a detailed description of the methodology, and conclude with threats to internal and external validity, and ethical procedures.

Chapter 3: Research Method

Introduction

This quantitative correlational study used self-reported data to analyze the relationships between (a) parental self-efficacy and (b) parental feeding practices and (c) parental feeding styles and obesity, as measured by the parental perception of child weight in Mexican American children in Texas. This chapter covers the following topics: research design and rationale, methodology, the population, sampling, sampling procedures, procedures for recruitment, participation, data collection, instrumentation and operationalization of constructs, threats to validity and ethical procedures.

Research Design and Rationale

The study variables were parental self-efficacy, parental feeding practices, parental feeding styles, obesity, parental weight, SES, gender, and years in the country. The research design was cross-sectional. After controlling for parental weight, SES, gender, and years in the country, the relationship between maternal and paternal efficacy, feeding practices and styles and obesity, as measured by the parental perception of child weight in Mexican American children living in Texas, was examined. The Tool to Measure Parenting Self-Efficacy (TOPSE) questionnaire (Kendall & Bloomfield, 2005) was used to measure parental self-efficacy The Parental Feeding Practices (PFP) Questionnaire (Tschann et al., 2013) for Mexican American parents was used to measure parental feeding practices. The Parenting Dimensions Inventory - Short Version (PDI-S) (Power, 2002) was used to measure parental feeding styles. A figure rating scale (Lombardo et al., 2014) was used to measure parental perception of child weight.

There were time and resource constraints. One of the time constraints was the recruiting of the population. Confirming the time and location to have participants complete the questionnaires was another constraint. With three questionnaires and a figure rating scale that had to be completed, completion of all three questionnaires and a figure rating scale was a time constraint that was agreed upon by the participant. One of the resource constraints was that one of the pediatric clinics was located at the children's hospital, and one of the elementary schools was part of one of the churches. The researcher was dependent on the children's hospital and the pediatric clinic on permission to administer the survey.

The rationale for the design choice was based on a review of the literature. Cross-sectional designs have been used in studies on parental self-efficacy (Marvicsin & Danford, 2013; Taveras et al., 2009), parental feeding styles (Hennessy et al., 2010) and practices (Cachelin & Thompson, 2013; Hennessy et al., 2010; Hughes et al., 2011; Khandpur et al., 2014) and childhood obesity (Cachelin & Thompson, 2013; Hennessy et al., 2010; Hughes et al., 2011; Khandpur et al., 2014; Marvicsin & Danford, 2013; Taveras et al., 2009). In a review of parental feeding styles, 11 of the 13 studies were cross-sectional, and 32 of the 38 parental feeding practices studies were cross-sectional, that is, they concerned familial correlates of childhood obesity (Berge, 2009). Vollmer and Mobley (2013) also conducted a review of parental feeding styles, and all 12 of the studies on child obesogenic behaviors and body weight were cross-sectional. This cross-sectional design was consistent with research designs needed to advance knowledge in the relationship between maternal and paternal efficacy, feeding practices and styles and

obesity, as measured by the parental perception of child weight, in Mexican American children between the ages of 8 and 10.

Methodology

Population

The target population was Mexican American mothers and fathers, born in the United States or Mexico, residing in Corpus Christi, Texas, with at least one child between the ages of 8-10. The sample was drawn from three elementary schools (one public and two private), one Catholic church, two pediatric offices, of which there were many pediatricians, and a children's hospital. The approximate size of the target population was not known.

Sampling and Sampling Procedure

A convenience sample was the chosen sampling strategy for the study. A convenience sample was chosen because according to Lund and Lund (2012), even if a theory supports a concern, if research is lacking to show such a relationship, the sampling bias of this nonprobability sampling may benefit the researcher, about whether the concern applies to the population to be studied. In this research, SCT has been set as the theoretical foundation. And, self-efficacy is a construct of SCT. Sosa (2012) asserted that a Mexican American mothers' efficacy in assisting children with a healthy weight depended on her ability to persevere through impediments (another SCT construct) such as confusion regarding nutrition, cultural food influences, lacking control over the child's diet and the knowledge to make healthy decisions for her children, to achieve behavior change. Also, parental self-efficacy research of childhood obesity has focused on

maternal effects as opposed to paternal effects (Sosa, 2012). Lund and Lund also stated that if the concern, in this case, childhood obesity, is nonexistent, then an unbiased sample, such as with probability sampling would result in the same findings. The justification for this sampling strategy also lies in ethics (Lund & Lund, 2012). By using a convenience sample, this investigation of whether maternal and paternal efficacy among Mexican Americans affects childhood obesity did not expose more participants than were needed (Lund & Lund, 2012).

The sample was drawn by making the surveys and a figure rating scale available to eligible parents at the children's hospital, church, elementary schools, and pediatric clinics. Populations included Mexican American families living in Corpus Christi, Texas. Participants needed to be able to read and speak English, and informed consent was needed to participate in the study. Excluded populations were parents of children 7 years and younger and 11 years or older and parents with children that had been prescribed a specific diet for health conditions were also excluded.

The sample size needed to achieve a power of 0.80 in a test at $\alpha = 0.05$, d of 0.3 was 67. An additional 20 -25% of the sample was surveyed, which increased the sample size to 80-84 participants, to allow for incomplete surveys or drop outs in the research study. According to Pinquart (2014), an effect size of 0.3, as documented by Cohen (1992) is small to medium. Therefore, an effect size of 0.3, which is an acceptable estimate because of the small to medium effect that will be produced, was used. The α level was set at 0.05, which is considered statistically significant (Zint, 2015). The power

level was set at 0.80, which is also considered to produce statistical significance (Zint, 2015). G*Power 3.1 software (Faul et al., 2009) was used to calculate the sample size.

Procedures for Recruitment, Participation, and Data Collection

Mothers and fathers were recruited from a children's hospital, church, elementary schools, and pediatric clinics in Corpus Christi, Texas. Mothers and fathers were invited to participate in the study through flyers introducing the research. Mothers and fathers were recruited until the target sample of 80 - 84 was reached. Study procedures including letters of cooperation (Walden University, 2015) from a participating children's hospital, church, elementary schools, and pediatric clinics were submitted for review and submitted for approval by the IRB. Demographic information that was collected was parental weight, SES, gender and years in the country.

The Consent Form for Adults (for participants over 18; Walden University, 2015), which was modified based on the appropriateness for the study's intent, and was submitted to the IRB for approval, was used. Parents were provided with the informed consent at the time of participation. The parent had to agree to the terms of the informed consent to proceed with the research and be considered a participant.

Each participant completed a self-administered survey and a figure rating scale. The surveys included the TOPSE questionnaire (Kendall & Bloomfield, 2005) to measure parental self-efficacy, the PFP Questionnaire (Tschann et al., 2013) for Mexican American parents, to measure parental feeding practices, the PDI-S (Power, 2002), to measure parental feeding styles, and a figure rating scale (Lombardo et al., 2014), to measure obesity as measured by parental perception of child weight. Demographic

questions were also included. The researcher provided the results of the study in the children's hospital, church, elementary schools, and pediatric clinics where the sample was generated. The researcher provided study results to educate Mexican American mothers and fathers about parental self-efficacy, feeding practices and styles and obesity, as measured by the parental perception of child weight, in children between the ages of 8 and 10.

Instrumentation and Operationalization of Constructs

TOPSE

The tool that was used to measure parental self-efficacy was the TOPSE questionnaire designed by Kendall and Bloomfield. The year of publication was 2005. Marvicsin and Danford (2013) focused on two of the nine scales in the TOPSE instrument; control (limits) and discipline (boundaries) which are parental characteristics that can support healthy eating. Parents skilled in areas of control, concerning limits and discipline, and concerning boundaries may have an advantage over the child's diet (Marvicsin & Danford, 2013). Marvicsin and Danford reported that average parental self-efficacy, in control, in comparison to high parental self-efficacy according to children's perceptions, resulted in higher BMIs for the child. Kahlor et al. (2011) asserted that control for Hispanics in comparison to Whites and Blacks led to unhealthy eating. Faith et al. (2012) further added that parental characteristics such as discipline that Marvicsin and Danford addressed with the TOPSE has been a gap in the literature concerning the effect on childhood obesity.

The TOPSE questionnaire consists of the following subscales (82 items): emotion and affection, play and enjoyment, empathy and understanding, routines and goals, control, discipline and setting, pressure, self-acceptance, learning and knowledge. Each item was scored on a 10-point Likert scale (*completely disagree* to *completely agree*). Scores in the lower-third of the scale reflected low efficacy. Scores in the middle-third of the scale reflected average efficacy. And, scores in the upper-third of the scale reflected high efficacy.

Kendall and Bloomfield (2005) aimed for α of no less than 0.7, with 0.8 the preferred α score. Eight of the 99 statements were eliminated to achieve acceptable α. The α for each scale ranged from 0.81 to 0.93, with an overall score for the TOPSE at 0.95. Nineteen parents completed the TOPSE tool initially, and within 4 to 6 weeks. Spearman's correlation coefficients for scales such as discipline and boundary setting were then calculated. Initially, self-efficacy and parenting authority figures reviewed the questionnaire for construct and face validity. Parents provided feedback on content validity, and nine statements were eliminated. In the United Kingdom, 58 mothers and five fathers (56 White and seven identified as Caribbean, Chinese, Iraqi, and Pakistani) of children younger than 7 participated in the validation of the TOPSE instrument. Thirty-four parents did not complete high school education and 29 parents graduated high school and attended college.

PDI-S

The tool that was used to measure feeding style was the PDI-S designed by Power in 2002. The appropriateness to the current study was that the PDI-S allowed assessment

of authoritative, authoritarian, indulgent/permissive, and neglectful/uninvolved parental styles by responsiveness and demandingness (Olvera & Power, 2010). The PDI-S was appropriate for use with parents of children between the ages of 3 and12 (Power, 2002).

The PDI-S consists of the following scales (27 items): nurturance, consistency (inconsistency and following through on discipline), organization, permissiveness, and type of control. Scores were derived by taking the average of responses. However, a mean score was calculated from the type of control items. Ratio scores more than 1 indicated an inclination to favor a type of control; ratio scores less than 1 indicated an inclination not to favor a type of control.

The only unacceptable α was for the amount of control subscale (Power, 2002). Power attributed the low α to the amount of control scale having a few items, and because it was divided into two parts. Power attempted to change the format of the subscale from A and B questions to Likert--scale questions; however, participants did not understand how to respond to the two-part questions in this format. The scale was still included because it has been able to measure differences between parenting styles such as authoritative and indulgent/permissive (Power, 2002).

Power (2002) used the Spanish version of the PDI-S with low-income Mexican American mothers who had children between the ages of 4 and 8. All α were more than .70 except for inconsistency, consistency and the organization subscales (Power, 2002). The disciplinary subscales had less stability over four years in comparison to the stability of the inconsistency and organization subscales (Power, 2002).

In a study that was conducted in Houston, Texas, 118 middle-class mothers had higher scores than Japanese mothers concerning amount and type of control, rule setting, and material/social consequences, respectively (Power, 2002). Japanese mothers had higher scores than the Houston mothers concerning reasoning and yelling, also types of control (Power, 2002). Based on cluster analysis, Houston mothers had authoritative, authoritarian, and indulgent/permissive parenting styles while Japanese mothers only had indulgent/permissive parenting styles (Power, 2002).

PFP Questionnaire

The tool that was used to measure feeding practice was the PFP Questionnaire for Mexican American parents designed by Tschann, Gregorich, Penilla, Pasch, de Groat, Flores, Deardroff, Greenspan and Butte. The year of publication was 2013. The appropriateness to the current study was that the parental feeding practices, specifically pressure to eat and restriction of amount of food, have been typically measured with the CFQ (Birch et al., 2001) (Muscher-Eizenman, 2013; Tschann et al., 2013). Birch et al. placed questions regarding using food as a reward under restriction. And, for Hispanics, restriction of amount of food is not equivalent to using food as a reward; it is a use of food to control behavior (Tschann et al., 2013). This issue may have occurred because the Hispanic culture was not considered in the development of the questionnaire (Tschann et al., 2013). The PFP Questionnaire allowed for the measurement of using food as a reward to be measured as the use of food to control behavior (Tschann et al., 2013).

The PFP questionnaire consists of the following subscales (63 items): positive involvement in child eating, pressure to eat, use of food to control behavior, and

restriction of amount of food. A five-point frequency of behavior scale was used, with scores ranging from 1 (*never*) to 5 (*always*). Parents' restriction of amount of food feeding practices resulted in higher BMIs for their children than parents with pressure to eat feeding practices (Tschann et al., 2013). Using food as a reward, according to Tschann et al. (2013), decreased children's interest in food and resulted in reduced BMI.

All but two first-order factors had α of < .50, and the average for all other factors was .73 (Tschann et al., 2013). The average for second-order factors was .81 (Tschann et al., 2013). Correlations of parental feeding practices and children's BMI indicated that the scales were linked to children's weight (Tschann et al., 2013).

Mothers and fathers that participated in the Tschann et al. (2013) study were born in Mexico. However, 95% of children between the ages of 8 and 10 were born in the US. Eighty-eight percent of parents were either classified as overweight or obese. Twenty percent of the children were overweight, and 28% of the children were obese. Parents' average level of education was 11th grade, and parents' average occupational status was a skilled worker.

Figure Rating Scale

The tool that was used to measure parental perception of child weight was a figure rating scale designed by Lombardo, Battagliese, Pezzuti, and Lucidi. The year of publication was 2014. The choice to use figural line drawings that do not depict facial features or are clothed was because according to Gardner and Brown (2010), these types of drawings allow the participant to look at the figure as opposed to characteristics of the figure. Lombardo et al. further stated that figural line drawings are suitable for use in any

culture. However, face validity of these types of drawings has received negative attention in the literature concerning the resemblance of actual child body size. The number of silhouettes used in the assessment of perception of the actual body size has also been an issue. Adults have been paired with assessments involving 7 – 9 silhouettes, but for children 11 years of age and younger, the ability to correctly differentiate among that many silhouettes posed an issue. In the literature, when children 6 to 14 years of age were presented with at least eight figures, they have typically chosen among 3 of the 8. Therefore, the researchers decided to reduce the number of figures, attempting to target a more accurate choice for the child. The figure rating scale consists of five silhouettes for children of both sexes that are made available on a show card and are arranged from smallest to largest. The figure rating scale has been used with males and females between the ages of 6 and 14 residing in Rome.

To establish concurrent validity of the children's self-evaluations of their actual body size evaluation, age-adjusted BMI, mother, father, and the interviewer evaluation of the child's body size was performed (Lombardo et al., 2014). The Bravais-Pearson correlation coefficients of children's self-evaluations of their actual body size, age-adjusted BMI, mother, father, and the interviewer evaluation of the child's body size were significant (> 0.586), implying that the figural rating scale that was used is a valid measure of children's body size. The correlation coefficients (0.449–0.660), excluding 1st and 2nd primary school classes, of children's self-evaluations of their actual body size evaluation and age-adjusted BMI were significant. The results of the correlations denoted that the figural rating scale is appropriate for children between the ages of 8 and 14.

