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More than Just Food: Analysis of Food and Social Interactions

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Bridgewater State University

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Abstract

This study examines gender differences in the social interactions of elementary school students during their lunchtime period. This pre-adolescent culture initiates gender role behaviors that reflect how future views on gender will grow. The role of social interaction between peers relates to the food choices made in the lunchroom. The data for this study was collected through observations that took place over the course of two months in an urban public elementary school in southeastern Massachusetts. Observations were collected to closely examine how students in elementary grades are intermixing by age and gender in an informal, school-based setting. The observational data shows that gender roles and norms are controlled through speaking interactions, food consumption, and chosen seating arrangements. This research shows that at the gender mixed tables, the girls were more likely to eat less than when they were sitting at a single gender table, however, this was not the case for the boys. The findings in this study are consistent with the previous research of Eder (1995), Orenstein (1994), and Thorne (1993), yet in focusing exclusively on lunchroom activity this study more deeply analyzes social interactions in the lunchroom setting specifically as a place to examine gender norms and roles.

Introduction

Outside of family, children's first social experience is in school. These peer led experiences teach children different gender-role expectations. While school days are highly structured, lunchtime is peer-focused time. Here, children develop an understanding of what their peers expect. Lunch period allows for socialization around food, including social rules about consumption and gender. "Another important way that children may obtain information about novel foods prior to tasting them is through observing others' reactions. Social learning of this sort plays an important role in children's preferences across a wide range of domains (Bandura, 1977). However, food is a particularly important domain within which to examine social learning" (Frazier, Gelman, Kaciroti, Russell & Lumeng, 2012, p. 87).

Social learning becomes central to children's decision making around food during the lunch period. Girls are often expected to eat less than boys and to eat healthier. Boys are expected to eat large quantities without fear of peer judgment. Elementary schools are a place of classroom learning however, they are also where children often first learn social norms and gender expectations. Social norms along with gender expected behaviors become a central learned behavior from the children's peers. The decisions made about food consumption, interactions around food and what is socially acceptable becomes a large part of the elementary school experience for children. Through this exploratory study, questions are raised about the expectations and interactions around food are observed in order to explore differences in gendered behavior.

Literature Review

Gender Influence

According to Lyng, Fagt, Davidsen, Hoppe, Holstein and Tetens (2013) “one well acknowledged methodological challenge in dietary assessment methods is that accuracy of self-reported consumption may differ between genders in populations of children. Gender has been shown to be associated with diet-related outcomes in terms of actual consumption and meal pattern ” (2). The association between food and gender roles is what drives the differences within the boys and girls in the choices they make around food and social interactions.

Gender socialization plays a large role in the consumption of food within social settings. Among peers, gender expectations are based on several different influences. Some of these influences have to do with what they are actually eating, and how much of a certain food may be consumed. Studies have shown that the different types of food that are consumed by girls and boys are often related to peers expectations and social interaction. According to Vollrath, Hampson and Júlíusson (2012) “girls consumed more sweet foods...than boys, which may be a result of parental feeding decisions or a gender-based taste preference, or a combination of the two” (1115).

Food preferences become an important difference between boys and girls in the elementary school years. According to Caine-Bish and Scheule (2009) “boys demonstrated higher preferences for ‘ethnic’ foods (ie, fajitas, tacos, etc.), ‘fish and casseroles,’ and ‘beef, pork, and barbeque’ than girls. Conversely, the ‘starches and

sweets' factor was significantly more preferred by the girls than the boys" (536). Additionally girls also showed a greater preference for fruits and vegetables than boys did. These preference differences between the two genders contributes to the consumption expectations of peers and the reinforcement of gender (Caine-Bish and Scheule, 2009).

Gender Role Expectations

Gender roles in society are upheld by the behavior expectations placed on each sex. Different gender role expectations are predetermined for an individual based on their sex. These gender roles are different for males and females, often limiting behaviors and activities. According to Arrindell, Well, Kolk, Barelds, Oei and Lau (2013) "masculinity stands for a society in which gender roles are clearly distinct: Men are supposed to be assertive, tough, and focused on material success, whereas women are supposed to be more modest, tender, and concerned with the quality of life" (54). These expectations limit the ways that girls and boys are permitted to act without facing negative feedback from their peers.

Gender expectations and role orientations are anticipated in society, as are gender-typed activities. According to Donald and Linington (2008) "Gender role orientation includes 'the beliefs individuals hold about normal roles of men and women in meeting family and work responsibilities' (Mintz & Mahalik, 1996, p. 806). It is based on complex psychological and social processes which define traditional masculine and feminine roles and responsibilities adopted by men and women" (660). Girls are expected to be caretakers, and behave in ways that

demonstrate gentleness, where boys are expected to be strong and forceful, often demonstrating that strength through fighting.

According to Martin, Kornienko, Schaefer, Hanish, Fabes and Goble (2013) “Interest in shared gender-typed activities is one of the predominant explanations of sex segregation (Mehta & Strough, 2009), but few studies have tested this explanation. Also, questions have arisen about whether sex segregation emerges because children are attracted to peers who are interested in the same-gender-typed activities, which then brings them into contact with same-sex peers” (921). This selective segregation often leaves boys and girls choosing to be with their peers of the same sex. Gender-typed activities and behaviors reinforce gender role expectations.

