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# STUDENT LEADERS' INVOLVEMENT AND THE IMPACT ON THEIR EATING HABITS

by

Carly Samuels

#### A Thesis

Submitted to the
Department of Educational Services and Leadership
College of Education
In partial fulfillment of the requirement
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#### Abstract

Carly Samuels
STUDENT LEADERS' INVOLVEMENT AND THE IMPACT ON THEIR EATING
HABITS
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Burton R. Sisco, Ed.D.
Master of Arts in Higher Education

The purpose of this study was to determine the eating habits of undergraduate student leaders at Rowan University. This study also sought to find a connection between the involvement of student leaders' and its effect on the food intake for student leaders. The *Student Athletes and Involvement Theory* instrument helped to quantify student leader involvement. This survey was distributed to undergraduate student leaders at the Student Government Association senate meetings.

The conclusions revealed in the study include involvement patterns being consistent with previous research, more nutritional education needed for undergraduate student leaders, more research needed to determine the relationships of undergraduate student leaders involvement and the impact on their eating habits, and students attitudes towards their eating habits being consistent with previous research.



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#### Chapter I

#### Introduction

The increasingly demanding schedules of student leaders has led to more of their time being dedicated to school work, activities, and jobs. Student leaders are relied on for various responsibilities, each taking their own time and dedication. These commitments can factor into the student leaders' self-care, specifically their eating schedule. While some student leaders abuse food intake during stressful times, others do not consume an efficient amount of food in order to fuel their bodies in a nutritious manner. Learning how student's leadership involvement affects their food intake, their understanding of what nutrition is, and the impact of an unhealthy diet to their participation are still to be determined.

#### **Statement of Problem**

While there is research that shows the importance of nutrition, as well as research that studies undergraduate student leaders' involvement, there is no study that looks at these two variables and how they interact with each other. Specifically, the current research available does not look at how the impact of student leaders' involvement effects their eating habits. As Deshpande, Basil, and Basil (2009) found, independence for most students start with the transition to college life, and this is also an important time for food choice decisions.

Additionally, there is no research that currently looks at what the involvement patterns of student leaders are, if student leaders understand what healthy eating is, if the level of involvement of student leaders impacts their eating habits, and what their attitudes towards eating habits are. Conducting research to fill these gaps in the



knowledge base will help students understand how their involvement can impact their health. It will also help professionals to educate students too. Research on the involvement of student leaders and the impact of their eating habits has not been conducted on a large scale, nor has it been studied at Rowan University.

#### **Purpose of Study**

This study was conducted to see if a connection existed between student leaders' involvement and their eating habits at Rowan University. The study sought to determine the impact on those eating habits and how they affected the student's collegiate experience. It sought to understand if the amount of involvement had an impact on eating habits, if students understood what healthy options were, and what the impact of these eating habits were on the lives of students. These findings helped to determine the importance of student leaders' self-care, specifically how involvement impacted their nutrition.

#### **Significance of the Study**

The increasing pressure for students to get involved is rivaled by the societal influence to be healthy. Often students balance homework, friends, family, club or organization involvement, volunteering, and jobs. Creating a sufficient time commitment for each of these areas can be difficult enough, and often self-care and proper nutrition are the areas that suffer. This study assists in determining if the amount of student leader involvement is related to their eating habits. By collecting these data, it should explain the role involvement has on the eating habits of student leaders.

Additionally, the findings of the research sought to influence student leaders themselves, as well as college administrators. The findings should suggest promoting



healthy practices among student leaders' lives. Conclusions may influence the practice of administrators, both at Rowan University and beyond, to best serve their involved student leaders.

#### **Assumptions and Limitations**

This study assumed that the subjects who participated in the study answered honestly. It is also assumed that the subjects were representative of the undergraduate student leader population at Rowan University who understood all questions on the survey and answered the self-reflective portions to the best of their abilities.

While the study was conducted as precisely as possible, it is understood that there were limitations. The first is that this study was only conducted at Rowan University and distributed to undergraduate student leaders who represented their club or organization at Student Government Association senate meetings in positions such as president, vice president, senator, secretary, or treasurer. While not every student attending the meeting held one of these positions, the meetings were intended for those who represented the clubs and organizations. Furthermore, not every kind of student leader was represented at the senate meetings, so there might have been a missing population of subjects that were not surveyed. The subjects involved in the survey may have had varying levels of nutritional education, so their responses may have been influenced by their amount of knowledge.

Another limitation is that the study was not proctored, but instead read individually by the subjects. Because subjects might have had their own interpretation of the surveys, the questions could have been misunderstood. There is also a potential for researcher bias. Therefore, data may have been unintentionally influenced by those



conducting the research. Additionally, a limited number of data collection activities were conducted.

#### **Operational Definitions**

- 1. Eating Habits: How often and what someone is eating. Snacking, meals, and the absence of eating is included as well.
- 2. Healthy: A nutritional standard influenced by educated professionals and the United States Department of Agriculture. This term is unique for every person and should be advised as a guideline, it will not be the same for everyone.
- 3. Involved Student Leaders: Freshmen to senior undergraduate students who are involved in extracurricular activities and specifically hold a leadership position, in a Student Government Association charted club or organization during the spring 2018 term at Rowan University. Student Leaders may be involved in multiple clubs or organizations, but they must hold at least one leadership position, such as president, vice president, senator, secretary, or treasurer.
- 4. Level of Involvement: How involved a student is by the leadership position that is held, number of different clubs or organizations they are part of, and time that is committed.

#### **Research Questions**

This study explored the following questions:

- 1. What are the involvement patterns of student leaders?
- 2. Do student leaders understand what healthy eating is?
- 3. Does the level of involvement a student leader has impact their eating habits?
- 4. What are the attitudes of student leaders towards their eating habits?



#### **Overview of the Study**

Chapter II offers a review of numerous literature pieces that are relevant to this study. It focuses on student leader involvement, food consumption, pressures of healthy eating habits, factors that impact the option to eat healthy, and risks with poor eating habits. Chapter II also looks into Astin's Involvement Theory and Maslow's Hierarchy of Needs. This review attempts to give an understanding of the aspects that influence current student leaders, their involvement, and their eating habits.

Chapter III provides the methodologies used to conduct this study. Described in this chapter is the context of the study, population, sample selection, data collection tools, data collection process, and analysis of the data collected. Of the 164 charted Student Government Association clubs and organizations, 102 subjects participated in the total sampling. They were distributed a paper copy of the survey at a Student Government Association senate meeting.

Chapter IV presents the outcomes of the study and how they relate to the proposed research questions in table and narrative forms. The results are also summarized and analyzed.

Chapter V discusses the major findings in the study. In this chapter, the conclusions of the research are compared to the major findings in Chapter II. It also offers suggestions and recommendations for practice and continued research.



#### **Chapter II**

#### **Review of the Literature**

#### Introduction

Undergraduate student leaders are constantly under varying degrees of stress. Classwork, jobs, extracurricular activities, relationships, and many other additional aspects add pressure to student leaders' daily lives. When so much is expected of student leaders, how can they be expected to take care of themselves? Understanding what student leaders eat, what affects their diet, and how often they eat, leads to a better understanding of how student leaders take care of themselves. The goal to extend the link from previous studies that focused on student involvement with time and impact, shift to healthy eating. Studying the eating habits of student leaders helps to gain insight into the self-care of student leaders.

The purpose of this literature review is to familiarize readers with the understanding of student leaders' involvement, current recommendations for healthy eating habits, and related theories. Students make the decisions to get involved, and they must also understand the impact that their eating habits have on them as well. The first section discusses student leader involvement, the second section looks at food consumption, the third section covers healthy eating habit recommendations, the fourth section looks at the factors that impact healthy eating habits, and the fifth section studies risks associated with poor eating habits. Having an understanding of these topics helps readers to gain knowledge of undergraduate students lives and the factors that impact their eating habits and overall self-care.



#### **Student Leaders**

As Samuels (2017) found, today's student leaders are highly involved with both academics, jobs, and extracurricular activities. Astin's work first started with his desire to understand the disconnect between college policies and achievement measures (1999). He felt that there was something in the middle that would be able to better link the outcomes. Astin (1993) studied various attributes of student leaders at four-year higher education institutions to better understand what was missing.

