**ACKNOWLEDGEMENTS**

I would like to thank my sister, Nancy Wanzer, for giving me the inspiration to write about this topic and for always being a role model for me for physical activity and diet. I would also like to thank Dr. Bill Stuart for all of his help and insights throughout the research process.

Abstract

*Obesity is a significant problem in the United States. One of the first times the responsibility of physical activity and diet becomes the sole responsibility of the individual is in a college setting. Parents and peers are known influential factors for many aspects of an adolescent’s life. In accordance to social learning theory, this study attempted to find significant influence in the previously communicated messages from parents and peers regarding physical activity and diet during adolescent and the influence on college student’s decisions about physical activity and diet. Results indicated that parental and peer communication did influence some of the college men and women’s decisions regarding physical activity and diet. Further implications are discussed.*

**INTRODUCTION**

Obesity has become prevalent in unhealthy lifestyles for many living in the United Sates. Increasingly, children and young adults are adding to the obesity rates with the percentages of these age groups doubling over the last 25 years. Although there are many campaigns targeting parents to promote children’s health in the United States today, childhood obesity rates are still too predominant (Andrews, Silk, & Eneli, 2010). Today, health has become more a personal moral which places the responsibility of successful or unsuccessful health on the individual. However, that individual cannot be held solely accountable as it has been found that children are socialized with health through the environment in which they live, mainly by their parents serving as influential modeling figures (Paugh & Izquierdo, 2009).

A college setting is one of the first times individuals become solely responsible for most aspects of their daily lives. We presume they will make healthy decisions as responsible young adults socialized by their parents, yet the term “freshman 15” stands true for many for the 15 pounds they are expected to gain after going off to college (Childers, Haley, & Jahns, 2011). This study focuses on parental and peer communication of physical activity and diet. I will ground my research on the effects of social learning theory by analyzing the messages communicated by parents about physical activity and diet to their children and adolescents, perceived now, as college students. This research will examine parental and peer messages of physical activity and diet during adolescents and the influence on college student’s choices regarding physical activity and diet.

The rates of children being categorized as either overweight or obese are now one in every three children. Stunning evidence revealing that compared to children of normal weight, overweight children are twice as likely to die before the age of 55. (Rabin, 2010). Children are continually living unhealthy lifestyles because of improper or no guidance and it is jeopardizing their whole future. As children become young adults, more responsibilities in the decisions they make regarding physical activity and diet become their own and college bestows the situations of their individual decision making. As college students go through their day, paying close attention to diet and nutrition are typically not at the top of their list and the “freshman 15” becomes more of a known reality than a rumor. Although some make conscious healthy decisions, first-time feelings of freedom often lead new college students to make poor decisions regarding health as they get caught up in late-night snacking and the availability of cheap eating in junk food (Bregel, 2006).

A critical aspect in structuring the decisions made by college students is the messages communicated by their parents and peers during their adolescent livs about diet and physical activity. The most successful programs in decreasing childhood obesity have resulted in the parents being the most instrumental and influential factors (Andrews, Silk, & Eneli. 2010). If parents realized the scope of the problem and the variables that can affect their roles in modeling healthy lifestyles to their children, they could be further instrumental in promoting healthy lifestyles for their children and influencing their individual decisions in college.

This phenomenon of communication in health is important to examine and deserving of attention because poor diet and obesity are significant problems in the U.S. While there are many campaigns today working towards preventing childhood obesity, they are lacking many important factors to consider. The most important factor often overlooked are parents and their influential power over their children’s eating patterns and chances of becoming obese (Andrews, Silk, & Eneli, 2010). Also, the adolescents are continuously surrounded by their peers during school, outside activities, etc. and receiving sources of information that influences their overall behaviors. Previous research often analyzes influences of children’s diet or activity behaviors, but most overlook the connection from adolescent life to college life. Parents and peers are the main sources of communication for adolescents on a daily basis, which can be an impacting variable on the way they form behaviors. With this research, future campaigns can highlight the importance of communication from parents and peers to shape healthier lifestyles for college students and attempt to decrease those impacted by the “freshman 15”.

**THEORETICAL GROUNDING**

Social learning theory can be used in analyzing and explaining this research. Social learning theory explains that behaviors are learned through the provided information and the environment which within it occurs, mainly by modeling. The behaviors are modeled then learned and are either positively or negatively reinforced or punished (Galvin, 2006). For example, a social context of family dinners provides an environment for applying social learning where a parent is the modeler and the adolescent is the learner. When the parent models a behavior, such as eating their vegetables at dinner, an adolescent’s attention may be called to this and the parents may provide information of why they are eating their vegetables (because they are healthy), the child retains this information then models this information and it is either reinforced or punished by maybe the parent granting extra play time or some other incentive for the child also eating their vegetables. If learned behavior of physical activity and diet is apparent in the children’s learning and the behaviors they have formed based on their parents, then parents are named as an influential factor in communicating and modeling positive messages for physical fitness and diet.