Threats to Validity

One threat to external validity was the ability to generalize to the populations of mothers and fathers with children younger than 8 years and older than 10 years. The ability to generalize to populations other than Mexican Americans was also a threat. And although the threats were an issue, the researcher drew the sample from a church, both private and public elementary schools, and pediatric clinics within and outside of the children's hospital. According to Trochim (2006A), this at least addressed the generalization of the place of the population. The researcher also addressed the generalization of time, as stated by Trochim, by making the surveys and figure rating scale available at different times at each place. Another threat was the Hawthorne effect, according to Cook (2010), participants may not act naturally under observation. Participants were aware that they were taking part in a series of surveys and a figure rating scale. This also introduced a methodological weakness of self-reported data. And, another weakness that was introduced was socially desirable responses by the participants. Cook asserted that if the researcher keeps participants separated from each other during the administration of the surveys, the Hawthorne effect is reduced. To address and perhaps reduce socially desirable responses, Cook stated that researchers should use an individual that is not affiliated with the study, to review the purpose. Threats to internal validity could result from instrumentation. However, concerning instrumentation, according to Yu & Ohlund (2012), if there are not any changes to the instruments or the researcher (for scoring purposes), study findings may not be threatened. To reduce a threat to statistical conclusion validity, a statistical power of at

least 0.8 was used (Trochim, 2006B). Also, the researcher used an α level of 0.05 because according to Trochim (2006B), an α of 0.10 increases the risk of a Type I error.

Ethical Procedures

The researcher gained agreements to access participants and data and included letters of cooperation and consent form for adults (participants over 18) in the IRB application. With the permission of Walden University, including IRB approval (No. 12-10-15-0120006) for the proposal, the study was conducted. The flyers contained an overview of the nature of the study. Participants were given information that stated that the study was not a part of the children's hospital, pediatric clinics, church, elementary schools, or any other agency. Parents were provided with the informed consent before beginning the survey. By clicking on the link at the end of the informed consent, the participant was made aware that they were indicating that they were at least 18 years old, had read and understood the consent form and agreed to participate in the research study. They were able to print or save the consent form for their records. Parents interested in the research were informed that they could choose not to proceed at any time during the research process. The data was kept confidential. The data was saved on the researcher's computer and on a travel drive that will be maintained by the researcher for five years. The researcher was the only individual with the password to both storage devices. The data will be destroyed at the end of the fifth year. Concerning other ethical issues such as conflict of interest, the researcher did not seek competing children's hospitals for research participants. According to Polonski (2004), it is unethical for a student researcher to collect data in the same field or organization in which the student researcher

is affiliated or employed unless the researcher elects to inform the organizations in the field.

Summary

This quantitative correlational study used self-reported data analysis to investigate the relationships between parental self-efficacy and parental feeding practices and styles and obesity, as measured by the parental perception of child weight in Mexican American children in Texas. The research design was cross-sectional. A convenience sample was the chosen sampling strategy for the study. Threats to validity were addressed, and ethical procedures were followed. In chapter 4, data collection will be introduced, followed by the results, and concluding with the summary.

Chapter 4: Results

Introduction

The purpose of this study was to investigate the literature gap on the relationship between (a) parental self-efficacy and (b) parental feeding practices and (c) parental feeding styles of obesity, as measured by the parental perception of child weight, in Mexican American children in Texas.

Research Question: What is the relationship between parental self-efficacy and parental feeding practices and styles of obesity, as measured by the parental perception of child weight, in Mexican American children residing in Texas, after controlling for parental weight, SES, gender, and years in the country?

Null hypothesis: There is no relationship between parental self-efficacy and parental feeding practices and styles to obesity, as measured by the parental perception of child weight, in Mexican American children residing in Texas, after controlling for parental weight, SES, gender, and years in the country.

Alternative hypothesis: There is a relationship between parental self-efficacy and parental feeding practices and styles to obesity, as measured by the parental perception of child weight, in Mexican American children residing in Texas, after controlling for parental weight, SES, gender, and years in the country.

This chapter covers the following topics: purpose of the study, research question, hypotheses, data collection, results and summary of answers to the research question.

Data Collection

The time frame for data collection was between March 19, 2016, and January 30, 2017. There were 111 responses (actual recruitment) and 83 completed responses. The sample size met the quota sample (n = 67) that I had calculated by G*Power apriori, with a 75% completion rate.

Also, I did not have to confirm the time and location to have participants complete the questionnaires, so that constraint was eliminated. Another discrepancy was that the sample was not drawn from any elementary schools. On October 7, 2015, the principal of Menger Elementary granted permission to allow me to post flyers on the campus; however, on March 23, 2016, I received an email from the principal. The principal had been informed that I would have to submit a Corpus Christi Independent School District (CCISD) application through the external research process for the research request to be considered for approval. Unfortunately, the CCISD external research process did not include a time frame that suited my needs. On October 19, 2015, the principal of St. Patrick's Elementary answered on behalf of the school and St. Patrick's church and was not able to accommodate my request. The principal of Incarnate Word Academy confirmed on October 30, 2015, that I would not be granted permission.

I initially stated that I would modify the Consent Form for Adults (for participants over 18; Walden University, 2015) based on the appropriateness for the study's intent. However, the children's hospital's IRB requested that I use their Model Informed Consent for Clinical Research Study instead. Walden University requested a few minor

revisions. On December 10, 2015, I received approval to use the children's hospital's Model Informed Consent for Clinical Research Study.

On July 1, 2016, I had yet to reach the intended sample size with the children's hospital, so I requested a change in procedure through Walden's IRB to post the SurveyMonkey link on a colleague's mother's group on Facebook. On July 5, 2016, Walden's IRB asked me to update the request for a change in procedure, to make SurveyMonkey available through a free program to help combat childhood obesity for families with children ages 7–13. I received an email confirmation from the IRB on July 21, 2016. On October 18, 2016, I made another IRB request for a change in procedure which involved the addition of another community partner, a Catholic church. An email confirmation from the IRB was received on November 1, 2016.

I initially calculated that the sample size needed to achieve a power of 0.80 in a test at $\alpha = .05$, *d* of 0.3 would be 67. However, *d* of 0.3 should have been *d* of 0.2. The sample size needed to be 80. An additional 20 -25% resulted in a need to sample 96 – 100 to allow for incomplete surveys or dropouts in the research study.

Logistic regression measures the change in the odds-ratio between variables and the incremental change in variable values (Munro, 2005). Linear regression provides the contribution of the independent variable to the trend of the dependent variable; in other words, the change in the dependent variable (Munro, 2005). Odds-ratios are important in public health and disease states (Munro, 2005). However, trends are more valuable in educational settings (Munro, 2005). Because I had enough power, using $f^2 = .15$ for a

medium effect size (Cohen, 1992; Zaiontz, 2017), a linear regression analysis was performed.

I was going to address the generalization of time, as stated by Trochim, by making the surveys and figure rating scale available at different times at each place; however, since the paper survey became an online SurveyMonkey survey for all participants regardless of recruiting site, the generalization of time was not an issue. Another threat that I was going to consider was the Hawthorne effect. According to Cook (2010), participants may not act naturally under observation. Participants were going to be aware that they were taking part in a series of surveys and a figure rating scale. However, the participants were not under observation. They could access and complete the SurveyMonkey on their own.

To address and perhaps reduce socially desirable responses, Cook (2010) stated that researchers should use an individual that is not affiliated with the study, to review the purpose. However, because the data was collected through SurveyMonkey, an individual that was not affiliated with the study was not needed to review the purpose. The participants could review the purpose on their own. And, instead of clicking on the link at the end of the informed consent, the participant was made aware that they were indicating that they were at least 18 years old, had read and understood the consent form and agreed to participate in the research study by clicking yes on the following page.

Results of SurveyMonkey had to be exported to SPSS. Some variables had to be recoded. Missing values were replaced in SPSS with the series mean (Langkamp, Lehman, & Lemeshow, 2010; Pigott, 2001). Missing data in survey research can occur

because the participant unintentionally omits a response, does not find an appropriate response, does not have a response, does not comprehend, does not find the question applicable, does not have interest to continue, does not have ample time to complete, or declines to continue with participation (Brick & Kalton, 1996; Cheema, 2014; Pigott, 2001; SPSS, 2009). Cheema (2014) stated that discussions in the literature regarding methods for handling missing data have included sample size, analysis methods, and proportion of missing data, however, recommendations regarding methods for handling missing data and when to apply them have been ambiguous. Eliminating cases that are not complete decreases statistical power (Gelman & Hill, 2006). According to Cheema (2014), the disadvantages of mean imputation, among others, have been documented in the literature; however, researchers in education have used such missing data handling methods. The decision to use such methods is found in the weakness in proficiency of quantitative methodology that is needed to utilize more complex missing data handling methods, and the skill to follow-through that is required in software programs (Cheema, 2014). If 10% or less of the data is missing, mean imputation is acceptable (Cheema, 2014; Ross, 1996). Roth (1994) affirmed that in some situations, mean imputation was better to utilize than listwise deletion and as good as pairwise deletion. In my data, mean, standard deviation, and frequencies were reviewed, and distributions were approximated to normal, allowing for mean imputation.

In Section 1, Statement 6 (I find it hard to cuddle my child) was phrased negatively so the statement was reverse scored. It was then included with the other five statements and coded as the emotion and affection variable. Play and enjoyment, and

empathy and understanding were coded into separate variables. In Section 4, Statement 5 (I can't stop my child behaving badly) was phrased negatively, so that statement was reversed scored. It was then included with the other five statements and coded as the control variable. Discipline and setting boundaries was coded into a separate variable. In Section 6, Statements 1 (It is difficult to cope with other people's expectations of me as a parent), 2 (I am not able to assert myself when other people tell me what to do with my child), and 3 (Listening to other people's advice makes it hard for me to decide what to do with my child) were phrased negatively, so the statements were reversed scored. They were then included with the other three statements and coded as the pressure variable. In Section 7, Statement 3 (I am not doing that well as a parent) was phrased negatively, so the statement was reversed scored. It was then included with the other five statements and coded as the self-acceptance variable. Learning and knowledge was the last variable coded as part of the TOPSE tool.

Nurturance, following through on discipline, consistency and organization were coded into separate variables. For the variable, amount of control, the participant was assigned a score of 1 for each time he/she chose the following answers:

B. Nowadays parents are too concerned about letting children do what they want.

B. Children need more guidance from their parents than they seem to get today.

A. I care more than most parents I know about having my child obey me.

A. I try to prevent my child from making mistakes by setting rules for his/her own good.

B. It is important to set and enforce rules for children to grow up to be happy adults.

Missing values were replaced in SPSS with the random number generator. Amount of control 1 included the B choices, and amount of control 2 included the A choices. Let situation go, material/social, physical punishment, reasoning, scolding the child, and reminding were coded into separate variables as part of the type of control, and was the last variable coded as part of the PDI-S tool.

Positive involvement in child eating (PICE); pressure to eat; use of food to control behavior; and restriction of amount of food were coded into separate variables. Although monitor/limit high calorie foods (MLHCF), a subscale of PICE was included in PICE, the subscale MLHCF was coded as a separate variable to measure against restriction. These variables became part of the PFP Questionnaire.

Descriptive Statistics

Most participants were at least 18 years old, and had read and understood the consent form and agreed to participate in the research study (97.3%). (See Table 1.) There were more female participants (66 %) compared to males (34%). (See Table 2 and Figure 4.) Most of the participants were born in the United States (75.7%). (See Figure 5.) Many of the participants had some college but no degree (27%), while others had a high school degree or equivalent (e.g., GED;19.8%), an Associate (13.5%) or a Bachelor degree (13.5%). (See Figure 6.) For income, many of the participants answered $25,000-$49,999 (35.1%), followed by $50,000-$74,999 (15.3%), $75,000-$99,999 (13.5%), and lastly $0-$24,999 (12.6%). (See Figure 7.) Many of the participants answered Other

(20.7%) for occupation and listed homemaker followed by Community and Social Service Operations (9.9%); and Healthcare Support Occupations (8.1%). (See Figures 8 and 9.) Most of the participants answered overweight (59.5%) followed by about the right weight (25.2%). (See Figure 10.)

Table 1

Percentage of Participants at Least 18 Years of Age Who Read and Understood the Consent Form and Agreed to Participate in the Research Study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	107	96.4	97.3	97.3
	No	3	2.7	2.7	100.0
	Total	110	99.1	100.0	
Missing	System	1	.9		
Total		111	100.0		

Table 2

Percentage of Female and Male Participants

	Frequency		Percent	Valid Percent	Cumulative Percent
Valid	Male	33	29.7	34.0	34.0
	Female	64	57.7	66.0	100.0
	Total	97	87.4	100.0	
Missing	System	14	12.6		
Total		111	100.0		