The Involvement Theory has five distinct postulates that together create Astin's idea of how students are involved (1999). The first postulate elaborates on how much physical and psychological investment is put into something (1999). This investment can be for aspects like academic studies or for a club meeting. The second postulate explains that involvement is on a continuum (1999). This continuum means that students can vary how much they invest at different times, this is typical and should be accepted. The third postulate describes both the quantitative and qualitative aspects (1999). Measurements can be described as how much time one puts in or by how much enjoyment they are getting from doing the activity, both options are acceptable. The fourth postulate clarifies that the amount of student learning and personal development one puts into something is a direct reflection into what they will get out of it (1999). What a student devotes is equal to what they will get from the experience. The fifth postulate states that it can only be as effective as the capacity to increase student involvement (1999). All of these postulates created a holistic view of student development as designed by Astin.

The research found that the time students put into learning is directly related to their outcomes. While there is a need for more data specifically related to extracurricular



activities, the data currently suggests that the time put into these activities reflects their outcomes as well (Astin, 1993). This investment of time significantly impacts student leaders schedules, which then impacts their eating habits. Being involved effects many aspects of student leaders lives, and this involvement can have a significant impact on what they eat and how often they eat. Astin's work is vital, as it explains the benefits that students receive from being involved, and why their involvement can impact their diet.

Experiences outside of the classroom build on skills taught inside of the classroom. Lizza (2007), found that students are spending more of their time dedicated to school and extracurricular activities. This investment of time means that other self-care tasks students have, like eating healthy, may not be considered priorities. Lizza's research suggests that the time spent dedicated to the variety of responsibilities that involved students hold today have an effect on their schedules and commitment to their free time. Specifically, Lizza's study recommends that the existence that highly involved students are active in multiple organizations and they hold a variety of leadership roles on campus. These findings suggest that the research at Rowan University resembles the findings in other Involvement Theory studies.

Students also grow throughout their collegiate experience in a variety of ways. Astin's (1993) study also researched student's self-ratings on leadership among many other attributes from their freshman to their senior years. The self-reporting allows for students to reflect on themselves and the work that they are doing. Astin found that the strongest positive effects were on leadership development. Research suggests that students are able to self-report progress in identifying as student leaders, which shows that they find the work that they are doing inside and outside of the classroom to be



beneficial to themselves. While students are self-reporting positive outcomes from their involvement, is the involvement also negatively impacting their self-care, specifically dieting habits?

Iacovone's (2017) research with student athletes contained informational findings that compared the Involvement Theory specifically at Rowan University. It chose to compare student's grade point averages, demographics, sport participated in, and the impact it had on their involvement experience (Iacovone, 2007). One major finding was that students are involved in campus outside of just athletics, but not ones that take up a lot of time. However, the study did not show a strong relationship between importance and satisfaction with social importance, academic importance, and campus atmosphere. Iacovone's findings suggested that a student's academic performance impacted their involvement.

Ackermann's (2005) research focused on student leader involvement and learning outside of the classroom. This learning is a byproduct that occurs while they are being involved in these activities. Ackermann looked at why students get involved, the perceived benefits of being involved, the perceived learning outcomes associated with involvement, and the perceived actions that can be taken by student affairs professionals to enhance the intentionality of involvement (2005). The study found that students get involved because they want to gain experience and build skills. Building on their leadership skills is the desired outcome for students investing their time in different clubs and organizations outside of the classroom. Ackermann's study finds that the students aspiration to get involved is because they want to develop their skills and further prepare themselves for their futures.



#### **Food Consumption**

Eating is one of the most basic functions that humans must do in order to survive. In a landmark study, Maslow studied human motivation. It was found that food is one of the most basic needs, and necessary in order for the body to function (Maslow, 1943). More than the other basic needs, which include safety, love, and esteem, people would hunger most for food (Maslow, 1943). In order to survive, one must have nourishment to fuel the body. Before student leaders can do anything, they must make sure that they have food in their body to provide them energy. Maslow's theory helps researchers to understand student's priorities and needs, and why it is so impactful when a student's diet is affected.

Maslow's theory also implies that there is a precise order in which achievement should be attained. The theory states that one must fulfill their basic needs before moving forward (Noltemeye, Bush, Patton, & Bergen, 2012). Fulfilling needs like food, breathing, and sleep must be claimed before moving onward. The layers of the theory build on each other, so after one is completed it will help someone grow to their next level. In order for someone to successfully grow, they must accomplish the layers of the theory in order so that they can build off of each other. Fulfilling certain needs leads someone to later growth.

The recommended amount and type of food is different for every person. The meal plan for each individual should be based on height, weight, age, and other factors. Each person has a different amount of calories they need in order to maintain a healthy lifestyle (Everything, 2016). Using tools like the United States Department of Agriculture's SuperTracker can help individuals figure out the right amount of calories



for their lifestyle (SuperTracker, n.d.). The daily food group target suggests that 2.5 cups of vegetables and 2 cups of fruit should be eaten every day (SuperTracker, n.d.). Other options for help figuring out the correct amount of calories to intake would be consulting a dietician or physician. Figuring out the correct amount of food to consume is important to student leaders so they can optimize their self-care.

Undergraduate student leaders are faced with many choices during their day, food options being one of them. Deciding where to eat, what to eat, and how much to eat are decisions students make everyday. When students attend college, they often have multiple options on campus, "Cafeterias, all-you-can-eat dining facilities, vending machines, and easy access to food 24 hours a day make it tempting to overeat or choose foods loaded with calories, saturated fat, sugar, and salt" (College, 2016, p. 1). The vast options can make purchasing healthy options hard. While there are healthy choices available, that does not mean that college students are going to choose them.

#### **Pressures of Healthy Eating Habits**

Students are constantly being influenced by those around them. Their parents, friends, and mentors all play large roles in persuading what students believe. The largest influence today is undoubtedly the media, like television, social media, and newspapers. The media is everywhere, and students are receptive to the information they are putting out, "Mainstream media frequently report information on nutrition, and most colleges and universities have become more involved in addressing what many see as an epidemic that has a dramatic impact on Americans' health" (Levi, Chan, & Pence, 2006, p. 91). Seeing celebrities endorse healthy foods or watching commercials for certain foods can have a



real impact on what students think they should eat or buy. The influence the media has on student's perception of healthy eating is impactful.

Students are under immense pressure to be perfect and look perfect. They are influenced by their peers to want to seek perfection. Living a healthy lifestyle or putting on an appearance of living a healthy lifestyle, can cause a lot of stress for students, "In striving for a perfection that does not exist, students never feel completely competent. This omnipresent sense of inadequacy mingles with the desire to hide any manifestations of imperfection, including stress, depression, and bad grades" (Landphair, 2007, p. 26). Students striving to eat healthy can add extra pressure to their already stressful lives. While having healthy eating habits is good for students, it is unhealthy for them to strive for a perfect life that adds stress.

Additionally, students may not understand just how important eating healthy is. While students may know that healthier options are better for them than fast food, they might be thinking with a short-term lens. Kees (2011) explains that students may make poor health decisions because they do not consider the future impact it will have on them. If students are focused on the present and not worried about the future, they may avoid taking into account the unhealthy food they are eating.

#### **Factors that Impact the Option to Eat Healthy**

Students may like eating, but they might not know what is actually considered healthy. Understanding what is healthy for students to eat, means that students would have an understanding of what their healthy options are. Students are not alone in their lack of education. As Grace (1997) notes, there is a problem of "inadequate nutrition on campuses today" (p. 247). The lack of knowledge includes not only healthy eating



options, but over-eating and other eating disorders as well. A large reason why students do not eat healthy could be traced back to campuses not being educated on proper nutrition or healthy eating habits.

Although students may want to eat healthy, they may not have the financial support to do so. It is not always an option for students to purchase healthy foods, as money can be a large source of stress for students. The pressure that they feel to purchase healthy foods may not be a reality if they do not have the money to do so. Rao, Lazano, and Taani (2014), found that students favor processed foods that cost less. Students are more likely to purchase unhealthier foods because they are simply able to afford it. Having the money to afford healthy foods can add a lot of pressure to a student's life.

Additionally, where students live affects their diet. Students who live on-campus have different access to food than students who live off-campus. While each campus is different, it is important to recognize the factors that influence students' lives.

Deshpande, Basil, and Basil (2009), found that students who live off campus have a reported higher energy from protein, as well as serum triglyceride levels, and ratios of total cholesterol to high density lipoprotein. While different studies look at different aspects, data conclude that the diets of students who live on-campus looks different than those who live off-campus.