Social learning can be used to explain many learned behaviors in familial and social situations, as well as, the behaviors learned or reinforced through gender roles. Parents and peers often reinforce femininity in girls and discourage masculine attributes or activities. Vice versa, they reinforce masculinity in young boys and direct them away from “girl like” behavior (Wood, 2005). This can be seen in regards to physical activity and dieting as masculinity often is seen as involving attributes like strong muscles, cut bodies, and outstanding athletic performance. As well as for femininity, females are often taught to care a lot about appearance which includes a regard for dieting/ healthy eating and exercising often to stay thin. Social learning can be used to explain how femininity and masculinity are learned in familial and social situations by how the parents and peers present and model the roles to the adolescents and either positively or negatively reinforces their behaviors when trying out the roles.

Through social learning, the behaviors of physical activity and diet which adolescents exert can be explained as a result of modeling and information provided by their parent or peer. Also, the learned behaviors of physical activity and diet which college students exert can be explained as a result of modeling and information provided by their parents and peers during their adolescent years. Gender roles can also be learned and be prevalent in the behaviors of diet and physical activity, however, they may differ between families and peers in that it will depend on how the parents and peers identify with and perceive their own gender roles which they model to the adolescents. In examining the learned behaviors of physical activity and diet of adolescents through social learning theory, we can explain that parents and peers should be named as influential factors in communicating and modeling positive physical fitness and diet choices.

**REVIEW OF LITERATURE**

***Parental influences in communicating physical fitness and physical appearance***

*Children and adolescents*

Parents have been found to be influential in the ways they communicate different behaviors and actions to their children through social learning. Researchers have examined the different influential factors affecting children’s physical fitness and physical appearance, however evidence suggest parents serve as one of most contributory factors in structuring their children’s lives in regards to physical fitness and appearance. In a study of parents as health promoters, Andrews, Silk, and Eneli (2010) examined how parents responded to the theory of planned behavior and how they relate when providing their children with healthy foods or limiting their intake of unhealthy ones. It was found that one predictive factor of childhood obesity was the parent’s body mass index (BMI), which measures a person’s body fat based on weight and height. This was a predictive factor because the parent’s BMI is based on their health related behaviors, which are modeled in front of their children (Andres, Silk, & Eneli, 2010).

Parent’s genetics and BMI percentile effect and often predict their children’s physical fitness levels. When a parent lives a moderately sedentary lifestyle it is transmitted to their children through modeling. When parent’s level of TV viewing increased it lowered the limitations they put on their child’s TV viewing. Watching TV is a sedentary activity that parents typically partake in and is then modeled by their children, influencing their physical activity involvement (Andrews, Silk, & Eneli, 2010).

Similarly, according to a study done by Turman (2007) on parental influences regarding children and adolescent’s participation in sports, parents are influential factors for their child’s involvement in the messages they convey about sports participation. When parents were asked about their children’s involvement in sports activities it also led the parents to talk about their own level of invested involvement in the sport. Of those involved, 63% of the parents assumed the role of supporter/encourager for their child because they provided the emotional and financial support needed for them to participate (Turman, 2007). Parents also described themselves as filling the teacher/mentor role for their child participating in sports where they were providing educated information about the sport which the coach did not provide (Turman, 2007).

*College students*

While parents play a large role in the communication of physical fitness during childhood and adolescence, that communication often decreases once in college. College students must rely on many other influential factors, such as previously learned knowledge, now that they are independently living from their parents. Childers, Haley, & Jahns (2011) found that parents need to let their college students make their own physical activity and diet decisions so that they can learn from their mistakes. Similarly, in a study on college student’s weight issues and decisions on eating, Childers et al. (2007) found that many students were trying to lose weight, mainly women, but their strategies for doing so were considered unhealthy. Also, they found that men entering college often tried to put weight on to feel better about their appearance (Childers, Haley, & Jahns, 2007).

Parents play a large role in communicating healthy lifestyles through involving their children in activities and themselves getting involved as a source of modeling behavior for their children. As well, parents role in letting their college kids develop their own habits of health and diet is important so that they can learn how to make their own decisions based on previous learned behaviors from their parents. These findings present evidence that parents are influential over their children’s and college student’s life in regards to physical activity, but it fails to examine the actual communication aspect of the messages being exchanged and how different variables of both the communicator(parent) and receiver (child/college student) could impact the learned behaviors from the messages.