Family influence

Family has a large influence on children’s food choices. Food choices are often made from the foundation of what families buy, eat, or cook. Adults are influential on children’s food choices because they are usually the ones providing the foods in the household. These influences begin in early childhood. Yet, children prefer the information provided by the adult unless it is seen as unreliable then, children prefer information from a reliable peer. Preschool age children may prefer to learn from peers over adults and these lessons can be about food when food is present, an adult’s influence can be a deciding factor for a child, but peer influences also matter. (Frazier et al 2012) Although parental influences may not be what a child wants, the influence of the parent being present helps control what is being

eaten. For example, if a parent insists a child eats his/her vegetables or they will not have dessert, the child is influenced by the presence of the adult to eat the vegetables even if he/she may not actually like or want to eat them.

Disordered Eating

Although anyone can be affected by an eating disorder, a higher percentage of girls are affected. According to Toepel, Knebel, Hudry, Coutre, and Murray (2012) “although both genders are affected, women have been found to be more susceptible to developing eating disorders and also obesity” (36778). Eating disorders can begin as early as the elementary school years in children. These disorders affect the types and quantities of foods an individual’s body may be consuming or lack of nourishment may be receiving. Without proper diet and nutrition through the consumption of valued foods, an individual can become malnourished, along with many other complicated disorders (Caine-Bish and Scheule, 2009). The diets of those with eating disorders become altered between the nutritional value in which one is receiving. With the lack of nutrition these bodies are receiving, the likelihood of them consuming healthy foods is lower than those who do not show weight controlled behaviors.

Individuals who suffer from unhealthy weight control through disordered eating are also more likely to focus on what their surrounding peers are doing. According to Bevelander, Anschütz, Creemers, Kleinjan and Engels (2013) “youngsters with so called “damaged” self-esteem (i.e. higher ISE than ESE) were found to follow peer intake more closely than those with lower ISE than ESE”

(72481). This shows that those who were facing eating disorders were more likely to want to please their peers when eating in front of them.

Social Interactions

The social aspect of eating is apparent when individuals are faced with choosing what to eat. When surrounded by peers in social-settings, girls and boys make different food and drink choices because they are influenced by the decisions that their peers are making. The interactions between peers are influential to individuals depending on their susceptibility to the social judgments of those around them (Marklund, Ahlstedt, Nordström, 2006). According to Frazier, Gelman, Kaciroti, Russell and Lumeng (2012) “another important way that children may obtain information about novel foods prior to tasting them is through observing others’ reactions. Social learning of this sort plays an important role in children’s preferences across a wide range of domains (Bandura, 1977). However, food is a particularly important domain within which to examine social learning” (87). These peer relationships focus on the preferences of peers. Peer relationships and surroundings can influence the decisions on what, and how much, food or beverages are consumed.

The settings of social interactions can also effect what is considered appropriate to eat. According to Lam and Leman (2009) “with the differing socialization of different ethnic groups, particularly with regard to food practices, ethnicity-based reasoning about novel foods may vary as a function of children’s ethnicity, particularly in the light of recent findings of ethnic differences in the

awareness of broadly held stereotypes in middle childhood” (480-481). Therefore, children of different ethnic backgrounds may hold different attitudes about foods and the social interaction with peers of different backgrounds can broaden ideas of what is appropriate to socially eat.

Peer Interactions

Along with social interactions, peer relationships become a large part of food consumption. The people surrounding individuals often reflect decisions that will be made based on factors that are subconsciously decided. According to Frazier, Gelman, Kaciroti, Russell and Lumeng(2012) “overall, child participants [in the study] demonstrated the strongest preference for foods that were being eaten by child models of the same gender as themselves who displayed positive facial expressions (appearing as if they were accepting and enjoying the target food).” (92). The results of this study suggest that children’s relationships to food are highly influenced by children of the same gender. This in particular showed the value children place on their decisions in relation to their peers, and how gender norms with food choice and eating differently affect girls and boys in school settings

Bevelander, Anschutz, Creemers, Kleinjan and Engels (2013) discuss social modeling as influential in food decision making: “people use others’ food intake as a norm or guideline for how much is appropriate to eat. From infancy on, people model their behaviors to learn and to affiliate with others as well as to be liked and socially embedded due to our need to belong.” This is important when considering how school-aged children make eating decisions. Bevelander et al (2013) further

explain, “social belonging is determined in part by self-esteem and self-esteem plays an important role in social interactions” (72481-72482). Social modeling affects how children make decisions about eating in social settings with peers. As any individual is eating with their peers, the stress to eat more or less can be present because of peer pressure. Peers influence how and what an individual may eat not based on hunger or even personal likes and dislikes, but only on the social need to be accepted by his or her peers. Children with lower self-esteem are more likely to be influenced by their surrounding peers, which makes them more vulnerable to making poor decisions about eating.

Food Awareness Consumption

Awareness and understanding about the healthfulness of particular foods begins at a young age. According to Lyng et al (2013) “in relation to fruit and vegetable consumption, it has been argued that girls have greater knowledge and self-efficacy compared to boys, although these determinants did not explain the gender differences in intake after adjusting for preferences and perceived accessibility (12)” (2). The consumption of fruits and vegetables and knowledge about what these foods do for the body are partners affecting the gendered choices in consuming these certain types of food. In a school setting, girls may be more prone to consuming less junk food because of their surrounding peers. This consumption can be different from being at home, even though knowledge about these foods may originate there. Additionally, according to Vollrath, Hampson and Júlíusson (2012), “girls and boys consumed similar quantities of sweet drinks and

fruits or vegetables, but girls ate more sweet foods than boys” (1115). Here, while girls appear to be making better food decisions according to Lyng et al (2013), this is not necessarily the case in all previous research.