#### **Risks with Poor Eating Habits**

There are many risks associated with poor eating habits. Binge eating is one of the most common risks. A binge-eating disorder is when someone "frequently consume(s) unusually large amounts of food and feel(s) unable to stop eating" (Binge,



2016, p. 1). Students who are under stress can often feel more pressure to distract themselves with various vices, one of those being food. Students can find binge-eating as a way to relieve stress.

Binge-eating can than have a large impact on weight. Eating for comfort instead of fuel can lead to over eating. Excessive over eating can lead to obesity or weight fluctuation (Clemente, 2002). Weight gain can have several impacts on a student's life. Repetitive behaviors like this can be very harmful to one's health. The impact of weight gain or weight fluctuation can have negative effects on a student's self-care.

On the opposite end of binge-eating, some student leaders do not eat. While some turn to food for comfort, others may not find enough time for food in their busy schedules. As the Centers for Disease Control and Prevention mentions, students "may not eat enough because of stress or other reasons" (College, 2016, p. 1). When students are stressed they may choose to prioritize other things over eating. Not eating regular meals can be just as detrimental to a student's health as binge-eating.

Additionally, the stress that college student leaders face can really impact their diet. Students are often put under a lot of pressure from various outlets, and the stress can affect different areas of their lives. Grace (1997) has also found that "stress inherent in the college environment often exacerbate a preoccupation with weight or precipitate eating disorders in those who are susceptible" (p. 247). If students are stressed and it is impacting their diet, weight, or even eating disorders, the implications could be extremely harmful. Stress can overwhelmingly influence a student's eating habits in a negative way, which could impact their weight or eating disorders.



#### **Summary of the Literature Review**

Student leaders are extremely busy with work, school, friends, homework, and leadership responsibilities. Their time is very limited and they must prioritize their values. Astin's Involvement Theory suggests that the more students are involved on campus, the stronger their collegiate experience. Personal investment of time can largely impact their self-care habits, specifically their eating. Lizza (2007) adds that experiences learned outside of the classroom, like the executive board positions students have or the jobs that they hold, build on what they are taught in the classroom. The student's ability to self-report on their experiences and their leadership skills help them to identify their own progress. While this progress may produce positive outcomes for students, is may also be producing negative impacts on their self-care. Ackermann (2005) noted that students want to get involved outside of the classroom to gain skills. Their desire to want to strengthen their talents for their futures is what drives that to want to be involved in clubs and organizations. Students choose to involve themselves in extracurricular activities because they believe it will better prepare them for their careers.

Food consumption is necessary for student leaders to function. Maslow explains that nutrients is one of the most basic needs humans must have. Maslow's theory helps researchers to understand that food is extremely important. Therefore, when a student leaders' schedule impacts their eating habits it is imperative to take note and understand why. Also, it is explained that each person has their diet, no two are alike. Individualizing meal plans to each person helps them to understand what they should be eating. Food options on a college campus might look very different than the options a student might have had at home. The cafeterias and convenience stores might add



another element to a student's diet that was not previously there. Food consumption is essential for student leaders, but their diets should be unique to themselves so that they can understand what food they should be eating in order to be healthy.

As a student leader, there are a lot of pressures to eat healthy. Students are constantly being influenced by the media who tells them what they should eat and what they should look like. These pressures, mixed with the perception of perfection, create an unrealistic goal for students. In addition, students do not always think about the repercussions of their actions when they do not eat a healthy diet. They are not thinking of the future, but rather of the present. Together, these factors create a lot of pressure for students to eat healthy.

Students often have different obstacles that allow them to eat or not eat healthy diets. Students may not be knowledgeable of what an actual healthy diet is, so they may not be able to realistically maintain one. Also, students may not be financially stable to afford eating a balanced diet. As well, where students live impacts what they eat. Living on-campus versus living off-campus offers different benefits and struggles for students. These three influences impact students eating habits greatly.

There are many risks to students who are unable to achieve healthy eating habits. It is common for students in college to have or develop eating an eating disorder while in school. For some students, this can develop into binge-eating or not eating. This can then affect weight fluctuation as well. Factors like stress can impress upon students in a big way and bring great risk to their lives.

Student leaders must eat in college in order to function. However, their involvement will influence how they eat, what they eat, and how often they eat. These



impacts can foster risks for students health. Undergraduate student leaders eating habits are an important part of their collegiate experience that can have major effects on all aspects of their lives.

This literature review offers background information on student leaders and their eating habits. Current studies show that student involvement affects their diet in different aspects. While understanding that food is one of the most vital necessities to sustaining life, it is also important to note when something impacts self-care. Researchers provide data of various factors including improper nutrition education, social influences, living situations, and monetary influences that affect what students eat. These conclusions from researchers are helpful to gain insight into what is beneficial and what is harmful to students, but it is not definitive.

The current published research conducted has not been specifically studied with student leaders, but rather with a general population. The findings of this study will continue research to determine how the involvement of student leaders impacts their eating habits, which can then impact their lives in different ways.



#### **Chapter III**

#### Methodology

#### **Context of the Study**

Rowan University of New Jersey is considered a selective medium-sized institution and has campuses in Glassboro, Stratford, and Camden (Fast Facts, 2017). This study was conducted at the Glassboro campus. Rowan University is home to a total of 17,372 students, 14,345 of them are undergraduate students (College, n.d.). A total of 54% of students are male and 46% are female (College, n.d.). Created in 1923, this public co-ed institution ranked #90 in top public schools (Rowan University, 2018). Rowan has also been rated in the top three schools for social mobility for the second year in a row (Fast Facts, 2017).

Currently, 38% of students live on campus (Rowan University, 2018). Also, 38.1% of class sizes have less than 20 students in them (Rowan University, 2018). Rowan offers a variety of programs including, 74 bachelor's degrees, 51 master's degrees, 4 doctoral degrees, 7 undergraduate certificates, and 38 post-baccalaureate certificates (Rowan University, 2018).

For extracurricular activities, there are currently 164 chartered clubs and organizations at Rowan University (K. Kealey, personal communication, October 19, 2017). Also, Rowan is ranked a NCAA D3 III Athletic Association (Rowan University, 2018). Additionally, there are 47 intramural sports and 36 club sports (Fast Facts, 2017). Data also show that 8% of women students and 10% of men students are involved in Greek Life (Rowan University, 2018).



#### **Population and Sampling**

The population for this study was undergraduate students at Rowan University who held leadership positions such as president, vice president, senator, secretary, or treasurer, in a chartered Student Government Association club or organization the Spring 2018 semester. The total population available was 164 chartered clubs and organizations, which made the sample consist of 164 subjects. A total population study was used to find subjects for the survey. Surveys were given to the subjects at the Student Government Association's senate meetings. Paper surveys were distributed to the student leaders through their club or organization folder at the beginning of the meeting. At no time were subjects asked to reveal their identity or anything that would reveal anonymity.

#### Instrumentation

The instrument used in this study to evaluate involved student leaders eating habits (Appendix C) was developed from Williford's Student Involvement Study (1995). Permission to use this study was granted by Dr. Michael Williford, the developer of the survey (Appendix B). This instrument was created at Ohio University and the survey is distributed to all first-year students in residence halls every year (Data, n.d.). Those who take the survey during their first-year also survey again during their senior year. This study specifically focuses on levels of involvement including academic and social activities, personal goals, and adjustment to college life.

The survey used in this study was heavily based off of Williford's questionnaire, with minor adjustments. Adjustments were made to accommodate the topic of eating habits in addition to involvement. A majority of the content and formatting from the original survey is included in the current instrument. The survey contains open ended



questions, multi-optional questions, and Likert scale statements. This format allowed for obtaining quality responses in an efficient manner. This survey was determined to be both valid and reliable as it is a fundamental survey used in many research projects. It has provided useful results in a variety of research projects including Williford's own work (1995).

Section 1 of the survey, Background Information, was added in order to retrieve important content about the subjects. These six questions provided information that also indicated which clubs and organizations had already participated in the survey and who still need to. Background Information is significant to collect as it helps to find out important information about the subjects being studied.

Section 2, Involvement and Time Commitment, and Section 3, Involvement Patterns, were directly taken from Williford's original study. Section 2 has 14 statements and Section 3 has 32 statements. These sections indicated the levels of involvement from the subjects in a variety of ways. The items in these sections determine the involvement patterns of the subjects.