***Parental communication about diet and nutrition***

*Children and adolescents*

An everyday occurrence of food intake greatly affects lifestyles in terms of health and typically, parents are the ones providing and preparing the food for their children. This control parent’s bestow over providing or limiting foods can shape or influence the way a child perceives dieting and healthy eating. Paugh and Izquierdo (2009) researched the interactions of dual-earner middle class families in regards to situations of eating. Parents are typically cognizant about what they want their children to eat and drink and many efforts to rely their thoughts are through directives and rule states, but it was found that parents tend to negotiate with the child about what they will consume. Typically, the negotiation includes changing type or amount of food, or offering some sort of unhealthy option if they eat the healthy option. When the parents engage in this negotiation they are communicated an unclear message to child because the child will often pick the unhealthier option (Paugh & Izquierdo, 2009).

Likewise, as parents are *expected* to provide healthy food options, research found that parents varied in their attitudes towards providing healthy foods and limiting unhealthy foods, possibly because they are not aware of healthy food options. Parents also vary on whether they perceive their roles as important or even influential in their children lives or if they even have control over it (Andrews, Silk, & Eneli, 2010). When they don’t feel in control of their decisions, it often shows they are not confident or are unsure that their actions will really make a difference in providing their child with a healthy lifestyle. Also, in support of that finding, response efficacy (a term used to refer to a person’s belief as to whether a recommended action step will actually reduce a threat) was found as a predictor of parents’ actually tracking their children’s eating. Some parents may or may not choose to track their children’s behaviors because they do not foresee or have confidence in the effectiveness it may have (Andrews, Silk, & Eneli, 2010).

As well as, in a study by Baxter, Bylund, Imes, and Scheive (2005), environments of family communication were analyzed to determine the perceived child compliance of healthy lifestyle rules in different environments that families communicated in. Research revealed that families high in expressiveness (conversation orientation) often had less compliance as a family to health related rules because of the value they place on individual decision making. Also, families which followed structured traditionalism (emphasizes conformity to a family unit’s authority structure), parents and children had more parallel ideas and attitudes in regards to health related rules (Baxter, Bylund, Imes, & Scheive, 2005). This research supports the idea that family structure and the environments in which they communicate can influence perceived communicated messages about health.

*College students*

While making the shift from parents cooking to dining hall menus, often find making decisions about what to eat as difficult because they are used to the home cook meals so they compare those to the ones they are being served in the dining halls (Childers, Haley, & Jahns, 2011). This could influence their decisions differently, picky eaters may not eat enough because of this comparison, but those overwhelmed with the large menu or quantity of food available may tend to overeat.

Also, parents contribute to college students weight issues because when they visit them at school they take their children out to eat, or pay for their groceries trips to stock up their dorms (Childers, Haley, & Jahns, 2011). When they stock up on these goods, they found that parents are often providing food and snacks with a highly caloric and fat content than if the student went shopping at school by them self. However, providing financial support by buying food and treating them to dinners are not the only ways parents influence their kids eating. Students also reported that when they go home to visit their parents, they often overeat because they offer to make their favorite food or whatever they want (Childers, Haley, & Jahns, 2011). This shows that parents have an impact on their college student’s eating and weight issues both when they are away at school and when they come home to visit.

Parental communication of diet and nutrition is very influential throughout childhood and the college years of their children. Previous researchers support these findings; they are looking at mainly the actions being communicated, there is still a need for research analyzing the actual messages being communicated and the variable affecting them that could lead to a difference in how they may be perceived and acted on.

***Parental communication regarding gender roles***

*Children and adolescents*

Gender roles can also be learned and be prevalent in the behaviors of diet and physical activity, however, they may differ between families in that it will depend on how the parents identify with and perceive their own gender roles which they model to their children. In children and adolescent’s sports, there are often different feminine and masculine stereotypes that exist of the players, however, families also often relay stereotypical gender norms in athletics. Turman (2007) analyzed the athlete sex and parent sex to see if it influenced the athlete’s perceptions of compliance gaining behaviors (compliance gaining is a term used to identify the act of getting someone to do something or alter their behavior). In regards to the gender roles, male athletes associated with rewarding, positive behaviors more so than female athletes. Also, the sexes of the parent were perceived differently by the children athletes; fathers used more rewarding and impersonal commitment attitudes. These findings support that stereotypical gender norms are often prevalent in families involved in sports which can influence how gender roles and associated behaviors are learned or reinforced. (Turman, 2007).

