Authoritative Mothers Exhibit More Permissive Feeding Practices Eating Away from
Home with their Children

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ABSTRACT

Eating away from home has been identified as one possible contributor to childhood
obesity, with links to poor diet quality and higher weight status due to dietary quality of
meals at restaurants and consumers' attitudes. Parenting style has been associated with
children's weight status and overall attitudes toward food, with authoritative parenting
being shown to help protect against childhood obesity. The current study aimed to
compare and contrast parenting and feeding practices at home and in the restaurant.
Twenty-five mothers with children, ages five to eight, who ate at restaurants at least two
times per week participated in facilitated, individual interviews. Interviews topics
included: parenting, child input in choosing restaurants and restaurant meal selection, and
food rules and practices at restaurants versus at home. Socio-demographic information,
parenting style, and the mothers' heights and weights were gathered, with descriptive
statistics computed. Interview data were transcribed, then thematically coded using
NVivo software. All mothers scored highest on authoritative parenting styles.
Participating mothers were Caucasian, well-educated, with above-average family
incomes. Mothers had an average of 2.2 children and a BMI of 27.9 kg/m^2. Mothers
described more stringent behavioral expectations and more permissive food rules at
restaurants. Parents had greater influence in determining whether to eat away from home
and where, whereas children had greater responsibility for meal selections at restaurants.
The results suggest that practices may differ at restaurants than at home, highlighting the
importance of further research, along with educational and behavioral strategies directed
toward mothers when eating away from home.

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Chapter I: Review of Literature

Childhood Obesity

Childhood obesity has become a major public health concern in the United States. The prevalence of obesity among preschoolers, ages 2-5 years, is 12.1%, and among school-aged children, ages 6-19, 18.2%, with higher rates (and greater increase in rates) among boys than girls (Ogden, Carroll, Kit, & Flegal, 2012). Almost one-in three children, 31.8%, are considered overweight or obese. The rate has nearly tripled in the past 30 years.

Childhood obesity has been linked with various chronic diseases in adulthood. Studies have shown that childhood overweight and obesity are associated with the risk of developing coronary heart disease in adulthood (Andersen et al., 2010; Baker, Olsen, & Sorensen, 2007; Raitakari, Juonala, & Viikari, 2005; Smoak et al., 1987), increased total mortality from coronary heart disease (Must, Jacques, Dallal, Bajema, & Dietz, 1992), and increased risk of developing certain cancers, type 2 diabetes, and other conditions (Barton, 2012; Must, et al., 1992). Studies have also shown that the earlier the onset of obesity, the higher the risk for developing impaired glucose metabolism as an adult (Power & Thomas, 2011). Children undergoing an early adiposity rebound or who undergo large increases in body mass index (BMI) may also be at an increased risk of becoming obese (Rolland-Cachera et al., 1987; Rolland-Cachera, Deheeger, Maillot, & Bellisle, 2006) and developing diabetes later in life (Eriksson, Forsen, Tuomilehto, Osmond, & Barker, 2003; Nguyen et al., 2010).

The obesity epidemic can be attributed to numerous factors influencing overall energy balance, including: increased intake of sugar-sweetened beverages; lower access and availability to healthy foods; mass market advertising of nutrient-poor food choices; increased sedentary activity, combined with decreased physical activity; increased frequency of eating away from home; and increased portion sizes (Ayala et al., 2008; Lasater, Piernas, & Popkin, 2011; Mota et

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al., 2008; Nicklas et al., 2001; O'Connor, Yang, & Nicklas, 2006; Patrick et al., 2004; Storey et al., 2012).

Eating Away From Home

The increase in the number of Americans who eat away from home on a daily basis has been a growing concern, particularly with the obesity epidemic. In the past 40 years, there have been dramatic increases in the number of Americans who are eating away from home. Currently, it is estimated that 57% of individuals eat away from home on a given day (ARS Food Surveys Research Group, 2000). In fact, according to 2002 data, Americans spend almost half, 43.0%, of their food budget on "away-from-home food," including restaurants (Economic Research Service, 2008). Adults and children with a higher socioeconomic status have a greater percentage of energy intake from away from home foods (Lachat et al., 2012). Restaurant foods, have been shown to contain higher amounts of saturated fat than foods consumed at home (Lin, Guthrie, & Frazao, 1999). Further, eating away from home, especially at quick-service restaurants, has been linked with higher consumption of calories and saturated fat, lower consumption of fruits and vegetables, higher intake of sugar-sweetened beverages, and higher weight status among children (Clemens, Slawson, & Klesges, 1999; French, Harnack, & Jeffery, 2000; French, Story, Neumark-Sztainer, Fulkerson, & Hannan, 2001; Larson, Neumark-Sztainer, Laska, & Story, 2011; Taveras et al., 2005; Thompson et al., 2004). Increased energy intake in children has also been associated with eating away from home as the percentage of calories consumed away from home increased from 23.4% in 1977 to 33.9% in 2006 (Poti & Popkin, 2011).

Several studies have shown that dietary patterns at restaurants may reflect patterns at home. In the United States, eating away from home has been associated with a lower overall healthy eating index (Lachat et al., 2012). One study found that consumption of convenience foods, such as salty snacks and sugar-sweetened beverages, was associated with a higher

frequency of dining at restaurants (Ayala et al., 2008). Likewise, families that eat away from home with the children three or more times per week at a quick-service restaurant were more likely to offer soda and chips in the home (Boutelle, Fulkerson, Neumark-Sztainer, Story, & French, 2007). Increased frequency at quick-service restaurants was associated with the consumption of salty snacks and also positively correlated with parent weight status. Thus, research suggests that eating frequently at restaurants as a family can be an indicator of overall diet and weight status.

Children's Menus

With an increase in eating away from home, foods and beverages directed toward children at restaurants, such as children's menus, may play a role in dietary quality. Many of the offerings on children's menus have been found to be high in calories, fat, and sodium, and low in nutrient density. A study conducted in Houston, Texas found that only 3% of restaurants within the city met the criteria for the National School Lunch Program (O'Donnell, Hoerr, Mendoza, & Tsuei Goh, 2008), suggesting poor nutritional quality of children's items at restaurants. Another study examined the nutritional content of children's menu items at quick-service and full-service restaurants. The study found that meals averaged 633 calories, 28.3g of total fat, 9.5g of saturated fat, 24.7g of protein, 69.3g of carbohydrates, and only 4.3g of fiber (Serrano & Jedda, 2009). The results indicated that the average number of calories and fat for children's meals were less at quick-service restaurants than at full-service restaurants. Quick-service restaurants generally offered smaller portions and healthier side items to mitigate total calories and fat of meals.

Parental Influences on Diet and Weight Status

The socio-ecological model depicts several layers to a child's diet, including individual, familial/home, and broader environmental and socio-cultural factors (Davison & Birch, 2001). By the time a child is 3-4 years old, eating is no longer solely driven by internal hunger cues, but

rather by environmental cues, specifically those provided by parents (Cashdan, 1994; Hendy, 1999; Illingworth & Lister, 1964). Many of these environmental cues are impacted by variables including: parenting styles, parents' beliefs and practices, feeding styles, mealtime structure, the availability of and preference for particular foods, portion size, and cultural values regarding food types and preparation (Cullen et al., 2003; Patrick, Nicklas, Hughes, & Morales, 2005). Behaviors and practices are of particular interest since parents' behaviors, especially those of mothers, are linked to child weight status. One particular study shows evidence that pre-school children mimic their parents' eating behaviors when they are away from their parents at school, highlighting impact of feeding practices and role modeling at an early age (Sutherland et al., 2008). Further, research shows that mothers, in particular, are influential in their children's weights and exhibit more concern over their child's eating behaviors (Johannsen, Johannsen, & Specker, 2006). Many maternal obesogenic behaviors, such as consuming sugar-sweetened beverages, watching TV, consuming fast food, and perceptions of physical activity, have been found to be strongly associated with obesogenic behaviors in their children (Adamo et al., 2010; Arcan et al., 2012; Sonneville et al., 2012).