Section 4, Eating Habits, was added to determine if student leaders understood what healthy eating is and their attitudes toward their eating habits. The 16 statements in this section were created from the information gathered from sources included in the Literature Review. Reputable studies and key findings from researchers and the United States Department of Agriculture influenced the statements. The findings from Section 4 guided the findings of student leader involvement and its impact on their eating habits.

The survey was pilot tested with 10 student leaders for face validity. These leaders were not eligible to take the survey at the Student Government Association's



senate meeting. The pilot test took approximately 10 minutes. The students proposed slight changes in relation to grammar and clarity. A Chronbach Alpha reliability analysis revealed an r value of .937 indicating the survey to be very stable and internally consistent. The final survey used for the study can be found in Appendix C.

#### **Data Gathering Procedures**

CITI training was completed before any research began. Before moving forward with distribution of the study, the Institutional Research Board (IRB) application (Appendix A) was submitted and approved. After receiving the approval but before the study was distributed, the instrument was piloted with a select group of subjects to make sure that there was no confusion with any items. The subjects did not have any problems while taking the survey suggesting it was clear for them to understand and complete.

The study was conducted anonymously so that identities could be kept private.

All subjects were 18 years or older and agreed to take the study. The survey was then distributed to self-identifying undergraduate student leaders at Rowan University in the spring 2018 semester.

#### **Data Analysis**

The independent variables included student leader status and the current class status of the subjects. The dependent variables included the student eating habits. The data collected were analyzed in the form of tables and narrative interpretation. The computer software, Statistical Package for the Social Sciences (SPSS), was used to collect and analyze data. The data were analyzed by measures of central tendency using descriptive statistics including Pearson correlations, frequencies, percentages, means, and standard deviations.



#### **Chapter IV**

### **Findings**

#### **Profile of the Sample**

The subjects of the study were undergraduate student leaders who represented their club or organization at the Student Government Association senate meeting on February 19, 2018 in positions such as president, vice president, senator, secretary, or treasurer. A total of 102 surveys were completed and collected out of the 164 chartered clubs and organizations in attendance, producing a 62% response rate.

Table 4.1 provides the sample demographics of the survey responses. Of the 102 respondents, 9 were 18 years or under (8.8%), 48 were ages 19 to 20 (47.1%), 36 were ages 21 to 22 (35.5%), and 9 were ages 23 and older (8.8%). The data shows that the subjects consisted of 41 females (40.2%) and 42 males (41.2%). There were 11 freshmen (10.8%), 23 sophomores (22.5%), 29 juniors (28.4%), and 21 seniors (26.6%). The GPAs of the subjects included 35 students with a 4.0 to 3.7 (34.3%), 13 students with a 3.6 to 3.4 (12.7%), 23 students with a 3.3 to 3.0 (22.5%), 3 students with a 2.9 to 2.7 (2.9%), 27 students with a 2.6 to 2.4 (26.5%), and 1 student with a 2.3 to 2.0 (1.0%). The subjects' living situation revealed that 62 students lived in a dormitory or other oncampus housing (60.8%), 15 lived in an off-campus residence (house, apartment, etc.) within walking distance (14.7%), and 24 lived in an off-campus residence (house, apartment, etc.) within driving distance (23.5%).



Table 4.1

Demographics of Sample (N=102)

Variable		f	%
Age	18 and under	9	8.8
	19 to 20	48	47.1
	21 to 22	36	35.3
	23 and older	9	8.8
Gender	Female	41	40.2
Missing=19	Male	42	41.2
Class Status	Freshman	11	10.8
Missing=18	Sophomore	23	22.5
	Junior	29	28.4
	Senior	21	20.6
GPA	4.0 to 3.7	35	34.3
	3.6 to 3.4	13	12.7
	3.3 to 3.0	23	22.5
	2.9 to 2.7	3	2.9
	2.6 to 2.4	27	26.5
	2.3 to 2.0	1	1.0
Living Situation	Dormitory or other on-campus housing	62	60.8
Missing=1	Off-campus residence (house, apartment, etc.) within walking distance	15	14.7
	Off-campus residence (house, apartment, etc.) within driving distance	24	23.5

## **Analysis of the Data**

**Research question 1.** What are the involvement patterns of student leaders?

Table 4.2 describes how many hours per week undergraduate student leaders spent on curricular and extracurricular activities. Collectively, students spent the most time studying for classes each week, only 5 students reported that they spent zero hours studying (4.9%), and 33 students reported they spent 6 to 10 hours studying (22.5%).



The data also show that students spent the least time involved with international-related activities with 99 students spending zero hours a week (97.1%) and only 3 students spending 1 to 5 hours each week (2.9%).

Table 4.2

Hours Spent Each Week on Curricular and Extracurricular Activities (N=102)

Variable	Time	f	%
Studying for Classes	0	5	4.9
	1 to 5	23	22.5
	6 to 10	33	32.4
	11 to 15	15	14.7
	16 to 20	13	12.7
	21 to 25	2	2.0
	More than 26	11	10.8
Intercollegiate Athletics	0	93	91.2
	1 to 5	4	3.9
	6 to 10	4	3.9
	16 to 20	1	1.0
Campus Recreation	0	62	60.8
(intramurals, fitness)	1 to 5	24	23.5
	6 to 10	12	11.8
	11 to 15	4	3.9
College Publications	0	97	95.1
(newspaper, yearbook magazines)	1 to 5	5	4.9
College Productions or	0	95	93.1
Performances (theatre,	1 to 5	3	2.9
band)	11 to 15	3	2.9
	21 to 25	1	1.0
Fraternities or Sororities	0	92	90.2
	1 to 5	7	6.9
	6 to 10	2	2.0
	16 to 20	1v	1.0

Table 4.2 (continued)

Variable	Time	f	%
Professional or	0	51	50.0
Departmental Clubs	1 to 5	46	45.1
	6 to 10	2	2.0
	11 to 15	1	1.0
	More than 26 hours	2	2.0
Hobbies or Social Clubs	0	48	47.1
	1 to 5	43	42.2
	6 to 10	9	8.8
	11 to 15	1	1.0
	16 to 20	1	1.0
Religious Organizations	0	90	88.2
	1 to 5	11	10.8
	6 to 10	1	1.0
Residence Hall	0	92	90.2
Activities (Hall Council,	1 to 5	8	7.8
RA Programs)	6 to 10	2	2.0
Student Government	0	43	42.2
	1 to 5	57	55.9
	11 to 15	1	1.0
	16 to 20	1	1.0
International-Related	0	99	97.1
Activities	1 to 5	3	2.9
Leadership Programs	0	82	80.4
1 0	1 to 5	16	15.7
	6 to 10	2	2.0
	11 to 15	1	1.0
	16 to 20	1	1.0
Volunteer Service	0	65	65
(individual or as a	1 to 5	32	32
group)	6 to 10	4	4
- · · ·	11 to 15	1	1

Table 4.3 provides data on the attitudes students have about the importance of social involvement. Items are arranged from most to least positive using mean scores. Students reported the most important aspect of social involvement was having close friends at Rowan, with a mean score of 1.55 and standard deviation of 1.98. Students reported that the least important aspect of social involvement was getting involved in religious activities, with a mean score of 3.21 and standard deviation of 1.31.

Table 4.3

Attitudes about the Importance of Social Involvement (N=102)
(1=Very Important, 2=Somewhat Important, 3=Neutral/Don't Know, 4=Somewhat Unimportant, 5=Not at all Important)

Variable	M	SD
Having Close Friends at Rowan	1.55	1.98
Establishing Personal Relationships with Peers at Rowan	1.59	0.85
Getting Involved in Student Organization	1.66	0.80
Interacting with People of Different Races	1.89	0.96
Getting Involved in Campus Activities Missing=1	2.01	0.93
Having a Job While Enrolled	2.34	1.21
Attending Cultural Events on Campus	2.58	1,17
Interacting with International Students Missing=1	2.75	1.11
Getting Involved in Religious Activities	3.21	1.31

Table 4.4 provides data on the attitudes students have about the satisfaction of social involvement. Items are arranged from most to least positive using mean scores. Students reported the most satisfying aspect of social involvement was having close friends at Rowan, with a mean score of 1.56 and standard deviation of 1.90. Students reported that the least satisfying aspect of social involvement was getting involved in religious activities, with a mean score of 2.63 and standard deviation of 1.13.

