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Parents' perceived financial behaviors impact on college students' financial behaviors

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THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF

Master of Science in College Student Affairs

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY

CHARLESTON, ILLINOIS

2020

I HEREBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING THIS

PART OF THE GRADUATE DEGREE CITED ABOVE

DATE

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Abstract

The purpose of this study was to explore the relationship between traditional-aged college students and their parents perceived financial behaviors. It utilized Dew and Xiao's Financial Management Behavior Scale (FMBS) (2011). Past research indicated that there is a positive impact between a parent's involvement in students' academic endeavors, however little research explored the relationship between their impact on a young adults' financial behaviors. Students' were asked a series of questions from the FMBS rating their actual financial behaviors. These results were compared to their perception of their parent's financial behaviors in the following categories: money management, credit management, savings management, insurance management, and their overall financial management. Results indicate no significance in overall student financial scores compared to perceived parent behaviors, however, further analysis suggests a relationship between specific financial behaviors. Additional findings, discussion, and recommendations are included in chapter five.

To the garage

For the work/thesis/classroom space, homeschool room, and much needed stress relief.

I couldn't have done it without you.

Acknowledgements

I would like to thank Dr. Eric Davidson for his dedication to my research and writing. Thank you for your willingness to tear my thesis apart. Now this is done, we can call it a good thesis. Dr. Michael Gillespie, for his constant kind words, support, Diet Coke, and challenge of my limited statistical knowledge. Dr. Katie Shaw for being my first mentor and for a decade of referring to me as one of her success stories. You have impacted me in more ways than you know. To my family, Eliot for homeschooling himself during chapters 3 through 5, and Jordan for believing in me far more than I believed in myself. Congratulations on your master's degree. Lastly, to COVID-19 for adding an additional layer of stress to the process. Thank you for constantly testing my persistence and dedication to furthering my education.

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CHAPTER I

Introduction

Student debt and its crippling effects on young adults is a major social issue in the United States (Britt, Canale, Fernatt, Stutz, & Tibbetts, 2015; Fosnacht & Calderone, 2017; Martin, 2016). There is a cultural burden of student debt, ranging from student loans applied directly towards tuition, to the increasing amount of credit card debt accrued to pay general living expenses in order to maintain a reasonable standard of living while enrolled in a university (Norvilitis et al. 2006). Large amounts of debt do not just constrain a student while they are in school, but will impact their life after graduation. Many students are unable to take desired jobs, or explore preferred career paths, after finishing their degrees due to the amount of money they need to repay. Although there does not seem to be a correlation between large amounts of debt and returning to live with family members after college, recent graduates are more likely to be satisfied with lower standards of living and favor more unsafe and less desirable neighborhoods to live based on the amount of debt owed (Callender & Jackson, 2008).

A strong focus in collegiate financial research focuses on individual anxiety, stress, and ability to succeed. Doehring (2017) states that guilt, shame, and stress are emotions often related to high amounts of debt and financial burden in college students and that students make financial decisions based on several different factors, such as family practices, their own ability to do well in school, as well as other personal indicators, such as their employment and how many scholarships they have applied for (Britt et al., 2015). Although this is true of many people in many stages of life, college is not a time where one can handle unnecessary amounts of stress and anxiety to be able to fully commit to some of the most important and self-discovering times

of one's life. Financial stress has been linked to depression and poor academic performance in college students (Lim, Heckman, Letkiewicz & Montalto, 2014; Heckman, Lim, & Montalto, 2014) and high amounts of debt have been linked to low retention rates (Britt, Ammerman, Barrett, & Jones, 2017). Doehring (2017) indicated that students with high levels of financial stress correlated directly with other unfavorable stress habits, such as over-eating, thoughts of helplessness, and paralyzing memories.

As college students continue to feel the burden of financial stress, it is increasingly important to understand the barriers they face in navigating a financial world. Much of the current data involving parental impact and the student's decision to attend university revolves around the amount of parental involvement during the student's high school career and not once they begin attending a 4-year university. Ross (2016) found that open communication regarding higher education between parent and child had a positive impact on a student's decision to attend college. Further research has focused on what kind of information parents seek in helping their children to the path of post-secondary education (Fann, McClafferty, & McDonough, 2009). Considering the amount of effect parental involvement can have on a student's college decision, little research exists to describe the relationship between a parent's financial literacy, as it is perceived by the student, and a student's self-reporting of their higher education related finances. There is little research describing the role parental financial behavior has on their college students' efficacy in managing their own financial behaviors once they begin to spend the academic year away from their parent's household. Parental financial modeling through direction and observation has been linked to strong self-control skills in adolescents and shown improvements in young adulthood financial literacy skills (Tang, 2017). Serido, Shim, Mishra,

and Tang (2010) found a significant correlation between parental financial modeling and their high school student's positive financial coping behaviors.

Purpose of the Study

The purpose of this research was to explore the relationship between perceived parental financial role-modeling and the impact it has on their college age student's ability to navigate their own finances.

Research Questions

1. Did a significant relationship exist between a student's perception of their parent's overall financial behaviors and the student's actual financial behaviors?
2. Did a significant relationship exist between a student's perception of their parent's money management behaviors and the student's actual financial behaviors?
3. Did a significant relationship exist between a student's perception of their parent's credit management behaviors and the student's actual financial behaviors?
4. Did a significant relationship exist between a student's perception of their parent's savings and investment behaviors and the student's actual financial behaviors?
5. Did a significant relationship exist between a student's perception of their parent's insurance management behaviors and the student's actual financial behaviors?

Significance of the Study

Although there is an abundance of research analyzing parental involvement and its effect on the student (Fann, McClafferty, & McDonough, 2009; Brueck, Mazza, & Tousignant, 2012), there is little research to address whether or not a parent's modelled behaviors during the students' upbringing will impact the student's ability to manage their finances once they have left the household in the academic school year for higher education. Financial stress is a burden

on undergraduate students, and although there are some resources available in terms of formal education, these resources should also include the parents as positive financial role models. Universities can benefit from further exploring the relationships that exist, as well as analyzing what current resources they make available, such as educational programming and financial aid workshops, in order to further implement these to benefit the student. These actions could potentially impact retention rates as well as general admissions. Students that are more aware of their personal finances and are displaying positive financial behaviors, are more likely to have higher life satisfaction and higher academic performance (Xiao, Tang, & Shim, 2009; Lim et al., 2014).

Limitations, Delimitations, and Assumptions

Limitations. This study was specific to student's attending one 4-year public institution and can only be compared to other similarly sized and priced institutions. The research focused on a traditional-age student population and the relationship between the perception of their parents' financial behaviors and their own financial literacy behaviors. This study did not include non-traditional age students or those coming from a zero-parent household.

