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# Influence of Family Style Meals on Self-Regulation in Preschool Children

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#### Influence of Family Style Meals on Self-Regulation in Preschool Children

Recent data from Gallup suggests that only half of families with children under 18 years of age eat dinner together every night (Saad, 2013). What might children be missing out on if their families do not engage in regular, consistent family meal routines? What benefits or opportunities might children and families have who do spend this time together? How, in American society, has the holistic, community focus of family time shifted to other priorities?

Eating together as a family is an opportunity to slow down and truly focus on one another and the food that is being eaten. By sitting down together at home, children build social and cultural foundations for behavior, setting them up for further success in later years. Family style meals are concentrated moments within our culture that provide a base where families can establish concrete routines and traditions that promote child development as well as a deep, symbolic ritual for both adults and children (Fiese, Foley & Spagnola, 2006). Family meal routines provide the time for communication and continuity for families, offering children a predictable and rhythmic daily practice that they can be accustomed to and depend on (Spagnola & Fiese, 2007).

Besides building community and teaching children cultural practices, family style meals have been shown to benefit children's development on many levels. Bandura's (1971) social learning theory explains how children learn both through their social and observational experiences by modeling their parents' and caregivers' actions. When children observe their parents, siblings, peers or teachers, they are able to learn through imitation and have the opportunity to practice their own individual skills. Eating together as a group, whether their family or greater community, allows for both social and observational learning to take place as children develop the skills of eating, conversation, and knowledge of satiation independently. Family structure has changed in the past century, with many families juggling multiple working parents, busy schedules, and the absence of time. Along with the societal shift in structure, comes shifts in priority to convenience, efficiency, and less ritualistic time for families. As a result, family routines have been stretched thinner and become less of a priority. With changes in family dynamics and the amount of available time, many children spend the majority of their day in childcare while parents are at work; many meals are now often consumed primarily with non-parental figures (Johnson et al., 2013). As children learn through their experiences with others and the behaviors they observe, the benefits and implications of family style meals within the early childhood classroom are also important to note. Environments including differing ages and ability levels allows for children to experience situations much like they do at home, observing and imitating the behaviors of their peers and teachers.

Several studies have explored the importance of family meals and the benefits young children receive from growing up in a culture that prioritizes mealtime rituals. Research has shown that children create their own mealtime processes within the culture they are a part of, exploring both their own individual behaviors as well as behavior within the larger group eating together (Alcock, 2007). Through routine family style meals in the early childhood classroom, children use their familiar classroom setting to practice being part of the community, taking part in conversations, and practicing the physical motor skills necessary to eat and be part of a meal in a socially acceptable way.

Both at home and at school, family style meals provide opportunities for children to learn important social and self-regulatory skills. By taking part in family style meals, children are able to learn the beliefs and expectations that their culture and communities value. These experiences provide a guide to acceptable behavior and self-regulatory abilities as children home their emotional, physical and motor skills (Boyer, 2012). Self-regulatory skills are important in fostering independent and successful community interactions, by nurturing awareness of personal and community needs while eating together.

Hence, this study will explore the concept of family style meals in a school setting with a strong, small community base. In this setting children eat together routinely with the same peers and teachers. Though family style community meals have been shown to benefit children in significant ways, the connection between the acquisition of self-regulatory skills and a community style family meal is in need of further exploration (Alcock, 2007; Boyer, 2012; Johnson et al., 2013). Preschool classrooms provide a place for children to practice fundamental skills before entering the classical academic school setting. Self-regulatory skills are reinforced as children move through their routines in the day in moments of dressing, bathroom use, and eating. By honing in on meal time specifically, the self-regulatory skills that children practice will be showcased in this study. Children develop their self-regulatory skills both at home and at school through the routine and practice of their daily lives. By eating together with their parents, teachers, siblings and peers, children can use the repetitive meal times and modeling to learn their own regulation.

#### **Literature Review**

With just over half of American families sitting down to eat together for dinner, the absence of time spent together as a family could have drastic implications for children devoid of these experiences (Saad, 2013). Higher academic success, increased language and interpersonal skills, as well as a reduced risk for alcohol or drug abuse are some of the benefits that have been found for children whose families partake in routinely eating together (Fiese & Schwartz, 2008).

Experiencing intimate, close meal times provides opportunities for children to enhance their learning. Through the routine of eating together on repeated occasions, children are able to practice their independent self-regulatory capabilities at the dinner table, interactions with others as well as their knowledge of food and basic healthy eating habits. Family and parent attitudes towards eating together may provide important information about the behavior and abilities of young children when observed within a school setting.

The review of the literature examines the beneficial components and elements of family style meals using peer-reviewed and refereed articles to explore the connection between family style meals and children's self-regulatory capabilities. Research topics explored include the benefits gained by partaking in family style meals at home and in school, cultural aspects of meal times, and the implications of routines for children, especially regarding family meals, as well as self-regulation capabilities. By considering these research topics, the goal of this literature review is to gain a better understanding of the connection between the self-regulatory abilities that children practice and develop through their experiences eating together as a family or community.

#### **Family Style Meals at Home**

Family style meals are most often thought of specifically as sitting down for dinner each night as a family within a home environment. However, with our ever-evolving busy society, this concept can be expanded to include any meal of the day where families come together to converse, spend time and connect while eating together. The routine of the family meal provides a structure and predictability for children and parents to rely upon, creating an understanding and shared appreciation for the time spent together (Tonyan, 2015). Within meal routines, parents and caregivers are able to teach lessons of culture, behavioral expectations, and life skills

through real and practical experiences together. Mealtimes provide a time for conversations and the establishment of cultural and familial expectations of table manners and behavior (Spagnola & Fiese, 2007). This type of routine allows for children to hone their communication and eating skills, creating a platform for stronger mental and physical health in the future (Fiese, Foley & Spagnola, 2006).