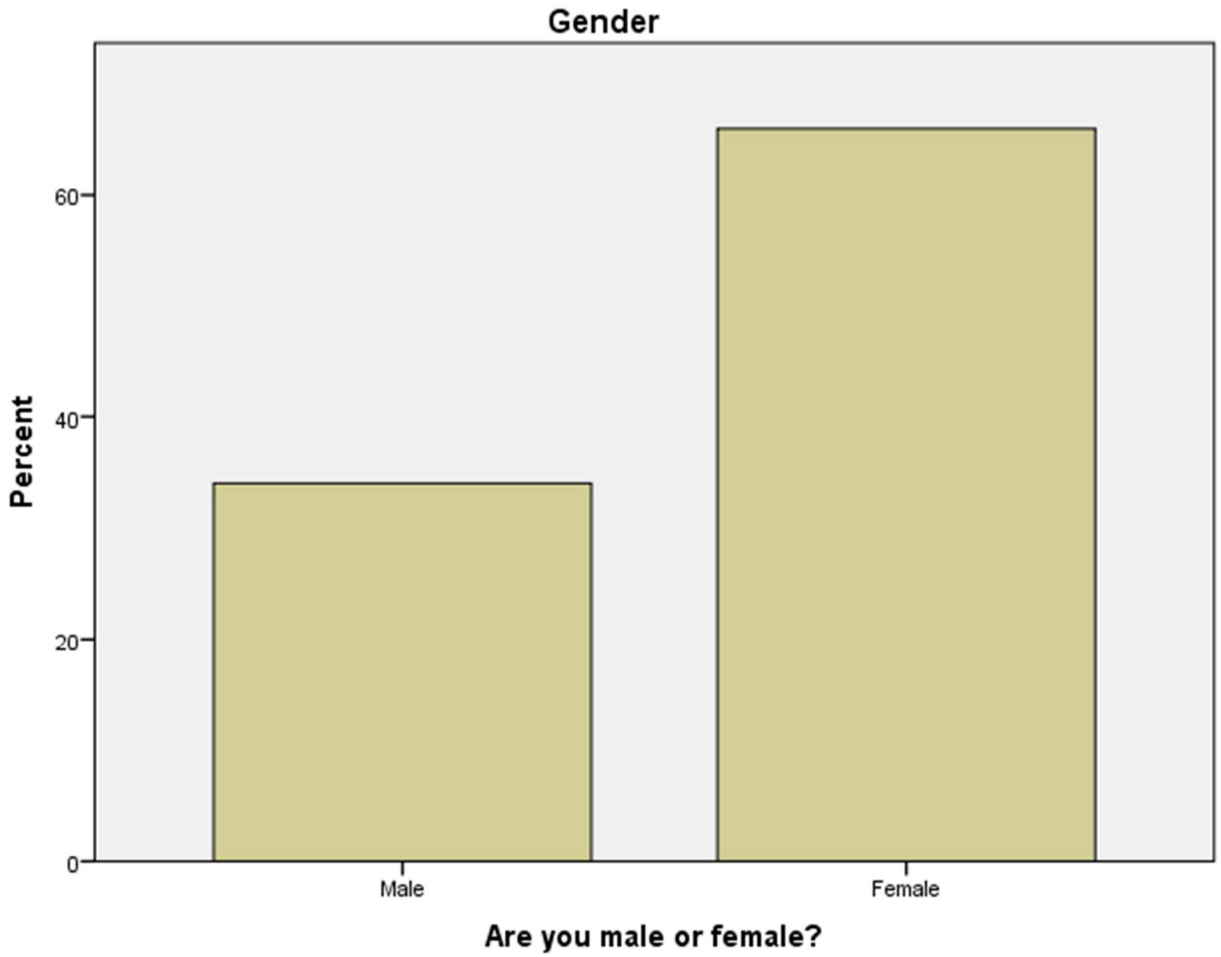

Figure 4. Percentage of female and male participants

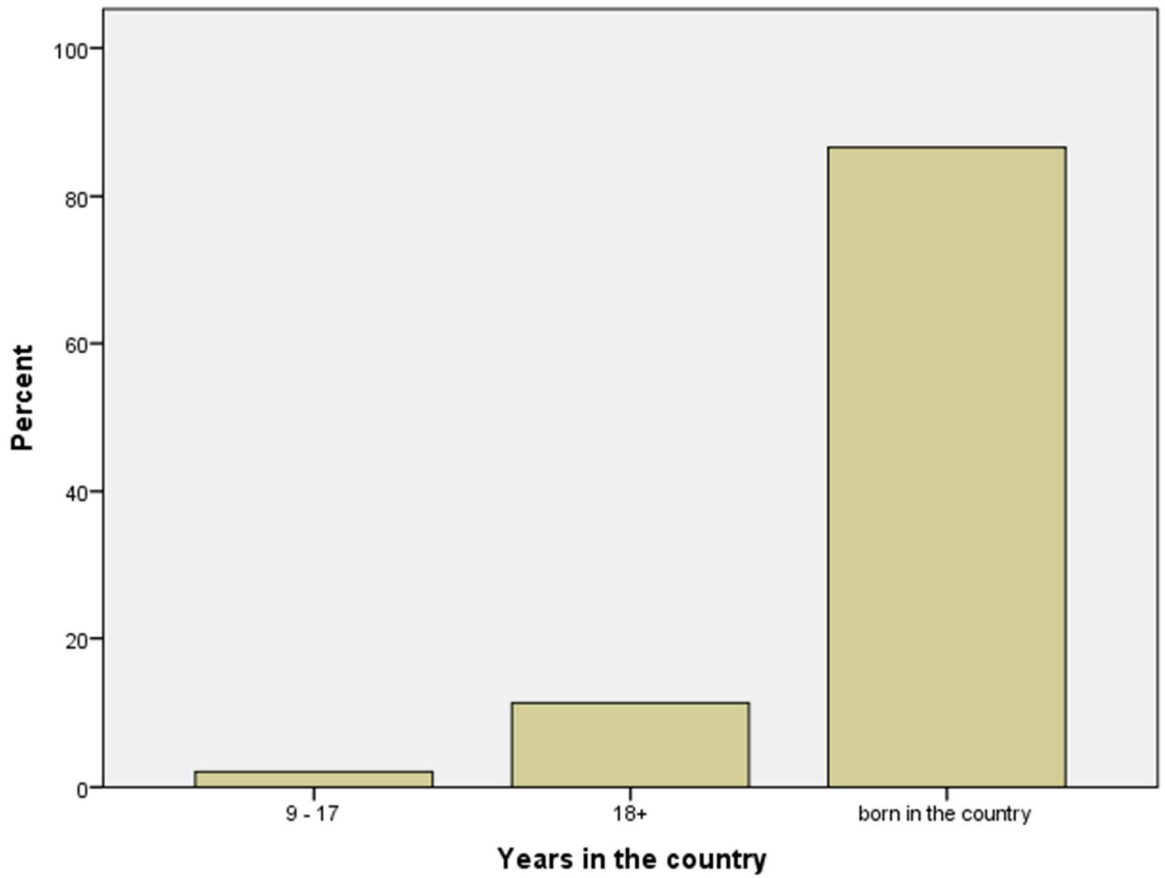

Figure 5. Percentage of participants' years in the United States

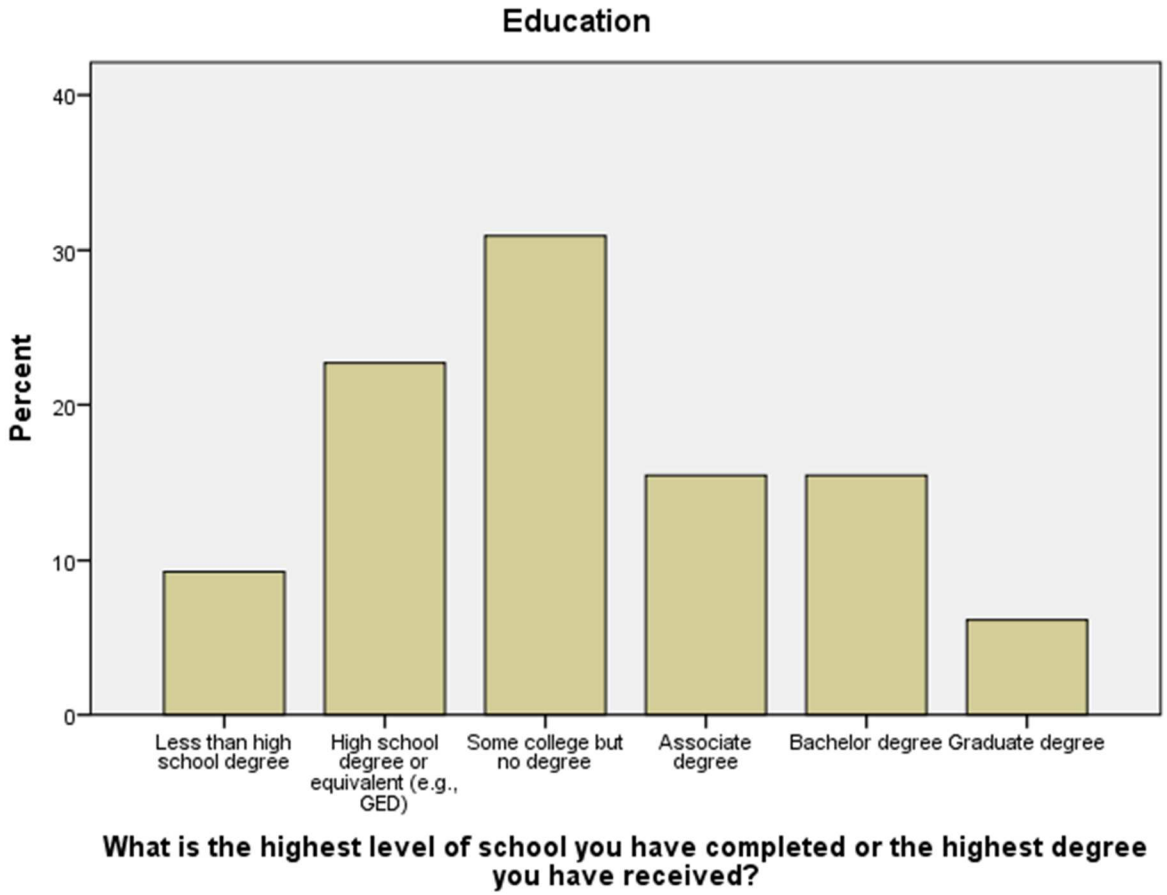

Figure 6. Participants' level of education (given as a percent of the population)

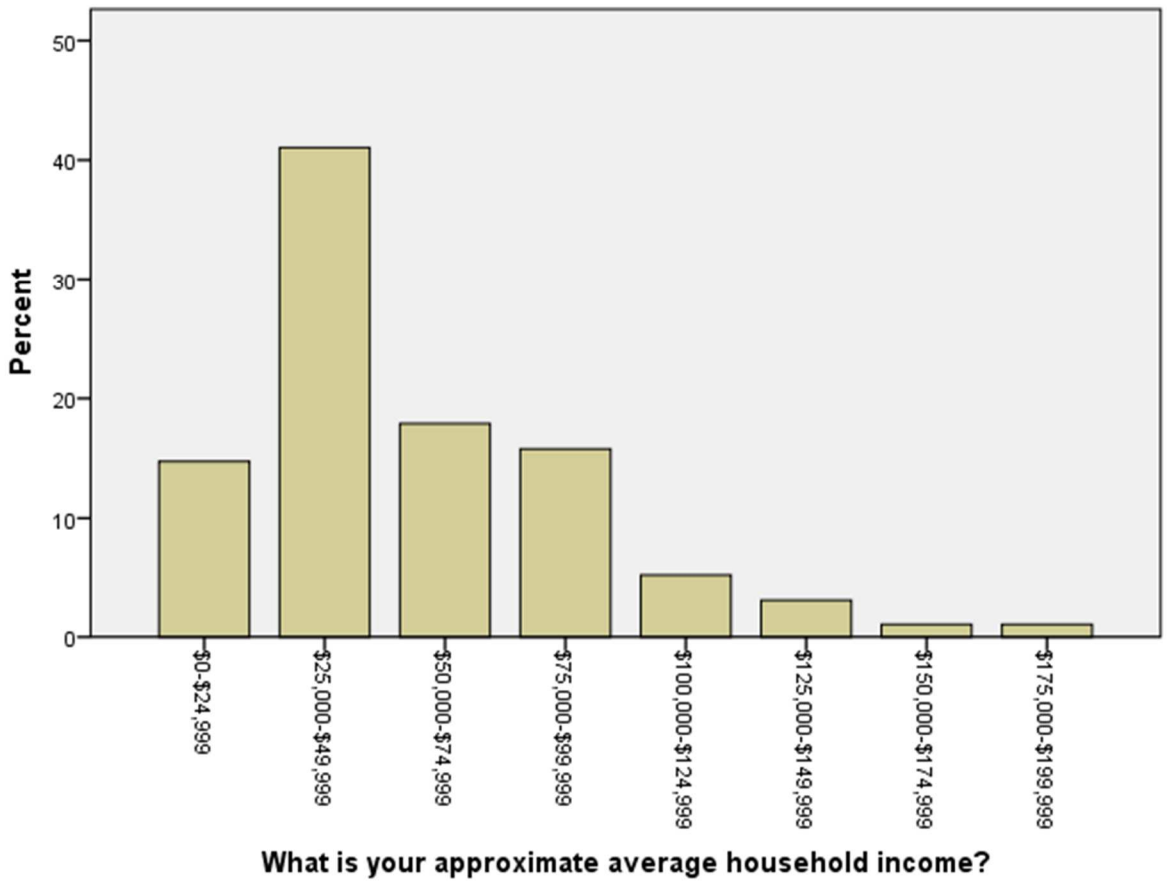

Figure 7. Participants' average household income

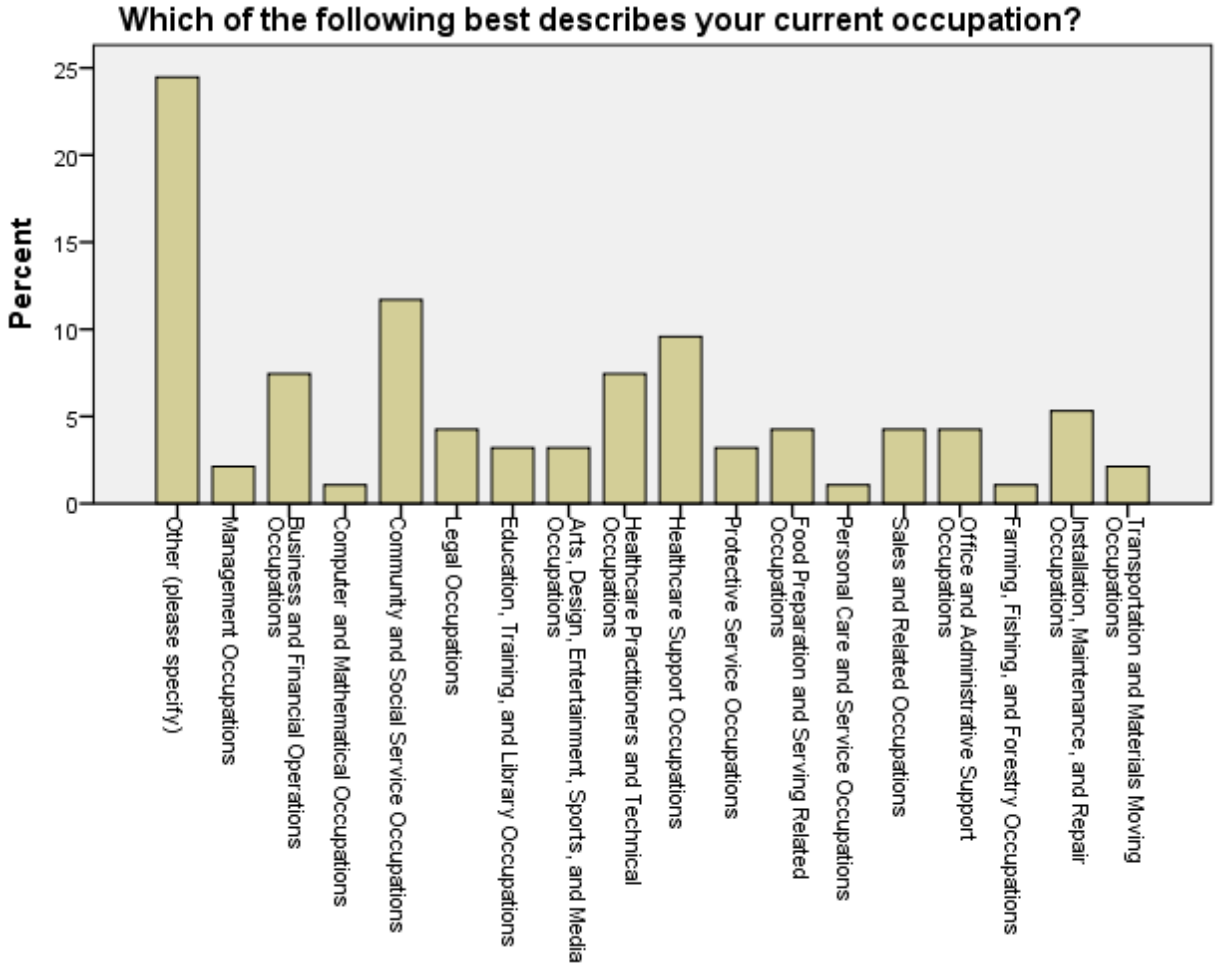

Figure 8. Participants' occupation (given as a percent of the population)