*College students*

Much research of gender roles in reference to health and diet examine college aged students and the relationships with their parents. In research by Gross and Nelson (2000), female undergraduate students were analyzed to reveal their perceptions of their parent’s messages about eating and weight and possible influences on them. Research exposed multiple messages of gendered differences, such as women’s pressure to be thin, from mothers and fathers that influenced their daughter’s perceptions of the messages. Direct communication of messages about eating and weight to young women from family members was found to be an influential pressure for the young women to be thin and often led to eating disorders. In accordance to the fact that mothers typically communicate more influential messages to their daughters than fathers, young women who perceived their mothers to be dissatisfied with their daughter’s weight or critical of if it led to more pressures to lose weight and dissatisfaction with their weight. Also, negative messages mother’s directly communicated to their daughters had a greater influence on the young woman’s perception of weight and diet than any messages communicated by their father. However, other perceived influences were that when fathers communicated negative messages to the child’s mother about the mother’s weight and eating, led to disturbances in eating or weight in the daughters. This supports findings that femininity ideals communicated and reinforced by parents have an impact on the way the daughter views their own body image and weight issues. (Gross & Nelson, 2000)

Gender roles parents communicate and reinforce to their adolescents and college students through messages are an influential factor in how their messages are perceived. Daughters and sons interpret and perceive communicated messages differently, often in accordance with typical feminine and masculine gender roles ideals, depending on the sex of the parent.

***Peer influences in communicating about diet***

*College students*

Childers et al. (2007) named peers as influential factors of decision regarding diet while in college because of tendency for college students to do what their friends are doing and the amount of time spent with them. However, previous insights do not offer explanation as to why peers during adolescents could have an influence on these decisions college students are making now about eating. Also, as Childers et al. (2007) found that the peer groups in college are very influential and often present opportunities for change from pre-college behavior because if their friends are eating, they will also eat, even if they aren’t hungry. Previous research has found a clear connection and influence between peers and college student’s behaviors regarding eating while in college, but does not identify whether or not previous peers during adolescence have a significant influence over their eating decisions as well.

***Peer influences in communicating about physical activity***

*College Students*

Males and females differ in physical features and the type of physical activity that they engage in typically. During adolescence your body is continually changing and expectations and desires of physical appearance are different from those in college. In accordance to the fact the gender plays a role in peer influence, Childers et al. (2007) found that males typically try to put on weight to obtain a more desirable body and women typically try to lose weight when both enter college. Previous research indicates peer influences are a strong influential factor on college student’s overall lifestyle. Sira and White (2010) found college as a time of excessive social and peer pressures that lead to weight control, unhealthy eating behaviors, and negative self-evaluation in terms of activity and diet. Similarly, Childers et al. (2007) found an association between friend’s level of exercise and male and college student’s level of exercise. Peers are known as influential in college settings, but previous research overlooks the influence of previous communication from peers during adolescence that may impact the decisions of the college students.

Findings through previous research present evidence that parents and peers are influential factors over their adolescent’s and college student’s lives in regards to physical activity and diet. However, it fails to examine the communication aspect of the messages being communicated and whether there is a significant level of influence from the previous messages and the decisions college students are making now regarding physical activity and diet. Since parents and peers are such influential factors during the adolescent’s and college student’s lives, their communication of messages regarding health and diet should cause consistent behavior by the adolescent, yet something is lost in the transition from pre-college life to becoming a college freshman. This study will attempt to fill these gaps. It will examine how college students perceive the previously communicated messages and the information within those messages of physical activity and diet by their parents and peers during adolescence and compare them to their behaviors while in college.

**HYPOTHESES**

*H1*: Greater frequency of positive messages communicated regarding healthy eating choices from male parents prior to college will be positively correlated with healthy eating choices in male college students.

*H2*: Greater frequency of positive messages communicated regarding healthy eating choices from male parents prior to college will be positively correlated with healthy eating choices in female college students.

*H3*: Greater frequency of positive messages communicated regarding healthy eating choices from female parents prior to college will be positively correlated with healthy eating choices in male college students.

*H4*: Greater frequency of positive messages communicated regarding healthy eating choices from female parents prior to college will be positively correlated with healthy eating choices in female college students.

*H5*: Greater frequency of positive messages communicated regarding healthy physical activity choices from male parents prior to college will be positively correlated with healthy physical activity choices in male college students.

*H6*: Greater frequency of positive messages communicated regarding healthy physical activity choices from male parents prior to college will be positively correlated with healthy physical activity choices in female college students.

*H7*: Greater frequency of positive messages communicated regarding healthy physical activity choices from female parents prior to college will be positively correlated with healthy physical activity choices in male college students.