Long-term, children who partake in family style meals may improve their awareness of their individual needs and their own self-regulatory abilities. The acquisition of abilities like satiation directly influences long term overall health as well as reducing levels of obesity. It has been found that family meals promote positive eating behaviors such as self-regulation through portion control, aiding in learning healthy and conscious eating habits (deWit et al., 2015). deWit et al.'s (2015) study focused on young people between the ages of 10 and 17 years of age in nine European countries. Through self-reported assessment in survey form, students answered questions regarding their personal eating behavior, family meal culture and their own self-regulatory abilities. The study discovered that children were more likely to consume fruits and vegetables within a joint family meal setting, in comparison to less healthy snack choices that were found to be consumed outside of the home. Additionally, deWit et al. (2015) discovered that family meals have a strong influence not only on eating behaviors and choices, but also on learning social and cultural standards for appropriate eating.

Through these assessments, there was significant association between strong selfregulation skills and healthy eating habits in relation to family meal culture across all countries studied. There was strong evidence indicating that a home food environment shapes the eating behaviors of young people. The study found significant associations between communal meal values and the eating behaviors of young people which indicated that parents and caretakers have a strong influence over the healthy choices children make (deWit et al., 2015).

#### **Family Style Meals in Schools**

Over half of children in the United States are currently in a regular childcare arrangement, whether in an organized facility or being cared for by family members (Laughlin, 2013). Therefore, exploring family style meals outside of the home is necessary to fully understand the current food culture of young children in the United States. Children in childcare and early childhood settings eat multiple meals together daily with their teachers, providing a second platform for social and practical eating experiences. Within an early childhood classroom meal setting, many lessons carry over from the family meal setting at home, providing a place for children to model positive meal behaviors, try new foods, and simply learn how to eat together in a group setting (Johnson et al., 2013). Johnson et al. (2013) studied parents and caregivers and how to enhance care provider and parent partnerships around young children's eating. By using a short questionnaire to survey both early childhood professionals and parents in focus groups in a round table conference in the western United States. This study included six focus groups including parents (n = 25) and early childhood caregivers (n = 39). The study found that both parents and teachers rely upon each other to teach and ensure that children receive adequate nutrition in both home and childcare settings. Parents specified that they rely heavily upon early childhood centers to provide breakfast in the morning for their children as this is a reliable source of nutrition. Parents also stated that they relied upon the centers to provide healthy, diverse nutrition for their children (Johnson et al., 2013). Both parents and teachers specified concern over quality of nutrition and increased access to processed foods for children. Parents also recognized that the skills acquired during meal time experiences were practical handwashing,

cleaning up abilities, social, and regulatory skills. The secondary community that is established within a school setting provides children with an additional platform to engage in learning language, social and emotional regulation (Johnson et al., 2013; Spagnola & Fiese, 2007).

Family style meals in schools are one of the most routine practices that both families and teachers provide for children, therefore creating the opportunity for repetitive, routine experiences for children to practice their skills (Spagnola & Fiese, 2007). For children in early childhood, routines are an important part of establishing predictable structure and an optimal learning environment.

#### **Routine in Family Meals**

As children become active participants in the daily functioning of their families and communities, routine and rhythm bring structure and comfort to their everyday life (Spagnola & Fiese, 2007). This type of structure provides children with a sense of security and predictability therefore allowing them to feel comfortable and confident in themselves and learn within their environment. Routine family and community practices create an emotional connection for children, providing a sense of value and familiarity to develop their socioemotional, language and academic skills (Spagnola & Fiese, 2007). The symbolic connections that are created through mutual eating experiences create moments of togetherness and community, allowing for the creation of meaningful routines.

Mortlock (2015) studied a group of toddlers in a New Zealand childcare center, exploring data in the form of taped footage to explore the social cooperation between children during meal times. Four children ranging from eight to 20 months were chosen from the infant and toddler program of the center for a close focus for this study. Video footage in one-hour increments were

taken of the four focus children over the course of several weeks and then analyzed by both researcher and teachers to ensure corroboration of what was occurring (Mortlock, 2015).

The video analysis revealed that the children, independent from their teacher, established their own playful routines while eating together, imitating each other's behavior and creating a repetitive routine that the children recreated each day. The routine established included children all playfully eating their yogurt together in the same, somewhat disruptive way together. Upon reflection, the researcher concluded that this type of established routine provided learning experiences in socialization for children and their community. By creating a simple routine, whether a playful one between children or a more serious ritual within families, their connection is deepened to their experience of eating, allowing for many other lessons to be learned at meal times (Mortlock, 2015).

Additionally, as Fiese, Foley and Spagnola (2006) noted, family meal time rituals encourage family commitment to one another. Whether cooking, setting the table, sitting together or cleaning up afterward, these routines and practices allow for families and schools to create structure and family identity. This study looked at the communication, problem solving and repetitive symbolic interactions at meal times through videotaping during meal times. The families within Fiese et al.'s (2006) study typically included two to three children, aiming to be a sample of the general population. One of the goals of this study was to examine the communication that occurs during family meals and the connection to the mental health of children. Analysis focused on the communication, commitment, and continuity that families have within their meal times. Strong continuity and routine surrounding meals showed a connection to strong mental health of children based on anecdotal evidence of family meal conversation (Fiese, Foley & Spagnola, 2006). A specific example showed a conversation between a mother and child, displaying how a mundane conversation provided the opportunity for problem solving and emotional support from the parent. As Spagnola and Fiese (2007) also described, by having solid routines within family style meals, children encounter social emotional learning and commitment to one another. On top of the important connection building, children also begin to build upon their practical, self-help and self-regulatory skills (Spagnola & Fiese, 2007).