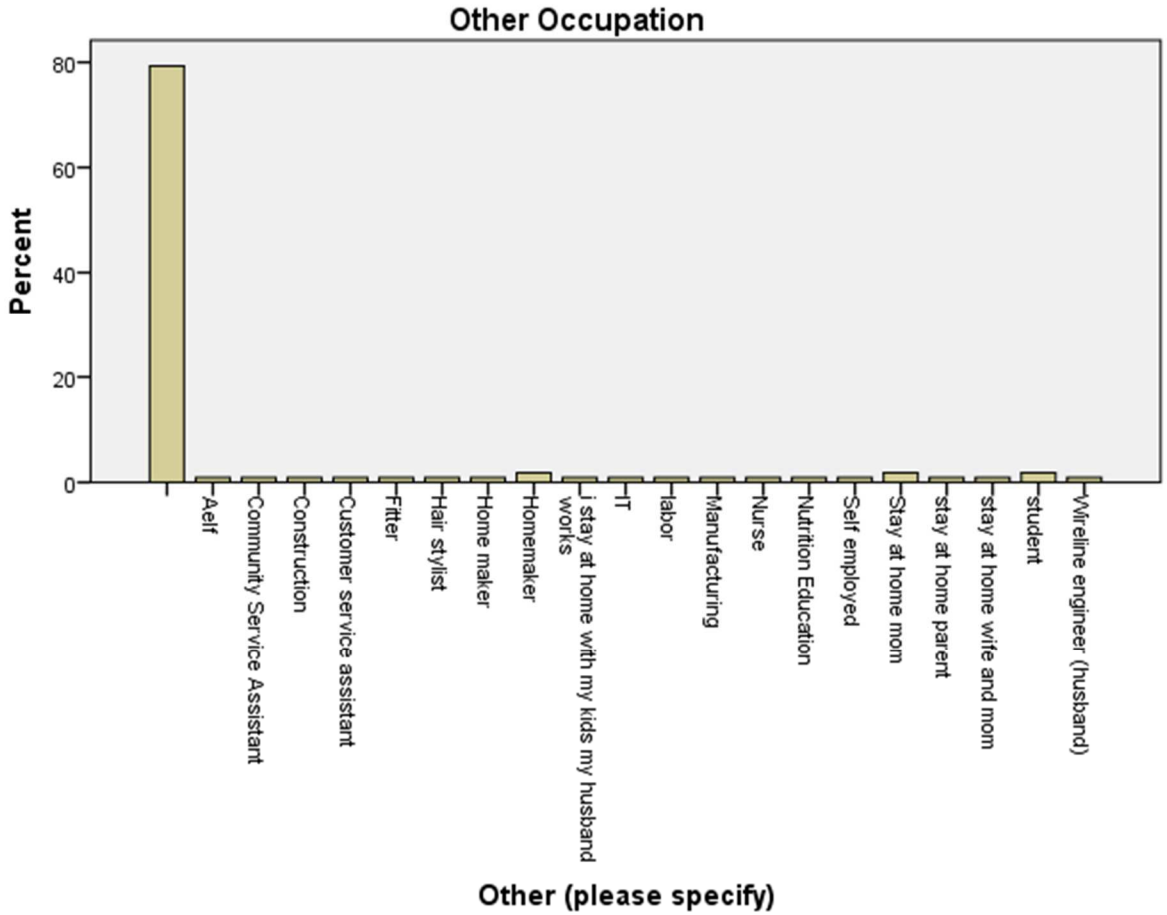

Figure 9. Participants' other occupation (given as a percent of the population

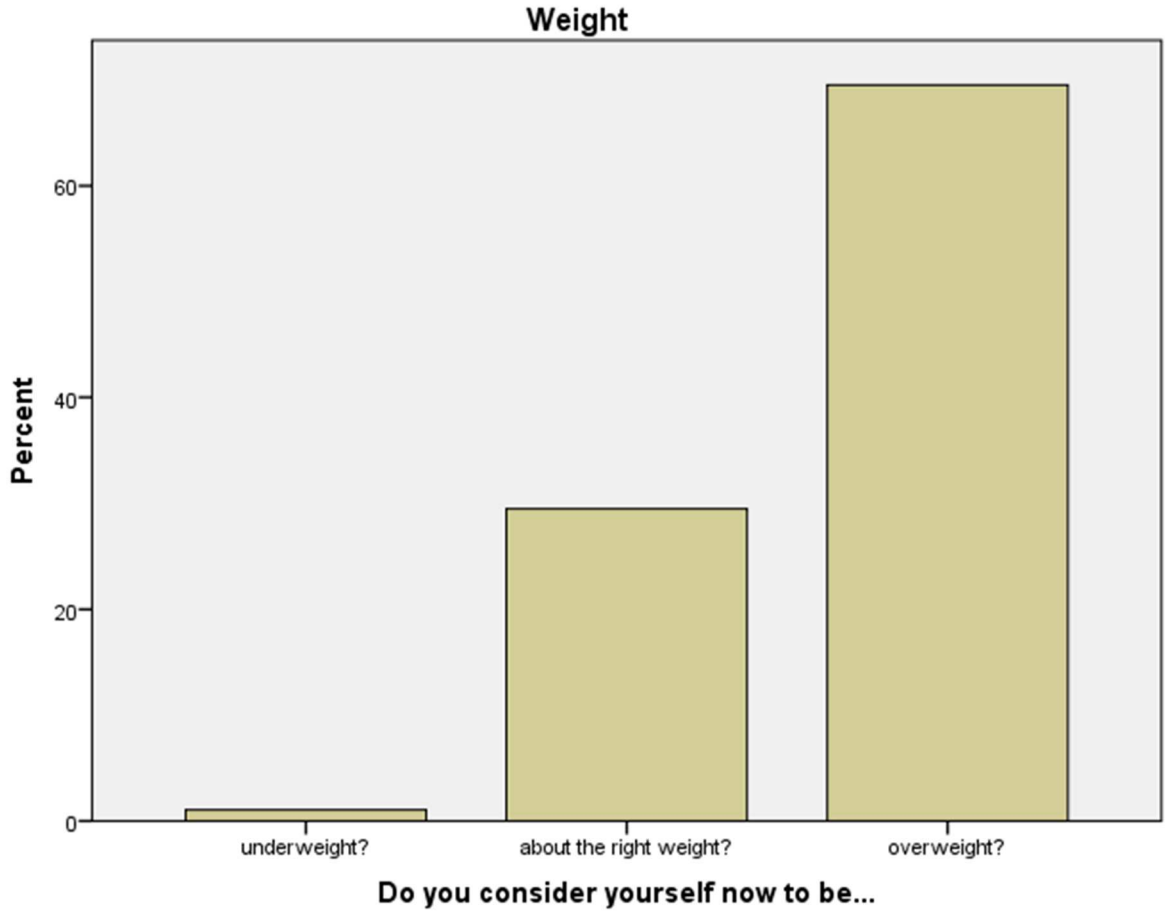

Figure 10. Participant's perception of current weight (given as a percent of the population)

I invited Mexican American mothers and fathers living in Corpus Christi, with at least one child between the ages of 8 and 10. The descriptive and demographic characteristics of the sample have been presented. I drew the sample from the children's hospital, pediatric clinics within and outside of the children's hospital; a mother's group on Facebook; a free program to help combat childhood obesity for families with children ages 7-13, and a Catholic church. A potential limitation of the study was that I could not assess the representativeness of the sample size.

An examination of the data was performed in SPSS, and all the data was plausible. The results reported in this section do not apply to the female child because I am only reporting significant results. To investigate the relationship between parental feeding styles on obesity, as measured by the parental perception of child weight, in Mexican American children residing in Texas, a simple linear regression was conducted. The predictor was *reasoning* (parental feeding style – type of control), and the outcome was the parental perception of child weight: Indicate the boy who most resembles your child. The predictor variable was found to be statistically significant [β = -.065, 95% C.I. (-.124, -.007), $p < .05$], indicating for every one unit increase in *reasoning* the parental perception of child weight: Indicate the boy who most resembles your child changed by - .065 units (see Table 3). The model explained approximately 4.3% of the variability (see Table 4). Therefore, the null hypothesis is partially rejected, and the alternative hypothesis is retained. As parents became more controlling (authoritative) in their feeding styles, their perception of their male child's body became thinner.

Table 3

Predictor Variables Let Situation Go, Reasoning, and Amount of Control,1 and 2. on Obesity, as Measured by Parental Perception of Male Child Weight

Coefficients[a]

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	95.0% CI	
		B	Std. error	Beta			Lower bound	Upper bound
1	(Constant)	2.468	.099	.208	24.817	.000	2.271	2.666
	Let situation go	.049	.022		2.219	.029	.005	.093
2	(Constant)	3.424	.371		9.222	.000	2.688	4.160
	Reasoning	-.065	.030	-.207	-2.211	.029	-.124	-.007
3	(Constant)	3.194	.222		14.388	.000	2.754	3.633
	Amt of Control 1	-.158	.068	-.215	-2.313	.023	-.294	-.023
	Amt of Control 2	-.153	.102	-.140	-1.504	.135	-.355	.049

a Dependent Variable: Parental perception of male child weight

Table 4

Model of Variability of Let Situation Go, Reasoning and Amount of Control1 on Obesity, as Measured by Parental Perception of Male Child Weight

Model summary

					Change statistics				
Model	R	R square	Adjusted R square	Std. error of the estimate	R square change	F change	df1	df2	Sig. F change
1	.208[a]	.043	.034	.766	.043	4.924	1	109	.029
2	.207[b]	.043	.034	.766	.766	4.888	1	109	.029
3	.257[c]	.066	.049	.760	.066	3.825	2	108	.025

a Predictors: (Constant), Let Situation Go
b Predictors: (Constant), Reasoning
c Predictors: (Constant), Amount of Control 1 & 2

To investigate the relationship between parental feeding practices on obesity, as measured by the parental perception of child weight, in Mexican American children residing in Texas, a simple linear regression was conducted. The results reported in this section do not apply to the female child because I am only reporting significant results. The predictor was *use of food to control behavior* (parental feeding practice), and the outcome was the parental perception of child weight: Indicate the boy who most resembles your child. The predictor variable was found to be statistically significant [β = .029, 95% C.I. (.009, .049), $p < .05$], indicating that for every one unit increase in *use of food to control behavior* the parental perception of child weight: Indicate the boy who most resembles your child changed by .029 units (see Table 5). The model explained approximately 7% of the variability (see Table 6). Therefore, the null hypothesis is partially rejected, and the alternative hypothesis is retained. As parents increased their *use of food to control behavior* their perception of their male child's body became heavier.

Table 5

Impact of Use of Food to Control Behavior on Obesity, as Measured by the Parental Perception of Male Child Weight

Coefficients[a]

Model		Unstandardized coefficients		Standardized coefficients			95.0% CI	
		B	Std. error	Beta	t	Sig.	Lower bound	Upper bound
1	(Constant)	2.075	.203		10.205	.000	1.672	2.478
	Use of food to control behavior	.029	.010	.264	2.858	.005	.009	.049

a Dependent Variable: Parental perception of male child weight

Table 6

Model of Variability of Use of Food to Control Behavior on Obesity, as Measured by Parental Perception of Male Child Weight

Model summary

Model	R	R Square	Adjusted R square	Std. error of the estimate	Change statistics				
					R square change	F change	df1	df2	Sig. F change
1	.264[a]	.070	.061	.755	.070	8.170	1	109	.005

a Predictors: (Constant), Use of food to control behavior

To investigate the relationship between parental feeding styles on obesity, as measured by the parental perception of child weight, in Mexican American children residing in Texas, a simple linear regression was conducted. The results reported in this section do not apply to the female child because I am only reporting significant results. The predictor was *amount of control 1* (parental feeding style), and the outcome was parental perception of child weight: Indicate the boy who most resembles your child. The predictor variable was found to be statistically significant [β = -.158, 95% C.I. (-.294, -.023), $p < .05$], indicating that for every one unit increase in *amount of control 1* the parental perception of child weight: Indicate the boy who most resembles your child changed by - .158 units (see Table 3). The model explained approximately 6.6 % of the variability (see Table 4). Therefore, the null hypothesis is partially rejected, and the alternative hypothesis is retained. As parents increased parental control feeding styles, their perception of their male child's body became thinner.

To investigate the relationship between parental feeding styles on obesity, as measured by the parental perception of child weight, in Mexican American children residing in Texas a simple linear regression was conducted. The results reported in this section do not apply to the female child because I am only reporting significant results. The predictor was let situation go (parental feeding style – type of control), and the outcome was the parental perception of child weight: Indicate the boy who most resembles your child. The predictor variable was found to be statistically significant [β = .049, 95% C.I. (.005, .093), $p < .05$], indicating that for every one unit increase in let situation go the parental perception of child weight: Indicate the boy who most resembles

your child changed by .049 units (Table 3). The model explained approximately 4.3% of the variability (see Table 4). Therefore, the null hypothesis is partially rejected, and the alternative hypothesis is retained. As parents became more indulgent/permissive in their feeding styles, their perception of their male child's body became heavier.

As parents became more controlling in their feeding styles, their perception of their male child's body became thinner. Reasoning is a type of control and Amount of Control 1 (greater parental control) are parental feeding styles known as authoritative. It is the only feeding style that has a positive effect on self-regulation of food (Maliszewski et al. 2017) and child weight status. According to Tschann et al. (2013), authoritative feeding styles have supported nutritious eating. In the SurveyMonkey, parents were categorized as reasoning if they "talk to the child (discuss alternatives, your reasons for wanting the child to do or not do something" ; Tschann et al., 2013).

As parents became more indulgent/permissive in their feeding styles, their perception of their male child's body became heavier. Let situation go is a type of control in parental feeding style known as indulgent/permissive. Indulgent/permissive feeding styles have been common among Hispanic parents (Hennessey et al., 2010). It is a feeding style that has had a negative effect on self-regulation of food and child weight status. Indulgent/permissive style**s** have also influenced unhealthy food consumption (Patrick, 2013) which has affected children's' BMI (Vollmer & Mobley, 2013) and resulted in increased risk for overweight and obesity (Patrick, 2013; Vollmer & Mobley, 2013). Among Hispanic boys, Hughes et al. (2011) affirmed associations with indulgent/permissive feeding styles and elevated BMI.

As parents increased their use of food to control behavior their perception of their male child's body became heavier. Use of food to control behavior is a parental feeding practice that also affects child diet and BMI. In a literature review by Berge (2009) parental use of food to control behavior, which included participants from various ethnic groups, resulted in increased BMI for children.

Results

A scatterplot of the standardized predicted value of the dependent on the independent against the standardized residuals were fitted with the Loess Curve. The relationships were approximately linear near zero. The linear relationships were satisfied. The variance of the residuals was also homoscedastic. The Durbin-Watson test statistic values were between 1.5 and 2.5, which are considered relatively normal. The no autocorrelation assumption was satisfied. In the Q-Q plots, the points clustered near the horizontal line. The distributions were normal. The variance inflation factors were not greater than 10. Multicollinearity was not present.

To test the relationship between parental self-efficacy and parental feeding practices and styles of obesity, as measured by the parental perception of child weight, in Mexican American children residing in Texas, after controlling for parental weight, SES, gender, and years in the country, a multiple linear regression analysis was conducted to evaluate the prediction of parental perception of child weight: Indicate the boy who most resembles your child from parental self-efficacy, parental feeding practices, parental feeding styles. The results of the multiple linear regression analysis revealed parental self-efficacy and parental feeding styles not to be statistically significant predictors in the

model ($p > .05$). However, the results of the multiple linear regression analysis revealed a statistically significant association between parental feeding practices. Controlling for covariates (parental weight, SES, gender, and years in the country**)**, the regression coefficient [$\beta = .041$, 95% C.I. (.016, .065) $p < .05$] associated with restriction of amount of food (a parental feeding practice) suggests with each additional *restriction of amount of food*, the parental perception of child weight: Indicate the boy who most resembles your child increased by approximately.041 (see Table 7). The R^2 value of .176 associated with this regression model suggests that the *restriction of amount of food* accounted for 1.7% of the variation in parental perception of child weight: Indicate the boy who most resembles your child, which means that 98.3% of the variation in parental perception of child weight: Indicate the boy who most resembles your child cannot be explained by the variable *restriction of amount of food* alone (see Table 8). The confidence interval associated with the regression analysis does not contain 0, which means the null hypothesis, there is no association between *restriction of amount of food* and parental perception of child weight: Indicate the boy who most resembles your child, can be partially rejected. As parents became more restrictive of food in their feeding practices, their perception of their male child's body became heavier. Results were significant but explained a small portion of the variance in the outcome variables. As parents became more restrictive of food in their feeding practices their perception of their male child's body became heavier. Restriction of amount of food is a parental feeding practice. Hispanic parents seem to favor feeding practices such as restriction of amount of food (Tschann et al., 2013). Restriction of amount of food makes the food more appealing for

children (Tschann et al., 2013; Vaughn et al., 2013). Parents' restriction of amount of food feeding practices resulted in higher BMIs for their children (Musher-Eizenman & Kiefner, 2013; Tschann et al., 2013).