Delimitations. The researcher chose not to include socio-economic factor as a variable in comparing financial literacy and student college decision. This is for the reason that low SES may not always indicate low financial literacy and high SES may not always indicate high financial literacy. Social classes are factors in navigating the framework, but not indicators of the outcome. Traditional-age college students from families with at least one parent were the focus of this research. Participants also only included students that lived away from their parent's household during the academic school year, at minimum, 1 or more years as discussed

in Chapter 3. Having lived away from home suggested that they were beginning to use their own financial behaviors separate from their parents.

Assumptions. It was assumed that student respondents came from households in which they had lived with at least one parent. It was also assumed that they were not currently living with said parent.

Definitions of Terms

Academic Success. Retaining satisfactory academic progress per federal guidelines: maintaining a 2.0 GPA, completing 67% of attempted credit hours, and completing an undergraduate degree in less than 180 credit hours (Federal Student Aid, 2019).

Dependent student. Dependency status as defined by federal guidelines: undergraduate student, that is under the age of 24, unmarried, zero dependents, not a veteran of the armed forces or serving on active duty, not an emancipated minors, was not in foster care/ward of the court/orphaned, or homeless (Federal Student Aid, 2019).

Financial behaviors. Positive actions indicating desirable steps to achieving personal and socially acceptable financial and economic goals (Shim et al., 2009).

Non-traditional age student. A post-secondary student that was either over the age of 24 or had other major responsibilities such as full-time employment or family obligations. Those that were considered independent by federal guidelines (Federal Student Aid, 2019).

Parental involvement. The amount in which a parent was involved in the student's educational and financial decision-making processes.

Parental financial modeling behaviors. Certain behaviors modelled by parents of college students in regards to money management, credit management, savings management, and insurance management.

Sophomore grade class. Students having completed at least 30 credit hours of undergraduate coursework.

Traditional-age student. A post-secondary student enrolled full-time credits of 12 hours or more, in a degree seeking program between the age of 18-24. A traditional-age student would not have other major responsibilities such as full-time employment or family obligations and were dependent per federal guidelines (Federal Student Aid, 2019). For the purpose of this research, traditional students also lived away from their parent's household during the academic year beginning their freshman year.

Undergraduate student. A traditional-age student enrolled in a degree seeking program at a 4-year public institution.

Zero-parent household. Students coming from a household in which they did not live with a permanent parent or guardian.

Summary

Chapter one contains a detailed introduction to the proposed study and what to expect from the proposed research. Chapter two contains a detailed account of the current literature surrounding the climate of parental financial literacy and the effects of involvement concerning its impact on their student's higher education. Chapter three contains the methods that will be used in the proposed research.

CHAPTER II

Review of Literature

Purpose of the Study

This chapter provides a detailed review of the literature currently surrounding the data on financial literacy in families and college students, as well as how parental involvement impacts the college student and their decision-making processes.

Parents' Involvement in Relation to College Student Success

The more involved parents are in their students' academic endeavors, the more successful the students are in their of higher education pursuits, including self-efficacy, and standard academic measures, such as GPA and retention (Brueck, Mazza, & Tousignant, 2012; Engberg & Wolniak, 2010; Kim, 2014). There are programs in place highlighting the impact that parents can have on their student in attending higher education and research suggests that parents hunger for, and benefit, from such programs (Fann, McClafferty, & McDonough, 2009). Parental involvement, such as advising, meeting with teachers, participating in school functions, and setting family rules regarding student supervision, can impact the student's decision to attend higher education even after a dropout or gap period (Ross, 2016). Similarly, Brueck, Mazza, and Tousignant (2012) found that high parental involvement significantly impacted the student's academic mastery in higher education. Academic mastery was defined as completion, intellectual curiosity, GPA, and academic focus. This determined that, when analyzed together, success in higher education academics is significantly related to the parent's involvement in high school education. This indicates that a strong level of parental involvement can positively impact a college student's wellbeing and happiness, suggesting a similar correlation between their financial involvement and shared financial behaviors.

Parents' Financial Literacy

Along with an increasing pressure to have a college education, there is a degree of disconnect with obtaining an education and how it is paid for. Baron's (2015) study explored the link between actual mathematic ability and one's ability to navigate a financial world. Baron found that financial independence could be categorized into several themes: financial knowledge, re-imagining self and possibilities, taking action, and impact on family. The most beneficial theme in this research being financial knowledge and its impact on the family. The adults in this research viewed their financial impact as an important lesson to relay to their children. They expressed desire to lead through example and good financial decisions, however, they struggled with this democratic process in a consumeristic world. The children and young adults of the study were also empowered in their relationship with mathematics to replicate Human Resources and Skills Development of Canada's (2012) promotion of more beneficial relationships with numbers and money. Shim, Barber, Card, Xiao, and Serido (2009) similarly found that the student's perception of a parent's financial knowledge impacted the financial wellbeing and attitude that the student would have. It seemed that positive or negative financial habits would persist through adulthood as they were first developed in the transition to early adulthood stages. Financial modeling has been found to be important in fostering positive financial behaviors and financial self-efficacy than parental financial literacy and general financial knowledge (Shim et al., 2009; Tang, 2017; Hilgert, Hogarth, & Beverly, 2003).

In terms of a researcher's ability to measure such financial indicators, Allgood and Walstad (2016) found that the perception of financial literacy is just as significant of actual measurements of financial literacy. The researchers measured financial variables, such as credit cards, insurance, financial advice, and investments, and found that how the participants

perceived their knowledge and success in navigating these types of finances, directly related to their actual measured ability. This suggests that financial literacy can be studied and determined based on the responses of perceived ability and not a concrete measuring instrument.

Student Financial Behaviors

Money management. Money management includes behaviors such as tracking expenses, budgeting, and reviewing bills monthly (Xiao, Tang, & Shim, 2009). Henry, Weber, and Yarbrough (2001) found that only 42% of their college student respondents had a budget and 38% of these students did not follow their budget all of the time. A majority of students lacked expense management and of those who took the initiative to begin to successfully handle their finances, many did not implement these practices into daily behaviors. Some effective financial behaviors were found by Borden, Lee, Serido, and Collins (2007) as following a monthly budget and balancing their checkbook. In their research, 43% of students reported having followed a monthly budget and 47% having balanced their checkbook in a pre-test before a financial skills seminar. Students that showed effective financial behaviors were less likely to engage in riskier financial behaviors such as exceeding credit card limits and receiving cash advances through credit cards. The seminar post-test indicated an increase in intended effective financial behaviors suggesting a need for financial programming on college campuses.