The overall routine of meal times allows for a meaningful experience for children when spent together as a family or community. Children experiencing family style meals also create their own playful meal time routines within childcare, as described by Mortlock (2015) previously. Alcock (2007) explored the question of how children create their own rules and routines while eating together within early childhood settings. The study used observational data to record children from six months to five years of age in New Zealand. Recorded data was analyzed to examine the playful and humorous experiences that children created during meals to make the experiences fun and enjoyable. By playing with words and rhyming within the process of eating and passing the food around the table, the children engaged in humorous routines repetitively. The study found that while the goal of mealtime, from the teacher may be to ensure proper nutrition for the children, the goals in place for children during meals may be focused more on the playful, humorous experience, while also consuming and satiating themselves (Alcock, 2007).

Routines are an opportunity for children to practice their fundamental developmental skills such as language and vocabulary, both fine and gross motor physical skills, socialemotional and communication skills (Spagnola & Fiese, 2007). The development of physical meal time skills such as eating with utensils and communicating with family and peers occur as children partake in these experiences. Through these experiences as well, children develop their individual regulatory skills as they learn through social and cultural expectations.

#### **Self-Regulatory Skills**

Self-regulation can be defined by the ability to comply with a request and initiate or cease an activity based on the demands of a situation (Boyer, 2009). The ability to self-regulate both emotionally and physically is learned through cultural and routine experiences as children learn how to be in control of their own bodies. Development of these skills for young children is supported through adult mentorship and direct experiences where children practice and learn to be in tune with their own motor and emotional capabilities (Boyer, 2012). Modeled societal expectations are pivotal to children developing social and emotional self-regulation abilities and can therefore vary across cultures. Family meals are opportunities to build and socialize eating behaviors with families (Orrell-Valente et al., 2006). A study by Orrell-Valente et al. (2006) examined families with five year olds within their homes who were observed in two hour sessions which included children's dinner time. The goal of video recordings were to analyze familial interaction patterns and parent socialization of children's eating habits. This study found that 74% of parents dined with their children and 20% actually ate while their children were eating. The study also found that children have an ability to innately regulate the volume of food they consume and can follow internal cues for satiety and hunger. Parental influence over amount of food consumed seemed to have negative impacts when externally pressuring children to eat, though it was evident that parental presence encouraged overall consumption and table etiquette (Orrell-Valente et al., 2006).

To develop self-regulatory behavior in children it is necessary for parental or adult facilitation of the learning environment, whether at home or at school. Creating interpersonal experiences brings the opportunity for children to engage in learning and shape their selfregulatory abilities within their peer and teacher interactions (Boyer, 2009). Early childhood settings allow for concentrated learning experiences for children to find interests with others of similar age, therefore learning the basic aspects of conversation. Basic aspects of conversation could include listening to one another or waiting to speak until another child is finished speaking. Within the family context, this concept is also reinforced through siblings and parent interactions.

Self-regulatory skills are the basis of how humans function as a larger group. Boyer (2012) explored how children acquire these skills through their own familial routines and culture. The study conducted by Boyer (2012) used teacher and parent anecdotal accounts to illuminate how different cultures view how children acquire self-regulatory skills. Adults, including parents and educators were seen overall as the role models for behavior and emotional regulation for children. By studying ethnographic evidence from 27 preschool families from culturally diverse backgrounds, Boyer (2012) concluded that cultural background influenced how the preschool children acquire self-regulatory skills. As each familial culture differs, expectations and cultural values will differ for each child. When children come together in group care settings, these cultural influences intertwine and form a new set of school culture and expectations that children learn through as well. Cultural background and differing expectations can influence the development of self-regulatory capabilities. Therefore, for the current study, it is important to consider the cultural influences that could be present within the findings.

#### Summary

This review of the literature illustrates several important trends regarding family style meals and young children currently. First, evidence supports that through meal times, parents are able to model and indirectly teach the cultural and behavioral expectations of their family (deWit et al., 2015). With fewer families eating together at home, family style meals in schools are increasingly more important to establish community, learn practical behaviors, and hone selfregulation skills from interactions with peers and teachers (Laughlin, 2013; Johnson et al., 2013). Finally, by exploring repetition and the routine of meals, communication abilities are strengthened for children as they navigate the social aspects of eating meals together (Spagnola & Fiese, 2007). While there has been extensive research on family meals in recent years, there has been limited direct research on the connection between children's self-regulation abilities and the frequency of family style meals encountered by the child and family. By examining family style meal frequency at home and children's abilities in table manners, interpersonal skills, overall health awareness and community engagement, parent perspective in child capabilities will be studied. Additionally, child abilities will also be assessed within school family style meals by teachers. Through teacher and parent perspective, the connection between family style meals and children's self-regulatory abilities both at home and at school will be explored. For this study, the independent variable is family style meal practices within the home. The dependent variable is the self-regulatory capabilities of the children while in a school setting.

#### Method

The study used a mixed methods approach to data collection (Creswell, 2015). Data were gathered both quantitatively and qualitatively to further understand the connection between family style meal frequency at home and their relation with children's self-regulation abilities. Self-regulatory abilities were measured both at home and at school. The independent variable, family meal practices at home, was measured using a parent survey which utilizes both qualitative and quantitative questions. The dependent variable, self-regulatory capacities, was measured quantitatively using a behavioral checklist of self-regulatory capabilities of the children within the school environment. The overall unit of analysis for this study was the family, including both the children and parents.