Table 4.4

Attitudes about the Satisfaction of Social Involvement (N=102)
(1=Very Satisfied, 2=Somewhat Satisfied, 3=Neutral/Don't Know, 4=Somewhat Dissatisfied, 5=Not at all Satisfied)

Variable	M	SD
Having Close Friends at Rowan	1.56	1.90
Missing= 3		
Getting Involved in Student Organizations	1.64	0.86
Missing= 3		
Establishing Personal Relationships with	1.67	0.85
Peers at Rowan		
Missing= 2		
Getting Involved in Campus Activities	1.94	0.96
Missing=4	1.,, 1	0.50
Interacting with People of Different Races	2.05	1.06
Missing=2		
Having a Job While Enrolled	2.40	1.27
Missing=3		
Av. P. Ch. IF. A. C	2.40	1.05
Attending Cultural Events on Campus Missing=2	2.49	1.05
1111001115-2		

Table 4.4 (continued)

Variable	М	SD
Interacting with International Students	2.57	1.06
Missing=3		
Getting Involved in Religious Activities	2.63	1.13
Missing=4		

Table 4.5 provides data on the attitudes students have about the importance of academic involvement. Items are arranged from most to least positive using mean scores. Students reported the most important aspect of academic involvement was instruction in their major courses, with a mean score of 1.18 and standard deviation of 0.55. Students reported that the least important aspect of academic involvement was instruction in their non-major courses, with a mean score of 2.05 and standard deviation of 1.01.

Table 4.5

Attitudes about the Importance of Academic Involvement (N=102)
(1=Very Important, 2=Somewhat Important, 3=Neutral/Don't Know, 4=Somewhat Unimportant, 5=Not at all Important)

Variable	M	SD
Instruction in My Major Courses	1.18	0.55
Academic Advising	1.56	0.83
Faculty Available Outside of Class	1.70	0.86
Instruction in My Non-Major Courses	2.05	1.01

Table 4.6 provides data on the attitudes students have about the satisfaction of academic involvement. Items are arranged from most to least positive using mean scores.



Students reported the most satisfying aspect of academic involvement was academic advising, with a mean score of 0.83 and standard deviation of 1.19. Students reported that the least satisfying aspect of academic involvement was instruction in their non-major courses, with a mean score of 2.18 and standard deviation of 1.07.

Table 4.6

Attitudes about the Satisfaction of Academic Involvement (N=102)
(1=Very Satisfied, 2=Somewhat Satisfied, 3=Neutral/Don't Know, 4=Somewhat Dissatisfied, 5=Not at all Satisfied)

Variable	M	SD
Academic Advising	0.83	1.19
Missing=3		
Instruction in My Major Courses Missing=1	1.70	0.95
Faculty Available Outside of Class Missing=1	1.86	0.94
Instruction in My Non-Major Courses Missing=2	2.18	1.07

Table 4.7 provides data on the attitudes students have about the importance of campus atmosphere. Items are arranged from most to least positive using mean scores. Students reported the most important aspect of campus atmosphere was adequate personal security with a mean score of 1.50 and standard deviation of 0.86. Students reported that the least important aspect of campus atmosphere was fitting into campus community, with a mean score of 1.74 and standard deviation of 1.01.



Table 4.7

Attitudes about the Importance of Campus Atmosphere (N=102)
(1=Very Important, 2=Somewhat Important, 3=Neutral/Don't Know, 4=Somewhat Unimportant, 5=Not at all Important)

Variable	M	SD
Adequate Personal Security	1.50	0.86
Missing=1		
Adequate Academic/Intellectual Atmosphere Missing=2	1.52	0.74
Adequate Social Atmosphere Missing=1	1.63	1.83
Adequate Physical Environment on Campus Missing=1	1.65	0.87
Fitting into Campus Community Missing=1	1.74	1.01

Table 4.8 provides data on the attitudes students have about the satisfaction of campus atmosphere. Items are arranged from most to least positive using mean scores. Students reported the most satisfying aspect of campus atmosphere was adequate academic/intellectual atmosphere with a mean score of 1.90 and standard deviation of 0.91. Students reported that the least satisfying aspect of campus atmosphere was adequate social atmosphere with a mean score of 2.01 and standard deviation of 1.05.



Table 4.8

Attitudes about the Satisfaction of Campus Atmosphere (N=102)
(1=Very Satisfied, 2=Somewhat Satisfied, 3=Neutral/Don't Know, 4=Somewhat Dissatisfied, 5=Not at all Satisfied)

Variable	M	SD
Adequate Academic/Intellectual Atmosphere Missing=3	1.90	0.91
Adequate Physical Environment on Campus Missing=2	1.92	0.99
Adequate Personal Security Missing=3	1.94	1.07
Fitting into Campus Community Missing=2	1.98	0.97
Adequate Social Atmosphere Missing=2	2.01	1.05

Table 4.9 provides data on the attitudes students have about the importance of personal goals. Items are arranged from most to least positive using mean scores. Students reported the most important aspect of personal goals was making progress toward career goals with a mean score of 1.18 and standard deviation of 0.48. Students reported that the least important aspect of personal goals was developing spiritually with a mean score of 2.54 and standard deviation of 1.38.



Table 4.9

Attitudes about the Importance of Personal Goals (N=102)
(1=Very Important, 2=Somewhat Important, 3=Neutral/Don't Know, 4=Somewhat Unimportant, 5=Not at all Important)

Variable	М	SD
Making Progress Toward Career Goals Missing=1	1.18	0.48
Making Progress Toward Personal Goals Missing=1	1.19	0.46
Being Interested in My Studies for Academic Success Missing=1	1.27	0.70
My Personal Motivation for Academic Success Missing=2	1.39	0.76
Adjusting Academically to College Missing=1	1.29	0.67
My Personal Achievement for Academic Success Missing=1	1.32	0.66
Managing Personal Stress Missing=2	1.46	0.86
Developing My Self-Esteem and Confidence Missing=1	1.49	0.87
Adjusting Emotionally to College Missing=1	1.56	0.84
Adjusting Socially to College Missing=1	1.57	0.84
Developing Personal Values and Beliefs Missing=1	1.61	0.94
Making Progress Toward Academic Goals Missing=1	1.92	0.38

Table 4.9 (continued)

Variable	М	SD
Developing a Philosophy of Life	2.02	1.13
Missing=2		
Developing Spirituality	2.54	1.38
Missing=1		

Table 4.10 provides data on the attitudes students have about the satisfaction of personal goals. Items are arranged from most to least positive using mean scores.

Students reported the most satisfying aspect of personal goals was making progress toward academic goals with a mean score of 1.59 and standard deviation of 0.81.

Students reported that the least satisfying aspect of personal goals was managing personal stress with a mean score of 2.38 and standard deviation of 1.26.

Table 4.10

Attitudes about the Satisfaction of Personal Goals (N=102)
(1=Very Satisfied, 2=Somewhat Satisfied, 3=Neutral/Don't Know, 4=Somewhat Dissatisfied, 5=Not at all Satisfied)

Variable	M	SD
Making Progress Toward Academic Goals	1.59	0.81
Missing=2		
Being Interested in My Studies for Academic Success Missing=2	1.60	0.95
My Personal Achievement for Academic Success Missing=2	1.75	1.00
Adjusting Academically to College Missing=3	1.76	0.94



Table 4.10 (continued)

Variable	M	SD
Making Progress Toward Personal Goals Missing=2	1.76	0.95
Making Progress Toward Career Goals Missing=3	1.79	0.98
My Personal Motivation for Academic Success Missing=4	1.80	1.08
Adjusting Socially to College Missing=2	1.83	1.00
Developing Personal Values and Beliefs Missing=2	1.87	0.99
Adjusting Emotionally to College Missing=3	1.96	1.11
Developing My Self-Esteem and Confidence Missing=4	2.03	1.21
Developing a Philosophy of Life Missing=5	2.04	1.09
Developing Spirituality Missing=3	2.37	1.11
Managing Personal Stress Missing=2	2.38	1.26

**Research question 2.** Do student leaders understand what healthy eating is?

Table 4.11 contains information about student leaders understanding of their own healthy eating. Items are arranged from most to least positive using mean scores. Out of the standard three meals a day, 66 students reported that eating dinner every day definitely applies to them (64.7%), while only 27 students reported that eating three



meals a day definitely applies to them (26.5%). A total of 20 students reported that they do not know if they eat two cups of fruit every day (19.6%), 24 students reported that eating 2.5 cups of vegetables every day somewhat applies to them (23.5%). A total of 10 students definitely agreed that nutritional facts are difficult for them to interpret (9.8%), while 15 students (14.7%) reported that the statement, "I am aware of the nutritional facts of the food that I consume" somewhat applies to them.