It is clear that parents have different levels of influence on their children, including diet and weight status, depending on parenting style, parenting practices, and feeding practices. *Parenting styles* encompass a broad range of behaviors that interact to affect child outcomes (Darling, 1999). It is generally agreed that while parents have an overall and consistent parenting style, actual parenting and feeding practices may vary, depending on context, and change over time. Parenting styles encompass and regulate a broader range of parenting practices (Darling & Steinberg, 1993). Feeding practices are considered the interaction between parenting style and practices related to food, particularly with younger children and refer to aspects of parental control in child feeding (Hughes et al., 2012).

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Parenting style is generally characterized by the degree of warmth – including nurturing and responsiveness - and structure and control - or demandingness (Baumrind, 1991). Three unique parenting styles have been identified based on these domains: authoritative, authoritarian, and permissive (Baumrind, 1966). Feeding practices have further refined permissive parenting style to include indulgent and uninvolved classifications (Hughes, Power, Orlet Fisher, Mueller, & Nicklas, 2005). Permissive parents are generally accepting of the child's desires, consult the child on decisions, and give explanations. An authoritarian parent has high demandingness and low responsiveness with values placed on absolute obedience rather than a child's autonomy. An authoritative parent accepts a child's unique qualities, but also sets a clear direction for standards and expectations. Authoritative parenting was linked with more independent behaviors in girls, social responsibility in boys, and high achievement in girls (Baumrind, 1966). Authoritative parenting proves to be consistently favored in Western culture as it creates clear standards without limiting child autonomy.

Parenting styles have also been linked with child weight status. In terms of diet and childhood obesity, authoritative parenting may be protective against childhood obesity (Berge, Wall, Loth, & Neumark-Sztainer, 2010). Research has shown that responsive parenting is vital in creating situations that will eventually lead to the internalization of the parent's values and standards of behavior (Kochanska, Forman, Aksan, & Dunbar, 2005). Likewise, other studies have found that a more involved parenting style is negatively correlated with child obesity (Lissau & Sorensen, 1994).

While authoritative parenting style remains the most favored, more research must be done to investigate the gap between the prevalence of authoritative parenting and the prevalence of obesity in the United States. Research shows that parents' influence can be comprised of: parenting style, feeding style, and parenting practices, suggesting that there are other variables that

need to be explored to help determine why childhood obesity has such a high prevalence and what can be done to effectively reduce the number of obese children in the United States (Kremers et al., 2012; Musher-Eizenman & Kiefner et al., 2012). However, among various researchers, definitions of the terms "feeding style" and "parenting practices" are inconsistent, particularly in regards to eating behaviors.

While there are overall trends in parenting style, parenting practices, and feeding practices and dietary quality and health however, there has been little consistency and consensus in what measurements and/or domains should be used to assess parenting style or even parenting practices, making it challenging to fully generalize the results (Musher-Eizenman & Kiefner, 2012).

One study explored the relationship between parents and adolescents with 13-15 year-olds and studied both paternal and maternal parenting styles (Kim et al., 2008). The researchers used a parenting style instrument that studied nine parenting behaviors perceived by the adolescents. Overall, the study found that greater maternal nurturing was associated with lower total kilocalorie and saturated fat intakes and paternal nurturing was associated with lower sodium intakes. Another study by Kremers, et al studied Dutch 16 and 17 year-olds and their fruit intake and fruit behaviors. Participants were asked to indicate the frequency of consumption for a variety of different fruits during the past month and the number of pieces they consumed (Kremers, Brug, de Vries, & Engels, 2003). Adolescents living in an authoritative home were more likely to consume fruits and vegetables. Those from authoritative and indulgent homes showed the most favorable attitudes towards fruit consumption. Further, another study showed that authoritative parenting was linked with a greater availability of fruits and vegetables in the home as well as greater parental encouragement to eat foods from a wider range of food groups (Patrick et al., 2005). Authoritarian feeding was both negatively associated with fruit and vegetable availability as well as child vegetable consumption.

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While parenting style is believed to drive parenting practices, one study on three year old children aimed to determine whether parenting styles and controlling feeding practices were actually related. Results showed that permissive parents were less likely to monitor their child's unhealthy food choices (Blissett & Haycraft, 2008). Permissive parenting was associated with maternal restrictiveness and paternal pressure to eat. Less pressure from the father to eat was associated with a higher weight status in the child. While the study found significant links between style and practices, the study did not find that parenting style was strongly linked to the child's BMI, however.

Healthy role modeling behaviors, on the other hand, by parents and preplanning of meals has been associated with greater 2-year reductions in child percent overweight (Wrotniak, Epstein, Paluch, & Roemmich, 2005). Similarly, it has been shown that child feeding practices that promote child health in situations where food is scarce lead to overeating and increased weight status when applied in obesogenic environments. Specifically, these practices lead to lack of adherence to satiety cues, overeating, learned preference for unhealthy foods used as rewards, eating in response to distress, and learned dislike for healthy foods (Ventura & Birch, 2008).

A constellation of factors may influence parenting practices, including motivation or child health concerns. One study involving parents of 3-5 year olds aimed to examine and define several feeding strategies (Carnell, Cooke, Cheng, Robbins, & Wardle, 2011). Parents in the study had several different motivations for promoting intake, including practicality, health/ nourishment, and promoting a balanced diet. Motivations to decrease weight in the child were the fewest. The parents exhibited many motivations for restricting intakes as well, including: cost, health/balance, weight concerns, personal beliefs, and lack of time. Parents in the study also exhibited flexibility in changing feeding patterns for special occasions.

Summary

Given the influences of parenting styles and practices on child eating behaviors combined with the increased level of eating away from home, understanding more about the interaction between parenting and the restaurant environment is essential to understanding how to improve dietary quality of meal selections at restaurants.

The present study aims to investigate more about the interaction of various factors and environments, namely parenting style and eating away from home, to discover how they impact child eating behaviors. To date, no known research has been published to explore this topics area. The study also aims to understand more about decision-making and 'food rules,' whether it be parent, child, or shared, at restaurants, and how they compare to home settings, to help guide additional research and initiatives to promote healthy eating.

Chapter II: Authoritative Mothers Exhibit More Permissive Feeding Practices Eating Away from Home with their Children

Abstract

<u>Objective</u>: To compare parenting practices and decision-making at restaurants and home among mothers.

<u>Methods:</u> Twenty-five mothers with children, ages five to eight, who ate at restaurants at least two times per week participated in facilitated, individual interviews. Interviews topics included: parenting, child input in choosing restaurants and restaurant meal selection, and food rules and practices at restaurants versus at home. Socio-demographic information, parenting style, and mothers' BMI were also collected.

<u>Results</u>: All mothers scored highest on authoritative parenting styles. They were more likely to decide whether and where to eat out, children meal selections. Mothers reported more permissive food rules at restaurants, attributed to underlying values about eating away from home (i.e. a privilege or "treat").

<u>Conclusions and Implications</u>: The findings suggest that practices may differ at restaurants than at home, highlighting the importance of further research, along with educational strategies directed toward mothers when eating away from home.

Introduction

Currently, it is estimated that 57 % of individuals eat away from home each day (ARS Food Surveys Research Group, 2000). Eating away from home, especially at quick-service restaurants, has been linked with higher consumption of calories and saturated fat, lower consumption of fruits and vegetables, and higher weight status (Clemens et al., 1999; French et al., 2000; French et al., 2001; Larson et al., 2011; Taveras et al., 2005; Thompson et al., 2004). In part, this is attributed to the dietary quality of meals served at restaurants and, in part, due to attitudes of consumers toward the dining experience (i.e. taste preference preferred over nutrition) (Stewart, Blisard, & Jolliffe, 2006; Stewart, Blisard, Jolliffe, & Bhuyan, 2005).