*H8*: Greater frequency of positive messages communicated regarding healthy physical activity choices from female parents prior to college will be positively correlated with healthy physical activity choices in female college students.

*H9*: Greater frequency of positive messages communicated regarding healthy eating choices from male peers prior to college will be positively correlated with healthy eating choices in male college students.

*H10*: Greater frequency of positive messages communicated regarding healthy eating choices from male peers prior to college will be positively correlated with healthy eating choices in female college students.

*H11*: Greater frequency of positive messages communicated regarding healthy eating choices from female peers prior to college will be positively correlated with healthy eating choices in male college students.

*H12*: Greater frequency of positive messages communicated regarding healthy eating choices from female peers prior to college will be positively correlated with healthy eating choices in female college students.

H13: Greater frequency of positive messages communicated regarding healthy physical activity choices from male peers prior to college will be positively correlated with healthy physical activity choices in male college students.

*H14*: Greater frequency of positive messages communicated regarding healthy physical activity choices from male peers prior to college will be positively correlated with healthy physical activity choices in female college students.

*H15*: Greater frequency of positive messages communicated regarding healthy physical activity choices from female peers prior to college will be positively correlated with healthy physical activity choices in male college students.

*H16*: Greater frequency of positive messages communicated regarding healthy physical activity choices from female peers prior to college will be positively correlated with healthy physical activity choices in female college students.

**METHODS**

***Participants***

Participants in the research were recruited through multiple outlets. The link to the online survey was distributed via Facebook through posting it as a status, sending the link through messages to friends, and posting the link on group wall’s that I am a member to. Also, the link was tweeted through my Twitter page, making it accessible to all of my followers. Lastly, the link was sent out via Longwood University’s email server to different organizations on campus and fellow classmates. Throughout using all of these outlets, a short description accompanied the link reading “Please take this short, online survey about parental and peer communication regarding physical activity and diet if you are currently an undergraduate college student.” This was to decrease the amount of people whom may take the survey that are not within the targeted population. Also, the participants were asked to send the link to their peers as well.

The sampling procedure used in collecting data for this research was a combination of targeted sampling and snowball sampling. A population of undergraduate college students, both men and women, were targeted to complete the survey. Those participants were also asked to pass the survey along to other peers, whom are also undergraduate college students, so a snowball sample also occurred.

The unit of analysis was undergraduate college student’s ability to recall communication about physical activity and diet from a mother/stepmother, father/stepfather, and peers during the adolescent years. Also, this research called for participants to report on their individual behaviors in making choices about physical activity and diet during their undergraduate college years.

The qualifications for participants in this research were that they had to be current undergraduate college students. Also, qualifications to complete certain sections of the survey was based on whether the participants lived with a mother or stepmother figure for at least 3 years during adolescence and/or whether they lived with a father or stepfather figure for at least 3 years during adolescence. Demographic information was also collected within the survey. The participants were asked to identify their sex and whether or not they are currently an undergraduate college student. The sex of the participants was asked in order to directly relate to and analyze the data in regards to the stated hypotheses. The participants were asked whether or not they are current undergraduate students in order to limit the population to only the targeted population I am researching. If the participants responded no to this question, they were directed to the exit page of the survey.

***Procedure***

To gather data, the participants completed an online survey, which was self-administered. A survey was used because of the convenience of distribution to a large population and in collecting and analyzing the data. This research has specific qualifications for some areas, so an online survey provides the researcher with the ability to automatically direct respondents a section or skip a section based on their previous answers. Also, the use of an online survey allows the participant to stay anonymous, as well as, may present an opportunity for more honest information to be revealed by the participant. An online survey was most appropriate for the research at hand because of the intention to discover a broad trend within the undergraduate college student population. Some of the actual survey questions that the participants answered are located in the Appendix. The survey consisted of 20 questions and was estimated to take about 10 minutes on average for participants to complete.The survey was completed by participants online using a popular website, Survey Monkey. After the participants received the link, the survey was completed as self-administrated and answered questions about parental and peer communication of physical activity and diet during adolescents and the college students choices regarding physical activity and diet now.

***Survey instrument***

All of the questions within the survey were created by the researcher to directly address the hypotheses with consultation with a faculty research mentors and Communication Studies Professor, Dr. William Stuart. A number of questions dealing with healthy eating asked participants to refer to a picture of “MyPlate”, developed by the United States Department of Agriculture’s (USDA) as an illustration of the five food groups that are the building blocks for a healthy diet. In subsequent questions, participants were given definitions and examples of the types of food and the recommended daily quantity for each food group, as presented by the USDA, as well as, a daily caloric intake chart for both men and women (USDA, ChooseMyPlate.gov). Other questions dealing with healthy levels physical activity asked participants to compare their activity levels and routines with the USDA’s “MyPlate” website recommendation. Questions included definitions and examples of different types of activity. Also, questions dealing with the level of intensity were asked and defined as per the USDA’s website as well (USDA, ChooseMyPlate.gov).