Credit management. Balance control or credit management includes behaviors such as maintaining sufficient bank funds, paying bills on time, and paying credit cards in full each month (Xiao, Tang, & Shim, 2009). Borden et. al (2007) found that 72% of students had one or more credit card, 33% of these students having accumulated an average amount of between \$1,001 and \$2,000 in total debt. Considering a college student's ability to work between balancing other aspects of higher education, this is a staggering amount to have to be able to pay

off in full each month, which is considered an effective financial behavior. Not surprisingly, only 51% of students indicated that they had paid off a credit card balance in full in the last 2 months.

Savings management. Saving includes behaviors such as regularly saving money, setting aside emergency funds, and contributing to investments and retirement (Xiao, Tang, & Shim, 2009). Kelly, Harpel, Fontes, Walters, and Murphy (2017) researched college student saving behavior using direct and indirect responses. College students, when asked indirectly, could identify the importance of saving, but did not necessarily use these behaviors when questioned directly about their own finances. This is important to note for this proposed research considering a student's perception of what should be done and what they actually do may not necessarily line up. It will be important to recognize this in the development of a questionnaire which will need to focus on measuring the actual behaviors that are used by the participants regarding their finances and not their financial knowledge.

Summary

After reviewing the current data surrounding this topic, there is a clear gap around how a parent's financial modelling can impact a student's actual financial behaviors, it is suggested that there may be a connection between one and the other, but little research conducted to indicate a relationship between positive financial modelling and a student's financial self-efficacy. Although it can be said their involvement in academics can impact the student positively, there is no exploration in whether positive financial role-modelling can impact the student's ability to successfully manage finances.

Current researchers have indicated that students do not have an adequate grasp on effective financial behaviors. It is important to know whether or not these riskier financial

behaviors are indicative of learned behaviors from their parents. This can help educators and student affairs professionals know whether or not financial programming on their campus can be productive in eliminating these types of stressors from a student's life.

CHAPTER III

Methodology

Overview

This chapter outlines the methodological framework that was used to conduct the study including design of the study, participants, research site, instrument, data collection, data analysis, research question, and treatment of data. This study utilized quantitative methods designed to explore the relationship between parent's financial behaviors as perceived by their students and the student's financial behaviors.

Research Questions

1. Did a significant relationship exist between a student's perception of their parent's overall financial behaviors and the student's actual financial behaviors?
2. Did a significant relationship exist between a student's perception of their parent's money management behaviors and the student's actual financial behaviors?
3. Did a significant relationship exist between a student's perception of their parent's credit management behaviors and the student's actual financial behaviors?
4. Did a significant relationship exist between a student's perception of their parent's savings and investment behaviors and the student's actual financial behaviors?
5. Did a significant relationship exist between a student's perception of their parent's insurance management behaviors and the student's actual financial behaviors?

Design of the Study

The study utilized a questionnaire completed by traditional-aged college students who had live away from their parent's household for one or more years. The topics focused on the

perceived parents' financial behaviors, reported by the student, as well as the self-reported behaviors practiced by the student.

Participants

Randomly selected sophomore grade class and above undergraduate students attending a mid-sized, 4-year university were invited to participate in the study. Using Krejcie and Morgan's (1970) table for determining sample size from a given population, an appropriate sample size for a student population of 2,799 would be a minimum of 333. The researcher attempted to collect data from a range of racial and ethnical backgrounds but limited the randomly selected participants to traditional-age students. Traditional-age students were defined as being those 18-24 year old students enrolled in undergraduate degree seeking programs who were registered for 12 credit hours or more (Federal Student Aid, 2019). Certain factors, such as their enrollment status and grade class, were determined prior to the distribution of the questionnaire. Other factors, such as whether or not they have lived outside of their parents' household, were determined through self-report. Only data collected from student's who reported living outside of their parent's home during the academic year were used. The participants were informed that the questionnaire was voluntary and that they could withdraw from the study at any time.

Research Site

The study took place at a mid-sized 4-year public institution in the Midwest, accredited by North Central Association. During the fall 2019 10th day census date, a total of 7,806 students were enrolled in the university, 3,990 were full-time undergraduate students and 2,799 were full-time undergraduate students, sophomore grade class and above ("Eastern's Tenth Day Enrollment", 2019). University demographics in 2018, the most recent data available, included 4,755 white (63.2%), 1,117 black or African American (14.84), 792 Hispanic/Latino (10.5%),

323 international (4.3%), 202 unclassified (2.7%), 168 Asian (2.2%), 149 two or more races (2.0%), 15 American Indian/Alaskan Native (.2%), and 5 Native Hawaiian/Other Pacific Islander (.1%) (“2018 Fact Sheet”, 2019). The university itself had an estimated cost of attendance of \$21,533 paid to the university for an average student who lived on-campus and registered for 15 credit hours (“Cost of Attendance,” 2019). The institution was located in a small, rural community with few opportunities outside of the university for different types of employment and recreational activities. An on-campus vehicle was not required for ample access of the town or required necessities like access to a grocery store, pharmacy, or bank.

Instrument

The research utilized Dew and Xiao’s Financial Management Behavior Scale (FMBS) (2011) issued electronically through certified university email addresses for the student to complete through Qualtrics, a web-based survey tool that the university subscribed to. The FMBS was developed as a comprehensive financial behavior scale to measure different domains of financial behaviors (Dew & Xiao, 2011). The FMBS measured an overall scale of financial behavior comprised of four subscales, cash management, credit management, savings management, and insurance management (Appendix C). It included 15 questions, 12 questions where the participants were able to respond to the frequency in which they had engaged in an activity in the last six months. The participant was able to respond from 1 (Never) to 5 (Always). The 12 questions measured an overall financial management behavior scale, as well as cash management, credit management, savings management, and investment management subscales. Participants were instructed to rate their behavior regarding insurance within the past year for questions 13-15. The participant was able to respond on a scale of 1 (Never) to 5

(Always). Many insurance policies renew on a yearly basis and this was the reason for the change in time frame measured (Dew & Xiao, 2011).

Validity. The original survey measured participants' actual debt and savings as well as the ability for the participant to self-report their financial behaviors. The FMBS was positively related to the responsible financial behaviors self-reported by participants' and savings and credit behaviors were associated with actual debt and savings reported. The FMBS was determined valid by an expert panel of financial planners and financial counselors to measure financial management behaviors (Dew & Xiao, 2011).