Using the concept of the socio-ecological model, it is essential to determine and investigate other variables that may affect child eating behaviors, and ultimately weight status, including individual, familial/home, and broader environmental and socio-cultural factors (Davison & Birch, 2001). Parenting style, especially mothers', has been linked with children's weight status and overall attitudes, beliefs, and behaviors toward diet and food (Johannsen et al., 2006). Parenting

style is generally characterized by the degree of warmth – including nurturing and responsiveness - and structure and control - or demandingness (Baumrind, 1991). Authoritative parenting is considered the most optimal style and has been found to help promote overall dietary quality and protect against childhood obesity (Berge, et al., 2010). Still, it is generally agreed that while parents have an overall and consistent parenting style, actual parenting practices may vary depending on context (Musher-Eizenman & Kiefner, 2012).

Although parents, especially mothers, are considered nutrition gatekeepers and thereby largely responsible for food and beverage choices and decisions, there is a paucity of research examining parenting practices when eating away from home. Given the contextual nature of parenting practices, it is essential explore more about how this specific environment (restaurants) and specific parenting behaviors, particularly related to diet and nutrition, may interact. The goal of this study was to explore parenting practices and decision-making when eating away from home and to discern if and how food parenting practices at restaurants differed from practices at home.

Methods

Study Sample. Twenty-five mothers of children, ages 5 – 8 years old, within Montgomery County and nearby counties of Virginia were recruited, using purposive and snowball sampling. Fliers were posted at local community centers, the library, childcare centers, and gyms within the region. Advertisements were also listed in the local newspaper and in a weekly newsletter listserv targeted toward parents within the area. All participants provided voluntary, informed consent to participate in the study prior to the collection of any data. All procedures and the protocol were reviewed and approved by Virginia Tech's Institutional Review Board.

Eligibility. Participants were eligible if they ate at a restaurant with their children at least two times per week and if the children did not have any dietary restrictions. A minimum of two times per week was assigned to effectively characterize parenting style at restaurants as a function of

frequency, with the assumption that families that eat out more frequently would exhibit different food parenting practices than those that eat out less frequently.

Facilitated, Semi-Structured Interviews. An interview script was created and reviewed by a team of experts in nutrition, public health, parent-child dynamics, and marketing. The script was also pilot-tested to improve flow and mechanics of the interview.

The interview script included questions about parenting philosophy, decision-making about choice of restaurants and selection of foods and beverages at restaurants, and parenting policies and practices at the restaurant. See Table 1 for entire list of questions. Questions included: "Describe your parenting style or your parenting philosophy;" "What are some general food rules that you have at home for your child;" "What types of rules do you have when eating away at restaurants;"and "How does your child influence your decision to go out to eat." Participants were also asked to complete a short activity as part of the interview, whereby they were given several small slips of paper with various restaurant logos and asked to organize them in order of preference when going out to eat as a family.

Interviews were conducted by a trained interviewer in a secure and private research office location located on Virginia Tech campus. Interviews ranged from 43 to 116 minutes in length. Each interview was recorded using two digital audio recorders with field notes taken.

Questionnaire. A written questionnaire with 49 questions was administered to all participants following the interview. The questionnaire included questions about: socio-demographic information, such as age, number of children, and race/ethnicity; frequency of eating away from home at quick-service and full-service restaurants; physical activity level; and parenting style, based on the Parenting Styles and Dimensions Questionnaire (Robinson, 1995).

Weight Status. Height and weight were collected using a stadiometer and Tanita scale following completion of the questionnaire. Participants were asked to remove their shoes to maintain

accurate measurements. Height and weight data were then used to compute body mass index (BMI).

Data Analysis. Interview data were transcribed manually, then coded thematically using NVivo software version 9.2, a software program produced by QSR International. Two independent researchers reviewed and coded transcripts to provide content validity.

Descriptive statistics were entered into Microsoft Excel to compute frequencies and means for socio-demographic questions and questions about eating away from home. For parenting style, responses were coded (1 – 6) and summed for each dimension of parenting style, then divided by the number of questions for that dimension to calculate a mean. A total of 13 questions addressed authoritative, 13 authoritarian, and four permissive parenting. The parenting style with the highest mean was used to characterize overall parenting style. Although parenting styles are contextual and not mutually exclusive (Robinson, 1995), parents generally lean toward one predominant parenting style.

Results

Participants: The average age of mothers was 38.4 years old, with the mean age of their child(ren) 6.7 years old. The mean number of children per family was 2.2. Eight-four percent (n=21) of participants were married, with the remaining 16% (4) separated. Sixty-eight percent (n=17) had family incomes above $70,000 per year; all but one had some college education, and 88% (22) had earned a bachelor's degree or higher. The mean BMI of the participants was 27.9 (median 27.3; range 19.3-40.9), with nine being classified as having healthy weights, nine overweight, and seven obese. Eighty-eight percent (22) of mothers reported that their children were at a healthy weight. Further, they reported their children as generally healthy, with a score of 4.65 based on a scale of 1 to 5 with 1 being "poor health" and 5 "excellent health." Mothers reported their children were

physically active for at least 60 minutes per week for an average of 4.9 times per week, with a standard deviation of 1.6.

Parenting Style. All mothers scored highest on the authoritative parenting style. Sixty-eight percent (17) of participants scored second-highest on authoritarian parenting style and 32% (8) permissive.

Frequency of Eating Away from Home Each Week: Mothers ate away from home an average of 3.1 times per week, both with or without their children, and 2.5 times per week with their children. The average number of visits per week at quick-service restaurants was 1.3, and the average number at full-service restaurants 1.4 times per week. Most mothers reported that they used the children's menus at restaurants nearly 100% of the time when eating away at a restaurant.

Eating at Home: The majority of mothers reported making dinner at home 3 to 5 times each week. Families typically made an effort to eat their meals together in a kitchen, dining room, or porch setting when possible, and they generally did not eat in front of the television.

Decision-Making. Mothers reported making decisions, first, about if they would eat away from home, followed by the choice of restaurant, then choices at the restaurant. Consistent with parenting style, mothers reported shared decision-making around all dimensions of eating away from home (see Figure 1)

Figure 1: Mother-Child Restaurant Decision-Making Process
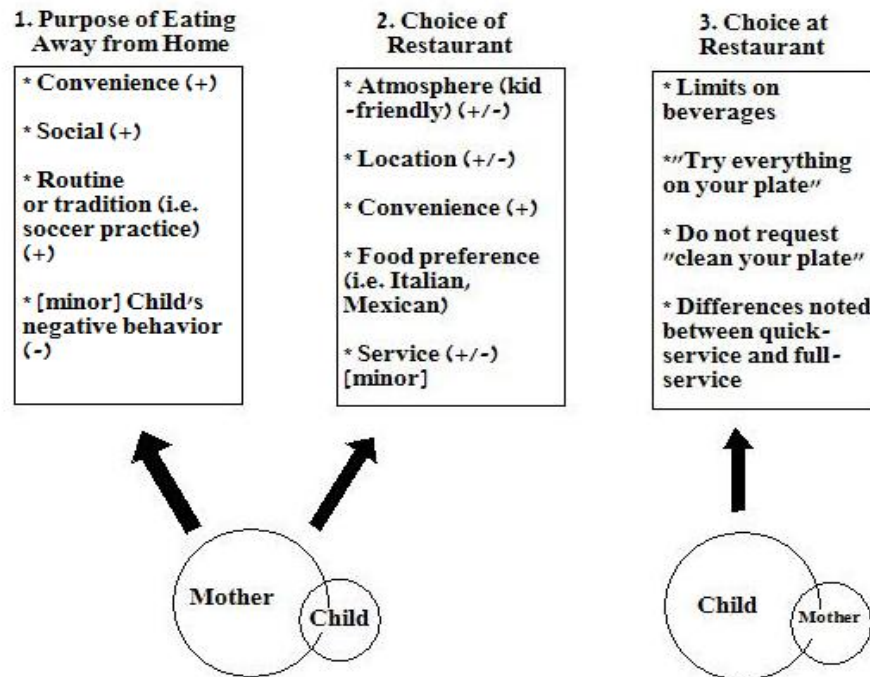
Differences in Overall Parenting Practices at Home versus at Restaurants