#### **Population and Setting**

The setting for this study was an early childhood center located at a small, liberal arts college campus in New England. The center provides childcare services for the faculty and staff of the college as well as a limited number families of the greater town when space allows. The center itself services children from six weeks to five years of age, including four different rooms where children move up by age. This study looked specifically at the preschool classroom, including children from three to five years of age and their parents. The author of the study serves as one of three primary teachers within the preschool classroom of the center. Family style meals are an existing part of the preschool classroom culture, with each of the three preschool teachers sitting with the same group of children for both morning snack and lunch each day. Familiar rituals, peers, and expectations are an existing part of each meal that the teachers and children eat together. Within these meals children wait for all members of the table to be present to begin eating, communicate respectfully and in context, use cloth napkins and practice acceptable and respectful table manners. Establishing a sense of community within each small group of children that makes up the larger group of preschool is an essential part of the curriculum at this center, creating a family like setting with clear expectations and a community focus.

#### **Protection of Human Subjects and Recruitment**

The research design, consent forms, parent survey and behavioral checklist were approved by the internal review board (IRB) of the research institution prior to the implementation of this study. All research design elements and questions to be asked were approved by the IRB. The researcher and research assistant had also completed the National Institute of Health course on the protection of human subjects.

Before the study began, parents of the children were notified of the upcoming study and the background information about it through email. Parents were informed that this study was completely optional and it was their choice whether or not to take part. Parent and child consent forms were distributed to the families along with a parent survey for each parent to fill out regarding the value and implementation of family style meals within their own home (See Appendix A for complete consent form). Parents were reminded that this study was optional and confidential at the time of distribution. Children were also read a child assent form before data collection commenced (See Appendix B).

#### **Participants**

All 19 children within the preschool classroom and 81% of parents participated in the study. There were ten boys and nine girls between the ages of three and five (M=3.70). The majority of children/families were Caucasian; there was one child of Asian heritage. All families include a mother and father that are present in their lives. Four of the children within the study were from the local community, while the 15 remaining were children of college employees Families at the center generally have a strong focus on academic achievement and motivation and live an upper to middle class lifestyle. The population of the center does not accurately

represent the demographic characteristics of greater community and town in which the center is located.

#### **Instruments and Procedures**

**Family Meal Routines at Home Survey.** The parent survey was designed to capture a picture of how family meals are structured in the homes and how each parent feels about family style meals. Questions asked focused on the length of time and frequency of family meals within their home. Parental rating of the eating abilities of their children, including their physical table skills, interpersonal skills, awareness of health, and contributions to their community were also surveyed. Parents were asked to rate these questions using a 1-5 Likert point scale (1=strongly disagree, 5=strongly agree) For the purpose of defining table skills, questions scores for both table manners and fine motor skills were averaged. To measure a child's involvement in their meal preparation and process, community involvement was measured. Parents assessed their child's participation in both meal preparation and clean up and scores were averaged to find the final score. Parents were asked to rate and explain their opinions of the benefits and negativities regarding eating together as a family.

Self-Regulations Skills Checklist for the Classroom. The second instrument utilized was a behavioral checklist designed by the researcher. The instrument was designed to rate the table and interpersonal skills as well as overall health awareness of the children within the school setting. The checklist was created with information and standards on healthy behavior practices provided by High Scope (2013) and the Maine Department of Education Early Learning Standards (Maine DOE, 2015). This checklist assessed a variety of capabilities including physical table skills (eight items), interpersonal skills (ten items), awareness of health (three items), and contributions to their table community (two items) which children might be able to

perform. The behavioral checklist required a rating of 1-5 (1=unable to complete, 5=proficient in ability). The items from each category were averaged. After all consent forms were returned, the researcher began behavioral observations during both morning snack and lunch times for each child in the classroom. Each observational period lasted the duration of the meal time, approximately 20 minutes. Observations were conducted by the researcher and research assistant while sitting nearby to the table of children eating together with an additional teacher sitting with them.

#### **Reliability and Validity**

The questions within the parent survey were designed based on prior research in the field (Alcock, 2007; Boyer, 2012; Fiese & Schwartz, 2008). Questions were developed by the researcher and then reviewed and revised by the research advisor and other professionals in the field for reliability and clarity of the wording. The survey and consent forms were given to parents within the exact same time frame and context. Parents were given two weeks to fill out the survey and received it on one particular day when coming to pick up their child. The survey provided an opportunity for parents to answer a variety of questions in different forms, both open-ended and simple, short answer or multiple choice questions. The survey provided a place for parent perspective of the behaviors of their children working to solidify the reliability of the observations made by teachers of similar behaviors at school during meals. Validity of this measurement tool may be threatened by any changes that could have occurred for the children or families within the study such as children meeting large developmental milestones, changes to family routine or larger familial structural changes.

The developmental checklist was designed by the researcher using prior research, professional experiences and multiple published standards checklists from the Maine Early

Learning Development standards and the High Scope organization (High Scope, 2013; Maine DOE, 2015). This checklist was reviewed by the research advisor and other early childhood colleagues to ensure reliability and clarity for the data taker. The researcher trained the research assistant in standard of bench marks to ensure similar rating of behaviors on the scale of one through five in eating capabilities and behaviors of the children. Internally, validity could be threatened by the daily changes that occur in the lives of children and their families. Specifically, attendance, weather emergencies, changes in diet, illness or family changes could alter the validity of the study.