Table 4.11

Understanding Healthy Eating (N=102)
(1=Definitely Applies, 2=Moderately Applies, 3=Neutral/Don't Know, 4=Somewhat Applies, 5=Not Applicable)

Statement		efinitely applies		lerately plies	Neutral/ Don't Know		Somewhat Applies		Not Applicable	
	f	%	f	%	f	%	f	%	f	%
I eat dinner every day <i>M</i> =1.71, Missing=2	66	64.7	16	15.7	6	5.9	5	4.9	7	6.9
I eat lunch every day <i>M</i> =2.04,	54	52.9	20	19.6	6	5.9	13	12.7	9	8.8
I am aware of the nutritional facts of the food that I consume <i>M</i> =2.39, Missing=1	32	31.4	30	29.4	15	14.7	15	14.7	9	8.8

Table 4.11 (continued)

Statement		finitely pplies		erately plies			Somewhat Applies			lot licable
						%	f	%		
I eat 2 snacks a day M=2.66, Missing=1	24	23.5	28	27.5	17	% 16.7	22	21.6	10	9.8
I eat breakfast every day M=2.78, Missing=1	30	29.4	21	20.6	12	11.8	17	16.7	21	20.6
I eat 3 full meals a day M=2.82, Missing=5	27	26.5	22	21.6	7	6.9	23	22.5	18	17.6
I eat 2.5 cups of vegetables every day <i>M</i> =3.1, Missing=2	16	15.7	22	21.6	18	17.6	24	23.5	20	19.5
Nutritional facts are difficult for me to interpret <i>M</i> =3.76, Missing=4	10	9.8	12	11.8	11	10.8	23	22.5	42	41.2
I eat 2 cups of fruit every day M=3.77, Missing=1	14	13.7	18	17.6	20	19.6	24	23.5	24	23.5

**Research question 3.** Does the level of involvement a student leader has impact their eating habits?

Table 4.12 shows the level of involvement of a student leader compared to the impact it has on their eating habits. The Pearson correlation was used to analyze the data. There is a positive relationship between "Eat lunch every day" and "Studying for classes," with a positive low moderate correlation of .267. There is a positive relationship between "I consume 2 cups of fruit ever day" and "Hobbies or social clubs," with a positive moderate correlation of .409.

Table 4.12

Student Leader Involvement and the Impact on Eating Habits (N=102)

Variable	r	p
I eat lunch every day	.267**	0.0006
Studying for classes		
Missing= 5		
I consume 2 cups of fruit every day	.409**	0.0002
Hobbies or social clubs		
Missing= 49		

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed).

**Research question 4.** What are the attitudes of student leaders towards their eating habits?

Table 4.13 shows student leaders attitudes towards their own eating habits. A total of 43 students (42.2%) selected "I am considered to be a healthy weight," definitely applied to them, but only 33 students (32.4%) indicated that "I am comfortable with my weight," definitely applies to them. Only 25 students (24.5%) selected that "My current



budget allows me to purchase healthy food," definitely applies to them and 20 students indicated it somewhat applies to them (19.6%).

Table 4.13

Student Leader Attitudes (N=102)
(1=Definitely Applies, 2=Moderately Applies, 3=Neutral/Don't Know, 4=Somewhat Applies, 5=Not Applicable)

Statement	Definitely Applies			erately plies		utral/ t Know		newhat	Not Applicable		
Maintaining a healthy lifestyle is important to me $M=1.67$ , $SD=0.895$ , Missing=1	55	53.9	30	% 29.4	11	% 10.8	4	3.9	1	1.0	
I am considered to be a healthy weight $M=2.07$ , $SD=1.265$ , Missing=2	43	42.2	32	31.4	8	7.8	9	8.8	8	7.8	
I often eat unhealthy food because it is easier for me to access $M=2.14$ , $SD=1.237$	41	40.2	28	27.5	17	16.7	9	8.8	7	6.9	

Table 4.13 (continued)

Statement	Definitely Applies			erately plies		eutral/ 't Know		omewha Applies		Not Applicable			
		%	f	%	f	%	.1		f	%			
When I am stressed I tend to binge eat or forget to eat $M=2.34$ , $SD=1.492$ , Missing=2	4	42.2	21	20.6	10	9.8	11	10.8	15	14.7			
I am comfortable with my weight $M=2.40$ , $SD=1.378$ , Missing=2	33	32.4	33	32.4	5	4.9	19	18.6	10	9.8			
My current budget allows me to purchase healthy foods $M=2.93$ , $SD=1.498$ , Missing=1	25	24.5	21	20.6	11	10.8	24	23.5	20	19.6			
My overall diet is healthy and I do not need to may any changes $M=3.18$ , $SD=1.240$ , Missing=3	11	10.8	21	20.6	20	19.6	33	32.4	14	13.7			

## Chapter V

# Summary, Discussion, Conclusions, and Recommendations

## **Summary of the Study**

This study investigated Rowan University undergraduate student leaders and their eating habits. The study aimed to determine any relationships between student leaders' involvement and their eating habits. The study focused on time commitments, involvement patterns, and eating habits. Student's own perceptions of how they spend their time, what they eat, and why they eat certain things were represented in the survey.

The subjects of the study were undergraduate student leaders who represented their club or organization at Student Government Association senate meetings in positions such as president, vice president, senator, secretary, or treasurer. A physical copy of the *Involved Student Leaders Eating Habits Questionnaire* was distributed to 164 chartered clubs and organizations. A total of 102 subjects returned the surveys, yielding a 62% response rate. The quantitative data were collected and analyzed with the Statistical Package for the Social Sciences (SPSS) computer software. The data were analyzed by measures of central tendency using descriptive statistics including Pearson correlations, frequencies, percentages, means, and standard deviations.

### **Discussion of the Findings**

**Research question 1.** What are the involvement patterns of student leaders?

The study found that students spent the most time studying for classes each week, with 33 students reporting spending 6 to 10 hours studying every week (22.5%). In other areas of involvement, 23.5% of students said that they spent 1 to 5 hours a week being involved in Campus Recreation., 42.2% of students are involved in hobbies or social



clubs for 1 to 5 hours a week, and 55.9% of students spent 1 to 5 hours a week being involved in Student Government. This is consistent with Lizza's findings that highly involved students are active in multiple organizations (2007). The survey reveals similar data to that of Lizza's, students are spending their time in multiple areas across campus.

Additionally, the survey data revealed that students chose to get involved because, "Having close friends at Rowan" is the most important aspect of social involvement to them. "Having close friends at Rowan" also provided students the most satisfaction with social involvement. "Instruction in my major courses" was the most important aspect of academic involvement, and "Academic advising" was the most satisfying aspect of academic involvement. "Adequate personal security" was the most important aspect of campus atmosphere, and "Adequate academic/Intellectual atmosphere" was the most satisfying aspect of campus atmosphere. "Making progress toward career goals," was the most important aspect of personal goals the sample subjects. "Making progress toward academic goals" was the most satisfying aspect of personal goals to students. The overall importance and satisfaction scores that students reported were higher than with these of lacovone's (2007) findings which had consistent but lower mean scores. The findings of this study revealed that there were stronger relationships for both importance and satisfaction items.

**Research question 2.** Do student leaders understand what healthy eating is?

The study found that students do not have a full understanding of what constitutes healthy eating. The survey found that 20 students reported that they do not know if they eat two cups of fruit every day (19.6%) and 24 students reported that eating two and one-half cups of vegetables every day somewhat applies to them (23.5%). The findings



revealed in the survey that students' eating habits do not align with the suggestions made by the United States Department of Agriculture (SuperTracker, n.d.).

The study also supports Grace's (1997) findings, which suggest that there is a problem of "inadequate nutrition on campuses today." The study found that 10 students definitely agreed that nutritional facts are difficult for them to interpret (9.8%), while only 15 students (14.7%) reported that the statement, "I am aware of the nutritional facts of the food that I consume" somewhat applies to them. Subjects reported a lack of nutritional knowledge which, supports Grace's conclusions about insufficient nutrition on campus.