Nutritional Knowledge

Knowledge of a food’s nutritional value becomes another factor in the decisions children make when choosing what to eat. If a child has knowledge about a food’s nutrition value, he or she is potentially more likely to make better eating decisions. According to Lyng et al (2013), this knowledge varies between genders, as does the likelihood to use the nutritional knowledge to make eating decisions. According to Lyng et al (2013) “girls possessed a greater knowledge about foods as they are more likely to participate in meal preparations and food purchases than boys” (5). Having greater knowledge positions girls to have an advantage to boys in making decisions about food based on their nutritional knowledge.

With access to knowledge about the nutritional value of food, there is a greater likelihood of that person making healthier decisions. Celeste-Williams, Lieberman, Banerjee and Boyle (2010) found in their study that when “although [participants] they were receiving nutritional information regarding healthy eating choices, they had a full sense of choice when it came to selecting their daily meals” (685). After the research was completed, the participants were able to make the choices that were known to be either healthy or unhealthy because they have been provided with the information. If the nutritional information has been given, the likelihood of a healthier diet becomes a reality.

According to Caine-Bish and Scheule (2009) “research has demonstrated that children’s food preferences predict the food children choose, but when children are asked their preferences, many of children’s top choices are foods high in fat, sugar, and calories. There are, however, many healthier food options that children also prefer such as grapes, strawberries, and low-fat milk” (533). When the options for healthy food becomes available for children, then the choice to eat the healthier food occurs. If the variety of foods offered in schools focused on healthy eating, then children receiving the school lunch would most likely be eating healthier. Here, it is not just about the choice of healthy versus non-healthy foods, but instead offering only good choices, leads to children eating healthier (Caine-Bish & Scheule, 2009).

Packed Vs. Purchased School Lunches

The nutritional value in a lunch can have a positive or a negative affect in a child’s day. Although school lunches are served, not all students receive them, as many will bring their lunch from home. With this, the meditating of what children are eating is based on what is packed from home, or provided from the school. According to Caine-Bish and Scheule (2009) “State regulations and specific school food service organizations continue to alter menu options to increase the nutritional value of foods sold within schools” (533). Schools are reducing fat and processed food in favor of fresh and healthy alternatives (Caine-Bish & Scheule, 2009). With the state and schools working side by side, the options for individuals who are buying school lunch will be directed toward eating healthier food items.

On the other hand, packed lunches can also be providing children with healthy foods, but also with foods that contain low health benefits and high health risks. For many individuals, packed lunches can include a lot of pre-packaged foods. Not only were the lunches that were packed lower in micronutrients, but they were also found to be slightly less healthy than an average school lunch (Rees, Richards & Gregory, 2008). According to Rees et al (2008) “the high intake of sodium provided via the packed lunches is not surprising considering that nearly all packed lunches consisted of bread or crackers, the majority of pupils had ham or cheese as a filling, and 56% had a packet of crisps or similar salted snack” (424). The nutritional value within the packed lunches is not always likely to have a higher impact for the individuals consuming them. Reese et al (2008) also found “although most (81%) pupils consuming school lunch ate at least one portion of vegetables with their meal, only 13% consumed a portion of fruit. Conversely, in the packed lunch group, 58% of pupils consumed a portion of fruit but only 8% (five pupils) ate a portion of vegetables” (423). These packed lunches can be packed with unhealthy options where the fruits can be easily thrown away without a parent or guardian knowing what was actually eaten during the day. With the higher percentage of sodium contained within the packed lunches, schools may be looking to push towards having school lunches be mandatory or monitoring what is being packed in the lunchboxes of their students.

Research Questions:

Research Q1: Social interactions in the lunchroom change the amount of food children consume.

Research Q2: Gender affects the quantity as well as quality of food a child is consuming.

Research Q3: Boys and girls have different preferences in foods.

Research Q4: Girls are more likely to be self-conscious about eating in front of boys, than other girls.

Research Q5: Girls are more likely to bring their lunches, which are more likely to have healthier options than students who buy lunch.

Methodology

Research Design

The design of this study was a qualitative observation of students at one elementary school in Southeastern Massachusetts examining behaviors related to social interactions around food. Observations were conducted in the Angelo Elementary Public School in Brockton, Massachusetts. The observations took place during the regular lunch period times over the course of six weeks. The students were not spoken to directly, but were just observed. The observations took place from around 11:30am-1:30pm during lunchtime. These students were aware of the

observer, but did not speak to the observer during the time of observational hours. The observer strictly acted as a lunchroom monitor without being paid or compensated for the time being within the school.

Sample

The sample of the subjects included within the study was approximately 600 elementary students at Angelo Elementary School in Brockton MA. These students were enrolled there in the 2013-2014 school year in grades kindergarten through fifth grade. The traditional age of the students varied between 5-11 years of age. The majority of the students were African American and Latino. No names were collected during this research, rather fictional names were assigned to observe students in the reporting of findings and results.

Setting

The setting of where the study was conducted is Angelo Elementary School, in Brockton, MA. This is only one of thirteen schools in the city of Brockton. This school has grades kindergarten through fifth grade. The observation was conducted in the cafeteria of the school during regular lunchroom periods.