Table 7

Multiple Linear Regression Analysis between Restriction of Amount of Food and Covariates on Obesity, as Measured by Parental Perception of Male Child Weight Coefficients

	Unstandardized coefficients		Standardized coefficients			95.0% CI	
Model	B	Std. error	Beta	t	Sig.	Lower bound	Upper bound
(Constant)	-.259	1.205		-.215	.830	-2.655	2.137
Sex	.094	.174	.055	.539	.592	-.252	.440
Years in the country	.289	.208	.148	1.389	.168	-.125	.704
Highest level of school completed	-.078	.066	-.128	-1.188	.238	-.208	.052
Approximate average household income	.049	.060	.087	.816	.417	-.070	.168
Current occupation	.015	.012	.118	1.166	.247	-.010	.039
Parental weight.	.125	.170	.076	.735	.464	-.213	.462
Restriction of amount of food	.041	.012	.372	3.288	.001	.016	.065

Table 8

Regression Model of Variability of Restriction of Amount of Food on Obesity, as Measured by Parental Perception of Male Child Weight

Model summary

					Change statistics				
Model	R	R square	Adjusted R square	Std. error of the estimate	R square change	F change	df1	df2	Sig. F change
1	.420[a]	.176	.109	.765	.176	2.624	7	86	.017

a. Predictors: (Constant), Restriction of amount of food, Current occupation?, Sex?, Approximate average household income?, Parental weight?, Years in the country?, Highest level of school completed?

Summary

Mexican American mothers and fathers living in Corpus Christi, with at least one child between the ages of 8 and 10, with no existing health conditions that interfered with the child's diet, were invited to take part in a research study of parental self-efficacy and parental feeding practices and styles on obesity, as measured by parental perception of child weight, in Mexican American children in Texas, after controlling for parental weight, SES, gender, and years in the country. There were 111 total responses to the SurveyMonkey. As parents became more controlling in their feeding styles, their perception of their male child's body became thinner. An authoritative feeding style seems to have a positive effect on self-regulation of food (Maliszewski et al. 2017) and child weight status. When parents use reasoning and have a specific amount of control, it appears to support nutritious eating. As parents became more indulgent/permissive in their feeding styles, their perception of their male child's body became heavier. An indulgent/permissive feeding style seems to have a negative effect on self-regulation of food and child weight status (Patrick, 2013). This type of feeding style also appears to influence unhealthy food consumption which can affect child BMI (Maliszewski et al., 2017; Musher-Eizenman & Kiefner, 2013; Vollmer & Mobley, 2013) and result in increased risk for overweight and obesity. An indulgent/permissive feeding style has been common among Hispanic parents (Hennessey et al., 2010).

As parents increased their use of food to control behavior and became more restrictive of food in their feeding practices, their perception of their male child's body became heavier. Parental use of food to control behavior (Berge, 2009) and restriction of

amount of food appear to affect child diet and BMI. Hispanic parents seem to favor restriction of amount of food (Tschann et al., 2013). Parental restriction of amount of food appears to make the food more appealing for children (Tschann et al., 2013; Tschann et al., 2015; Vaughn et al., 2013).

In Chapter 5, I cover the following topics: purpose and nature of the study and why it was conducted, interpretation of the findings, limitations of the study, recommendations, implications for social change, concluding with the key essence of the study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative study was to investigate the gap in the literature on the relationship between? parental self-efficacy and parental feeding practices and styles of obesity, as measured by the parental perception of child weight, in Mexican American children in Texas. The SCT was used to further explain the potential parental influence on children's obesity. The TOPSE questionnaire (Kendall & Bloomfield, 2005) was used to measure parental self-efficacy; the PFQ for Mexican American parents (Tschann et al., 2013) was used to measure parental feeding practices, and the PDI-S (Power, 2002) was used to measure parental feeding styles. A figure rating scale (Lombardo et al., 2014) was used to measure parental perception of child weight. This investigation allowed for important factors to be considered in the design of future interventions for this presently at-risk, underserved, minority population. The study was conducted because Hispanic children between the ages of 6 to 11 years are among the most obese children, males (25.8), females (24.1), in the United States (Ogden et al., 2016); their BMI is at or above the sex-specific 95th percentile on the CDC BMI-for-age growth charts). Children are not self-reliant and need their parents with respect to their nutritional intake (de Lauzon-Guillain et al., 2012; Faith et al., 2012; Lindsay et al., 2012; Sosa, 2012; Vaughn et al., 2013); thus, parents influence their children's weight status (Faith et al., 2012; Vaughn et al., 2013) and ultimately obesity (Sosa, 2012). The study has implications for positive social change: the impact of parental feeding practices and

styles could alter disease and premature death in children of Mexican American origin, allowing for longer and healthier lives for the Hispanic community.

As parents became more authoritative (reasoning and greater parental control) in their feeding styles their perception of their male child's body became thinner. As parents became more indulgent/permissive (let situation go) in their feeding styles their perception of their male child's body became heavier. As parents increased their use of food to control behavior and became more restrictive of food in their feeding practices, their perception of their male child's body became heavier. The results reported in this section do not apply to the female child because I am only reporting significant results.

Interpretation of the Findings

As parents became more controlling in their feeding styles, they perceived their male child's body as thinner. According t**o** Maliszewski et al. (2017), an authoritative feeding style has a positive effect on self-regulation of food and child weight status. When parents used reasoning and had greater parental control, it supported nutritious eating (Tschann et al., 2013). As parents became more indulgent/permissive (let situation go) in their feeding styles, they perceived their male child's body as heavier. An indulgent/permissive feeding style has a negative effect on self-regulation of food and child weight status (Patrick, 2013). This type of feeding style also influences unhealthy food consumption, which can affect child BMI (Maliszewski et al., 2017; Musher-Eizenman & Kiefner, 2013; Vollmer & Mobley, 2013) and result in increased risk for overweight and obesity (Patrick, 2013; Vollmer & Mobley, 2013). An indulgent/permissive feeding style has been common among Hispanic parents

(Hennessey et al., 2010). For Hispanic boys, indulgent/permissive feeding styles have resulted in BMIs at or above the 95th percentile in comparison to Hispanic girls, and Black boys and girls (Hughes et al., 2011).

As parents increased their use of food to control behavior and as they became more restrictive of food in their feeding practices, they perceived their male child's body as heavier. Restriction of amount of food interferes with children's self-regulation of food, because children neglect their internal hunger cues and are then led by parents' use of control (Baronowski et al., 2013; Khandpur et al., 2014; Musher-Eizenman & Kiefner, 2013; Tschann et al., 2013; Tschann et al., 2015). Parental use of food to control behavior (Berge, 2009) and restriction of amount of food affect children's diet and BMI. Hispanic parents seem to favor restriction of amount of food (Tschann et al., 2013). Parental restriction of amount of food makes the food more appealing for children (Tschann et al., 2013; Tschann et al., 2015; Vaughn et al., 2013).

Unhealthy parental feeding styles and practices are among the risk factors that contribute to the occurrence of obesity in children (Patrick, 2013; Power, O'Connor, Fisher, & Hughes, 2015). Results were significant but explained a small portion of the variance in the outcome variables. A deficiency of parental self-efficacy is another risk factor for childhood obesity (Faith et al., 2012; Grossklaus & Marvicsin, 2014; Sosa, 2012). However, the results of the analysis revealed parental self-efficacy not to be a statistically significant predictor in the model.

The theoretical framework for this research was Albert Bandura's social cognitive theory (SCT). The constructs of SCT that have been addressed are outcome expectancies,

outcome expectations, self-efficacy, and impediments (Sosa, 2012). Bandura's use of such constructs has been prevalent in childhood obesity prevention efforts, on parental influences (Sosa, 2012; Vaughn et al., 2013). The outcome constructs allow for the value of behavioral outcomes to be weighed against the costs (Sosa, 2012). Taveras et al. (2009) stated that the degree of self-efficacy has a great influence on an individual's ability to achieve change because the person will persevere through the impediments. And, impediments are the hindrances that affect self-efficacy (Sosa, 2012).

Self-efficacy is a SCT construct and is defined as self-assurance in succeeding at change (Bohman et al., 2013; Faith et al., 2012; Sosa, 2012). Self-efficacy denotes the person's self-assurance to accomplish the behavior (Sosa, 2012). Hypothetical implications asserted by Faith et al. (2012) were that if parents could rate their self-assurance on their ability to succeed in behavioral changes, perhaps childhood obesity could be positively affected (Faith et al., 2012).

Hendy et al. (2009) indicated that SCT, specifically the self-efficacy construct, concerning healthy food selection by parents during meals affected children's ability to do the same. Parents have demonstrated an understanding of food and its effect on health; however, applying the information has been a struggle because of low self-efficacy (Decker; 2012; Lindsay et al., 2012). Parents perceptions of good health, such as healthy weight is also affected by self-efficacy (Grossklaus & Marvicsin, 2014; Sosa, 2012).

Dietary guidelines are provided by the U. S. Department of Agriculture to address healthy weight, for example, by way of MyPlate (Decker, 2012; USDA, 2014). MyPlate assists individuals concerning food group amounts, which also affect calories (USDA,

2014). However, many individuals state that they lack the self-efficacy to follow the USDA guidelines (Decker, 2012). If a parent is going to attempt obesogenic behavior changes, self-efficacy will be necessary so that when the parent faces impediments, the parent will be able to succeed in an outcome that is valuable (Decker, 2012), conquer the problem and achieve the behavior change (Decker, 2012; Sosa, 2012). According to Faith et al. (2012), parents feeding behaviors are affected by perceived parental self-efficacy (Bohman et al. 2013; Faith et al., 2012; Grossklaus & Marvicsin, 2014).

Children rely on their parents for food (Decker, 2012; de Lauzon-Guillain et al., 2012; Faith et al., 2012; Lindsay et al., 2012; Marvicsin & Danford, 2013; Vaughn et al. 2013); parental characteristics such as control/limits and discipline/boundaries are needed to further support efficacy, regarding healthy food decisions (Marvicsin & Danford, 2013). The TOPSE was used to address parental self-efficacy, control/limits, discipline/boundaries, and expand the limited research on childhood obesity (Faith et al., 2012; Grossklaus & Marvicsin, 2014; Sosa, 2012), especially among Mexican Americans. Marvicsin and Danford (2014) focused on two of the nine scales in the TOPSE instrument, control (limits) and discipline (boundaries), which are parental characteristics that can support healthy eating. Parents skilled in areas of control, concerning limits and discipline and concerning boundaries may have an advantage over the child's diet (Marvicsin & Danford, 2013). Based on findings, Marvicsin and Danford reported that average parental self-efficacy, in control, in comparison to high parental self-efficacy according to children's perceptions, resulted in higher BMIs for the child. Conversely, Kahlor et al. (2011) asserted that control for Hispanics in comparison to

Whites and Blacks resulted in unhealthy eating. Kahlor et al. investigated parental perceptions of a healthy child diet and the obstacles parents faced, concerning obesity. Gerards, Hummel, Dagnelie, de Vries, and Kremers (2013) concurred, writing that low parental self-efficacy could also be an impediment that affects the decisions that parents make in how they address their child's food behavior.

Hispanic mothers, according to Cachelin & Thompson (2013) would rather their children have a larger body frame. Children that appeared slim brought thoughts of illness (Centrella-Nigro, 2009; Sosa, 2012) and eventually death, for Mexican American mothers (Sosa, 2012). Awareness of parent's perceptions of healthy weight according to Grossklaus & Marvicsin (2014) is essential. Comprehension of the underlying reasons for these perceptions and of the cognitive processes that are used with regards to feeding behaviors that are affected by their self-efficacy is key to preventative efforts (Grossklaus & Marvicsin, 2014).

Limitations of the Study

Limitations of the study related to the temporal association could not be ascertained and that is why causality could not be established. I used a convenience sample. Mexican American mothers and fathers of children ages 8 to 10 in Corpus Christi, Texas were recruited from a children's hospital; pediatric clinics within and outside of the children's hospital; a mother's group on Facebook; a free program to help combat childhood obesity for families with children ages 7 - 13; and a Catholic church within a 10-month period. This type of sampling limited the generalizability of the results. The representativeness of the sample size could not be assessed. Reporting bias

could have influenced study outcomes because the parental data was based on self-report. Another weakness was the possibility of socially desirable responses by the participants based on the survey design. I attempted to mitigate this weakness by assuring voluntary participation and by keeping parents' responses confidential. The self-reported responses were anonymous and were kept confidential. Views of body size could have become biased simply by figural drawing placement (Gardner & Brown, 2010). Gardner and Brown (2010) stated that figural line drawings that did not include details, such as a face or garments, allowed for the study participant to concentrate on the size of the figure (Gardner and Brown, 2010).

By using mean imputation, the standard errors of estimates were lower (Columbia; Pigott, 2001). Also, the estimated variance and standard deviations were weakened (Columbia, Pigott, 2001), along with covariance and correlations (Columbia) (SPSS, 2009). Regression coefficients (Pigott, 2001) are also biased (SPSS) when using this technique.

Recommendations

The results of the analysis revealed parental self-efficacy not to be a statistically significant predictor in the model. As parents became more controlling (reasoning and greater parental control) in their feeding styles their perception of their male child's body became thinner. As parents became more controlling (indulgent/permissive – let situation go) in their feeding styles, their perception of their male child's body became heavier. As parents increased their use of food to control behavior and became more restrictive of food in their feeding practices, their perception of their male child's body became

heavier. Results were significant but explained a small portion of the variance in the outcome variables. The results reported in this section do not apply to the female child because I am only reporting significant results.

Hispanic children between the ages of 6 to 11 years are among the most obese children in the US (Ogden et al., 2016). An authoritative feeding style seems to have a positive effect on self-regulation of food (Maliszewski et al., 2017) and child weight status. However, an indulgent/permissive feeding style seems to have a negative effect on self-regulation of food and child weight status (Patrick, 2013). Restriction of amount of food also interferes with children's self-regulation of food because the children neglect their internal hunger cues and are then led by parents' use of control (Baronowski et al., 2013; Khandpur et al., 2014; Musher-Eizenman & Kiefner, 2013; Tschann et al., 2013; Tschann et al., 2015).

Healthy feeding styles and practices do not interfere with children's self-regulation of food because the children do not neglect their internal hunger cues and satiety (Pinquart, 2014; Tschann et al., 2015; Vollmer & Mobley, 2013). Though, unhealthy parental feeding styles and practices are among the risk factors that contribute to the occurrence of obesity in children (Patrick, 2013). Professionals working with the Hispanic community should refer parents to local childhood obesity programs such as the free program to help combat childhood obesity for families with children ages 7 - 13.