As a whole, responses were equally mixed on whether eating away from home was a "privilege" or "normal" behavior. Those that felt it was normal did express some remorse or regret. A few participants expressed that it was "unfortunate" that it was more of a normal behavior and others stated that it *should* be a privilege. Most mothers also reported they were more likely to be "strict" with parenting and behavioral expectations, outside of food, at the restaurant. Mothers credited their concern for others' dining experiences as a reason for the differences in parenting. One participant reflected upon the differences in her parenting:

> "*I guess my parenting style is...generally the same but I'm probably a little bit more relaxed at home with keeping to....to the rules but I'm probably a little bit more strict at restaurants just because I don't want to ruin somebody else's experience at the restaurant too*."

Another mother shared a similar view, stating,

> "*Uhm, we'd probably be a little bit stricter on certain things, like we talked about volume. You know at home, getting a little bit overly excited and talking a little bit*

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louder is not a crisis, but in a restaurant you have to keep your voice down, there are other people here and they do not want to hear it."

In addition to differences in parenting at home versus at the restaurant, mothers also noted differences in parenting across different restaurant types. Again, mothers often mentioned a consideration for others as reasoning for differences in their parenting in different environments. One participant described these differences, stating:

"Places that there are clearly more people having, like a date, or if they are…an elderly couple, I'm more, like, conscientious of, like, them leaning over the table or just like…I mean, they just are so crazy…they're always doing something. So, I am just…it does depend on the environment. And if it's a quieter restaurant then I make them be more quiet, and I'm more lenient when it's chaos anyway cause we're just blending in."

Another mother shared a similar view:

"So you know, if we're at a really nice restaurant they have…you know they can't be so giggly and silly. And I like for them to realize, that's…we try and take them to some nicer restaurants occasionally so they know that there is a difference, and you have to behave differently at a nicer restaurant than you do at Panera."

Mothers had similar behavioral expectations at restaurants as they did at home. Common expectations included using good manners, staying in seats, and using "inside voices." Overall, mothers reported that their children were usually well-behaved at the restaurant and that they had clear expectations for behavior. Any "moodiness" or bad behaviors were generally caused by tiredness or sibling rivalry that would also be witnessed at home. In general, these incidents were isolated, with a few mothers mentioning that they avoided these situations by eating at home when their children were tired or unlikely to behave as well. However, a few mothers did specifically mention that when their children were younger, eating away from home was more stressful due to the age and misbehavior of their children.

Differences in Food Parenting Practices at Home versus at Restaurants

Reasons for Eating Away from Home

Overwhelmingly, the most cited reason for eating away from home was convenience. Participants generally listed "no cooking and cleaning" as primary motivators for eating away from home. Convenience in regards to schedules and activities throughout the week was also commonly mentioned with convenience. The majority of participants also ate away from home simply for pleasure, often stating that it was "fun". Nearly all participants also reported that they ate away from home with their families for social or celebratory reasons. Similarly, convenience and greater quality time with family were major factors noted as "positives" of eating away from home. In regards to convenience, mothers specifically noted the absence of cooking and cleaning when eating away from home as primary conveniences. Fun or enjoyment, an increased variety of foods, and teaching children social behaviors were also mentioned as more minor themes. Further, mothers typically reported that eating away from home was not stressful, particularly due to their children's positive behavior at the restaurant.

Reasons for Choosing Restaurants

Many mothers mentioned that their children provided input on restaurants. When choosing a specific restaurant, parents typically had the overall decision in which to attend, but most children had a vote in the decision. One participant described her process of choosing a restaurant:

> *"We recommend…we'll say hey, you guys wanna go to Cracker Barrel tonight? And even if one of them says no, but my husband and I wanna go, we'll end up there anyways. But if they have a real..if [the husband] said no, you know what? I've really been wanting to go to Applebee's. I'll be like, why? What's at Applebee's that's not at Cracker Barrel? You know and then we'll talk about it."*

Another participant also expressed a representative attitude towards choosing the restaurant, stating, *"Uhm, if I have a strong preference as to where to go or my husband, then we'll just make*

the decision as to where to go, but if we don't have a strong preference, we'll throw it to a vote." Overall, mothers did not report differences in decision-making across different restaurants. Mothers with more than one child were generally consistent with the decision-making and ordering process unless one of the children was not able to read the menu on his or her own. Generally, children requested to go out to eat on several occasions which were typically prompted by a toy or passing by a specific restaurant. A small fraction of these requests were granted by parents. Overall, children tended to have a lesser influence in the decision process regarding why to eat away from home or in which restaurant would be frequented.

The most commonly listed criteria for frequenting restaurants were atmosphere and taste. Mothers stated that it was important that the restaurant was "kid-friendly" and provided adequate accommodations for their children. Consistent with the thoughts of many other mothers, one participant pointed out, *"I don't want to be going out to eat and everybody be trying to have a date night and the kids are being loud."* Coupons and specials also played a large role in choosing the restaurant overall. Many participants mentioned "Kids Eat Free" offers as a major factor in chooses certain restaurants on a regular basis. Similar to reasons for eating away from home, convenience and location were also mentioned as major factors in choosing the restaurant. Health or nutritional content of menu offerings was a minor theme for avoiding restaurants, but was not discussed when choosing restaurants.

When asked about the influence of toys, coloring, and games at restaurants in their decisions, mothers expressed that the activities were more of a "bonus," but they typically did not have a large impact on the restaurant decision since many mothers carried activities with them to the restaurant. When asked about play areas at restaurants, mothers' opinions varied. Sometimes participants mentioned actively avoiding play areas, and other times play areas were not a

consideration. Mothers were most likely to favor play areas when traveling long distances as a means of allowing their children to release energy while playing.

Consistent with their priorities of atmosphere and taste, the same factors were the most commonly mentioned reasons for avoiding certain restaurants. Mothers chose to avoid restaurants that were not "kid-friendly" or that did not offer a menu that satisfied the family's various taste preferences. The majority of participants also listed health or nutritional value of the menu items at a restaurant as a reason for avoiding restaurants. Many participants stated that they tried to avoid quick-service restaurants. One mother stated, "*I try to avoid Burger King, McDonalds. That's why I'm glad McDonald's is hidden here. Uhm, Wendy's, I try to avoid Wendy's. Taco Bell. I mean I'm not opposed to my kids eating that stuff, I just know it's not very good for them.*" When asked about the negatives of eating away, health and nutritional value were consistently mentioned as major downsides of eating away from home. One participant stated:

> "*....Nutrition. I mean it definitely suffers because you know… if you go get a pizza even the vegetables that have been put on the pizza have been overcooked, so there's no nutritional value in them, so…there is that negative, yeah. There's a lot of fat—not necessarily the best nutrition…that would be a negative.*"

Factors in What is Ordered at the Restaurant

<u>Decision-Making at the Restaurant.</u> Overall, participants allowed their children to make their own choices and receive their own menus, for the most part, when they were dining out at restaurants. They reported articulating these expectations of decision-making away from home with their children. One participant captured the general attitude of participants, stating:

> "*Yes. That they find…I mean ultimately…sometimes I'll say, 'Well ultimately it's your choice, and my job as a parent is to help you learn about your choices.' You know…so. Sometimes I'm more strict than others and I'll say, 'This time it's not a choice. It's my choice because I see you making too many bad choices. And when I see you making too many bad choices I'm gonna step in as your parent and correct that.'*"

At the restaurant, families were split on whether they had a regular seating arrangement. Often, families with more than one child would have one child sit next to a given parent to ensure good behavior and assist their children when necessary. Many mothers stated that their children placed their own orders with the wait staff at the restaurant. Gender was not mentioned as a major difference in ordering for children. The only differences due to age occurred when the younger children could not read the menu and needed choices read to them.