Limitations

The limitations within this study included not having a representative sample, but instead uses this school as a case study. The findings here are not generalizable for this reason. The sample did not include the entire city of Brockton,

rather just the students in the Angelo Elementary School. Another limitation included within the study is that the observational period was limited to the visits of the observer. If the observation could be done throughout an entire school year, the results may have been different, with potentially a change in eating habits from the start of the school year to the end. Along with this, the students were able to see the observer taking notes during the observation, which may have affected their actions and interactions.

Findings & Discussion

Research Q1: Social interactions in the lunchroom change the amount of food children consume.

Findings

Social interactions are influenced by gender expectations (Arrindell et al 2013; Donald & Linington 2008). One example of this was during a second grade lunch, I observed three boys, Joe, Steve and Billy, and two girls, Michelle and Rachel, engage with one another for the 25 minutes period. Billy was very focused on telling the others a story about fight he had with his brother. Billy addressed his emotions of the stories by saying, "I was so tough" and "it wasn't even a big deal." While Billy was trying to impress all of the students at the table, Joe decided to act out the story with him. This included Joe fake slapping Billy in hope to prove he was not telling his story accurately. This interaction of the social settings with the mixed gender students shows that Billy was already very aware of the social masculine stereotype

that society expected of him to impress the girls at the table. This masculinity in Billy continued while he ate large amounts of food in front of his peers. While Billy and Joe appear well aware of their motive to impress the girls sitting with them, the girls barely touched their own lunches. The reaction of Michelle and Rachel at this table demonstrates how the social interaction with their male peers affecting how little they ate, leaving larger food consumption to the boys.

Another example of gendered social interaction was at a fifth grade boys' table together where the conversations were again about physical strength. Between the four boys at the table, Mike, Darren, Jimmy, and Peter, they were contemplating having an arm wrestling match between all four of them. Mike and Darren had set their arms up to begin to wrestle. Jimmy stood next to them saying "okay now no cheating you two, ready, set, GO!" As the Mike and Darren were wrestling, Mike accidently knocked over a cup of water. Darren yelled, "Mike! What the hell man!" Mike was startled and said it was an accident. Darren looked over and at Jimmy and said confidently, "well, that's an automatic win right? Since he knocked over the water and stopped the wrestle?" Jimmy contemplated this with Peter but agreed with Darren. Jimmy then argued that it was an accident and the ruling was not fair and asked for a rematch. As the rematch went on, Darren completed the match with a victory. After this, the boys went back to devouring the lunch they had left before the period was over. This type of eating behavior by boys was seen several different days during the observational period.

A different example comes from a mixed gender interaction during the fifth grade lunch. A conversation evolved between two students, Dillon and Alyssa, who

were sitting at different tables. Dillon shouted across to Alyssa, “yo! Alyssa, let me get some of your chicken nuggets?” Alyssa nodded her head and walked into the food line. After Alyssa had received her food, she sat at the table next to Dillon with her group of girlfriends. Dillon promptly yelled, “Alyssa! Remember what you said!” Alyssa, without a word, got up from her seat with several chicken nuggets in her hand and placed them onto Dillon’s plate. In this situation, Alyssa never said no to giving away the chicken nuggets, yet did as her male classmate asked. The social interaction between the students was almost automatic for the girl to do what the boy had asked of her. This social interaction interfered with how much Alyssa could eat because Dillon had already asked for part of her meal. If Dillon had not asked for some of her lunch, Alyssa may have eaten all of the chicken nuggets served that day. This is just one of many examples I observed over the course of the seven weeks of lunchroom periods where gender role expectations were central to the student behaviors and the way in which they interacted with their peers.

Discussion

In the research of Frazier et al (2012) the setting of social interaction between students conformed to the reaction of the students I watched. “Social learning of this sort plays an important role in children’s preferences across a wide range of domains (Bandura, 1977). However, food is a particularly important domain within which to examine social learning” (Frazier et al, 2012, pg. 87). This interaction with food is controlled by the peers surrounding them. For Darren and Mike, the social surroundings of their male peers influenced their acting out

masculinity, to be judged on the arm wrestling taking place during lunch. While their lunches were eaten after they had completed their match, their eating was affected by the social expectation to complete the arm wrestling match first. In society, the males are socialized to act masculine, such as being competitive, aggressive and assertive (Arrindell et al, 2013). The students who were at a mixed gender table had their interaction with food also controlled by their social setting. Alyssa was influenced by her male classmate, Dillon, who asked her to give him part of her lunch. Here, the expectation is that girls eat less and should eat less, leaving more food for the boys who are expected to eat more (Arrindell et al, 2013).

Although the self-esteem levels were not looked at in this study, Alyssa may have had a low self-esteem causing her to do as her classmate Dillon asked. According to Bevelander et al (2013) “that is, youngsters with so called “damaged” self-esteem (i.e. higher ISE than ESE) were found to follow peer intake more closely than those with lower ISE than ESE” (72481). These individuals with so called damaged self-esteem fall into a group of students that are more influenced by their peer surroundings.

Research Q2: Gender affects the quantity as well as quality of food a child is consuming.