Externally, a threat to the validity of the study, including both the parent survey and behavioral checklist tools would be the applicability of this study and the tools used in all early childhood settings. The focus at this particular center on family meals, cooking, healthy foods, gardening and parent involvement around food creates a sample that would not apply to all early childhood populations. Given that the population of this specific center, and the preschool in particular, is a bubble in the population of the greater community, this sample could potentially not match those of other early childhood centers nearby or throughout the region.

#### Results

#### **Importance of Family Meals**

Of the 31 parent participants in the study, 87% strongly agreed that family meals were an important aspect of family life. The other 13% specified that they agreed that family style meals were important. Table 1 displays the reasons participants felt eating together as a family was a positive experience and a focus within their family.

# Table 1.Parent Perspectives on Family Meals

- "Focused listening! Patience and verbal response to feelings and ideas."
- "Builds a sense of togetherness, a time to regroup and connect."
- "Any time we have together in the evenings and weekends are valuable. We love food! And like to share that with the children!"
- "They are a time to reconnect, pause, and talk before bedtime routines."
- "Time to talk and bond-uninterrupted time as a family."
- "With how busy our lives are, it allows us time to come together as a family, placing emphasis on how important that time is together. We are also teaching our children table manners/etiquette and healthy eating habits."
- "It's the time when we're all together, focused on a common activity."
- "The meal, as a communal gathering, is important. Time to meaningfully connect is limited (for us). Meals provide that opportunity."
- "Modeling adult behavior and interaction; conversation; politeness. A chance to talk, not just play."
- "One of the only times during the day that we're all together and focusing on each other."
- "We feel family meals are one of the most important part of our day, because we all come together and have time to connect."
- "Our lives are extraordinarily busy- it is a key time to be together and connect with each other."
- "We eat together every day. We eat to be social and to be healthy. Our child is chattier at the "dinner" table than when she is off playing imagination games or working on a puzzle, so it's one of my favorite times together."
- "It is time for us to come together. Shared food is a great way to reaffirm and symbolize our shared relationships. It is the essence of family life, cross-culturally."
- "Fun to be together and pause to share time. Learning social skills and portion control. We share news and feelings, happy stories and concerns."
- "The time together is critical as are the lessons of patience, communication, teamwork and helping, nutrition, manners. We also want our kids to see meals and food as something to be celebrated, together."
- "Chance to spend quality time together. Opportunity to ensure that our child gets nutritious food."
- "Family bonding, no distractions, just each other, complete attention."
- "It is a time for us to gather together and hear about each other's days, to share undivided attention, appreciate the labor of making a meal to keep healthy. We both grew up in households where family dinner was a cultural ritual."
- "They are a time with minimal distraction to all sit and catch up."
- "It is a time when we come together and focus on each other."
- "Quiet time to talk together."
- "It is the time of day we check in with each other and have face to face conversations without distractions."

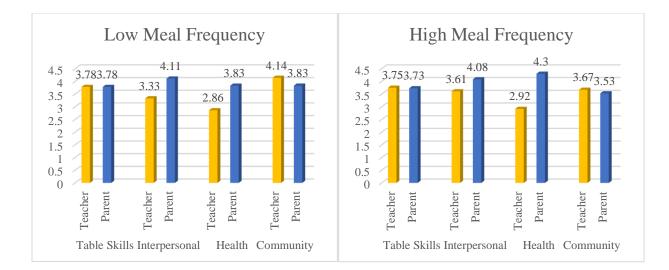
This table shows the themes of connectedness, focused attention and quiet that are present in the subject pool and why families within the sample place value in carving out time for family moments and meal times together. Families value shared meal times as they provide a time for spending time together, communication, quieter or less interrupted times, modeling and teaching appropriate behavior as well as the cultural importance behind these shared experiences. Parents specified the importance of family meal time as a place for family bonding with full attention to create a social and healthy community.

#### Meal Frequency and Children's Self-Regulatory Skills

After data collection occurred, children were separated into two groups, those who participated in frequent family style meals (high family meals) at home and those who participated in them less often (low family meals). The high and low family meals groups were created by splitting groups based on the average (M=11.5) per week. Parents of the "low" group of children noted barriers to eating meals together to be not being ready or having enough time to cook before their child was hungry, busy schedules, distracting cell phones, children's pickiness, or extracurricular and late night activities taking precedent.

After the separation into the high/low family meals groups parent and teacher-rated child behaviors was examined for table skills, interpersonal table skills, overall awareness of healthy food, and contributions to their community at the table using average item scores for each measure. Figure 1 shows the rating of both teacher and parent in the four skill areas for the "low" meals group and "high" meals group.

Figure 1. Self-Regulatory Skills Based on Home Meal Frequency.



As Figure 1 demonstrates, there was very little difference found between children's physical table skills in the "low meals" and "high meals" group from both parent and teacher perspectives. Children who experienced family meals less frequently had slightly higher rating of their table skills. Parents in both the group experiencing a high frequency of meals and those experiencing a low frequency rated their children higher than teachers did in interpersonal skills. Similarly, parents in both the high and low meal frequency groups rated their children higher than teachers in knowledge of healthy eating practices. In the category of contributions to their community, parents and teachers in the less frequent meal experiences rated children slightly higher than those in the high frequency group.