Type of Restaurant. Although mothers reported shared decision-making, when quick-service versus full-service restaurants were discussed, significant differences in level of parent versus child influence on food purchases were noted. For example, mothers reported exerting more influence (and more guilt) on the child to order healthier side items at quick-service restaurants than at full-service restaurants, regardless of the main item, even though nutrition was not mentioned in decisions about the choice of actual restaurant. While many participants allowed their children to have the majority of the decision on their meal orders, child input was generally part of a vote or just taken into consideration.

Permissive Practices at Restaurants. Based on the selection of foods at restaurants and the often celebratory or "special" nature of eating away from home, mothers were more likely to be more lenient what their children ate at a restaurant, viewing it as more of a "special occasion." Regardless of their views on eating away from home, participants used meals at home to offset or "balance out" the perceived negative nutritional aspects of eating out at restaurants. One participant stated: "*Uhm, there's not entrées we veto—there's certainly things I would prefer they not want to eat… and we know we're going to eat a healthy meal later, I'm not going to…yeah so..*" One mother also commented on her attitudes about eating behaviors at the restaurant in relation to the frequency of eating away from home:

> *"I'm more lax. Yeah I mean they can, you know they can have if they want a basket of fries or there's nothing on the menu that they like, they can have the basket of fries. I don't think it's healthy, but we're out and we're not going to make a fuss, we just want everybody to be happy. And you know if we ate out every night, then that would not be suitable."*

Similarly, mothers expressed the challenges of enforcing the same food rules they established at home, especially given the meal selections on children's menus. One participant pointed out, *"Yeah, I mean we're not eating out because we're trying to be healthy."* Similarly, another mother stated, *"...if I want my kids to eat healthy...yeah. I'm not planning on getting it at a restaurant. I think that's what I need to provide at home for them."*

<u>Food Rules.</u> Most mothers commented on having food rules when eating away from home, but highlighted having more stringent rules at home. Still, they mentioned several food rules that were consistent between eating venues, such as "trying everything on the plate," although children were not necessarily expected to eat everything on the plate, and no soda.

> *"If you order it, AKA if Mommy makes it, or if the food is on the table, you need to eat...at least try it, if not eat it. You know, and in a restaurant—you ordered it, you said you wanted it, you know, so that's where we want them to make the decision again because we want them to eat it. And at home, again, I try to choose things that I know they'll eat. And if it's something new...same things as in the restaurant, you know if they put something on the side, you don't have to eat it, but you have to try it."*

In regards to limits on soda, nearly all of the participants reported that soda was restricted or limited both at the restaurant and at home, with more exceptions noted in the restaurant. Mothers also mentioned that they tried to limit all caffeinated beverages. A minor theme involved refills: No more than one refill was allowed of a beverage, other than water, at the restaurant. One participant stated: *"Uhm, I veto caffeine...caffeinated sodas at a certain time for most outings."*

Nearly all participants did not require their children to finish everything on their plates at the restaurant. Despite requiring children to try everything on their plates, mother consistently encouraged their children to eat until full. One mother commented: *"I don't know about how*

much, but we ask them to eat what they can, try not to overeat but to eat until they're full, and

don't order a lot of extra things if it's going to go to waste."As a result, mothers were split on the

amount their children ate at a restaurant versus at home. Most mentioned that the quality of the

foods offered at restaurants were nutritionally inferior to those offered at home. Typically,

mothers stated that the foods offered at restaurants were not offered at home.

At home, most mothers typically offered either no substitutions or very minor substitutions

for meal items, especially since they also generally reported that there were two or more items

available at each meal. When significantly different meal substitutions were offered, they

typically did not require substantial preparation. A minor theme emerged about requiring a

vegetable with each meal, both at the restaurant and at home.

Restrictions. Mothers also reported limiting or restricting child(ren)'s options. Several mothers

reporting giving their children choices regarding menu items, choosing a few that they deemed

"healthier" for their children to select. One mother described her typical behavior at a restaurant:

> *"You know and it's not that they're not allowed to have fries, it's just, you know, I usually*
> *don't even mention it when I read the menu. I'll be like, 'Oh do you want to have the*
> *applesauce cup or broccoli?' So I'd rather get something decent in them."*

Another participant shared: *"And sometimes what I'll do is, like, if my meal comes with French*

fries, I'll let him have my French fries or part of my French fries or something like that and I'll

just order him a different side." A third participant stated*, "I try to stay away from an entire meal*

of fried stuff for him."

Discussion

The goal of this study was to try to elucidate parenting style as a function of frequency of

eating out at restaurants. The hypothesis was that parents would exhibit different practices when

they ate away from home. Themes from the interviews found that the mothers in this study

reported more stringent expectations related to overall behavior, yet more permissive or lenient

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practices when eating at restaurants compared to at home. Mothers consistently limited or restricted soda and caffeinated beverages, but were more likely to allow their children to consume these beverages while at restaurants. Mothers consistently encouraged their children to try everything on their plates both at home and at the restaurant, but did not require them to finish their entire meals. While mothers did have some limitations on certain foods or quantities of foods, they were more likely to compromise at the restaurant. Mothers often viewed eating away from home as a privilege or "treat" and therefore were more likely to have more lenient food rules at restaurants.

Families chose to eat away from home primarily for convenience and fun and favored restaurants with kid-friendly atmospheres. Children were able to provide input on the choice of restaurant but were generally less-influential in restaurant choice. However, parents allowed their children to have more input in their meal choice at the restaurant.

Limitations. Several limitations are noted for this study, including a small sample size, self-reported practices, and generalizability of the sample regarding factors such as parenting style and socio-demographic level. More research should be done with more diverse samples (i.e. in regards to income, education level, or geographic location) to help determine other variables that influence eating behaviors at restaurants for those groups.   Additionally, many complexities and nuances exist to influence parenting style, namely: personality and temperament of parents and children, situational determinants, and psycho-social domains, such as parental depression or self-esteem.   The study also utilized a categorical assessment of parenting style as opposed to a continuous assessment, which may impact results. Further, more questions were designated for authoritative and authoritarian than permissive, possibly skewing results. Additionally, though the researchers attempted to study the bi-directional nature of socialization across parenting styles by

asking questions about children's reactions and behaviors, the study did not fully capture this aspect.

Further, this study only used maternal report measures. Future research may expand upon the results and further investigate the topic by including paternal and child report measures. In addition to parenting styles, parent practices and feeding styles should be measured to give a more complete understanding of the interaction of these factors and the impact on child eating behaviors.

Given the results and limitations of the study, more research should be conducted to examine possible trends more extensively. The results regarding more lenient food rules suggests that there are other variables, in addition to health and nutrition of menu items, which impact the choices that parents allow their children to make at restaurants and should be examined further. The bidirectional nature of socialization should be examined in depth using both parent and child report measures to gain a more complete understanding of child eating behaviors at restaurants.

Results on motivations for eating away from home are consistent with current research that shows convenience is a main motivation for both food purchases and diet. Understanding consumer motivations for frequenting restaurants is essential to learning how to help families make healthier choices away from home. In this case, mothers were extremely vocal about the lack of healthy options at restaurants, and were adamant about changes that could be made to current children's menus. Prior research suggests that health education may help direct consumers when choosing a restaurant, but it is uncertain whether such education would affect a highly-informed population such as the study sample.