Parent financial behavior perception questions. To determine the student's perception on their parent's financial behaviors, the survey asked five questions regarding the participant perception of overall financial management, cash management, credit management, savings management, and investment management (Appendix B). Respondents could respond on a scale of "Strongly Disagree" to "Strongly Agree." Those responding with "Agree" or "Strongly Agree" were recoded to categorize perceived parental behaviors as "Good." Those responding with "Disagree" or "Strongly Disagree" were recoded to categorize perceived parental behaviors as "Bad." Participants who responded "Don't Know" to the perceived parent financial behavior questions will be included in the final data analysis as "Don't Know."

Demographic questions. Demographics including, sex, age, ethnicity, marital status, employment status, university enrollment, and living arrangements were collected from the questionnaire to determine eligibility for participation (Appendix A). Eligibility included that they fit the description of full-time, traditional-age student that did not live with a parent or guardian during the school year. Participant's responses to demographic questions 1a-7a were used to determine their eligibility for this criterion. Any blank responses to questions 1a-7a

disqualified the participant, since it could not be determined that they fit the demographic criteria, and their responses were not be used in data collection.

Data Collection

Approval from the Eastern Illinois University's Institutional Review Board (IRB) was obtained through the Office of Research and Sponsored Programs. Data was collected using Qualtrics, an online survey program to conduct research through questionnaires. A pilot study was administered to a selection of unqualified participants (acquaintances of the researcher) before the questionnaire was sent to potential participants to demonstrate ease of study, length, clarity, performance of online survey platform, and time taken to complete. Actual study solicitations were emailed to randomly selected, registered students to their university email accounts during the spring 2020 semester. The questionnaire was sent to full-time, undergraduate students of sophomore grade class or above (30+ credit hours completed), with the assumption that these students were at least 18 years old. Demographic questions determined the additional qualifications to participate in the research, such as, living arrangements and current employment. Students not qualifying as traditional-aged student were removed from the data set.

Data Analysis

The data was analyzed for completeness and authenticity by reliability in the responses. Blank responses, or unanswered questions to critical data, such as questions 1a-7a of the demographic's questions, the parent financial behavior perception questions, or the FMBS, disqualified participants responses from data collection. The Statistical Package for Social Sciences (SPSS 22.0) was utilized to calculate frequencies, measures of central tendencies, and

standard deviation on all data collected from the sample, including demographics, perception of parent's financial behaviors, and the FMBS.

A Kruskal-Wallis non-parametric one-way ANOVA on ranks test were analyzed to answer research questions. A Kruskal Wallis is used to determine whether there are differences within two or more groups, or two or more medians of groups, of non-parametric level independent variables. Assumptions required in order to conduct a Kruksal-Wallis include that there are two or more independent groups to be tested; ordinal, ratio, or interval scale independent variables; no relationship between the groups, or Assumption of Independence; and all groups have the same shape distribution (Glen, 2016).

Research Question One

To answer research question 1: "Did a significant relationship exist between a student's perception of their parent's overall financial behaviors and the student's actual financial behaviors?," a Kruskal-Wallis non-parametric one-way ANOVA on ranks test was analyzed. The independent variable was determined by a student's response to question 1b. Those responding with "Agree" or "Strongly Agree" were recoded to categorize perceived parental behaviors as "Good." Those responding with "Disagree" or "Strongly Disagree" were recoded to categorize perceived parental behaviors as "Bad." Participants who responded "Don't Know" to the perceived parent financial behavior questions will be included in the final data analysis as "Don't Know."

The dependent variables were determined by calculating the overall financial management behavior scale score, and the cash management, credit management, savings management, and investment management subscales scores. Prior to testing, Levine's test of equality of variance

was used to determine if the assumptions of equality of variances are met. An alpha level of .05 was used to determine statistical significance.

H₀1: There was not a statistically significant difference in student financial behaviors among perceived parental overall financial management.

H_a1: There was a statistically significant difference in student financial behaviors among perceived parental overall financial management

Research Question Two

To answer research question 2: “Does a significant relationship exist between a student’s perception of their parent’s money management behaviors and the student’s actual money management behaviors?”, a Kruskal-Wallis non-parametric one-way ANOVA on ranks test was analyzed. The independent variable will be determined by a student’s response to question 2b. Those responding with “Agree” or “Strongly Agree” were recoded to categorize perceived parental behaviors as “Good.” Those responding with “Disagree” or “Strongly Disagree” were recoded to categorize perceived parental behaviors as “Bad.” Participants who responded “Don’t Know” to the perceived parent financial behavior questions will be included in the final data analysis as “Don’t Know.” The dependent variables were determined by calculating the overall financial management behavior scale score, and the cash management, credit management, savings management, and investment management subscales scores. Prior to testing, Levine’s test of equality of variance was used to determine if the assumptions of equality of variances are met. An alpha level of .05 was used to determine statistical significance.

H₀2: There was not a statistically significant difference in student financial behaviors among perceived parental money management.

H_{a2}: There was a statistically significant difference in student financial behaviors among perceived parental money management

Research Question Three

To answer research question 3: “Does a significant relationship exist between a student’s perception of their parent’s credit management behaviors and the student’s actual credit management behaviors?”, a Kruskal-Wallis non-parametric one-way ANOVA on ranks test was analyzed. The independent variable will be determined by a student’s response to question 3b. Those responding with “Agree” or “Strongly Agree” were recoded to categorize perceived parental behaviors as “Good.” Those responding with “Disagree” or “Strongly Disagree” were recoded to categorize perceived parental behaviors as “Bad.” Participants who responded “Don’t Know” to the perceived parent financial behavior questions will be included in the final data analysis as “Don’t Know.” The dependent variables were determined by calculating the overall financial management behavior scale score, and the cash management, credit management, savings management, and investment management subscales scores. Prior to testing, Levine’s test of equality of variance was used to determine if the assumptions of equality of variances are met. An alpha level of .05 was used to determine statistical significance.

H₀₃: There was not a statistically significant difference in student financial behaviors among perceived parental overall credit management.

H_{a3}: There was a statistically significant difference in student financial behaviors among perceived parental overall credit management

Research Question Four

To answer research question 4: “Does a significant relationship exist between a student’s perception of their parent’s savings and investment behaviors and the student’s actual savings

and investment behaviors?”, a Kruskal-Wallis non-parametric one-way ANOVA on ranks test was analyzed. The independent variable will be determined by a student’s response to question 4b. Those responding with “Agree” or “Strongly Agree” were recoded to categorize perceived parental behaviors as “Good.” Those responding with “Disagree” or “Strongly Disagree” were recoded to categorize perceived parental behaviors as “Bad.” Participants who responded “Don’t Know” to the perceived parent financial behavior questions will be included in the final data analysis as “Don’t Know.” The dependent variables were determined by calculating the overall financial management behavior scale score, and the cash management, credit management, savings management, and investment management subscales scores. Prior to testing, Levine’s test of equality of variance was used to determine if the assumptions of equality of variances are met. An alpha level of .05 was used to determine statistical significance.