***Validity***

The use of the USDA’s “MyPlate” website was to ensure reliability in the information given to the participants, as well as, to establish credibility within the questions used per previous insights from the federal government. Strengths in using these questions include the credibility of the source, the simple language used that allows for less misunderstanding by the participants, and the availability of graphics that creates a broader understanding of the topic and an interactive way to present it. A weakness of using this information within the questions is the vast amount of examples available of both different foods and activities that could not all be presented. This may lead to some confusion for the participants and distortion in answers.

The questions in the survey were designed to directly relate to the hypotheses. Depending on the sex of the participant and the sex of the parent that they engage in recall about, the data should result in correlations. The participants’ answers to the recall section about messages regarding eating and physical activity during their adolescent years were analyzed and compared with their answers of the choices that they make now as undergraduate college students in regards to physical activity and eating. The applicable data collected from the sections about the college student’s current eating and physical activity choices were compared with the USDA’s recommendations that constitute as healthy eating and healthy engagement in physical activity.

*Independent Variables*

Within these IVs, positive communication was defined as any communicated (verbally and nonverbally) form of support, discussion, encouragement, reward, reinforcement, negative talk about unhealthy food or engaging in physical activity, or positive recall of physical interactions with healthy foods and engagement in physical activity. Positive communication for healthy eating was defined as partaking in, discussing, or encouragement of the consumption of the recommended daily food (both type and quantity), as well as, the daily caloric intake recommended for your age, body type, and participation in activity as defined by the USDA and “MyPlate”. Physical activity was defined as movement of the body that uses energy, as defined by the USDA and “MyPlate”.

For this study, a father or stepfather figure was defined as any male figure that represented a father, stepfather, or fatherly figure during the college student’s adolescent years (13-18 years old) and lived with them for at least three years during that time. A mother or stepmother figure was defined as any female figure that represented a mother, stepmother, or motherly figure during the college student’s adolescent years (13-18 years old) and lived with them for at least three years during that time. Peers were operationalized as any friends or other adolescents that the college student came into contact with and communicated with at least once a week, for at least three years, during their adolescent years.

*Dependent Variables*

Eating choices were operationalized as any consumption of food or drinks by the male and/or female college student during their undergraduate college years. Physical activity choices were examined as any participation in physical activity or exercise by the male and/or female college student, during their undergraduate college years, considered as movements of the body that used energy.

***Conditions***

The survey questions were created to directly address the stated hypotheses; therefore, certain conditions were generated within the survey. Participants were asked whether or not they lived with a mother or stepmother figure for at least 3 years during their adolescence years. If answered yes, they were directed to questions dealing specifically with the mother/stepmother figure and recall of information regarding physical activity diet during their adolescence. If answered no, they were not exposed to this section. Participants were also asked the same question in regards to a father or stepfather figure, if answered yes they were directed to a section about father/stepfather figure and recall of information regarding physical activity diet during their adolescence, if answered no they were not exposed to this section of questions.

This particular condition was chosen for this research in order to analyze the data in response to the hypotheses. During the collection of data, female participants were analyzed in correlation of their responses to each mother and/or father figure specifically. As well as, male participants were analyzed in correlation of their responses to each mother and/or father figure specifically. If the participants did not live with either a mother and or father figure during their adolescence, the possibility of them answering the questions would be possible if not conditioned, and the data would be distorted and inaccurate as a result. The influential factors were analyzed by both sex of the student and sex of the influencer; therefore, this condition was necessary.

**RESULTS**

***Parental Influence on College Student’s Eating Choices***

*H1***.** Hypothesis 1 stated that greater frequency of positive messages communicated regarding healthy eating choices from male parents prior to college will be positively correlated with healthy eating choices in male college students. Hypothesis 1 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (20) = .134, p< .584, finding no significant correlation between previously communicated messages from male parents having an influence on male college student’s healthy eating choices.

*H2***.** Hypothesis 2 stated that greater frequency of positive messages communicated regarding healthy eating choices from male parents prior to college will be positively correlated with healthy eating choices in female college students. Hypothesis 2 was tested using a Pearson product moment correlation test. The hypothesis was supported r (91) = .228, p< .039, finding a small, but statistically significant correlation between previously communicated messages from male parents having an influence on female college student’s healthy eating choices.