Implications for Research and Practice, Results suggest that comprehensive behaviorally-motivating strategies should be developed for families who eat out frequently, clearly addressing possible notions that eating away from home is unique from eating at home. More research is

warranted to advance the understanding of the interactions of parenting practices and eating away from home and how they impact children's dietary behaviors.

Chapter III: Discussion and Conclusions

Summary

Overall, mothers had clear and distinct food rules at home and were more lenient with food rules while dining at the restaurant. Despite more permissive food and beverage rules, mothers reported that they were stricter or had higher expectations for overall behavior while at the restaurant. Both mother's views of eating away from home, as well as their primary motivations for eating away from home, may offer insight into discrepancies in food and behavioral expectations between the home and restaurants. Mothers typically felt that eating at a restaurant was more of a privilege and were driven to eat out as a means of convenience or enjoyment. Thus, due to the social nature of eating away from home, mothers were more concerned with the overall experience.

Research has shown that overweight and obese individuals tend to be more influenced by environmental cues when eating away from home and tend to consume significantly more at restaurants compared to home (de Castro, King, Duarte-Gardea, Gonzalez-Ayala, & Kooshian, 2012). Given that 64% of the present study sample was overweight or obese, the associated responsiveness to environmental cues when eating away from home may have bear a relation to beliefs about eating away from home as a "treat" or privilege. Future research should investigate this relation further.

Consistent with prior research, the results indicate that consumers prioritize convenience and enjoyment, over health and dietary benefits, when choosing to eat away from home (Botonaki & Mattas, 2010; Stewart et al, 2006; Stewart et al., 2005). Convenience was mentioned by a large number of participants in this study as a motivator for eating away from home and for the choice of restaurants. Full-service and quick-service restaurants were both convenient for different

reasons with full-service allowing for no cooking or cleaning and quick-service accommodating lack of time to sit down and eat. Although it has been found that health education may help direct consumers when choosing a restaurant, it is less certain whether such education would affect a highly-informed population such as the study sample (Stewart et al., 2006). Altering the actual menu selections may prove to be more effective in improving dietary quality for this population.

The results of the present study are less consistent with dietary implications mentioned in previous research. One study found that eating away from home one or more times per week increased the likelihood that families offered salty snacks or sugar-sweetened beverages in the home (Ayala et al., 2008). However, the study focused on a very different sample, recruiting Latino families with a monthly income of less than $1,500 per month for a five-member family. These participants were also recruited from schools in which there were no physical activity programs. In the same study, families preferred quick-service restaurants. The findings of this study may only be generalizable to a similar sample with middle-income families, since they preferred full-service over quick-service restaurants. Conversely, mothers of the present study reported that their children were physically active at least a few times a week, suggesting that there are also other protective factors that can prevent childhood obesity despite a higher frequency of eating away from home.

In terms of quick-service food purchases, the results of the study are largely consistent with other studies on diet and nutrition. In one study, the researchers looked specifically at quick-service purchases and found that families who consumed less than three quick-service meals per week were more likely to offer milk and vegetables at home, whereas those families that consumed three or more meals at quick-service establishments were more likely to offer salty snacks (Boutelle et al., 2007). In the present study, mothers reported eating at quick-service

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restaurants 1.3 times per week and specifically mentioned offering milk and vegetables at home, although specifics were not collected through dietary recalls or other dietary assessments.

Implications for Research and Practice

More research is warranted on parenting practices when eating away from home. Many questions remain largely unanswered. More research pertaining to overall diet quality should be conducted to determine whether the belief that eating away from home as a "treat" or privilege that can be balanced out is an accurate and representative view. Further, to determine the accuracy of this view of eating away from home, a sample with more diverse frequencies of eating away from home should be studied. Future research should also investigate what types of parenting practices are employed with more diverse and disparate audiences and among mothers who exhibit other dominant parenting styles, how self-reported parenting and feeding practices at restaurants align with actual practices (i.e. observations), the roles of mediating factors, such as gender, personality style, and weight status of child(ren) on parenting practices away from home, and the role that fathers play in regulating children's eating behaviors at restaurants.   Additionally, future research may utilize child-report measures in addition to parental report to capture a greater understanding of the bi-directional nature of parenting and socialization. Further, researchers may specifically use a measure of feeding practices in addition to parenting styles to gain a greater understanding of the interaction between the two.

The results suggest that parenting practices differ at restaurants than at home, based on views of eating away from home. Beliefs about eating away from home as a "treat" or privilege highlight the importance of broader, societal-level educational and behavioral strategies to shift attitudes and beliefs about eating away from home, especially as the frequency increases. Another possible solution is to offer healthier options at restaurants, mentioned by mothers in this study, although such modifications would need to address financial and other constraints of restaurants.

Appendix A: IRB Approval

VirginiaTech | Office of Research Compliance
Institutional Review Board
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, Virginia 24060
540/231-4606 Fax 540/231-0959
e-mail irb@vt.edu
Website: www.irb.vt.edu

MEMORANDUM

DATE: July 6, 2011

TO: Elena L. Serrano, Michelle Kasparian, Jane Machin

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires May 31, 2014)

PROTOCOL TITLE: Parenting Styles and the Effect on Children's Menu Choices

IRB NUMBER: 11-506

Effective July 6, 2011, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/pages/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:
Approved as: **Expedited, under 45 CFR 46.110 category(ies) 4, 6, 7**
Protocol Approval Date: **6/20/2011**
Protocol Expiration Date: **6/19/2012**
Continuing Review Due Date*: **6/5/2012**
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:
Per federally regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

An equal opportunity, affirmative action institution

VirginiaTech

MEMORANDUM

DATE:	May 30, 2012
TO:	Elena L Serrano, Michelle Kasparian, Jane Emma Machin
FROM:	Virginia Tech Institutional Review Board (FWA00000572, expires May 31, 2014)
PROTOCOL TITLE:	Parenting Styles and the Effect on Children's Menu Choices
IRB NUMBER:	11-506

Effective May 30, 2012, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Continuing Review request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As:	**Expedited, under 45 CFR 46.110 category(ies) 4,6,7**
Protocol Approval Date:	**June 20, 2012**
Protocol Expiration Date:	**June 19, 2013**
Continuing Review Due Date*:	**June 5, 2013**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

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Appendix B: Consent Form

**Informed Consent for Participants
in Research Projects Involving Human Subjects
Focus Groups**

Title of Project: <u>Parenting Styles and the Effects on Children's Menu Choices</u>

Investigator: <u>Elena Serrano, Ph.D.</u>   Co-PI: <u>Michelle Kasparian</u>

I. Purpose of this Research/Project

The purpose of this study is to gather opinions to understand more about how parenting style leads families and children to make their meal choices at restaurants or on take-out menus.

II. Procedures

As a participant of this study, you will be asked to complete a 45-60 minute interview as well as one short survey. You will also be asked to consent to the documentation of your interview and reporting of your comments (without any identifying information) in a published report and/or manuscript. Audio recording will take place during the interview. Upon completion of the interview, you will be asked to take height and weight measurements.

III. Risks

There are no more than minimal risks associated with your participation in this interview and research project.

IV. Benefits

There are no direct benefits for participating in this study. The results will give researchers insight on what leads families and children to make certain choices at restaurants.

V. Extent of Anonymity and Confidentiality

Your responses cannot be kept anonymous and confidential during the interview; however, we will assign a user number to you, which will take the place of your name in the final transcription, which will be kept in a secure location to ensure confidentiality. Further, efforts will be made to remove any possibility of identifying any individual's comments (place, position, etc.) in any published reports.

VI. Compensation

A $20 Target, Olive Garden, or Panera giftcard will be provided to individuals who participate in the study.