H₀₄: There was not a statistically significant difference in student financial behaviors among perceived parental savings management.

H_{a4}: There was a statistically significant difference in student financial behaviors among perceived parental savings management.

Research Question Five

To answer research question 5: “Does a significant relationship exist between a student’s perception of their parent’s insurance management behaviors and the student’s actual insurance behaviors?”, a Kruskal-Wallis non-parametric one-way ANOVA on ranks test was analyzed. The independent variable will be determined by a student’s response to question 5b. Those responding with “Agree” or “Strongly Agree” were recoded to categorize perceived parental behaviors as “Good.” Those responding with “Disagree” or “Strongly Disagree” were recoded to categorize perceived parental behaviors as “Bad.” Participants who responded “Don’t Know”

to the perceived parent financial behavior questions will be included in the final data analysis as “Don’t Know.”

The dependent variables were determined by calculating the overall financial management behavior scale score, and the cash management, credit management, savings management, and investment management subscales scores. Prior to testing, Levine’s test of equality of variance was used to determine if the assumptions of equality of variances are met. An alpha level of .05 was used to determine statistical significance.

H₀₅: There was not a statistically significant difference in student financial behaviors among perceived parental insurance management.

H_{a5}: There was a statistically significant difference in student financial behaviors among perceived parental insurance management.

Table 1
Research Questions 1-5

RSQ	Independent Variable	Dependent Variables	Statistical Tests
Does a significant relationship exist between a student’s perception of their parent’s overall financial behaviors and the student’s actual financial behaviors?	Student Perception regarding parent overall financial management (question 1b)	FMBS Aggregate Score (questions 1c-15c) FMBS money management (questions 1c-4c) FMBS credit management (questions 5c-7c) FMBS savings and investment (questions 8c-12c) FMBS insurance management (questions 13c-15c)	Kruskal-Wallis test of two or more independent variables

Does a significant relationship exist between a student's perception of their parent's money management behaviors and the student's actual financial behaviors?	Student Perception regarding parent overall money management behaviors (question 2b)	FMBS Aggregate Score (questions 1c-15c) FMBS money management (questions 1c-4c) FMBS credit management (questions 5c-7c) FMBS savings and investment (questions 8c-12c) FMBS insurance management (questions 13c-15c)	Kruskal-Wallis test of two or more independent variables
Does a significant relationship exist between a student's perception of their parent's credit management behaviors and the student's actual financial behaviors?	Student Perception regarding parent overall credit management behaviors (question 3b)	FMBS Aggregate Score (questions 1c-15c) FMBS money management (questions 1c-4c) FMBS credit management (questions 5c-7c) FMBS savings and investment (questions 8c-12c) FMBS insurance management (questions 13c-15c)	Kruskal-Wallis test of two or more independent variables
Does a significant relationship exist between a student's perception of their parent's savings and investment behaviors and the student's actual financial behaviors?	Student Perception regarding parent overall savings and investment behaviors (question 4b)	FMBS Aggregate Score (questions 1c-15c) FMBS money management (questions 1c-4c) FMBS credit management (questions 5c-7c) FMBS savings and investment (questions 8c-12c) FMBS insurance management	Kruskal-Wallis test of two or more independent variables

		(questions 13c-15c)	
Does a significant relationship exist between a student's perception of their parent's insurance management behaviors and the student's actual financial behaviors?	Student Perception regarding parent overall insurance management behaviors (question 5b)	FMBS Aggregate Score (questions 1c-15c) FMBS money management (questions 1c-4c) FMBS credit management (questions 5c-7c) FMBS savings and investment (questions 8c-12c) FMBS insurance management (questions 13c-15c)	Kruskal-Wallis test of two or more independent variables

Treatment of Data

Data included complete questionnaires from the student. Questionnaires were issued through Qualtrics and imported from an excel file into SPSS software 22.0 for statistical analysis. Questionnaires with missing data were excluded from analysis. Before beginning the questionnaire, students were required to read and agree to an informed consent. No contact information was collected, and consent was implied based on their continuance of the questionnaire. All information will be kept by the researcher in order to maintain confidentiality of the participants. Data will be kept electronically on a flash drive for three years after the completion of the conducted research, per IRB policy, at this time, the flash drive will be destroyed.

CHAPTER IV

Findings

The researcher sought to find whether a significant relationship existed between the student's perception of parental financial behaviors and the student's actual financial behaviors. Utilizing an online questionnaire from Dew and Xiao's Financial Management Behavior Scale (FMBS) (2011), students rated their perceived parent's overall, money management, credit management, savings management, and insurance management financial behaviors on a 5-point Likert scale from "Strongly Disagree" to "Strongly Agree." Participants were then asked to rate how often they have engaged in various positive financial behaviors related to overall finances management, money management, credit management, savings management, and insurance management financial behaviors on a 5-point Likert scale from "Never" to "Always." Responses were analyzed using Kruskal-Wallis tests which analyzed the aggregate and scale score from the FMBS against three variables. Those that responded "Strongly Agree" and "Agree" were united to indicate "Good" perceived parental financial behaviors," "Strongly Disagree" and "Disagree" were united to indicate "Bad" perceived financial behaviors" and those responding "Don't Know" remained designated as "Don't Know."

Demographic Descriptions of Participants

The questionnaire went to a random sample of 2,414 sophomore, junior, and senior students aged between 18-24. A total of 289 (11.9%) questionnaires were completed. Of these 289 responses, 173 (7.2%) surveys were complete with all questions answered by participants that fit the target demographic. Student ages ranged from 18-23, per population demographic, with the mean age value of 20 years old.

Of the participants, 34.7% reported they were sophomores, 32.9% were juniors, and 32.4% were seniors. Participants indicated that 30.1% lived on-campus with a roommate, 31.2% lived on-campus single, 30.1% lived off-campus with a roommate, and 8.7% lived off-campus single. When asked about gender, 27.7% of participants identified as male, 71.1% identified as female, and 1.2% identified as other. When responding to race, 0.6% identified as American Indian or Alaska Native, 1.2% identified as Asian, 11.0% identified as Black or African American, 2.9% identified as Hispanic, 2.9% identified with Multiple races, 0.6% identified as Other, and 80.9% identified as White. The institution's International or Native Hawaiian/Pacific Islander population were not represented by participants with completed surveys. These and other study participant demographics are illustrated in table 2.