The Weigh of Life Kids! is a nutrition program that is designed to educate parents of 4 - 8-year-old children about energy balance, healthy cooking, healthy meals and snacks, meal planning/restaurant choices, and national nutrition guidelines. The Weigh to

Go! is a food and fitness program designed to assist overweight children between the ages of 9 - 17 and their families learn about healthy eating habits and nutritious cooking, to name a few. The Adolescent Weight Management Program is a comprehensive nutrition and weight management clinic that offers families a multidisciplinary approach to dealing with childhood obesity. Nutritionists educate the child and family about quality, recommended food group amounts, and serving sizes of healthy foods.

Salud America! The Robert Wood Johnson Foundation Research Network to prevent obesity among Latino children launched and connects an online group of advocates, community leaders, healthcare professionals, parents, policymakers, researchers, and teachers. Professionals working with the Hispanic community need to educate parents on guidance, regarding indulgent/permissive feeding styles (Power et al., 2015). Parental feeding practices, such as restriction of amount of food and use of control, need to be included in obesity prevention interventions; education on hunger cues and portion control should be provided (Tschann et al., 2015).

Research in parental feeding styles and practices and their effects on obesity in Hispanic children has been limited (Maliszewski et al., 2017; Tschann et al., 2015). Among the Hispanic subgroups, 63 - 64% of the population was Mexican Americans (Tschann et al., 2015; USCB, 2014). Childhood obesity programs and prevention efforts, such as through the research conducted by Salud America!, is more cost effective than management of the secondary comorbidities that require hospital treatment. The effects of obesity on Hispanic children are often coupled with diseases and disorders such as diabetes mellitus (Maliszewski et al., 2017), asthma, (Flores et al., 2012; Maliszewski et

al., 2017), and psychosocial disorders (Maliszewski et al., 2017). Emphasizing prevention and educating parents on the outcomes of fostering such behaviors could allow for increased parental support against childhood obesity (Sosa, 2012).

Implications

Causes of obesity in Hispanic children continue to be researched. Salud America! also provides regional customized data regarding health, including county-level statistics, such as percent population, and the uninsured. Obesity in Hispanic children continues to increase in South Texas. With the percent population for Mexican-Americans higher than any other subgroup in the Hispanic group, indicators such as percent population and uninsured information are vital. Hispanic children suffer from lack of insurance (Maliszewski et al., 2017), 50% more than White children and receive referrals to medical specialists 50% less than White children (Branscum & Sharma, 2011). This population cannot afford such a barrier.

Parents have an impact on whether a child will become obese (Sosa, 2012). This effect begins in the home environment which also has a crucial influence on children's food habits (Vaughn et al., 2013). Children between the ages of 2 and 12 (Vaughn et al., 2013) depend on their parents for their dietary intake (Decker, 2012; de Lauzon-Guillain et al., 2012; Faith et al., 2012; Lindsay et al., 2012; Marvicsin & Danford, 2013; Vaughn et al., 2013), which is why children of this age group continue to be important to address, concerning obesity.

In obesity intervention programs, exploration of feeding styles and practices will allow professionals to personalize parental control of meals, such as focusing on healthy

choices that the child is attempting and encouraging foods from all groups daily (Maliszewski et al., 2017). Parents also need to be made aware that they should not be a short-order cook; they should simply offer the child to select from the meal that has been prepared (Maliszewski et al., 2017). Restriction, a form of control in parental feeding practices, also needs to be addressed. Restriction of amount of food, according to Tschann et al. (2015), will force the child to ignore internal hunger cues. Professionals need to educate Mexican American parents on the importance of allowing the child to focus on internal hunger cues, so weight status is not negatively impacted.

Awareness of parent's perceptions of healthy weight according to Grossklaus & Marvicsin (2014) is also essential, for professionals working with the Hispanic community. Strengthening culturally competent obesity prevention strategies requires the role of the environment on individuals' behaviors to be addressed. Parental health behaviors are impacted by interpersonal, institutions and organizations, community, and structures and systems (CDC, 2013). Individual relationships, support groups, social networks, and culture context are part of the interpersonal circle, so for an obesity prevention strategy to be successful, attention should be given to culture (CDC, 2013), for this Mexican American population.

Hispanic children between the ages of 6 to 11 are among the most obese children, males (25.8), females (24.1), in the US (Ogden et al., 2016). To strive to reduce the obesity rates in children, parents should be included as part of the solution, because they contribute to many of the known risk factors (Sosa, 2012), such as unhealthy feeding practices and feeding styles (Patrick, 2013).This study is original because it focused on

an issue of childhood obesity that has lacked investigation about the relationship of parental feeding practices and styles of obesity (Grossklaus & Marvicsin, 2014; Patrick, 2013; Sosa, 2012) in Mexican American children (Sosa, 2012) in Texas. The findings from this investigation may afford the further understanding of the impact of parental practices and styles on the effectiveness of obesity interventions targeting Mexican American children (Sosa, 2012; Tschann et al., 2013) in Texas. The implications of the positive social change from my study could include the impact of parental feeding practices and styles in altering disease and premature death in children of Mexican American origin, and perhaps allowing for longer and healthier lives for the Hispanic community.

Conclusion

The study was conducted because Hispanic children between the ages of 6 to 11 are among the most obese in the US. An authoritative feeding style seems to have a positive effect on self-regulation of food and child weight status. Indulgent/permissive style**s** have influenced unhealthy food consumption which has affected child BMI and resulted in increased risk for overweight and obesity. Restriction of amount of food interfere with children's self-regulation of food because the children neglect their internal hunger cues and are then led by parents' use of control. Use of food to control behavior is a parental feeding practice that also affects child diet and BMI.

The lack of control (indulgent/permissive style) concerning child feeding could be a reason because it leaves the child to struggle with decisions about what is considered healthy food. Parental restriction of amount of food appears to make the food more

appealing for children. This quantitative investigation may allow for important factors to be considered in the design of future interventions for this presently at-risk, underserved minority population. Obesity interventions need to include education regarding how parents respond to child hunger cues, the adverse effects of the amount and type of control, regarding parental feeding styles and controlling feeding practices, such as restriction of amount of food and use of food to control behavior. Parents may not be aware of the effect of their parental practices but with some guidance may understand the impact on the outcome and choose healthier practices. They also need to receive knowledge on authoritative feeding styles such as reasoning. These types of feeding practices have supported nutritious eating and have been linked to healthy BMI percentiles. Lastly, for professionals working with the Hispanic community, parents that are taking part in interventions may benefit if culture is considered, regarding the parental perception of child weight. Perhaps, these interventions will someday allow for a more preventative approach. decreasing secondary comorbidities and allowing for healthier lives for the Hispanic community. The implication for positive social change could involve the further understanding of the impact of feeding practices and styles on the effectiveness of obesity interventions and perhaps on morbidity and mortality in Mexican American children, especially boys, in Texas.

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Appendix A: Permission Letters from Developers to Use Instruments

Maria Goodwin 6/28/14

to
s.kendall

Good Evening Dr. Kendall,

My name is Carmen Goodwin. I am a PhD student working on my dissertation. I am considering utilizing the Tool to Measure Parenting Self-Efficacy questionnaire, associated with eating habits and physical activity. My chair is requesting a copy of the questionnaire. I am requesting a copy as stated in your article: Developing and validating a tool to measure parenting self-efficacy. Thank you in advance.

Respectfully,

Carmen Goodwin, PhD (ABD)
Walden University
Public Health Program, Community and Health Promotion
7/1/14

Ikioda, Faith 3:36 AM (18 hours ago)

to
me

Dear Maria
Thank you for your email. Unfortunately Linda Bloomfield has now retired from the University of Hertfordshire and I now deal with the TOPSE queries. Concerning your request for the TOPSE tool, do find the instructions below.

You may access and download the TOPSE PDF tool at our website:

www.topse.org.uk.

On the site under main Menu on the right hand side, select the option for "How to access TOPSE" or go to http://www.topse.org.uk/site/index.php?option=com_rsform&view=rsform&Itemid=173

Complete the registration form

Once registration is complete, the tool will be available immediately as a PDF document for you to download.

WE do ask that you do not make any changes to TOPSE and that you acknowledge our work in any publications.

If you have any further questions, please do not hesitate to contact me.

Best wishes

Dr Faith Ikioda
Research Fellow,
Centre for Research into Primary and Community Care, CRIPACC
University of Hertfordshire
College Lane Campus
01707285286
[redacted]

From: Maria Goodwin [redacted]
Sent: Tuesday, March 17, 2015 11:36 AM
To: Power, Thomas
Cc: Paula Scott
Subject: Parenting Dimensions Inventory (PDI-S)

Good Afternoon Dr. Powers,

I am a PhD Student in need of a copy of the Parenting Dimensions Inventory (PDI-S). If you would permit me a copy, I am also requesting use of the PDI-S for my research. Any assistance with this request would be appreciated.

Carmen Goodwin
PhD Student
Walden University

From: Power, Thomas
Sent: Tuesday, March 17, 2015 5:07 PM
To: Maria Goodwin
Subject: RE: Parenting Dimensions Inventory (PDI-S)

Hi Carmen:

Attached is the PDI-S, the research manual, and a list of sample publications. Good luck with your research!

Tom

Thomas G. Power, Ph.D.
Professor
Department of Human Development
Prevention Science Graduate Faculty
Washington State University
P.O. Box 644852
Pullman, WA 99164-4852
[redacted]

3 Attachments

Preview attachment PDI Short Version.doc

PDI Short Version.doc

Preview attachment PDI-S Manual.doc

PDI-S Manual.doc

Preview attachment PDI References.doc

PDI References.doc

3/21/15

Maria Goodwin [redacted] 3:37 PM (21 hours ago)

to tschannj

Good Afternoon Dr. Tschann,

I am a PhD student working on my dissertation. I am requesting permission to use the Parental Feeding Practices questionnaire for use with Mexican-American parents. Thank you in advance.

Respectfully,
Carmen Goodwin
PhD Student
Walden University

Tschann, Jeanne [redacted] 12:43 PM (7 minutes ago)

to me

Dear Carmen Goodwin,
I am pleased that you want to use the PFP questionnaire. Since it is in the public domain, you don't have to ask for my permission. Of course, you will cite my paper that describes the PFP when you publish your findings!
Best wishes on your work,
Jeanne Tschann

Jeanne Tschann, Ph.D.
Professor of Psychology
Department of Psychiatry
Box 0848
Laurel Heights, Suite 465
University of California, San Francisco
San Francisco, CA 94143
[redacted]

Maria Goodwin [redacted] 11/9/14

to Sheryl

Good Morning Dr. Hughes,

I am replying to this previous request as a reminder to our past communication. You stated, "Let me know if you need anything else". I am requesting permission to use the following:

Figure 2. Typological Approach to Feeding

Hughes, S.O., Shewchuk, R.M., Nicklas, T.A., & Qu, H. (2008). Indulgent feeding style and children's weight status in preschool, Journal of Developmental and Behavioral Pediatrics, 29, 403-410. doi: 10.1097/DBP.0b013e3181182a976

Thank you in advance,

Carmen Goodwin, PhD (ABD)
Walden University

Hughes, Sheryl O [redacted] 11/10/14

to me

Hi Maria,

Yes, you can use the figure from the publication stated below.

Do you need a copy of it or can you get it from the pub?

Let me know.

sheryl

Sheryl O. Hughes, PhD
Associate Professor
Children's Nutrition Research Center
Baylor College of Medicine
1100 Bates
Houston, TX 77030
[redacted]

Maria Goodwin [redacted] Sep 16 (10 days ago)

to
caterina.lomba. ,
gemma.battagli. ,
lina.pezzuti ,
Fabio.lucidi

Good Evening/Morning,

My name is Maria Goodwin. I am a PhD Candidate in Public Health with Walden University in the United States. My research question:

What is the relationship between parental efficacy and parental feeding practices and styles on obesity, as measured by parental perception of child weight, in Mexican American children residing in Texas, after controlling for parental weight, SES, gender, and years in country?

Are the silhouettes that were custom-drawn by a professional artist to represent realistic line-drawn body forms available for viewing? For doctoral researchers?

Thank you in advance.

Respectfully,

Maria de Carmen Goodwin
PhD Candidate
Walden University
Public Health

Caterina Lombardo Sep 22 (4 days ago)

to me

Dear Maria Goodwin
sorry for the delay of my answer: I was abroad for an international meeting.
Attached please find the images we used in the following study:

Lombardo, C., Battagliese, G., Pezzuti, L., Lucidi, F.: Validity of a figure rating scale assessing body size perception in school-age children (2014) Eating and Weight Disorders, 19 (3), pp. 329-336. DOI: 10.1007/s40519-013-0085-0

There are two sets of images, one for female and one for male children. They should be preceded by appropriate instructions (as described in the paper).
If you are interested, you can use them citing the paper.

Thank you for your interest.

Best regards
Caterina

--
Caterina Lombardo, PhD
Professor of Clinical Psychology
Department of Psychology
Sapienza University of Rome
[redacted]
Attachments area
Preview attachment Figurine bambini.doc

Figurine bambini.doc

Appendix B: Letter of Intent

Maria Goodwin
[redacted]

October 12, 2015

Juleros Nazareno
IRB Monitor
[redacted] Children's Hospital
[redacted]

Dear Juleros Nazareno:

The Institutional Review Board has approved my application for the study entitled, "Parental Self-Efficacy, Feeding Practices and Styles and Obesity in Mexican American Children," conditional upon the approval of the community research partner ([redacted] Children's Hospital), which will need to be documented in signed notifications of approval. Walden's IRB approval only goes into effect once the Walden IRB confirms receipt of those notifications of approval. I am submitting this letter with the intent to post flyers ***at [redacted] and any of its off-site affiliations such as The [redacted] Clinic, [redacted], etc. And, I have received permission to post flyers at [redacted] Elementary, located on [redacted] and [redacted]***, in order to recruit volunteers needed for survey participation. ***The specific area this research study will be conducted will be online.***

The intent is based on the following conditions: submission of NIH certificate of training, proposal document, informed consent, instruments, flyer, and cover memo. The aforementioned documents are for review in order to determine if the research study qualifies for an exempt or expedited IRB review, pending risk category of the study. ***All of the aforementioned conditions have been met.***

The following precautions will be taken to protect participant confidentiality: I have designed an anonymous consent and data collection procedures so that identities are completely protected even from me, the researcher. I will not retain a link between study code numbers and direct identifiers after the data collection is complete. I will not provide an identifier or potentially identifying link to anyone else besides myself.

> Anonymous surveys rely on implicit endorsement rather than obtaining a signed endorsement. In other words, instead of collecting a signature the researcher will

instruct the participant to click yes on the page, which will indicate that the individual is at least 18 years old, has read and understood the consent form and agrees to participate in the research study. The participant will be instructed to print or save the consent form for their records. The flyers will be posted and the survey will be made available for approximately one month or until the sample size is reached.