**Research question 3.** Does the level of involvement a student leader has impact their eating habits?

The study found that there was a low moderate positive correlation of .267 between subjects who selected "I eat lunch every day," and spent time "Studying for classes." There was also a positive moderate correlation of .409 between subjects who selected, "I consume 2 cups of fruit ever day" and also spent time involved with "Hobbies or social clubs." This supports Astin's findings that time put in extracurricular activities reflects positive outcomes (1993). In this study, there is a positive correlation between studying for classes and eating lunch, as well as eating the suggested amount of fruit and time spent being involved in clubs. Additional findings were not supported by any previous research that was found by me.



**Research question 4.** What are the attitudes of student leaders towards their eating habits?

The study found that 43 students (42.2%) selected, that "I am considered to be a healthy weight" definitely applied to them, but only 33 students (32.4%) selected, "I am comfortable with my weight" definitely applied to them. As Landpahair (2007) found, "students never feel completely competent" because of their quest for perfection (p. 26). The 32.4% of students who reported were comfortable with their weight reinforces Landphair's belief that most students are feeling inadequate.

Additionally, the study found that only 25 students (24.5%) selected, "My current budget allows me to purchase healthy food" definitely applied to them and 20 students said it somewhat applied to them (19.6%). The subjects self-reporting supported Rao, Lazano, and Taani's (2014) findings that stated students are more likely to purchase unhealthy foods because they cost less. The findings suggest that monetary restrictions are an obstacle for students when purchasing foods.

### **Conclusions**

The results of the study suggest four conclusions. The first is that the study found that the involvement patterns suggested by previous researchers hold true. Student leaders are involved in multiple areas. The subjects also rated their importance and satisfaction of social involvement, academic involvement, campus atmosphere, and personal goals at a higher rate than in previous research.

The second conclusion is that more nutritional education is needed for undergraduate student leaders. Subjects reported that they do not have a firm understanding of what eating healthy is and this impacts their eating habits.



The third conclusion is that more research is needed to determine the relationships of undergraduate student leaders involvement and the impact on their eating habits.

While correlations were found, more research would be able to further help fill the knowledge base.

The fourth conclusion is that students attitudes towards their eating habits is consistent with previous research. The subjects thoughts on their own healthy weight and comfortability with their weight reveals that students are struggling. Additionally, financial barriers influence students healthy eating options.

It can be concluded that more research is required to further understand student leaders involvement and the impact on their eating habits.

### **Recommendations for Practice**

Based on the findings and conclusions of the study, the following are recommendations for practice:

- 1. Share the findings of the research with students and administrators.
- 2. Provide an opportunity for students to educate themselves on nutrition.
- 3. Create an opportunity for more research on the relationships of student leaders involvement and the impact of their eating habits.

### **Recommendations for Further Research**

Based on the findings of the study, the following recommendations are presented for continued research:

1. Update Likert-scale questions on the survey to reflect traditional practices, specifically with 5 being "very important" and 1 being "not at all important."



- 2. Conduct surveys at different times of year to see if this aspect impacts how students eat.
- Conduct surveys at different institutions to compare the results to those at Rowan University.
- 4. Conduct surveys with non-student leaders at Rowan University and compare the results to student leaders to see if there are any differences.
- 5. Incorporate qualitative data to obtain more detailed responses from student leaders.



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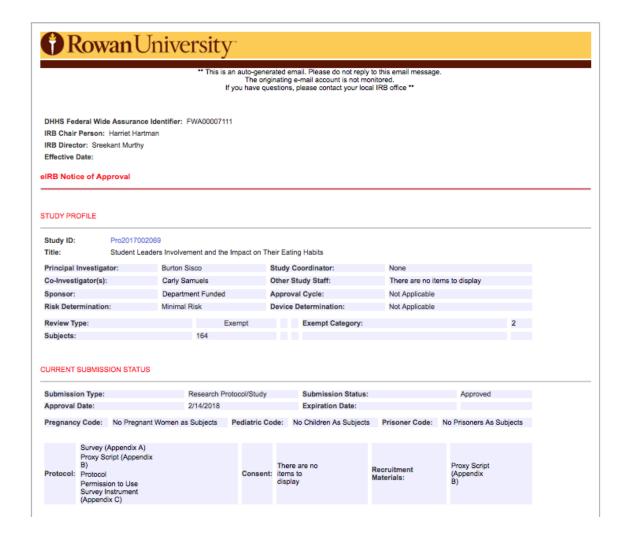
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## Appendix A

## **Institutional Review Board Approval**





\* Study Performance Sites

There are no items to display

Glassboro Campus 201 Mulli-

201 Mullica Hill Road, Glassboro, NJ 08028

#### ALL APPROVED INVESTIGATOR(S) MUST COMPLY WITH THE FOLLOWING:

- 1. Conduct the research in accordance with the protocol, applicable laws and regulations, and the principles of research ethics as set forth in the Belmont Report.
- Continuing Review: Approval is valid until the protocol expiration date shown above. To avoid lapses in approval, submit a continuation application at least eight weeks before the study expiration date.
- 3. Expiration of IRB Approval: If IRB approval expires, effective the date of expiration and until the continuing review approval is issued: All research activities must stop unless the IRB finds that it is in the best interest of individual subjects to confline. (This determination shall be based on a separate written request from the PI to the IRB.) No new subjects may be enrolled and no samples/charts/surveys may be collected, reviewed, and/or analyzed.
- 4. Amendments/Modifications/Revisions: If you wish to change any aspect of this study, including but not limited to, study procedures, consent form(s), investigators, advertisements, the protocol document, investigator drug brochure, or accrual goals, you are required to obtain IRB review and approval prior to implementation of these changes unless necessary to eliminate apparent immediate hazards to subjects.
- 5. Unanticipated Problems: Unanticipated problems involving risk to subjects or others must be reported to the IRB Office (45 CFR 46, 21 CFR 312, 812) as required, in the appropriate time as specified in the attachment online at: http://www.rowan.edu/som/hsp/
- 6. Protocol Deviations and Violations: Deviations from/violations of the approved study protocol must be reported to the IRB Office (45 CFR 46, 21 CFR 312, 812) as required, in the appropriate time as specified in the attachment online at: http://www.rowan.edu/som/hso/
- 7. Consent/Assent: The IRB has reviewed and approved the consent and/or assent process, waiver and/or alteration described in this protocol as required by 45 CFR 46 and 21 CFR 50, 56, (if FDA regulated research). Only the versions of the documents included in the approved process may be used to document informed consent and/or assent of study subjects; each subject must receive a copy of the approved form(s); and a copy of each signed form must be filed in a secure place in the subject's medical/patient/research record.
- 8. Completion of Study: Notify the IRB when your study has been stopped for any reason. Neither study closure by the sponsor or the investigator removes the obligation for submission of timely continuing review application or final report.
- 9. The Investigator(s) did not participate in the review, discussion, or vote of this protocol.
- 10. Letter Comments: There are no additional comments.

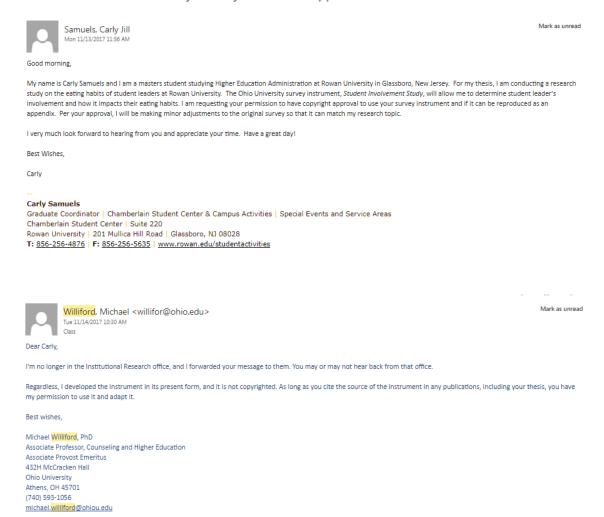
CONFIDENTIALITY NOTICE: This email communication may contain private, confidential, or legally privileged information intended for the sole use of the designated and/or duly authorized recipients(s). If you are not the intended recipient or have received this email in error, please notify the sender immediately by email and permanently delete all copies of this email including all attachments without reading them. If you are the intended recipient, secure the contents in a manner that conforms to all applicable state and/or federal requirements related to privacy and confidentiality of such information.