Table 2
Demographics of Study Participants (n = 173)

Demographic Variable	Frequency	Percentage (%)	N	Univ. %
Gender				
Male	48	27.7	1,864	23.9
Female	123	71.1	2,785	35.7
Other	2	1.2	Not reported by univ.	
Age				
Not reported by univ.				
18	7	4.0		
19	37	21.4		
20	46	26.6		
21	47	27.2		
22	30	17.3		
23	6	3.5		
24	0	0.0		
Ethnicity				
American Indian/Alaska Native	1	0.6	18	0.2
Asian	2	1.2	224	2.9
Black/African American	19	11.0	1,145	14.7
Hispanic	5	2.9	915	11.7
Multiple	5	2.9	152	2.0
Other	1	0.6	226	2.9
White	140	80.9	4,799	61.5

Current Grade Class				
Freshman	0	0.0	1258	16.1
Sophomore	60	34.7	775	9.9
Junior	57	32.9	1,035	13.3
Senior	56	32.4	1,581	20.3
Employment Status				
Work Full-time (32+ hrs/week)	0	0	Not reported by univ.	
Work Part-time (<32 hrs/week)	123	71.1		
Permanently sick, disables	0	0		
Unemployed or temp. laid off	49	28.3		
Retired	1	0.6		
Current Living Arrangement				
On-Campus w/ Roommates	52	30.1		
On-Campus - Single	54	31.2		
Total on-campus			5,385	69.0
Off-Campus w/ Roommates	52	30.1		
Off-Campus – Single	15	8.7		
Total off-campus			2,421	31.0
Commute from Family Home	0			
Commute - Other	0			
Marital Status				
Married	0		Not reported by univ.	
Single	173	100		
Separated	0			
Divorced	0			
Widowed/Widower	0			

Financial Management Behavior Survey

Data collected from 173 participants who completed the survey questionnaire were used to determine measures of central tendency and dispersion for the aggregate and scale scores of the FMBS. Table 3 summarizes these findings.

The Money Management Subscale Score was derived from questions 1c-4c for 173 respondents. Actual money management scores ranged from 8-20, with a mean score of 15.14,

with a standard deviation of 2.79. The median and mode score for the scale were 15 and 15 respectively.

The Credit Management Subscale Score was derived from questions 5c-7c for 173 respondents. Actual Credit Management scale scores ranged from 3-15, with a mean score of 6.28, with a standard deviation of 2.61. The median and mode score for the scale were 7 and 3 respectively.

The Savings Management Subscale Score was derived from questions 8c-12c for 173 respondents. Actual Savings Management scale scores ranged from 5-25, with a mean score of 13.27, with a standard deviation of 4.64. The median and mode score for the scale were 13 and 13 respectively.

The Insurance Management Subscale Score was derived from questions 3c-15c for 173 respondents. Actual Insurance Management scale scores ranged from 3-15, with a mean score of 5.32, with a standard deviation of 3.63. The median and mode score for the scale were 3 and 3 respectively.

The overall Financial Management Behavior Scale Aggregate Score was derived from adding all 4 subscale scores for 173 respondents. Actual FMBS Aggregate scale scores ranged from 23-75, with a mean score of 40.01, with a standard deviation of 8.98. The median and mode score for the scale were 40 and 43 respectively.

Table 3

Measures of Central Tendency and Dispersion for Financial Management Behavior Scale Aggregate and Sub-Scales

Component	N	Mean	Std. Dev.	Variance	Range	Min	Max
Money Management	173	15.14	2.79	7.78	12	8	20
Credit Management	173	6.28	2.61	6.82	12	3	15
Savings Management	173	13.27	4.64	21.49	20	5	25
Insurance Management	173	5.32	3.63	13.18	12	3	15
Aggregate FMBS	173	40.01	8.98	80.61	52	23	75

Perceived parent overall financial behaviors on actual student financial management behaviors

To determine research question one, does a significant relationship exist between a student’s perception of their parent’s overall financial behaviors and the student’s actual financial behaviors, Kruskal-Wallis non-parametric one-way ANOVA on ranks tests were conducted.

Student overall financial behavior management was not significantly affected by perceived overall parent financial behaviors, $H(2) = 1.42, p = 0.49$. Student credit management behaviors were not significantly affected by perceived overall parent financial behaviors, $H(2) = 0.90, p = 0.64$. Student money management behaviors were not significantly affected by perceived overall parent financial behaviors, $H(2) = 0.53, p = 0.77$. Student savings management behaviors were not significantly affected by perceived overall parent financial behaviors, $H(2) = 2.25, p = 0.33$. Student insurance management behaviors were not significantly affected by perceived overall parent financial behaviors, $H(2) = 0.09, p = 0.95$. In summary, perceived parental overall perceived financial behavior did not significantly impact overall student financial management, credit management, money management, savings management or insurance management behaviors.

Table 4
Perceived parent overall financial behaviors on actual student financial management behaviors

Student Financial Behaviors	N	Kruskal-Wallis Test			Pairwise Comparisons		
		H	df	p-value	p-value	r	
Money Management	173	0.53	2	0.77	Good - Bad	n/a	n/a -
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
					Good - Bad	n/a	n/a
Credit Management	173	0.91	2	0.64	n/a	n/a	

					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Savings Management	173	2.23	2	0.33	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Insurance Management	173	0.09	2	0.95	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Aggregate FMBS	173	1.42	2	0.49	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a

Perceived parent money management on actual student financial management behaviors

To determine research question two, does a significant relationship exist between a student's perception of their parent's money management behaviors and the student's actual money management behaviors, Kruskal-Wallis non-parametric one-way ANOVA on ranks tests were conducted. When significant differences were found, ad hoc pairwise comparison tests and effect size were analyzed to determine where the significant differences existed between "Good," "Bad," and "Don't Know" perceived parental money management.

Student overall financial management behaviors were not significantly affected by perceived parent money management, $H(2) = 3.32, p = 0.19$. Student credit management behaviors were not significantly affected by perceived parent money management, $H(2) = 2.18, p = 0.34$. Student money management behaviors were not significantly affected by perceived parent money management, $H(2) = 0.30, p = 0.86$. Student insurance management behaviors were not significantly affected by perceived parent money management, $H(2) = 0.79, p = 0.67$.