#### Discussion

This action research study used both qualitative and quantitative data to determine the frequency and importance of family style meals within the home. Additionally, quantitative data was used to assess children's self-regulatory capabilities within the classroom during family style meals. The goal of both of these activities was to understand if there is a connection between self-regulatory capabilities of preschool children and the frequency of family styles meals that they experience at home. Parent participants in the study all indicated that family meals were

something that was important in their family life which is in line with the priorities of the childcare center where their children attend and the study was conducted. Qualitative data from parents indicates that time for family meals was valued because many felt there were few other opportunities for family moments with their children throughout the week. With shifts in priorities and family structure, lack of time presents a significant barrier to eating together as a family (Johnson et al., 2013).

In exploring why families valued time spent together while eating, 82% viewed the communal bonding time as very important to their families. Despite valuing family meals, only 21% of parents mentioned that they felt participating in family meals was a way to build their child's developmental skills. These findings suggest that parents place higher value on the community that meals foster rather than the self-regulatory developmental skills that children learn through modeling and expectations during these meals. Parents may not mention the developmental skills which can be gained either because they place less value on these skills or are unaware of the learning and developmental opportunities present in these moments. Secondly, all families indicated that meals were an important and common part of their everyday lives, though did not indicate the skills that their children were also indirectly developing in these moments. Boyer (2009) discovered a similar disconnect in parents not being aware of the skills in self-regulation that children attain through adult modeling.

Findings suggest that parent education efforts could be undertaken to help inform parents of the value to self-regulation in development, and how everyday activities, like family meals, help to develop these self-regulatory capacities. It is possible that through further education of how children's self-regulation skills are supported through family meals, parents could be more aware and intentional in their own modeling practices during meals (Boyer, 2012). Data analysis of children's eating behaviors in school and at home shows that children who frequently have family meals at home were rated almost identically in their table skills by both their parents and teachers. Additionally, children who experienced family meals less often were also rated nearly identically in their skill level at the table by both their parents and teachers. This finding indicates that teachers and parents, independently from each other, had similar personal standards of assessment for levels of self-regulatory ability. Practical skills such as demonstrating proper table etiquette, use of utensils or pouring abilities were all aspects assessed by both parents and teachers. While eating together in school with other children could look quite different from eating as a family at home, these skill areas are still present in both locations, therefore parents and teachers were able to observe similar levels of ability despite the differing circumstances.

Overall, parent rating of their children's interpersonal skills was much higher than ratings given by teachers. This difference in rating was present for both children experiencing a high frequency of family meals at home as well as children experiencing a low frequency. This finding can be related to the difference in setting of where these assessments were taken, given that that teachers rated children in the context of an early childhood classroom with eighteen other children surrounding them. Teachers observed children's behaviors and capabilities within a classroom context where children are developing their skills together and modeling each other's behaviors. Areas assessed were the child's abilities to follow rules internally, refrain from disruption, group conversation abilities and awareness of others in their surrounding areas. For children in early childhood settings, self-regulatory interpersonal interactions could be very challenging and complex to learn and practice alongside eighteen other children. Within the home setting, children are able to showcase their skills in different ways due to their close parent relationships, a quieter setting and fewer children to learn alongside. At home, it may be easier for children to display their optimal self-regulatory conversation skills and express of needs appropriately. Additionally, parents naturally have a stronger relationship with their children than teachers do. Therefore, children may have a higher comfort level and better ability to communicate in their home environment.

Data on children's abilities and awareness of health depicted a significant difference between parental and teacher rating. Children were rated on their awareness of the differences between foods and willingness to try new foods. Overall, parents rated their children higher than teachers. Parents could have ratied their children based on their overall family value and awareness towards healthy foods, not specifically the attitude or awareness of health of their individual child. Teachers, on the other hand, would base their assessment off of their observations of the specific children's eating habits and conversations surrounding food while in the classroom. Further research could look more specifically at children's eating habits to better understand the acquisition of this knowledge and understanding of the differences and benefits of healthy food (deWit et al., 2015).

Children experiencing a lower frequency of family meals at home were rated the highest by teachers in their contributions and involvement in their community. Within this category, children were rated on their involvement in helping to set and clear the table for meals as well as contributions to actually preparing the food eating during meal times. Within this specific preschool, children are expected to take turns in many of the meal chores that go along with being part of and contributing to a larger group. Children who eat fewer meals with their families at home would most likely not have the opportunity to be part of the chore aspect of meals and therefore parents may not be aware of their child's ability to finish these tasks. For children in school who do not have these experiences at home, they may have received a higher rating from teachers because they are willing and happy to partake in being part of their greater community but not expected to be part of this process at home. In the high meal frequency group, teachers also rated children's contributions slightly higher than parents, indicating a lower level of expectation of ability at home than what teachers are able to see within a larger classroom setting.

The study examined the frequency of family style meals that children experience and their level of self-regulatory skills. Based on the distinction between "high frequency" and "low frequency" of family meals (M=11.5) per week, very few differences were found between the two groups and how parents and teachers rated children's abilities. Because this study was conducted in an early childhood setting where all families are able to afford the expensive tuition of private childcare center, it could be understood that all children in this setting experience a level of parent involvement and access to food that is higher than the typical population. In their study, deWit et al. (2015) found a median frequency of meals per week of (M=2.44), therefore showing that the sample studied experiences a much higher level frequency of meals per week than the greater population does. If this study were conducted with a larger sample population of broader socioeconomic status, findings could potentially indicate stronger differences between "low" and "high" meal frequency groups.