*H3***.** Hypothesis 3 stated that greater frequency of positive messages communicated regarding healthy eating choices from female parents prior to college will be positively correlated with healthy eating choices in male college students. Hypothesis 3 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (20) = .002, p< .993, finding no significant correlation between previously communicated messages from female parents having an influence on male college student’s healthy eating choices.

*H4***.** Hypothesis 4 stated that greater frequency of positive messages communicated regarding healthy eating choices from female parents prior to college will be positively correlated with healthy eating choices in female college students. Hypothesis 4 was tested using a Pearson product moment correlation test. The hypothesis was supported r (88) = .225, p< .035, finding a small, but statistically significant correlation between previously communicated messages from female parents having an influence on female college student’s healthy eating choices.

***Parental Influence on College Student’s Physical Activity Choices***

*H5*. Hypothesis 5 stated that greater frequency of positive messages communicated regarding healthy physical activity choices from male parents prior to college will be positively correlated with healthy physical activity choices in male college students. Hypothesis 5 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (22) = .338, p< .124, finding no significant correlation between previously communicated messages from male parents having an influence on male college student’s healthy physical activity choices.

*H6*. Hypothesis 6 stated that greater frequency of positive messages communicated regarding healthy physical activity choices from male parents prior to college will be positively correlated with healthy physical activity choices in female college students. Hypothesis 6 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (85) = .156, p< .155, finding no significant correlation between previously communicated messages from male parents having an influence on female college student’s healthy physical activity choices.

*H7*. Hypothesis 7 stated that greater frequency of positive messages communicated regarding healthy physical activity choices from female parents prior to college will be positively correlated with healthy physical activity choices in male college students. Hypothesis 7 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (22) = .211, p< .347, finding no significant correlation between previously communicated messages from female parents having influence on male college student’s healthy physical activity choices.

*H8*. Hypothesis 8 stated that greater frequency of positive messages communicated regarding healthy physical activity choices from female parents prior to college will be positively correlated with healthy physical activity choices in female college students. Hypothesis 8 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (89) = .044, p< .681, finding no significant correlation between previously communicated messages from female parents having an influence on female college student’s healthy physical activity choices.

***Peer Influence on College Student’s Eating Choices***

*H9*. Hypothesis 9 stated that greater frequency of positive messages communicated regarding healthy eating choices from male peers prior to college will be positively correlated with healthy eating choices in male college students. Hypothesis 9 was tested using a Pearson product moment correlation test. The hypothesis was supported r (19) = .497, p< .030, finding a statistically significant correlation between previously communicated messages from male peers having an influence on male college student’s healthy eating choices.

*H10*. Hypothesis 10 stated that greater frequency of positive messages communicated regarding healthy eating choices from male peers prior to college will be positively correlated with healthy eating choices in female college students. Hypothesis 10 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (91) = .161, p< .126, finding no significant correlation between previously communicated messages from male peers having an influence on female college student’s healthy eating choices.

*H11*. Hypothesis 11 stated that greater frequency of positive messages communicated regarding healthy eating choices from female peers prior to college will be positively correlated with healthy eating choices in male college students. Hypothesis 11 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (20) = .216, p< .360, finding no significant correlation between previously communicated messages from female peers having an influence on male college student’s healthy eating choices.

*H12*. Hypothesis 12 stated that greater frequency of positive messages communicated regarding healthy eating choices from female peers prior to college will be positively correlated with healthy eating choices in female college students. Hypothesis 12 was tested using a Pearson product moment correlation test. The hypothesis was supported r (89) = .267, p< .012, finding a small, but significant statistically correlation between previously communicated messages from female peers having an influence on female college student’s healthy eating choices.

***Peer Influence on College Student’s Physical Activity Choices***

*H13*. Hypothesis 13 stated that greater frequency of positive messages communicated regarding healthy physical activity choices from male peers prior to college will be positively correlated with healthy physical activity choices in male college students. Hypothesis 13 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (21) = .250, p< .274, finding no significant correlation between previously communicated messages from male peers having an influence on male college student’s healthy physical activity choices.

*H14*. Hypothesis 14 stated that greater frequency of positive messages communicated regarding healthy physical activity choices from male peers prior to college will be positively correlated with healthy physical activity choices in female college students. Hypothesis 14 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (91) = .022, p< .836, finding no significant correlation between previously communicated messages from male peers having an influence on female college student’s healthy physical activity choices.

*H15*. Hypothesis 15 stated that greater frequency of positive messages communicated regarding healthy physical activity choices from female peers prior to college will be positively correlated with healthy physical activity choices in male college students. Hypothesis 15 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (20) = .195, p< .411, finding no significant correlation between previously communicated messages from female peers having an influence on male college student’s healthy physical activity choices.