Student savings management behaviors were significantly affected by perceived parent money management, $H(2) = 7.69, p = 0.02$. Pairwise comparisons with adjusted p -values showed that there were no significant differences between students who reported “Don’t Know” compared to those that perceived their parents’ to have “Good” money management ($p = 0.34, r = -0.12$) or “Bad” money management ($p = 1.000, r = 0.00$). However, there were significant differences between students who perceived their parents’ money management as “Good” compared to students that perceived their parents’ money management as “Bad” ($p = 0.05, r = 0.05$).

In summary, perceived parental money management did not significantly affect student overall financial management behaviors, credit management, money management, or insurance management behaviors. Perceived parental money management did significantly affect student savings management, with ad hoc pairwise comparisons finding significant differences between students who perceived their parents as having “Good” and “Bad” money management.

Table 5

Perceived parent money management on actual student financial management behaviors

Student Financial Behaviors	N	Kruskal-Wallis Test			Pairwise Comparisons		
		H	df	p -value		p -value	r
Money Management	173	0.30	2	0.86	Good - Bad	n/a	n/a
					Good - Don’t Know	n/a	n/a
					Bad - Don’t Know	n/a	n/a
Credit Management	173	2.18	2	0.34	Good - Bad	n/a	n/a
					Good - Don’t Know	n/a	n/a
					Bad - Don’t Know	n/a	n/a
Savings Management	173	7.69	2	0.02*	Good - Bad	0.05*	0.05*
					Good - Don’t Know	0.34*	-0.12*
					Bad - Don’t Know	1.00	0.00

Insurance Management	173	0.79	2	0.67	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Aggregate FMBS	173	3.32	2	0.19	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a

* $p \leq .05$

Perceived credit management on actual student financial management behaviors

To determine research question three, does a significant relationship exist between a student's perception of their parent's credit management behaviors and the student's actual credit management behaviors, Kruskal-Wallis non-parametric one-way ANOVA on ranks tests were conducted. When significant differences were found, ad hoc pairwise comparison tests and effect size were analyzed to determine where the significant differences existed between "Good," "Bad," and "Don't Know" perceived parental credit management.

Students credit management behaviors were not significantly affected by perceived parent credit management, $H(2) = 3.36, p = 0.19$. Students money management behaviors were not significantly affected by perceived parent credit management, $H(2) = 4.03, p = 0.13$. Students insurance management behaviors were not significantly affected by perceived parent credit management, $H(2) = 0.95, p = 0.62$.

Students overall financial management behaviors were significantly affected by perceived parent credit management, $H(2) = 10.67, p = 0.01$. Pairwise comparisons with adjusted p -values showed that there were no significant differences between students who reported "Don't Know" compared to those that perceived their parents' to have "Bad" credit management ($p = 1.00$). However, there were significant differences in students who reported

“Don’t Know” compared to students who perceived parents’ credit management to be “Good” ($p = 0.04$) and there were significant differences in students who perceived parents’ credit management to be “Bad” and students who perceived their parents’ credit management to be “Good” ($p = 0.03$).

Students savings management behaviors were significantly affected by perceived parent credit management, $H(2) = 12.18, p = .00$. Pairwise comparisons with adjusted p -values show that there were no significant differences between students who reported “Don’t Know” compared to those that perceived their parents’ credit management to be “Bad” ($p = 1.00, r = 0.01$) or students who perceived their parents’ credit management to be “Good” ($p = 0.09, r = -0.17$). However, there were significant differences in students who perceived parents’ credit management to be “Bad” and students who perceived their parents’ credit management to be “Good” ($p = 0.01, r = -0.24$).

In summary, perceived parental credit management did not significantly affect student credit management, money management, insurance management behaviors. Perceived parental credit management significantly affected student overall financial management behaviors, with ad hoc pairwise comparisons finding significant differences between students who perceived their parents as having “Good” and “Bad” credit management. Perceived parental credit management also significantly affected student savings management behaviors, with ad hoc pairwise comparisons finding significant differences between students who perceived their parents as having “Good” and “Bad” savings management.

Table 6

Perceived credit management on actual student financial management behaviors

Student Financial Behaviors	N	Kruskal-Wallis Test			Pairwise Comparisons		
		H	df	p -value	p -value	r	
Money Management	173	4.03	2	0.13	Good - Bad	n/a	n/a

					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Credit Management	173	3.36	2	0.19	Good - Bad Know	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Savings Management	173	12.18	2	0.00*	Good - Bad Know	0.01*	-0.24*
					Good - Don't Know	0.09*	-0.17*
					Bad - Don't Know	1.00	0.01
Insurance Management	173	0.95	2	0.62	Good - Bad Know	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Aggregate FMBS	173	10.67	2	0.01*	Good - Bad Know	0.03*	-0.20*
					Good - Don't Know	0.40*	-0.60*
					Bad - Don't Know	1.00*	0.06*

* $p \leq .05$

Perceived parent savings management on actual student financial management behaviors

To determine research question four, does a significant relationship exist between a student's perception of their parent's savings and investment behaviors and the student's actual savings and investment behaviors, Kruskal-Wallis non-parametric one-way ANOVA on ranks tests were conducted. When significant differences were found, ad hoc pairwise comparison tests and effect size were analyzed to determine where the significant differences existed between "Good," "Bad," and "Don't Know" perceived parental savings management.

Students credit management behaviors were not significantly affected by perceived overall parent savings management, $H(2) = 2.86, p = 0.24$. Students money management behaviors were not significantly affected by perceived overall parent savings management, $H(2)$

= 1.10, $p = 0.58$. Students insurance management behaviors were not significantly affected by perceived parent savings management, $H(2) = 1.23$, $p = 0.57$.

Students overall financial management behaviors were significantly affected by perceived overall parent savings management, $H(2) = 7.72$, $p = 0.02$. Pairwise comparisons with adjusted p -values showed that there were no significant differences between students who reported “Don’t Know” compared to those that perceived their parents’ savings management as “Bad” ($p = 1.000$, $r = 0.07$) or those that perceived their parents’ savings management to be “Good” ($p = 0.16$, $r = -0.15$). There were also no significant differences between students that perceived parent savings management as “Bad” compared to students that perceived parents’ savings management as “Good” ($p = 0.07$, $r = -0.17$).

Students savings management behaviors were significantly affected by perceived overall savings management behaviors, $H(2) = 15.49$, $p = 0.00$. Pairwise comparisons with adjusted p -values showed that there were no significant differences between students who reported “Don’t Know” compared to those that perceived their parents’ savings management to be “Good” ($p = 0.59$, $r = 0.10$). However, there was significant difference between students who perceived their parents’ savings management as “Good” compared to those that perceived their parents’ savings management as “Bad” ($p = 0.01$, $r = -0.24$) and those that reported “Don’t Know” compared to those that perceived their parents’ savings management to be “Good” ($p = 0.02$, $r = -0.21$).