#### **Limitations to Data**

There are many restrictions present in this data to note in discussing the findings. The two tools used in assessing family meals and the relation to children's self-regulatory capabilities were created by the researcher for the sole purpose of the study. Both assessment tools used rating scales from one to five, but associated different terms for the ratings. The parent survey

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was based on ratings of "agree" or "disagree" and the teacher assessment checklist was based upon proficiency of ability. For the parent survey specifically, while all families had at least one parent participate, there were seven cases where only one parent filled out the survey. When measuring the frequency of family meals at home, answers could have reflected all meals including breakfast, lunch and dinner or only referred to dinner time specifically due to unclear wording of the question, therefore providing inconsistent subject responses.

The observations that were taken in the classroom used the behavioral checklist tool designed by the primary researcher. Within this particular classroom, observations were taken over the course of three weeks. During observations, the researcher and research assistant, both primary teachers in the classroom, observed while a substitute teacher sat with the children as they ate. Additionally, one of the three co-lead teachers of the classroom was out of work for the duration of the research period. The primary researcher completed 63% of the observations of the children, including the researcher's six primary children and the absent teacher's six primary children, while the research assistant completed the other 37% of child observations, including her own seven primary children. Some observations were taken within times of lower attendance due to public school vacation weeks, weather closures and illness.

Overall, the sample population represented in this study is not representative of the overall greater community or early childhood population. This study included a small sample size of families accustomed to living upper-middle class lifestyles where food and family time is of regular habit. Subjects within this study represent a bubble in the greater community population, therefore demonstrating results that may only be applicable to this particular early childhood setting.

#### Conclusion

Family meals for young children are an important place to develop and practice many practical skills necessary for future human interaction. This study highlighted many of the necessary skill areas that children develop during these experiences and the differences in interpretation of these skills by both parents and teachers. This study found that parents place high value on the communal family time spent together during family meals, therefore placing high priority on this family time but not necessarily the developmental skills that are learned indirectly through these experiences. Further educational opportunities for parents and early childhood professionals could help to highlight the additional developmental skills that come along with the important time spent together as a family or community.

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#### Appendix A

#### PARENT/GUARDIAN INFORMED CONSENT AND PERMISSION FORM

Dear Parent or Guardian,

You and your child are invited to participate in a research project being conducted by Katherine Chandler, a graduate student at the University of Maine at Farmington. The purpose of the research project is to gain a better understanding of family style meals and how they influence young children's self-regulation.

#### What will you be asked to do?

If you decide to participate in this study, you will be asked to fill out a questionnaire regarding how your family eats at home, how meal times are structured and your experiences eating with your children. This survey will be an open-ended questionnaire and will take a total of 10-15 minutes to complete.

#### What will your child be asked to do?

If you consent for your child to participate in this study, your child will be observed four times, twice from between 9:00 AM and 10:00 Am and twice between 11:30 AM and 12:30 PM between the months of January and May of 2017. Your child's self-regulation behaviors will be observed while eating in a family-style meal setting over the course of this time period. Your child's primary teacher will be interacting directly with your child in these observations and may ask questions regarding the foods they are eating or what they did that day to encourage eating practices and conversation at the table. Observation periods will be typical to the daily eating practices that your child is accustomed to at BCCC.

#### Risks

There are minimal risks to you or your child in partaking in this study. Observations that occur will be typical to everyday meals that the children partake in each day with their primary teacher sitting with them during meals. Prior to the beginning of observation, the study will be explained to your child and they will be asked if they wish to participate. If your child becomes uncomfortable in any way during the observation period, the researcher will cease any questions asked of them. If you become uncomfortable with any questions asked in the survey you may choose not to answer them.

#### Benefits

There are no direct benefits to you or your child in participating in this study. The information gathered in this study may help expand the connection between family-style meals and the benefits to young children. Additionally, this study may help inform teachers and parents of how to implement family-style meals both at home and at school.

#### Confidentiality

All data that will collected in this study will be kept strictly confidential. Your name and your child's name will be kept confidential through a number coding process. Any identifying information will not be reported in any publications. All data collected will be locked in a filing

cabinet in the home of Katherine Chandler and will be kept for a maximum of three years. After three years, all data will be destroyed.

#### Voluntary

Participation in this study is voluntary. If you choose to be part of this study, you may stop at any time. If you choose to have your child participate in this study, he/she may stop at any time. Whether or not you and/or your child participate in this study will not impact your relationship with the Bowdoin College Children's Center. You and/or your child may choose not to answer any question you do not wish to and may withdraw from the study at any time. There are no repercussions for joining the study or not.

#### **Contact Information**

If you have any questions about this study, please contact me, Katherine Chandler at <u>katherine.chandler@maine.edu</u> (207-653-1241). You may also reach the faculty advisor to this study Donna Karno Ph.D. at <u>donna.karno@maine.edu</u>. You may also contact the chair of the University of Maine at Farmington IRB Karol Maybury at <u>karol.maybury@maine.edu</u>. If you would like a summary of the results, please contact the primary investigator at the contact information given above.

#### **Parent/Guardian Informed Consent**

I, \_\_\_\_\_\_, and \_\_\_\_\_\_fully understand the purpose of this research study and the procedures to be followed. I understand that my records will be kept confidential, my participation is voluntary, and that I may withdraw at any time without penalty. I also recognize that I may skip any questions within the survey I do not wish to respond to. I understand that results of this research will be shared in the form of verbal presentation or potential journal article. By signing below, I assert that:

- $\Box$  I fully understand the study described above.
- $\Box$  I give my consent to serve as a subject in this research by filling out a survey.

(Date)

(Parent 1 Signature)

(Date)

(Parent 2 Signature)

#### Parent/Guardian Permission for Child

- $\Box$  I have read and understand the purpose of this study.
- □ I give permission for my child to be part of this observational study.
- □ I understand that the results of this study may be shared with colleagues within the Early Childhood Profession.
- $\Box$  I understand that my child can withdraw from this study at any time.