VII. Freedom to Withdraw

You are free to withdraw from the study at any time. As a participant, you have the right to not answer any question if you choose.

VIII. Approval of Research

As required, this research project has been approved by the Institutional Review Board for Research Involving Human Subjects at Virginia Polytechnic Institute and State University, by the Department of Human Nutrition, Foods, and Exercise.

_____   _____
IRB Approval Date   Approval Expiration Date

IX. Subject's Responsibilities

I voluntarily agree to participate in this study. Following are my responsibilities:
- Complete one short survey and a 45-60 minute interview
- Consent to recording of my comments
- Have my height and weight measurements taken and recorded

X. Permission

I have read and understand the Informed Consent Form and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent:

_____
Print Name

_____   _____
Participant Signature   Date

Should I have any pertinent questions regarding this research or its conduct, the research subjects' rights, or whom to contact in the event of a research-related injury to the subject, I may contact:

Elena Serrano, PhD   540.231.3464/serrano@vt.edu
Investigator   Telephone/e-mail

Kevin Davy, PhD   540.231.4900/kdavy@vt.edu
Department Reviewer   Telephone/e-mail

David Moore   540.231-4991/moored@vt.edu
Chair, IRB   Telephone/e-mail
Office of Research Compliance

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Facilitated Interview	**Date:** _____ **Code #** _____

Parenting Style Questions

Please rate how often you engage in the different parenting practices, listed below. Scores range from "Never" to "Always" on a 5-point scale.

1.   I am responsive to my child's feelings and needs:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

2.   I take my child's wishes into consideration before I ask him/her to do something:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

3.   I explain to my child how I feel about his/her good/bad behavior:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

4.   I punish my child by withholding emotional expressions (e.g., kisses and cuddles):

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

5.   I provide comfort and understanding when my child is upset:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

6.   I spank my child when I don't like what he/she does or says:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

7.   I compliment my child:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

8.   I consider my child's preferences when I make plans for the family (e.g., weekends away and holidays):

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

9.   I respect my child's opinion and encourage him/her to express them:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

10.   I treat my child as an equal member of the family:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

11.   I provide my child reasons for the expectations I have for him/her:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

12.   I have warm and intimate times together with my child:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

13.   When my child asks me why he/she has to do something I tell him/her it is because I said so, I am your parent, or because that is what I want:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

14.   I ignore my child's bad behavior:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

15.   I punish my child by taking privileges away from him/her (e.g., TV, games, visiting friends):

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

16.   I yell when I disapprove of my child's behavior:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

17.   I encourage my child to freely "speak his/her mind", even if he/she disagrees with me:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

18.   I explode in anger towards my child:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

19.   I use criticism to make my child improve his/her behavior:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

20.   I use threats as a form of punishment with little or no justification:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

21.   I openly criticize my child when his/her behavior does not meet my expectations:

Never   □ 1   □ 2   □ 3   □ 4   □ 5   □ 6   Always

22.   I find myself struggling to try to change how my child thinks or feels about things:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

23.   I feel the need to point out my child's past behavioral problems to make sure he/she will not do them again:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

24.   I explain the reasons behind my expectations:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

25.   I remind my child that I am his/her parent:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

26.   I remind my child of all the things I am doing and I have done for him/her:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

27.   I find it difficult to discipline my child:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

28.   I give into my child when he/she causes a commotion about something:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

29.   I spoil my child:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

30.   I encourage my child to talk about his/her feelings and problems:

Never   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   Always

Demographic Questions

31. What is your address? _____(street)

_____(town/city)
_____ (zip code)

32. How old are you? _____ years

33. What is your marital status? (Please check the appropriate box.)
   - ☐ Single
   - ☐ Married
   - ☐ Separated
   - ☐ Divorced

34. How many children do you have living at home? (Please check the appropriate box.)
   - ☐ 1
   - ☐ 2
   - ☐ 3
   - ☐ 4 or more

35. How old are they?

   Ages: _____

   What are their gender(s)? _____

36. What is the exact age of your 5-8 year old? (Please check the appropriate box.)
   - ☐ 5
   - ☐ 6
   - ☐ 7
   - ☐ 8

37. Where did you see our advertisement? (Please check the appropriate box.)
   - ☐ Roanoke Times
   - ☐ Word of mouth
   - ☐ Email listserv
   - ☐ Posted flier (childcare center, Weight Club, other)
   - ☐ Other: _____

38. What is your highest level of education? (Please check the appropriate box.)
   - ☐ Some HS
   - ☐ HS completion
   - ☐ Associate degree
   - ☐ Some college
   - ☐ Bachelor's degree
   - ☐ Master's degree
   - ☐ PhD
   - ☐ MD

39. What is your annual household income? (Please check the appropriate box.)
- ☐ <$10,000
- ☐ $10,001 - $20,000
- ☐ $20,001 - $30,000
- ☐ $30,001 - $40,000
- ☐ $40,001 - $50,000
- ☐ $50,001 - $60,000
- ☐ $60,001 - $70,000
- ☐ $70,001 or more

40. Which of the following programs do you participate in? (Please check all of the appropriate boxes.)
- ☐ None
- ☐ WIC
- ☐ SNAP/Food Stamps
- ☐ Head Start
- ☐ Commodity Supplemental Food Program
- ☐ Food Bank
- ☐ Free or Reduced Breakfast/Lunch
- ☐ Other:_____

Eating Away from Home

41. How many times per week do **YOU** eat away from home? (Please check the appropriate box.)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

42. How many times per week do you eat away from home **with your family (including your 5-8 year old child)?** (Please check the appropriate box.)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

43. How many times per week do you eat at <u>a fast food/quick-service restaurant</u> like *McDonald's, Chick-Fil-A, Burger King, Subway* **with your family (including your 5-8 year old child)?** (Please check the appropriate box.)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

44. How many times per week do you eat at a <u>sit-down, full-service restaurant</u> (like Red Robin, Chili's) **with your family (including your 5-8 year old child**)? (Please check the appropriate box.)
  ☐   1
  ☐   2
  ☐   3
  ☐   4
  ☐   5
  ☐   6
  ☐   7 or more

45. What are your top 3 attended restaurants and locations (towns/cities)?
  1.   _____ (restaurant) _____ (location)
  2.   _____ (restaurant) _____ (location)
  3.   _____ (restaurant) _____ (location)

Your 5-8 Year Old Child's Health
46. In general, what is the health of your 5-8 year old? (Please check the appropriate box.)
  ☐   Poor
  ☐   Fair
  ☐   Good
  ☐   Very Good
  ☐   Excellent

47. How many times per week does your 5-8 year old child engage in physical activity for 60 minutes or more?
  ☐   (Please check the appropriate box.)
  ☐   1
  ☐   2
  ☐   3
  ☐   4
  ☐   5
  ☐   6
  ☐   7 or more

48. How would you classify the healthfulness of what your 5-8 year old child eats and drinks from 1 to 5 with 1 being very unhealthy and 5 being very healthy? (Please check the appropriate box.)
   ☐ 1 (very unhealthy)
   ☐ 2
   ☐ 3
   ☐ 4
   ☐ 5 (very healthy)

49. How would you classify the weight of your 5-8 year old? (Please check the appropriate box.)
   ☐ Underweight
   ☐ Normal
   ☐ Overweight
   ☐ Obese

<div align="center">THANK YOU for your time!</div>

Appendix D: Interview Script

Facilitated Interview   **Date:** _____
Code #: _____

Welcome, my name is Michelle and I'm going to interview you today. Thank you for coming and taking the time to give your thoughts and opinions. We asked you to participate because you are a parent of a school-aged child. We will be recording today's interview using a digital recorder. Your name will not be used in any records of the interview. A code number will be used in place of your name. Any information shared in this room will be kept confidential and only for this study. No names will be used in any reports. The facilitated interview portion will last about 45-60 minutes.
Today we are going to talk about eating away from home, at restaurants. We really want your opinions and thoughts on the topic. There are no right or wrong answers, so please feel free to say what you think.