## Appendix B

## **Permission to Use Survey Instrument**

## Student Involvement Study- Survey Instrument Approval





## Appendix C

## **Survey Instrument**



### **Involved Student Leaders Eating Habits Questionnaire**

We are inviting you to participate in a research survey entitled "Involved Student Leaders Eating Habits Questionnaire". We are inviting you because you are representing your Student Government Association club or organization. In order to participate in this survey, you must be 18 years or older.

The survey may take approximately 15 minutes to complete. Your participation is voluntary. If you do not wish to participate in this survey, do not respond to this paper survey. The number of subjects to be enrolled in the study will be 164.

The purpose of this research study is to assess the connection between Rowan University undergraduate student leader's involvement and their eating habits. This study will help us to gain a better understanding of student leader's levels of involvement as it correlates to their eating practices. The total number of subjects involved are 164 student leaders who represent their Student Government Association club or organization.

Completing this survey indicates that you are voluntarily giving consent to participate in the survey.

There are no risks or discomforts associated with this survey. There may be no direct benefit to you, however, by participating in this study you may help us understand a connection between student leaders and their eating habits, discovering the positive associations, and learning more about the negative outcomes as well. These findings will add to the knowledgebase, to further improve student leader's wellbeing.

Your response will be kept confidential. We will store the data in a secure computer file and the file will destroyed once the data has been published. Any part of the research that is published as part of this study will not include your individual information. If you have any questions about the survey, you can contact Carly Samuels at the address provided below, but you do not have to give your personal identification.

Researcher:
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Educational Services, Administration and
Higher Education
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## **Section 1: Background Information**

Mark or write in the answer that best describes your response.

1.	What club or organization a	re you currently representing at	this meeti	ng?
	What is your age?	3. Gender:	4.	My current class
	18 & Under	Female		status is
	19 to 20	Male		Freshman
	21 to 22	Transgender		Sophomore
	23 & Older			Junior
_	William to the Control of the Contro	D 4 9		Senior
	What is your cumulative G			224-20
	4.0 to 3.7	3.6 to 3.4		3.3 to 3.0
	2.9 to 2.7	2. 6 to 2.4		2. 3 to 2.0
	1.9 to 1.7	1. 6 to 1.4		1.3 & Below
they p	ertain to you. If so, check "ye	now often you do certain activit es" and write in how many hour ase answer every question by pl	rs you part acing you	icipate in the r response in the
			Yes	Hours per Week
	Studying for classes		[ ]	
	Intercollegiate Athletics		[ ]	
	Campus Recreation (intrami			
	College Publications (newsp		[ ]	
	College Productions or Perf	ormances (theatre, band)	[ ]	
	Fraternities or Sororities		[ ]	
	Professional or Departmenta	al Clubs	[ ]	
	Hobbies or Social Clubs		[ ]	
	Religious Organizations		[ ]	
	. Residence Hall Activities (H	Hall Council, RA programs)	[ ]	
	. Student Government		[ ]	
	. International-Related Activi	ties	[ ]	
	. Leadership Programs		[ ]	
14	. Volunteer Service (individu	al or as a group)	[ ]	



### **Section 3: Involvement Patterns**

The following questions have two parts. First rate how important each item is to you by circling one of the numbers from 1-5. Second, rate how satisfied you are with each item by circling one of the numbers from 1-5. Use the following scale:

	Importance  Importance  Act Soft Soft Soft Soft Soft Soft Soft Sof					,	Satisfaction  Satisfaction  Satisfaction  Satisfaction  Satisfaction  Satisfaction  Acronic Satisfaction  Acro				
Social Involvement	<u> ک</u> و	<b>. G</b>	Strate Service	Land Satisfied	Transport of	THE THE PARTY OF T	4	SA S	Street Street	SE LA CO	Anom on the or of the or o
1. Establishing Personal Relationships with Peers at Rowan	1	2	3	4	5		1	2	3	4	5
Having Close Friends at     Rowan	1	2	3	4	5		1	2	3	4	5
3. Getting Involved in Student Organizations	1	2	3	4	5		1	2	3	4	5
4. Getting Involved in Campus Activities	1	2	3	4	5		1	2	3	4	5
5. Attending Cultural Events on Campus	1	2	3	4	5		1	2	3	4	5
6. Interacting with International Students	1	2	3	4	5		1	2	3	4	5
7. Interacting with People of Different Races	1	2	3	4	5		1	2	3	4	5
8. Getting Involved in Religious Activities	1	2	3	4	5		1	2	3	4	5
9. Having a Job while enrolled	1	2	3	4	5		1	2	3	4	5
Academic Involvement  10. Instruction in My Major Courses	1	2	3	4	5		1	2	3	4	5
11. Instruction in My Non-Major	1	2	3	4	5		1	2	3	4	5
Courses 12. Faculty Available Outside of Class	1	2	3	4	5		1	2	3	4	5
13. Academic Advising	1	2	3	4	5		1	2	3	4	5



Campus Atmosphere										
14. Adequate Personal	1	2	3	4	5	1	2	3	4	5
Security	1	2	2	4	_	1	_	2	4	~
15. Adequate Physical	1	2	3	4	5	1	2	3	4	5
Environment on Campus	1	2	2	4	_	1	2	2	4	~
16. Adequate Social Atmosphere	1	2	3	4	5	1	2	3	4	5
17. Adequate Academic/Intellectual Atmosphere	1	2	3	4	5	1	2	3	4	5
18. Fitting into Campus Community	1	2	3	4	5	1	2	3	4	5
De consideration la										
Personal Goals	1	2	2	4	_	1	2	2	4	_
19. Making Progress	1	2	3	4	5	1	2	3	4	5
Toward Personal Goals	1	2	2	4	_	1	2	2	4	_
20. Making Progress	1	2	3	4	5	1	2	3	4	5
Toward Academic Goals	1	2	2	4	_	1	2	2	4	_
21. Making Progress Toward Career Goals	1	2	3	4	5	1	2	3	4	5
22. Adjusting Academically	1	2	3	4	5	1	2	3	4	5
To College										
23. Adjusting Socially	1	2	3	4	5	1	2	3	4	5
To College										
24. Adjusting Emotionally	1	2	3	4	5	1	2	3	4	5
To College										
25. Managing Personal Stress	1	2	3	4	5	1	2	3	4	5
26. Developing My Self-Esteem	1	2	3	4	5	1	2	3	4	5
And Confidence										
27. Developing Personal	1	2	3	4	5	1	2	3	4	5
Values & Beliefs										
28. Developing a Philosophy	1	2	3	4	5	1	2	3	4	5
of Life										
29. Developing Spirituality	1	2	3	4	5	1	2	3	4	5
30. My Personal Motivation	1	2	3	4	5	1	2	3	4	5
For Academic Success										
31. My Personal Achievement	1	2	3	4	5	1	2	3	4	5
For Academic Success										
32. Being Interested in My Studies	1	2	3	4	5	1	2	3	4	5
For Academic Success										



## **Section 4: Eating Habits**

Please indicate how the statements below relate to you, with 5 not applying to you at all and 1 definitely applying to you. Use the following scale:

		4	ي جي	ijė <sup>s</sup> 1	Sillar And Sillar Silla
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	,	Ker . é	ingo.		Ara Ar
	Si	. Tag	` <del>≥e</del> ii	, can	<del>Sar</del> r
1. I am considered to be a healthy weight.	1	2	3	4	5
2. I am comfortable with my weight.	1	2	3	4	5
3. I eat 3 full meals a day.	1	2	3	4	5
4. I eat 2 snacks a day.	1	2	3	4	5
5. I eat breakfast everyday.	1	2	3	4	5
6. I eat lunch everyday.	1	2	3	4	5
7. I eat dinner everyday.	1	2	3	4	5
8. I consume 2 cups of fruit everyday.	1	2	3	4	5
9. I consume 2.5 cups of vegetables everyday.	1	2	3	4	5
10. When I am stressed I tend to binge eat or forget to eat.	1	2	3	4	5
11. I am aware of the nutritional facts of the food that I consume.	1	2	3	4	5
12. Nutritional facts are difficult for me to interpret.	1	2	3	4	5
13. My overall diet is healthy and I do not need to make any changes.	1	2	3	4	5
14. My current budget allows me to purchase healthy food.	1	2	3	4	5
15. I often eat unhealthy food because it is easier to access.	1	2	3	4	5
16. Maintaining a healthy lifestyle is important to me.	1	2	3	4	5