*H16*. Hypothesis 16 stated that greater frequency of positive messages communicated regarding healthy physical activity choices from female peers prior to college will be positively correlated with healthy physical activity choices in female college students. Hypothesis 16 was tested using a Pearson product moment correlation test. The hypothesis was not supported r (91) = .075, p< .481, finding no significant correlation between previously communicated messages from female peers having an influence on female college student’s healthy physical activity choices.

**DISCUSSION**

***Parental Influence on College Student’s Eating Choices***

Parental messages previously communicated about diet had no significant influence on the decisions college men make about diet (hypotheses 1 & 3). This result could provide further reasoning for a study previously done by Paugh and Izquierdo (2009) finding parents are typically cognizant about what they want their children to eat and drink and many efforts to rely their thoughts are through directives and rule states, but it was found that parents tend to negotiate with the child about what they will consume. If parents are continually negotiating with their child and changing the types of food to gear towards their child’s typically unhealthy wants, then they are sending a mixed message. The healthy eating messages from their parents are lost and replaced with the child making their own decision.

Overall, parental messages previously communicated about diet did have a significant influence on the decisions college women make about diet (hypotheses 2 & 4). These results are related to a study by Gross and Nelson (2000) who found that direct communication of messages about eating and weight to young women from family members was found to be an influential pressure for the young women. Their study also found another influence was when fathers communicated negative messages to the child’s mother about the mother’s weight and eating, it led to disturbances in eating or weight in the daughters.

***Parental Influence on College Student’s Physical Activity Choices***

Overall, parental messages about physical activity previously communicated had no significant influence on the decisions college men or women make about physical activity (hypotheses 5-8). These results were surprising because of the previous research by Jose, Blizzard, Dwyer, Mckercher, and Venn (2011) that found a significant association between a father’s physical activity level and son’s activity level, which persisted into the transitional life stage in males. These results were consistent with Jose et al (2011) study, finding that paternal physical activity was not largely associated with or served as a predictor factor for physical activity for transitioning females and that mother’s physical activity was linked with adolescent female’s physical activity.

***Peer Influence on College Student’s Eating Choices***

Peer communication previously communicated about diet had a significant influence on the decisions about diet of college students when it was the same sex that communicated these messages (male and male, female and female), however there was no significant influence found when it was the opposite sex communicating about diet (hypotheses 9-12). Childers et al. (2007) named peers as influential factors of decision regarding diet while in college because of tendency for college students to do what their friends are doing and the amount of time spent with them. Previous insights do not offer explanations as to why peers during adolescents could have an influence on these decisions college students are making now about eating. However, these results are consistent with different gendered norms insights. During adolescent typically girls spend more time with girls, and boys spend more time with boys, as socialized by society from birth, which could be one explanation as to why the same sex influences, but opposite sexes do not.

***Peer Influence on College Student’s Physical Activity Choices***

Overall, peer communication previously communicated about physical had no significant influence on the decisions college students made about physical activity (hypotheses 13-16).

There was no previous research found on the potential influence peers have on college student’s physical activity choices. However, Childers et al. (2007) found, the peer groups in college are very influential and often present opportunities for change from pre-college behavior regarding physical activity choices because if their friends are working out, they might as well go with them. Their study found peers as influential in a college setting, however, this study found no significant correlation for influence from peers during adolescence.

**LIMITATIONS & FUTURE RESEARCH**

A limitation of this study would be the small number of participants. This study only gathered information from a total of 142 participants. Also, there were a very small number of males who participated; only 29. This being said, the results could be different if there were a larger number of participants to gather a better representation of the population as a whole. Future research should look to gather more participants for a better representative sample of both females and males overall. Future research should also look to examine the actual aspects of communication and the different reinforcing rewards or punishments parents and peers may have used when communicating about physical activity and diet to see if that has an influence on the college student’s decisions, which should according to social learning theory.

**CONCLUSION**

Overall, there was little significance of influence for parental and peer communication about physical activity and diet on the choices college students make regarding physical activity and diet. However, there was significant influence found for parental messages and college women choices regarding diet and peer communication about diet when it was the same sexes involved in the communication. In accordance to my theoretical grounding of social learning theory, parental and peer previously communicated messages should have a significant influence on the college students choices regarding physical activity and diet when there are positive reinforcements attached the their behaviors. Future research should look to examine the actual aspects of communication and the different reinforcing rewards or punishments parents and peers may have used when communicating about physical activity and diet to see if that has an influence on the college student’s decisions.

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**APPENDIX**