Findings

In this study, boys were more likely to eat a larger quantity of food than girls. Additionally, boys demonstrated better eating habits through higher consumption of fruits and vegetables. An example of gender affecting the quantity as well as

quality of food being consumed would be during a second grade lunch with a table of five boys, John, Mark, Connor, Drew and Jack. Each of the five boys immediately began eating once they had sat at the table. John ripped open his roll to place macaroni and cheese inside of the bread to create a sort of sandwich. Mark began putting dressing on his salad, along with biting into the chicken he received from the lunch line. Connor, Drew and Jack all were focused on consuming everything on their plates as fast as they could. As I looked over, I saw a table of all girls sitting besides them. This table had Jessica, Mary, Lauren, and Haley sitting chatting about the latest peer drama, yet not really eating their food. Mary was mixing around her mashed potatoes without actually eating them, and Haley was nibbling on a bagel pizza she created.

The atmosphere of the all-girl table was completely different from the all-boys table. As I looked over to the boys, Mark and John had already finished everything on their plates, while the other boys were walking to the 'share table.' This table was where any student could place or pick up food items that they needed. Before the lunch was over, all of the boys at the table had gone over to the 'share table' to grab either an extra milk or snack. Although the boys were eating plenty, the girls were not eating much. Looking back to the girls, Mary had only eaten some of her chicken and Haley had only eaten her pizza bagel. Jessica and Lauren had barely touched their plates and were throwing most of their lunches away. The quantity of food consumed varied greatly between the two single-gender tables. This happened on several occasions where girls appeared less willing to eat

much of their lunches, leaving higher levels of consumption to their male peers, even when not at the same table, but at neighboring tables.

Another example of this gendered behavior was seen during a second grade lunch, between four boys, Liam, Tommy, Tory, and Eddie who had all purchased their lunches from the school cafeteria. The neighboring table of two girls, Darcy and Miley, had brought their lunches from home while their classmate Jenna and Alison had bought lunch. The students who had purchased their lunches from the school had chicken nuggets, cut up carrots, apple slices, a roll and a milk. I saw Jenna and Alison pick around carrots and apples on their plate and eat the surrounding food. Liam, Tommy, Tory and Eddie who had also received the school lunch were eating almost all of the carrots and apple slices given to them. As for Darcy and Miley, their lunches included some sort of fruit along with assorted snacks. They however, did not eat the fruit provided in their lunch bags. The boys in this lunch were much more willing to eat the fruits and vegetables, but the girls were not. This interaction was a repeated pattern that I observed over the course of seven weeks being present within the lunchroom.

Discussion

The diets of the different tables varied by number of students along with the genders associated within the table area. According to Lyng et al (2013) “one well acknowledged methodological challenge in dietary assessment methods is that accuracy of self-reported consumption may differ between genders in populations of children. Gender has been shown to be associated with diet-related outcomes in

terms of actual consumption and meal pattern ” (2). This consumption of food was altered by the gender of peers sitting at the table with an individual. For the tables at were both girls and boys, the likelihood of a girl eating a large amount was very rare. At the single-gender tables, the consumption of food was greater by both girls and boys. For example, at the mixed second grade table I observed, the girls ate very little while the boys were not affected. However, over at the all girls table, all of the girls were actively eating their lunches when they were sitting together as a group, even though they consumed less than boys at the all-boy table.

The quality of food was also varied by the genders within the second grade lunch tables. The boys who had bought lunch ate the carrots and apple slices provided by the school, while the girls who had the same lunch had not. The girls who brought their lunches also did not eat the fruits provided for them. The quality of the food provided was the same for the students who bought the school lunch, yet the actual consumption differed between genders. The boys were more likely to eat the more nutritious food, while the girls were not.

In addition, the tables that had the same genders could have been more influenced by their same-sex peers because of the social interaction. According to Frazier, Gelman, Kaciroti, Russell and Lumeng (2012) “overall, child participants [in the study] demonstrated the strongest preference for foods that were being eaten by child models of the same gender as themselves who displayed positive facial expressions (appearing as if they were accepting and enjoying the target food).” (92). In this study, the individuals are more likely to identify with the children of the same gender and had a positive facial expression. This can relate to the tables that

had the same gender students eating a greater amount. From watching their peers, individuals may have felt a stronger urge to eat based on the influence of their peers at the table.

Research Q3: Boys and girls have different preferences in foods.

Findings

Previous research has shown that girls and boys show different food preferences, this is also the case in this study. One example of this was during a first grade lunch period I watched a group of eight students, Chloe, Robbie, Jasmine, Amanda, Jonny, TJ, Tucker, and Megan sit together and begin their lunch. Amanda and Robbie pulled open their lunch bags that they had brought to school. The other five students had bought the school lunch provided which was either a salad with chicken and peaches for Jonny and TJ, or turkey taco with salsa, lettuce, tomato, rice, green beans, peaches, for Tucker, Megan, Chloe and Jasmine. Amanda's lunch included a yogurt, goldfish, a fruit cup, and a brownie while Robbie had a sandwich, chips, and an apple. Amanda ate everything provided except the fruit cup, while Robbie ate his entire meal. The difference in the two students who brought their lunches was the lack of fruit being consumed from the girl. As for the students who bought lunch, I watched Jonny and TJ eat their entire salads including the chicken and peaches provided. However, Tucker was the only student who ate the lettuce, tomatoes, green beans and peaches out of the students that received those options. Megan, Chloe, and Jasmine only ate the turkey taco and rice provided by the school.

This observation of the gender difference in the vegetables and fruit was common throughout the cafeteria over the course of the time I was present within the school.