Do you have any questions about the interview process before we begin?

First we are going to ask you about your parenting style.

Tell us a little about your parenting style or your parenting philosophy.
       Probe: Would you consider yourself demanding yet responsive, demanding and directive, or lenient?

Generally speaking, what do you find works best to get your child (5-8 year old) to do what you want?
       Probe: brushing teeth, speaking with "inside voice", good behavior

Now we're going to move on to some general food rules you have at home.

What types of general food rules do you have at home for your 5-8 year old?
       o Foods that are restricted for the 5-8 year old:
       o Foods that are limited for the 5-8 year old:
       o Drinks that are restricted for the 5-8 year old:
       o Drinks that are limited for the 5-8 year old:
       o Most popular meals you serve for your 5-8 year old:
       o What are your 5-8 year old child's 3 least favorite meal options?
       o How do you deal with your 5-8 year old child's negative reaction to these foods?

How would you classify the healthfulness of what your 5-8 year old eats and drinks?
       Probe: Why do you consider what he/she eats and drinks to be healthy or unhealthy?

What is the eating structure like at home?
       Probe: Where do you eat your meals-dining room, kitchen, living room?

Probe: Do younger/older kids eat the same thing? Do kids eat the same things that their parents eat? What differences are there?
How often do you prepare dinner at home each week – not ordering in?

Now, we'd like to ask you about your experiences with restaurants.
In general, how often do you go out to eat each week with your 5- 8 year old?
Are there certain days you tend to eat out more than others?
       Probe: Time of day, weekday, weekend?

<u>Why</u> do you go out to eat?
- Under what circumstances do you go out to eat on a week-to-week basis?
  a. Celebratory, lack of time, convenience, child's eating habit, cooking habits

How do you view eating away from home?
       a. Privilege
       b. Normal behavior

How does your child influence your decision to go out to eat?
       a. How often does your child request going out to eat?

How do you decide <u>which</u> restaurant to go to?
       a. How do you decide the type of restaurant? The actual restaurant?
          Probe: Do you have certain ones you usually want to go to?
          Probe: Do you avoid any restaurants? If so, why?

       b. How important is it that your child likes the restaurant?

       c. What role do toys, games, and coloring/crayons have in making your decision?

       d. What role do play areas or playgrounds play in your decision?

       e. What role does the atmosphere of the restaurant play?

       f. What role does your child play in the decision?

          Probe: Does the child provide input on the restaurant you go to with him/her? How?

       g. Who chooses the restaurant?

       h. What role does the menu play in your decision?

What are the types of restaurants that you generally go to? What are some restaurants that you have been to in the last 6 months? How would you group them?

Given this list of restaurants in the New River Valley, group the restaurants together how you generally view them and name each group. You may place any that you are unfamiliar with to the side.

When do you generally attend each category of restaurants?
        Probe: What conditions or circumstances prompt you to choose each type of
        restaurant?
Which restaurants do you choose more than others? Why?
        Probe: What makes some restaurants less desirable?

Now, we'd like to ask you to describe and what happens when you eat at a restaurant.

We are going to walk through your experience at a restaurant.
        a. Where does everyone sit? Is there a usual seating arrangement? What about the 5-8 year old? Is it the same or different at a sit-down restaurant?
        b. Does the 5-8 year old get his/her own menu?
        c. Who decides what the child will drink?
        d. How do you decide what to order for the 5-8 year old?
            i.   Do you make the decision without consulting the child?
            ii. Do you consult the child? Are there items that you veto?
            iii. Do you have the child make the full decision?
            iv. When the menus are distributed, what happens? Does your 5-8 year old get his/her menu?
            v.   Is the decision process the same or different at the different categories of restaurants that you previously mentioned?
        e. Who usually orders for him/her? (Parent or child)
            i.   What do you or your 5-8 year old child usually order? Why?
            ii. Are there differences in what is ordered for your 5-8 year old compared to other children in the family?
            iii. What differences are there in how food is ordered based on gender of this child versus others in your family?
            iv. What differences are there in the process of how food is ordered based on age – older or younger children versus 5-8 years old?
            v.   Are these the same or different at different categories of restaurants?
        f. What types of general rules do you have when you are eating away from home?
            i.   What are your expectations about behavior when eating away from home?
                a. Sitting in seats

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b. Language (i.e. potty words), voice tone (i.e. inside voices)

c. Whining, crying, or complaining

d. How much or what to eat

ii. Foods that are restricted for the 5-8 year old:

iii. Foods that are limited for the 5-8 year old:

iv. Drinks that are restricted for the 5-8 year old:

v. Drinks that are limited for the 5-8 year old:

vi. Do any of these expectations or limitations and restrictions differ across different categories of restaurants?

g. Describe how your 5-8 year old usually behaves at the restaurant.

i. In general, what are some positive things about eating at a restaurant, especially with your 5-8 year old?

a. Cooking?

b. More concentrated, quality time?

c. Difference across various restaurant categories?

ii. In general, what are some negative things about eating at restaurants, especially with your 5-8 year old?

a. How stressful is eating away from home? Why?

b. Differences among different restaurants?

iii. How common is it for your child to whine, cry, or complain at restaurants?

1. What are some triggers for bad behavior at the restaurant?

2. What proportion are restaurant related?

3. What proportion are general problems you see at home too (i.e. sibling rivalry)?

4. How do you respond?

5. Differences between various restaurants?

What are some things that you do the same at a restaurant and at home?

a. What about the foods you eat?

vii. Types of food

viii. Amount of food

Describe your parenting style when you are eating at restaurant versus when you are eating at home.

a. Similarities?

b. Differences?

What similarities are there for parenting style among your different restaurant types that you listed?

What differences are there for parenting style in those restaurants?

Now we are going to talk about the options for foods and beverages at restaurants.
What do you think about the menu options available for children at restaurants?

      a. Portion sizes
      b. Nutritional value
      c. Cost
      d. Any differences in various restaurant types?

What are your thoughts about the children's menu at restaurants for your 5-8 year old?

      a. How often do you use it?
      b. What would you change about the kid's menus available?
      c. How would this impact your decision to eat at restaurants?
      d. Do these vary for the different restaurant types? How?

Which category of restaurants contains options that you consider healthier for your 5-8 year old?

Now we would like to focus on information that is provided on menus.
Have you seen a menu with calorie information included on it?
      a. Ex: Panera, McDonald's [Present Panera and McDonald's nutrition information]
      b. What were your thoughts about it? How did you react?
      c. Did you overestimate or underestimate the number of calories in the menu items?
      d. Did this change the way you made your decision? How?
         Probe: Did it make you avoid something or choose something different?

What do you think about having calorie or other nutrition information on children's menus?
      a. To what degree do you think it is important for you as a parent?
      b. To what degree do you think it is important for your child?
      c. How would labeling change what is ordered at a restaurant for your 5-8 year old?
           a. You?
           b. Your child?
      d. Given this children's menu with calorie information, which meal selection would you choose?
           a. What are your general thoughts on this children's menu?
      e. What are your thoughts on McDonald's Happy Meal nutrition?

What do you think about a 'healthy meal' or drink' logo to help you make healthier choices?

a. How do you think adding a logo to indicate healthier options would impact your choices?
    b. How you made decisions with your child?

(After presenting the different logos): Which of these do you find the most appealing?
    a. What is about that logo that makes it the most appealing? Why?
    b. Which one would your child like most? Why?
    c. Do you have any other suggestions?

We really appreciate your participation in this study and would like to thank you for your time. Did you have anything else to add?

Thank you for your time!

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