By signing below, I assert that I fully understand the above and give my consent for my child to serve as a subject in this research.

(Child's Name)

(Parent/Guardian Printed Name)

(Date)

(Parent/Guardian Signature)

#### Appendix B

#### CHILD ORAL ASSENT SCRIPT Children 0-7

Hello, my name is Katherine Chandler and I am a student at the University of Maine at Farmington. I am talking to you now because I am doing a project to learn about family-style meals.

I would like to ask you to be part of my study. This means that I will sit with you during meal times and watch how you and your friends talk and eat together. Secondly, I may ask you questions about what you are eating, what you like to eat or what you did that day. I will ask to sit with you four times during the Winter and Spring to watch how you and your friends interact during snack and lunch times. We will sit together at meal times and I will interact with you in the same way we always talk during our snack and lunch times at school. You will sit with the same group of friends and teacher that you do on a day to day basis.

If you say "yes" to being part of my study, you can ask me to stop asking you questions at any time. I will not be upset if you do not want to be part of this study or if you ask to stop after the study has begun. You do not need to answer any question you do not want to. Your parents have agreed for you to be part of this study if you would like to. I will use my observations only for my study and will not share them with anyone.

Would you like to be part of my study?

#### Appendix C

#### **Family Meals Survey**

 Parent Name:
 \_\_\_\_\_\_

#### Family Structure:

- 1. How many people make up your immediate family? \_\_\_\_\_
- 2. What is/are the age(s) of your children?

#### **Family Meals:**

- 3. How long does a typical meal last in your house? \_\_\_\_\_ minutes.
- 4. How many times per week do you eat together as a family? \_\_\_\_\_ times. Please circle one (or more if applicable): Breakfast Lunch Dinner
- 5. During meal times, what kinds of things do you talk about with your children?
- 6. Are there any barriers to having family meals in your house? <u>Yes</u> No If so, what are they?

**Opinions About Child Skills and Family Meals:** Please rate these questions on a scale of Strongly Disagree to Strong Agree in the table below.

	Strongly	Disagree	Neither Agree	Agree	Strongly
	Disagree		or Disagree		Agree
7. My child has good table manners	1	2	3	4	5
8. My child has good fine motor skills	1	2	3	4	5
9. My child has strong interpersonal skills (social & emotional)	1	2	3	4	5
10. My child is able to take part in meal routines independently.	1	2	3	4	5
11. My child is aware that some food is healthier than others.	1	2	3	4	5

Strongly	Disagree	Neither Agree	Agree	Strongly
Disagree		or Disagree		Agree

### FAMILY STYLE MEALS AND CHILDREN'S SELF-REGULATION

12. Family meals are important	1	2	3	4	5

Please explain why:

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
13. There are positive aspects of eating together as a family.	1	2	3	4	5

Please explain why:

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
14. There are negative aspects of eating together as a family.	1	2	3	4	5

Please explain why:

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
15. My child is involved with the meal preparation process.	1	2	3	4	5

Please explain why:

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
16. My child is involved in the meal clean- up process.	1	2	3	4	5

Please explain why:

# THANK YOU FOR TAKING THE TIME TO FILL OUT MY SURVEY!

# Appendix D

# FAMILY MEAL-SELF REGULATION BEHAVIORAL CHECKLIST

Child's Name: \_\_\_\_\_ Age: \_\_\_\_\_

Meal Time (circle one): AM Snack Lunch Observation # (1 or 2):

During family-style meals the child demonstrates this behavior:

#	Behavior	Rate ability	Additional Comments
		level 1-5 (1	
		as unable to	
		complete; 5	
		as proficient	
		in ability)	
	TABLE SKILLS		
1	Ability to sit at the table		
	without reminders		
2	Demonstrates acceptable table		
	etiquette		
3	Uses fork or spoon		
	appropriately		
4	Ability to pour without spilling		
5	Ability to drink from a cup		
	without spilling		
6	A 1 • 1 •		
6	Ability to take appropriate		
	sized bites		
7	Doog not knock over chiests at		
/	Does not knock over objects at		
	the table (i.e. cup, plate,		
8	pitchers) Ability to know when/when		
0			
	not satiated (i.e. hungry or full)		
	INTERPERSONAL SKILLS		
9			
7	Expresses needs appropriately		

10	Able to follow rules & behavior standards internally	
11	Able to refrain from disruptive behavior	
12	Able to refrain from defiant behavior	
13	Accepts consequences of their own actions	
14	Respects the rights and property of others	
15	Recognizes the needs of others at the table	
16	Able to wait their turn while others are talking	
17	Ability to listen to conversations	
18	Ability to actively participate in conversations	
19	Follows classroom social expectations during meals (ex: setting the table, sitting to eat together, cleaning up)	
20	Able to follow classroom meal routines (ex: washing hands, waiting for others to begin eating, cleaning up process)	
21	HEALTH Vnouve that food is important	
21	Knows that food is important to grow strong and healthy	
22	Understands some food is healthier than others	
23	Can identify some healthy foods	Multe DDE 2015 High Score 2010

REPERDECES High Scope: (2013). Healthy behavior: Children ongoge in benkhy practices. High Scope: Educational Research Foundation. Maine Department of Education. (2015). Maine's early learning and development standards. Maine Department of Health & Human Services. Retrieved from <u>Improvementine over the public pre-cher/choc/chocuments. Maine. ED N puf</u>