Respectfully,

Maria Goodwin

Appendix C: Letter of Cooperation from a Research Partner

[redacted] Children's Hospital
[redacted]
Corpus Christi, TX 78411

December 11, 2015

Dear Maria Goodwin,

Based on my review of your research proposal, I give permission for you to conduct the study entitled Parental Feeding Self-Efficacy, Feeding Practices and Styles, and Obesity in Mexican American Children within [redacted] Children's Hospital. As part of this study, I authorize you to allow mothers and fathers to be invited to participate in the study through flyers introducing the research. Each participant will complete self-administered surveys. The surveys will contain informed consent, the Tool to Measure Parenting Self-Efficacy questionnaire (Kendall & Bloomfield, 2005) in order to measure parental self-efficacy, the Parental Feeding Practices Questionnaire (Tschann et al., 2013) for Mexican American parents, in order to measure parental feeding practices, the Parenting Dimensions Inventory-Short-form (Power, 2002), in order to measure parental feeding styles, and a figure rating scale (Lombardo, Battagliese, Pezzuti, & Lucidi. 2014). Demographic questions will also be included. The researcher will provide the results of the study via email to [redacted] Children's Hospital ([redacted]) (to include [redacted] Pediatrics, The [redacted] Clinic), and [redacted] Elementary School, where the sample will be generated. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: [redacted] *will insert a description of all areas that the partner will provide.* We reserve the right to withdraw from the study at any time if our circumstances change.

The student will be responsible for complying with our site's research policies and requirements, including [redacted] *will describe requirements*.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

Juleros Nazareno
[redacted] Children's Hospital

Institutional Review Board
[redacted]
Corpus Christi, TX 78411
Phone: (361) [redacted]
Fax: (361) [redacted]
Email: Juleros.Nazareno@dchstx.org

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verify any electronic signatures that do not originate from a password-protected source (i.e., an email address officially on file with Walden).

Appendix D: Flyer for Inviting Research Participants

Volunteers Needed for Research Study: "Parental Self-Efficacy, Feeding Practices and Styles and Obesity in Mexican American Children"

Description: Investigating the relationship of parental self-efficacy (*the level of confidence that a parent has with respect to basic childrearing skills)* and feeding practices and styles on obesity in Mexican American children in Texas. Participation will take about 45 minutes. You are being asked to complete surveys at http://surveymonkey.com/r/mCGdc16 Please tear off a tab at the bottom of this flyer.

To participate: You must be at least 18 years old; a parent of at least one child between the ages of 8 and 10 who does not have any health conditions that interfere with their diet, and be English-speaking.

If you have questions or concerns, contact the principle investigator of the study, Maria Goodwin, at [redacted]

This research is conducted under the direction of Dr. Peter B. Anderson, Health Sciences Department, and has been reviewed and approved by the Walden University Institutional Review Board.

Maria Goodwin http://surveymonkey.com /r/mCGdc16
Maria Goodwin http://surveymonkey.com /r/mCGdc16
Maria Goodwin http://surveymonkey.com /r/mCGdc16
Maria Goodwin http://surveymonkey.com /r/mCGdc16
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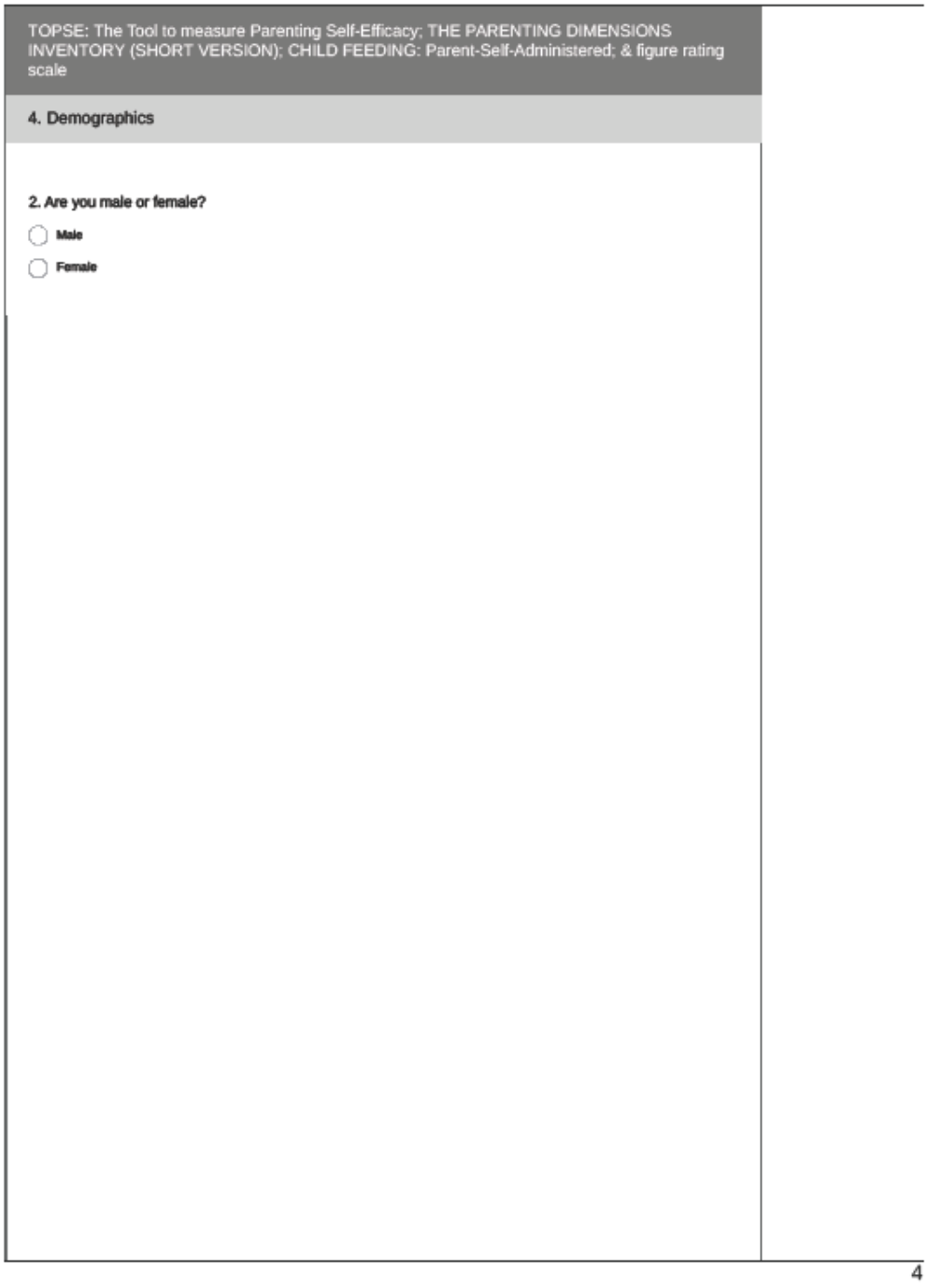
Maria Goodwin http://surveymonkey.com /r/mCGdc16

Appendix E: TOPSE, PDI-S, PFP, and Figure Rating Scale


TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

4. Demographics

2. Are you male or female?

- Male
- Female

4

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

5. Demographics continued

3. Years in the country

- ◯ 0 - 8
- ◯ 9 - 17
- ◯ 18+
- ◯ born in the country

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

6. Demographics continued

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

- ◯ Less than high school degree
- ◯ High school degree or equivalent (e.g., GED)
- ◯ Some college but no degree
- ◯ Associate degree
- ◯ Bachelor degree
- ◯ Graduate degree

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

7. Demographics continued

5. What is your approximate average household income?

- ◯ $0-$24,999
- ◯ $25,000-$49,999
- ◯ $50,000-$74,999
- ◯ $75,000-$99,999
- ◯ $100,000-$124,999
- ◯ $125,000-$149,999
- ◯ $150,000-$174,999
- ◯ $175,000-$199,999
- ◯ $200,000 and up

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

8. Demographics continued

6. Which of the following best describes your current occupation?

- ◯ Management Occupations
- ◯ Business and Financial Operations Occupations
- ◯ Computer and Mathematical Occupations
- ◯ Architecture and Engineering Occupations
- ◯ Life, Physical, and Social Science Occupations
- ◯ Community and Social Service Occupations
- ◯ Legal Occupations
- ◯ Education, Training, and Library Occupations
- ◯ Arts, Design, Entertainment, Sports, and Media Occupations
- ◯ Healthcare Practitioners and Technical Occupations
- ◯ Healthcare Support Occupations
- ◯ Protective Service Occupations
- ◯ Food Preparation and Serving Related Occupations
- ◯ Building and Grounds Cleaning and Maintenance Occupations
- ◯ Personal Care and Service Occupations
- ◯ Sales and Related Occupations
- ◯ Office and Administrative Support Occupations
- ◯ Farming, Fishing, and Forestry Occupations
- ◯ Construction and Extraction Occupations
- ◯ Installation, Maintenance, and Repair Occupations
- ◯ Production Occupations
- ◯ Transportation and Materials Moving Occupations
- ◯ Other (please specify)

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

9. Demographics continued

7. Do you consider yourself now to be...

- ◯ underweight?
- ◯ about the right weight?
- ◯ overweight?

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

10. TOPSE: The Tool to measure Parenting Self-Efficacy

There are no right or wrong answers. Your answers will remain confidential.

Using the scale below, please select the number associated with how much you agree with each statement.
The scale ranges from 0 (completely disagree) to 10 (completely agree).
You may select any number between 0 and 10.

8. The following section is about emotion and affection.

	0 Completely disagree	1	2	3	4	5 Moderately agree	6	7	8	9 Completely agree	10
I am able to show affection towards my child.	○	○	○	○	○	○	○	○	○	○	○
I can recognize when my child is happy or sad.	○	○	○	○	○	○	○	○	○	○	○
I am confident my child can come to me if they're unhappy.	○	○	○	○	○	○	○	○	○	○	○
When my child is sad I understand why.	○	○	○	○	○	○	○	○	○	○	○
I have a good relationship with my child.	○	○	○	○	○	○	○	○	○	○	○
I find it hard to cuddle my child.	○	○	○	○	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

11. TOPSE: The Tool to measure Parenting Self-Efficacy

Using the scale below, please select the number associated with how much you agree with each statement.
The scale ranges from 0 (completely disagree) to 10 (completely agree).
You may select any number between 0 and 10.

9. The following section is about play and enjoyment.

	0 Completely disagree	1	2	3	4	5 Moderately agree	6	7	8	9 Completely agree	10
I am able to have fun with my child.	○	○	○	○	○	○	○	○	○	○	○
I am able to enjoy each stage of my child's development.	○	○	○	○	○	○	○	○	○	○	○
I am able to have nice days with my child.	○	○	○	○	○	○	○	○	○	○	○
I can plan activities that my child will enjoy.	○	○	○	○	○	○	○	○	○	○	○
Playing with my child comes easily to me.	○	○	○	○	○	○	○	○	○	○	○
I am able to help my child reach their full potential.	○	○	○	○	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

12. TOPSE: The Tool to measure Parenting Self-Efficacy

Using the scale below, please select the number associated with how much you agree with each statement.
The scale ranges from 0 (completely disagree) to 10 (completely agree).
You may select any number between 0 and 10.

10. The following section is about empathy and understanding.

	0 Completely disagree	1	2	3	4	5 Moderately agree	6	7	8	9 Completely agree	10
I am able to explain things patiently my child.	○	○	○	○	○	○	○	○	○	○	○
I can get my child to listen to me.	○	○	○	○	○	○	○	○	○	○	○
I am able to comfort my child.	○	○	○	○	○	○	○	○	○	○	○
I am able to listen to my child.	○	○	○	○	○	○	○	○	○	○	○
I am able to put myself in my child's shoes.	○	○	○	○	○	○	○	○	○	○	○
I understand my child's needs.	○	○	○	○	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

13. The Tool to measure Parenting Self-Efficacy

Using the scale below, please select the number associated with how much you agree with each statement.
The scale ranges from 0 (completely disagree) to 10 (completely agree).
You may select any number between 0 and 10.

11. The following section is about control.

	0 Completely disagree	1	2	3	4	5 Moderately agree	6	7	8	9 Completely agree	10
As a parent I feel I am in control. .	○	○	○	○	○	○	○	○	○	○	○
My child will respond to the boundaries I put in place.	○	○	○	○	○	○	○	○	○	○	○
I can get my child to behave well without a battle.	○	○	○	○	○	○	○	○	○	○	○
I can remain calm when facing difficulties.	○	○	○	○	○	○	○	○	○	○	○
I can't stop my child behaving badly.	○	○	○	○	○	○	○	○	○	○	○
I am able to stay calm when my child is behaving badly.	○	○	○	○	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

14. TOPSE: The Tool to measure Parenting Self-Efficacy

Using the scale below, please select the number associated with how much you agree with each statement.
The scale ranges from 0 (completely disagree) to 10 (completely agree).
You may select any number between 0 and 10.

12. The following section is about discipline and setting boundaries.

	0 Completely disagree	1	2	3	4	5 Moderately agree	6	7	8	9 Completely agree	10
Setting limits and boundaries is easy for me.	○	○	○	○	○	○	○	○	○	○	○
I am able to stick to the rules I set for my child.	○	○	○	○	○	○	○	○	○	○	○
I am able to reason with my child.	○	○	○	○	○	○	○	○	○	○	○
I can find ways to avoid conflict.	○	○	○	○	○	○	○	○	○	○	○
I am consistent in the way I use discipline.	○	○	○	○	○	○	○	○	○	○	○
I am able to discipline my child without feeling guilty.	○	○	○	○	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

15. TOPSE: The Tool to measure Parenting Self-Efficacy

Using the scale below, please select the number associated with how much you agree with each statement.
The scale ranges from 0 (completely disagree) to 10 (completely agree).
You may se lectany number between 0 and 10.

13. The following section is about pressures.

	0 Completely disagree	1	2	3	4	5 Moderately agree	6	7	8	9 Completely agree	10
It is difficult to cope with other people's expectations of me as a parent	○	○	○	○	○	○	○	○	○	○	○
I am not able to assert myself when other people tell me what to do with my child.	○	○	○	○	○	○	○	○	○	○	○
Listening to other people's advice makes it hard for me to decide what to do.	○	○	○	○	○	○	○	○	○	○	○
I can say 'no' to other people if I don't agree with them.	○	○	○	○	○	○	○	○	○	○	○
I can ignore pressure from other people to do things their way.	○	○	○	○	○	○	○	○	○	○	○
I do not feel a need to compare myself to other parents.	○	○	○	○	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

16. TOPSE: The Tool to measure Parenting Self-Efficacy

Using the scale below, please select the number associated with how much you agree with each statement.
The scale ranges from 0 (completely disagree) to 10 (completely agree).
You may select any number between 0 and 10.

14. The following section is about self-acceptance.

	0 Completely disagree	1	2	3	4	5 Moderately agree	6	7	8	9 Completely agree	10
I know I am a good enough parent.	○	○	○	○	○	○	○	○	○	○	○
I manage the pressures of parenting as well as other parents do.	○	○	○	○	○	○	○	○	○	○	○
I am not doing that well as a parent.	○	○	○	○	○	○	○	○	○	○	○
As a parent I can take most things in my stride.	○	○	○	○	○	○	○	○	○	○	○
I can be strong for my child.	○	○	○	○	○	○	○	○	○	○	○
My child feels safe around me.	○	○	○	○	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

17. TOPSE: The Tool to measure Parenting Self-Efficacy

Using the scale below, please select the number associated with how much you agree with each statement.
The scale ranges from 0 (completely disagree) to 10 (completely agree).
You may select any number between 0 and 10.

15. The following section is about learning and knowledge.

	0 Completely disagree	1	2	3	4	5 Moderately agree	6	7	8	9 Completely agree	10
I am able to recognize developmental changes in my child.	○	○	○	○	○	○	○	○	○	○	○
I can share ideas with other parents.	○	○	○	○	○	○	○	○	○	○	○
I am able to learn and use new ways of dealing with my child.	○	○	○	○	○	○	○	○	○	○	○
I am able to make the changes needed to improve my child's behavior.	○	○	○	○	○	○	○	○	○	○	○
I can overcome most problems with a bit of advice.	○	○	○	○	○	○	○	○	○	○	○
Knowing that other people have similar difficulties with their children makes it easier for me.	○	○	○	○	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

18. **THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION)**

For the questions that follow, you will be asked about your attitudes and behavior toward one of your children.