An additional example of gender having different preferences in food was during a fourth grade lunch period. Here, a conversation came to life between two separate tables. Sophie, was sitting with a group of girls eating their lunches as a neighboring table that was packed with boys, including one named Leo. Although Sophie had plenty of food on her plate, I watched her walk over to the boy table with confidence. Sophie looked at Leo and said, "can I have those apples?" Leo responded promptly with, "NO! I'm going to eat those in a second." Sophie, ignored Leo and began to take the apples without permission. Leo was furious and yelled, "Sophie I told you no!" Sophie walked away with confidence that she had won over the apple slices. Even though Leo was upset that Sophie had taken his apple slices, he got up and walked over the 'share table' to grab another container of the sliced apples that another student had left to share. He then took the apple slices back to his table and began eating them. At the table Sophie was sitting at, I watched Sophie brag to her classmates that she was able to get the apple slices from Leo but had no intention of eating them. In this scenario, Leo had actually wanted to eat the apple slices, while Sophie was just taking them as a show of status and power. Although this is just one example of gender preferences, it was a repeated pattern throughout the school within the time of my observations. On each of the days it was possible to observe differences in food choices between girls and boys.

Discussion

At the first grade mixed gender lunch table, I observed the lack of fruits and vegetables the girl students were consuming. According to Vollrath, Hampson and Júlíusson (2012), “girls and boys consumed similar quantities of sweet drinks and fruits or vegetables, but girls ate more sweet foods than boys” (1115). Although this research shows similar quantities of fruits and vegetables, this group of students did not demonstrate those eating patterns. Instead I observed boys eating greater amounts of fruit and vegetables than boys in this particular research. This was a repeated pattern within the study.

In previous research, Caine-Bish and Scheule (2009) stated, “boys demonstrated higher preferences for ‘ethnic’ foods (ie, fajitas, tacos, etc.), ‘fish and casseroles,’ and ‘beef, pork, and barbeque’ than girls. Conversely, the ‘starches and sweets’ factor was significantly more preferred by the girls than the boys” (536). The girls at this school were more likely to be seen eating a greater amount of sweet food as opposed to the boys who indulged in both sweet and savory foods, including fruits and vegetables. The girls ate the same amount of turkey tacos and rice as the boys, the boys ate more of the fruit and vegetables provided than the girls, and the girls appeared more likely to choose “ethnic foods” (tacos) than the boys at this table. Although this was not the case at every table, the findings here are not consistent with what previous research demonstrated (Caine-Bish & Scheule 2009).

For the students that were buying the school lunches, both a vegetable and a fruit was always provided. This allowed for the option of eating the fruits and vegetables. Although most of the students consuming school lunch ate at least one

portion of vegetables with their meal, a smaller percentage of students consumed a portion of their fruit. In the packed lunch group, about half of the students consumed a portion of fruit but a very small portion of vegetables. The likelihood of the students who brought their lunches having consumed the vegetable is much lower than the students who bought the school lunch. In the Angelo Elementary school the majority of the boys ate the vegetable provided, while the girls did not. The variation of food preferences is seen through what the students were choosing to consume. Greater amounts of fruits and vegetables were consumed by the boys than the girls with both genders being offered the same types of foods (Rees, Richards and Gregory, 2008).

Research Q4: Girls are more likely to be self-conscious about eating in front of boys, than other girls.

Findings

Martin et al (2013) discussed selective sex segregation often chose to be separate. When together, girls are often more self-conscious of their behaviors in front of their male peers. One example of girls being more likely to be self-conscious in front of boy peers was during a third grade lunch period. A group of eight students, Emily, Brian, Nolan, Maria, Justin, Kate, Linda, and Fred all sit down together. Brian, Nolan, Justin and Fred all dug right into their lunches without hesitation, while the girl students were much more reserved. As I watched, I began noticing the timid vibe coming from the girls sitting at this table. Kate, finally cracked open her juice box and began drinking as Maria began to eat her fruit. Both

Emily and Linda had not touched any of their lunch for the first five minutes of the period beginning. The boys at the table were not however affected by the girls sitting at the table. As the lunch was coming to an end, I looked around at the students lunches. Brian, Nolan and Justin had nothing left in front of them. Fred had eaten everything but a cup of sliced apples. Kate had finished her goldfish and juice box, while Maria had only eaten her fruit. Emily and Linda had only taken one item each from their lunches and were ready to throw the rest away. This table showed an extreme difference between the gender in quantity of food consumed. This was just one example of many where girls limited their food intake when sitting with their male peers.

During the same third grade lunch period I also observed two all-girl tables. One of the tables included the students, Brittany, Rebecca, Brooke, Ally, and Taylor. At the start of the lunch period all of the girls eagerly ate their lunches. Taylor and Brooke had bought their lunches and were creating their bagel pizzas. Brittany, Rebecca and Ally had brought their lunches from home and ate what had been packed for them. As the students dug into their lunches, I heard them discussing media news such as the latest on Justin Bieber and Disney Channel shows. All of the girls were focused on eating. At the other all-girls table during this first grade lunch, Ashley, Christina, Kerry, and Tara were just as involved with their lunches as the other all-girls table. Each of these students were eating and talking yet not concerned with the peers or fearing their judgment of them. This was a repeated pattern throughout the students within the elementary school where the influence of boys next to or near girls appeared to limit how much they would eat. For boys,

girls either were not influential or possibly led to shows of eating more, though boys seemed to be more influenced by other boys instead of girls.

Discussion

At the mixed gender table, the differences in the girls' food and the boys' were much different. According to Bevelander et al (2013) "social modeling behavior is based on a normative framework; that is, people use others' food intake as a norm or guideline for how much is appropriate to eat" (72481-72482). The norm at mixed gender table has the female students eating less in front of their male peers. However, the female students that were sitting with only females were likely to eat a greater amount. The social message direct toward girls at the mixed gender table pushed the female students away from eating a larger quantity, leaving them to pick at their food and throw away most of their lunches.

Caine-Bish and Scheule (2009) stated, "project EAT found girls' fruits and vegetable servings decreased 0.7 servings between middle school and high school. Furthermore, research has shown that girls using unhealthful weight control behaviors had lower intake of fruits and vegetables as opposed to girls reporting no weight control behaviors" (538). Here, although the students were in the elementary school, the lack of fruit and vegetable consumption becomes apparent in the early years and could be seen as limiting eating for weight control, with the idea that girls are supposed to eat less in front of boys.

Research Q5: Girls are more likely to bring their lunches, which are more likely to have healthier options than students who buy lunch.

Findings

While expectations that packed lunches are healthier than institutional food, school lunches have become increasingly healthier and now often include multiple fruit and vegetable options. Where we see the decrease in healthy options from the students that have a packed lunch. One example of this in the observation was the consumption of healthier foods being eaten by the students who bought lunch. At a fourth grade lunch, students, Jonathan, Danielle, Ashley, Melissa, Robbie and Nate all sat down together to begin their lunch period. Jonathan, Melissa, Robbie and Nate all bought the school lunch provided, while Danielle and Ashley brought their lunches from home. The lunch provided by the school was homemade cheese pizza, salad, carrots and fruit. While these students were provided with salad, carrots and fruit, the students who brought their lunch from home did not have the same enclosed in their lunch bags. Danielle had some a turkey and cheese sandwich on white bread, chips, an apple, and a brownie. Ashley had a bagel with cream cheese, a yogurt, grapes, and cookies. Jonathan, Melissa, Robbie and Nate consumed at least half of the fruit and vegetable portions provided by the school, while Danielle and Ashley had limited options and consumed less. This was a repeated pattern I saw several different times while observing.

Another example of this was during a third grade lunch at an all-boys table where Joe, Josh, Larry and Tyler bought lunch, but Colin brought his. The student who bought the school lunch were provided with American chop suey, green salad, carrots, fruit and a roll. Colin opened his lunch box to find a ham and cheese sandwich, chips, yogurt, and a cupcake for dessert. Josh, Larry and Tyler were all

consciously eating everything on their plates. However, Colin ate all of his lunch besides the yogurt provided. Joe picked around the green salad, but ate the carrots and fruit from the school. The students that were provided with the school lunch were able to have various choices for nutritious food, while the student who brought his lunch only had one, and chose to throw it away. Over the course of the observation weeks, the differences between who brought and bought lunches, and what they contained became a clear pattern.

Discussion

Rees et al (2008) “The high intake of sodium provided via the packed lunches is not surprising considering that nearly all packed lunches consisted of bread or crackers, the majority of pupils had ham or cheese as a filling, and 56% had a packet of crisps or similar salted snack” (424). The students who were provided lunch from the school had at least two, sometimes three, options of fruits and vegetables rather than sodium packed foods. The students’, who brought their lunch from home, were more likely to have more processed foods to be consumed. Here, the nutritional intake of students can rely on who is providing their lunch for them. The likelihood of children who are buying the school lunches to eat fruits and vegetables is greatly increased because the school is not providing them with a lot of processed or high sodium foods. This creates the likelihood for the students buying the school lunch to be in taking healthier food options.

The variation of what each child was consuming was based off of if they had purchased a lunch from the school, or had brought their lunch from home. The

majority of the students bought the school lunches, but those students who were bringing their lunches, were more likely to have fewer fruit and vegetable items. This made the likelihood of them consuming fewer fruits and vegetables less than those who bought because the school provided students who bought with at least two options of fruits and vegetables. Additionally, equal numbers of boys and girls brought their lunches from home, girls were not more likely to bring their lunches as anticipated.

Conclusion

In conclusion, there are many aspects of peer interactions that contribute to social learning and decision-making around food during the lunch period. The gender expectations of peers often control what and how much girls and boy choose to eat. Girls were more likely to appear self-conscious of the amount of food they were consuming when sitting with or near male peers, but were less affected by peer judgment when they sat at an all-girl table away from male peers. This pattern was repeated again and again throughout the observations where the girls ate less while sitting with male peers, sometimes even giving their food to boys at their lunch table or nearby tables. These behavioral social norms along with gender expectations become central to learned behavior from the children's peers.

In looking at the nutritional quality of food that the children chose to eat, it was shown that there were marked differences between students bringing lunch from home and those buying the school lunches. Here, there was a larger quantity of students who bought the school lunches compared with the number of students

who brought lunch, and there were equal numbers of boys and girls bringing lunch from home. The students who were buying lunches were getting more healthier options to choose from, rather than the students who brought lunch to school, with fewer processed food options available to them in the lunch line. The students who bought the school lunches were then more likely to eat healthier than those who brought lunch.

The variety of food consumed was found also to differ by gender of the students. Boys were more likely to eat fruits and vegetables while the girls were not although in previous research the reverse was found. Most important though in all of this is that decisions around food were linked to the social expectations of peers, where social acceptance appears to me more important than hunger, and personal food tastes and preferences.