16. The following statements represent matters of interest and concern to some parents. Not all parents feel the same way about them. Select the number which most closely applies to you and your child.

	Not at all Like Me 1	Not Much Like Me 2	Somewhat Like Me 3	Pretty Much Like Me 4	Very Much Like Me 5	Exactly Like Me 6
I encourage my child to talk about his or her troubles.	○	○	○	○	○	○
I always follow through on discipline for my child, no matter how long it takes	○	○	○	○	○	○
Sometimes it is so long between my child's misbehavior and when I can deal with it that I just let it go.	○	○	○	○	○	○
My child and I have warm intimate moments together.	○	○	○	○	○	○
There are times I just don't have the energy to make my child behave as he or she should.	○	○	○	○	○	○
Once I decide how to deal with a misbehavior of my child, I follow through on it.	○	○	○	○	○	○
I encourage my child to be curious, to explore, and to question things.	○	○	○	○	○	○
My child can often talk me into letting him or her off easier than I had planned	○	○	○	○	○	○
I find it interesting and educational to be with my child for long periods.	○	○	○	○	○	○
I make sure my child knows that I appreciate what he or she tries to accomplish.	○	○	○	○	○	○
I believe that once a family rule has been made, it should be strictly enforced without exception.	○	○	○	○	○	○
I respect my child's opinion and encourage him/her to express it.	○	○	○	○	○	○
My child convinces me to change my mind after I have refused a request.	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

19. THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION)

17. For each of the following statements, select the number which indicates how often the statement is true of your family.

	Never 1	Once in a While 2	Sometimes 3	Frequently 4	Most of the time 5	Always 6
We have a regular dinner schedule each week.	○	○	○	○	○	○
Our house is clean and orderly.	○	○	○	○	○	○
Our family is organized.	○	○	○	○	○	○
We get everything done around the house that needs to be done.	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

20. THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION)

18. Listed below are pairs of statements concerning parents' attitudes toward childrearing. For each pair, read both statements. Then determine which statement you agree with most, and select the letter in front of that statement. Use ONLY ONE letter per item.

	A	B
A. Nowadays parents place too much emphasis on obedience in their children. B. Nowadays parents are too concerned about letting children do what they want.	○	○
A. Children need more freedom to make up their own minds about things than they seem to get today. B. Children need more guidance from their parents than they seem to get today.	○	○
A. I care more than most parents I know about having my child obey me. B. I care less than most parents I know about having my child obey me.	○	○
A. I try to prevent my child from making mistakes by setting rules for his/her own good. B. I try to provide freedom for my child to make mistakes and to learn from them.	○	○
A. If children are given too many rules, they will grow up to be unhappy adults. B. It is important to set and enforce rules for children to grow up to be happy adults	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

21. THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION)

Listed below are several situations, which frequently occur in childhood. You may or may not have had these experiences with your child. Imagine that each has just occurred and rate how likely it is that you would do EACH of the responses listed below the situation.

19. After arguing over toys, your child hits a playmate. (Select a number for EACH response.)

	Very unlikely to do 0	1	2	Very likely to do 3
a. Let situation go.	○	○	○	○
b. Take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys).	○	○	○	○
c. Send to room or isolate by sitting in a chair.	○	○	○	○
d. Spanking or hitting.	○	○	○	○
e. Talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something).	○	○	○	○
f. Scold the child.	○	○	○	○
g. Remind your child of the rule or repeat the direction.	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

22. THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION)

20. Your child becomes sassy while you discipline him or her. (Select a number for EACH response.)

	Very unlikely to do 0	1	2	Very likely to do 3
a. Let situation go.	○	○	○	○
b. Take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys).	○	○	○	○
c. Send to room or isolate by sitting in a chair.	○	○	○	○
d. Spanking or hitting.	○	○	○	○
e. Talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something).	○	○	○	○
f. Scold the child.	○	○	○	○
g. Remind your child of the rule or repeat the direction.	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

23. PARENTING DIMENSIONS INVENTORY (SHORT VERSION)

21. You receive a note from your child's teacher that your child has been disruptive at school. (Select a number for EACH response.)

	Very unlikely to do 0	\1	2	Very likely to do 3
a. Let situation go.	○	○	○	○
b. Take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys).	○	○	○	○
c. Send to room or isolate by sitting in a chair.	○	○	○	○
d. Spanking or hitting.	○	○	○	○
e. Talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something).	○	○	○	○
f. Scold the child.	○	○	○	○
g. Remind your child of the rule or repeat the direction.	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

24. THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION)

22. You catch your child lying about something he or she has done that you would not approve of. (Select a number for EACH response.)

	Very unlikely to do 0	1	2	Very likely to do 3
a. Let situation go.	○	○	○	○
b. Take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys).	○	○	○	○
c. Send to room or isolate by sitting in a chair.	○	○	○	○
d. Spanking or hitting.	○	○	○	○
e. Talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something).	○	○	○	○
f. Scold the child.	○	○	○	○
g. Remind your child of the rule or repeat the direction.	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

25. THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION)

23. You see your child playing at a busy street that you have forbidden him or her to go near for safety reasons. (Select a number for EACH response.)

	Very unlikely to do 0	1	2	Very likely to do 3
a. Let situation go.	○	○	○	○
b. Take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys).	○	○	○	○
c. Send to room or isolate by sitting in a chair.	○	○	○	○
d. Spanking or hitting.	○	○	○	○
e. Talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something).	○	○	○	○
f. Scold the child.	○	○	○	○
g. Remind your child of the rule or repeat the direction.	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

26. CHILD FEEDING: Parent-Self-Administered

24. Here are some more questions about feeding.

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to Answer 8
How often do you let your child eat whatever he/she wants? (Choose one)	○	○	○	○	○	○
How often do you offer your child his/her favorite foods in exchange for good behavior? (Choose one)	○	○	○	○	○	○
How often do you limit the amount of high-fat foods (fried foods, French fries) your child eats? (Choose one)	○	○	○	○	○	○
How often do you keep track of the sweets (candy, ice cream, cake, pies, pastries) your child eats? (Choose one)	○	○	○	○	○	○
How often do you try to make your child eat all of the food on his/her plate? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

27. CHILD FEEDING: Parent-Self-Administered

25. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child always eats everything on his/her plate without being asked to 6	Refuse to answer 8
How often do you tell your child to leave whatever he/she doesn't want to eat? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

28. CHILD FEEDING: Parent-Self-Administered

26. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child never wants to eat between meals 6	Refuse to answer 8
How often do you keep your child from eating between meals? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

29. CHILD FEEDING: Parent-Self-Administered

27. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to answer 8
How often do you say something positive about the food that your child is eating? (Choose one)	○	○	○	○	○	○
How often do you give your child something to eat or drink if he/she is cranky or grumpy, even if you think he/she isn't hungry? (Choose one)	○	○	○	○	○	○
How often do you encourage your child to eat healthy foods before less healthy ones? (Choose one)	○	○	○	○	○	○
At dinner, how often do you let your child choose the foods he/she wants from what is served? (Choose one)	○	○	○	○	○	○
How often do you offer sweets (candy, ice cream, cake, pastries) to your child as a reward for good behavior? (Choose one)	○	○	○	○	○	○
How often do you limit how much your child can eat his/her favorite foods? (Choose one)	○	○	○	○	○	○
How often do you keep track of the snack food (potato chips, Doritos, cheese puffs) that your child eats? (Choose one)	○	○	○	○	○	○
How often do you tell your child how tasty a new food is? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

30. CHILD FEEDING: Parent-Self-Administered

28. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child never says I'm not hungry 6	Refuse to answer 8
If your child says, I'm not hungry, how often do you try to get him/her to eat anyway? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

31. CHILD FEEDING: Parent-Self-Administered

29. Continued

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to answer 8
How often do you ask your child what he/she wants for dinner? (Choose one)	○	○	○	○	○	○
How often do you limit the amount of sweets (candy, ice cream, cake or pastries) that your child eats? (Choose one)	○	○	○	○	○	○
How often do you reason with your child to get him/her to eat (for example, Milk is good for your health because it will make you strong)? (Choose one)	○	○	○	○	○	○
How often do you give your child something to eat or drink if he/she is bored, even if you think he/she isn't hungry? (Choose one)	○	○	○	○	○	○
How often do you encourage your child to try new foods? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

32. CHILD FEEDING: Parent-Self-Administered

30. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child always likes what is being served 6	Refuse to answer 8
If your child does not like what is being served, how often do you make something else? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

33. CHILD FEEDING: Parent-Self-Administered

31. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to Answer 8
How often do you encourage your child to eat less? (Choose one)	○	○	○	○	○	○
How often do you keep track of the high-fat foods (fried foods, French fries) that your child eats? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

34. CHILD FEEDING: Parent-Self-Administered

32. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child always eats everything on his/her plate without being asked to 6	Refuse to Answer 8
If your child eats only a small amount, how often do you try to get him/her to eat more? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

35. CHILD FEEDING: Parent-Self-Administered

33. Continued

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to Answer 8
How often do you tell your child he/she doesn't have to eat something he/she doesn't like? (Choose one)	○	○	○	○	○	○
How often have you put your child on a diet to control his/her weight? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

36. CHILD FEEDING: Parent-Self-Administered

34. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child never wants to eat snacks 6	Refuse to Answer 8
How often do you allow your child to eat snacks whenever he/she wants? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

37. CHILD FEEDING: Parent-Self-Administered

35. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to Answer 8
How often do you give your child something to eat or drink if he/she is upset, even if you think he/she isn't hungry? (Choose one)	○	○	○	○	○	○
How often do you tell your child that healthy food tastes good? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

39. CHILD FEEDING: Parent-Self-Administered

37. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to Answer 8
How often do you limit the amount of junk foods your child can eat? (Choose one)	○	○	○	○	○	○
How often do you keep track of the sugary drinks (soda/pop, Kool-Aid) your child drinks? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

40. CHILD FEEDING: Parent-Self-Administered

38. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child always finishes everything on his/her plate, without being asked to 6	Refuse to Answer 8
When he/she says he/she is finished eating, how often do you try to get your child to eat one more (two more, etc.) bites of food? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

41. CHILD FEEDING: Parent-Self-Administered

39. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child never wants seconds 6	Refuse to Answer 8
How often do you let your child have seconds? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

42. CHILD FEEDING: Parent-Self-Administered

40. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to Answer 8
How often do you tell your child he's/she's eaten enough? (Choose one)	○	○	○	○	○	○
How often do you compliment your child for eating food (for example, What a good boy! You're eating your vegetables)? (Choose one)	○	○	○	○	○	○
How often do you allow your child to leave the table when he/she is full, even if your family is not done eating? (Choose one)	○	○	○	○	○	○
How often do you give your child something to eat or drink if he/she is sad, even if you think he/she isn't hungry? (Choose one)	○	○	○	○	○	○
How often do you encourage your child to eat a variety of foods? (Choose one)	○	○	○	○	○	○
How often do you tell your child he/she has to finish eating before he/she can go play or do something else? (Choose one)	○	○	○	○	○	○
How often do you give your child small servings of food at meals? (Choose one)	○	○	○	○	○	○
How often do you ask your child what he/she ate during the day? (Choose one)	○	○	○	○	○	○
How often do you remind your child to finish eating? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

43. CHILD FEEDING: Parent-Self-Administered

41. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child eats everything on his/her plate, without being asked to 6	Refuse to Answer 8
How often do you let your child leave food on his/her plate? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

44. CHILD FEEDING: Parent-Self-Administered

42. Continued questions about feeding.

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to Answer 8
How often do you limit the amount of soda your child drinks? (Choose one)	○	○	○	○	○	○
How often do you encourage your child to eat by arranging the food to make it more interesting (for example, making smiley faces on the pancakes)? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

45. CHILD FEEDING: Parent-Self-Administered

43. Continued

	never 1	sometimes 2	often 3	very often 4	always 5	my child never wants to eat snacks 6	Refuse to Answer 8
If your child asks for a snack, how often do you give it to him/her? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

46. CHILD FEEDING Parent-Self-Administered

44. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to Answer 8
How often do you give your child something to eat or drink to make him/her happy, even if you think he/she isn't hungry? (Choose one)	○	○	○	○	○	○
How often do you encourage your child to try to eat healthy foods such as vegetables? (Choose one)	○	○	○	○	○	○
How often do you tell your child if he/she finishes the meal, he/she can have a sweet or a soda? (Choose one)	○	○	○	○	○	○
If your child eats more than usual at one meal, how often do you try to restrict his/her eating at the next meal? (Choose one)	○	○	○	○	○	○
How often do you find out how much your child ate during the day? (Choose one)	○	○	○	○	○	○
How often do you tell your child to eat everything on the plate? (Choose one)	○	○	○	○	○	○
How often do you limit the number of snacks your child eats? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

47. CHILD FEEDING: Parent-Self-Administered

45. Continued questions about feeding

	never 1	sometimes 2	often 3	very often 4	always 5	my child never wants to eat snacks 6	Refuse to Answer 8
How often does your child get his/her own snack without asking first? (Choose one)	○	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

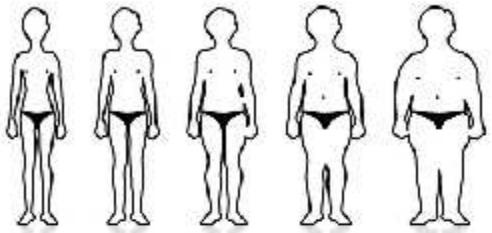
48. CHILD FEEDING: Parent-Self-Administered

46. Continued

	never 1	sometimes 2	often 3	very often 4	always 5	Refuse to Answer
How often do you add small servings of new foods to your child's plate? (Choose one)	○	○	○	○	○	○
How often do you tell your child if he/she doesn't eat, he/she can't watch TV? (Choose one)	○	○	○	○	○	○
How often do you restrict the amount of fattening food your child can eat? (Choose one)	○	○	○	○	○	○
How often do you keep track of the servings of fresh fruits and vegetables your child is eating? (Choose one)	○	○	○	○	○	○
How often do you tell your child he/she can't leave the table until he/she finishes? (Choose one).	○	○	○	○	○	○
How often do you try to serve the meals your child likes? (Choose one)	○	○	○	○	○	○
How often do you insist that your child eat his/her meal? (Choose one)	○	○	○	○	○	○

TOPSE: The Tool to measure Parenting Self-Efficacy; THE PARENTING DIMENSIONS INVENTORY (SHORT VERSION); CHILD FEEDING: Parent-Self-Administered; & figure rating scale

49. figure rating scale



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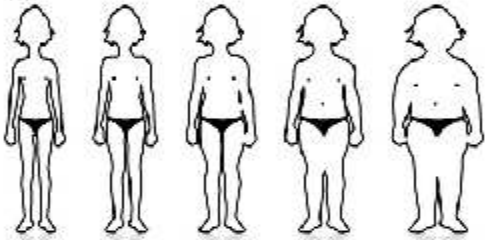

	First	Second	Third	Fourth	Fifth
Indicate the boy who most resembles your child.	○	○	○	○	○
Indicate the girl that most resembles your child.	○	○	○	○	○