Future Research

In undertaking further research on this topic in the future research I would want to first continue with observations, collecting more data that would allow me to see a change of behaviors over time, possibly starting in September at the beginning of a new school year and tracking behaviors through June. Additionally, interviewing the children in this school would allow me to directly ask them why they make the decisions that they do about food consumption and lunchroom behaviors. In order to find out what children actually know about the nutritional value of food, interviews or surveys would offer more information. Potential questions would focus on what their nutritional knowledge of food included. The

research findings would provide more insight into gender expectations and peers influence, and would provide information on students' understanding of the potential health risks in their decision-making.

References

- Arrindell, W. A., van Well, S., Kolk, A. M., Barelds, D. H., Oei, T. S., & Lau, P. (2013). Higher Levels of Masculine Gender Role Stress in Masculine than in Feminine Nations: A Thirteen-Nations Study. *Cross-Cultural Research, 47*(1), 51-67. doi:10.1177/1069397112470366
- Bevelander, K. E., Anschütz, D. J., Creemers, D. M., Kleinjan, M., & Engels, R. E. (2013). The Role of Explicit and Implicit Self-Esteem in Peer Modeling of Palatable Food Intake: A Study on Social Media Interaction among Youngsters. *Plos ONE, 8*(8), 1-11. doi:10.1371/journal.pone.0072481
- Caine-Bish, N. L., & Scheule, B. (2009). Gender Differences in Food Preferences of School-Aged Children and Adolescents. *Journal Of School Health, 79*(11), 532-540. doi:10.1111/j.1746-1561.2009.00445.x
- Celeste-Williams, L., Lieberman, L. J., Banerjee, P., & Boyle, J. (2010). The Effects of a Nutritional Intervention on the Nutritional Knowledge of Children and Adolescents with Visual Impairments. *Journal Of Visual Impairment & Blindness, 104*(11), 677-687.
- D'Sylva, A., & Beagan, B. L. (2011). 'Food is culture, but it's also power': the role of food in ethnic and gender identity construction among Goan Canadian women. *Journal Of Gender Studies, 20*(3), 279-289. doi:10.1080/09589236.2011.593326
- Donald, F., & Linington, J. (2008). Work/family border theory and gender role orientation in male managers. *South African Journal Of Psychology, 38*(4), 659-671.
- Fayet, F., Mortensen, A., & Baghurst, K. (2012). Energy distribution patterns in Australia and its relationship to age, gender and body mass index among children and adults. *Nutrition & Dietetics, 69*(2), 102-110. doi:10.1111/j.1747-0080.2012.01582.x
- Frazier, B. N., Gelman, S. A., Kaciroti, N., Russell, J. W., & Lumeng, J. C. (2012). I'll have what she's having: the impact of model characteristics on children's food choices. *Developmental Science, 15*(1), 87-98. doi:10.1111/j.1467-7687.2011.01106.x
- Jennings, M., Stoker, L., & Bowers, J. (2009). Politics across Generations: Family Transmission Reexamined. *Journal Of Politics, 71*(3), 780-799.
- Lam, V., & Leman, P. (2009). Children's Gender- and Ethnicity-based Reasoning about Foods. *Social Development, 18*(2), 478-496. doi:10.1111/j.1467-9507.2008.00493.x

- Lyng, N., Fagt, S., Davidsen, M., Hoppe, C., Holstein, B., & Tetens, I. (2013). Reporting accuracy of packed lunch consumption among Danish 11-year-olds differ by gender. *Food & Nutrition Research*, 571-7. doi:10.3402/fnr.v57i0.19621
- Marklund, B., Ahlstedt, S., & Nordström, G. (2006). Health-related quality of life in food hypersensitive schoolchildren and their families: parents' perceptions. *Health & Quality Of Life Outcomes*, 448-12. doi:10.1186/1477-7525-4-48
- Martin, C., Kornienko, O., Schaefer, D. R., Hanish, L. D., Fabes, R. A., & Goble, P. (2013). The Role of Sex of Peers and Gender-Typed Activities in Young Children's Peer Affiliative Networks: A Longitudinal Analysis of Selection and Influence. *Child Development*, 84(3), 921-937. doi:10.1111/cdev.12032
- Patel, R. C. (2012). Food Sovereignty: Power, Gender, and the Right to Food. *Plos Medicine*, 9(6), 1-4. doi:10.1371/journal.pmed.1001223
- Rausch Herscovici, C., Kovalskys, I., & José De Gregorio, M. (2013). Gender differences and a school-based obesity prevention program in Argentina: a randomized trial. *Revista Panamericana De Salud Publica*, 34(2), 75-82.
- Rees, G. A., Richards, C. J., & Gregory, J. J. (2008). Food and nutrient intakes of primary school children: a comparison of school meals and packed lunches. *Journal Of Human Nutrition & Dietetics*, 21(5), 420-427. doi:10.1111/j.1365-277X.2008.00885.x
- Toepel, U., Knebel, J., Hudry, J., Coutre, J., & Murray, M. M. (2012). Gender and Weight Shape Brain Dynamics during Food Viewing. *Plos ONE*, 7(5), 1-9. doi:10.1371/journal.pone.0036778
- Vollrath, M. E., Hampson, S. E., & Júlíusson, P. B. (2012). Children and eating. Personality and gender are associated with obesogenic food consumption and overweight in 6- to 12-year-olds. *Appetite*, 58(3), 1113-1117. doi:10.1016/j.appet.2012.02.056