In summary, perceived parental savings management did not significantly affect student credit management, money management, and insurance management behaviors. Perceived parental savings management significantly affected student overall financial management behaviors, with ad hoc pairwise comparisons finding no significant differences between students who perceived their parents as having “Good,” “Bad,” or “Don’t Know” credit management.

Perceived parental savings management also significantly affected student savings management behaviors, with ad hoc pairwise comparisons finding significant differences between students who perceived their parents as having “Good” and “Bad” as well as “Good” and “Don’t Know” savings management.

Table 7

Perceived savings management on actual student financial management behaviors

Student Financial Behaviors	N	Kruskal-Wallis Test			Pairwise Comparisons		
		H	df	p-value	p-value	r	
Money Management	173	1.10	2	0.58	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Credit Management	173	2.89	2	0.24	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Savings Management	173	15.49	2	0.00*	Good - Bad	0.59*	0.10*
					Good - Don't Know	0.02*	-0.21*
					Bad - Don't Know	0.01*	-0.24*
Insurance Management	173	1.125	2	0.57	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Aggregate FMBS	173	7.72	2	0.02*	Good - Bad	0.07	-0.17
					Good - Don't Know	0.16	-0.15
					Bad - Don't Know	1.00	0.07

Perceived parent student insurance management on actual student financial management behaviors

To determine research question five does a significant relationship exist between a student's perception of their parent's insurance management behaviors and the student's actual insurance behaviors, Kruskal-Wallis non-parametric one-way ANOVA on ranks tests were conducted. When significant differences were found, ad hoc pairwise comparison tests and effect size were analyzed to determine where the significant differences existed between "Good," "Bad," and "Don't Know" perceived parental insurance management.

Students credit management behaviors were not significantly affected by perceived parent insurance management, $H(2) = .16, p = .92$. Students credit management behaviors were not significantly affected by perceived parent insurance management, $H(2) = .16, p = .92$. Students insurance management behaviors were not significantly affected by perceived parent insurance management, $H(2) = 1.56, p = 0.46$.

Students overall financial behaviors were significantly affected by perceived overall parent insurance management, $H(2) = 11.35, p = 0.00$. Pairwise comparisons with adjusted p -values showed that there were no significant differences between students who reported "Don't Know" compared to those that perceived their parents' to have "Bad" insurance management ($p = 0.22, r = 0.13$) or those that perceived their parents' insurance management as "Bad" compared to those that perceived their parents' insurance management as "Good" ($p = 1.00, r = -0.07$). However, there were significant differences in students who reported "Don't Know" and perceived parents' insurance management as "Good" ($p = 0.00, r = -0.25$).

Students money management behaviors were significantly affected by perceived parent insurance management, $H(2) = 6.29, p = 0.04$. Pairwise comparisons with adjusted p -values showed that there were no significant differences between those that perceived their parents' insurance management as "Good" compared to those that perceived their parents' insurance

management as “Bad” ($p = 1.000$, $r = 0.06$) and “Don’t Know” ($p = 0.07$, $r = -0.17$). There were also no significant differences in students who reported “Don’t Know” compared to those that perceived their parents’ insurance management as “Bad” ($p = 0.06$, $r = 0.18$).

Students savings management behaviors were significantly affected by perceived overall insurance management behaviors, $H(2) = 9.58$, $p = 0.01$. Pairwise comparisons with adjusted p -values showed that there were no significant differences between students who reported “Don’t Know” compared to those that perceived their parents’ insurance management as “Bad” ($p = 0.38$, $r = 0.12$) or between students who perceived their parents’ insurance management as “Bad” compared to students who perceived their parents’ insurance management as “Good” ($p = 0.95$, $r = -0.08$). However, there were significant difference between students who reported “Don’t Know” compared to those that perceived their parents’ insurance management as “Good” ($p = 0.01$, $r = -0.23$).

In summary, perceived parental insurance management did not significantly affect student credit management and insurance management behaviors. Perceived parental insurance management significantly affected student overall financial management behaviors, with ad hoc pairwise comparisons finding significant differences between “Don’t Know” and “Good.” Perceived parental insurance management significantly affected student money management behaviors, however, ad hoc pairwise comparisons finding no significant differences between “Good,” “Bad,” or “Don’t Know.” Perceived parental insurance management significantly affected student savings behaviors, with ad hoc pairwise comparisons finding differences between “Don’t Know” and “Good.”

Table 8
Perceived parent student insurance management on actual student financial management behaviors

Student Financial Behaviors	N	Kruskal-Wallis Test	Pairwise Comparisons
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		H	df	<i>p</i> -value		<i>p</i> -value	<i>r</i>
Money Management	173	0.04	2	0.43	Good - Bad	0.06*	0.18*
					Good - Don't Know	0.07*	-0.17*
					Bad - Don't Know	1.00*	0.06*
Credit Management	173	0.16	2	0.92	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Savings Management	173	9.58	2	0.01*	Good - Bad	0.95*	-0.08*
					Good - Don't Know	0.01*	-0.23*
					Bad - Don't Know	0.38*	0.12*
Insurance Management	173	1.52	2	0.46	Good - Bad	n/a	n/a
					Good - Don't Know	n/a	n/a
					Bad - Don't Know	n/a	n/a
Aggregate FMBS	173	11.35	2	0.00*	Good - Bad	1.00*	-0.07*
					Good - Don't Know	0.00*	-0.25*
					Bad - Don't Know	0.22*	0.13*

* $p \leq .05$

Summary

In summary, students' overall financial behaviors were not significantly affected by perceived overall good parent financial behaviors, students' money management behaviors were not significantly affected by perceived good parent money management, students' credit management behaviors were not significantly affected by perceived good parent credit management, and students' insurance management behaviors were not significantly affected by perceived good parent insurance management. The only perceived parent behavior that directly impacted the student's actual behavior was savings management behaviors. However, students' savings management behaviors were significantly affected by perceived good parent money

management, students' overall financial behaviors were significantly affected by perceived good parent credit management, students' savings management behaviors were significantly affected by perceived good parent credit management, students' overall financial behaviors were significantly affected by perceived overall good parent savings management, students' overall financial behaviors were significantly affected by perceived overall good parent insurance management, students' money management behaviors were significantly affected by perceived good parent insurance management, and students' savings management behaviors were significantly affected by perceived overall good insurance management behaviors.

CHAPTER V

Discussion

Overview

The purpose of this chapter is to provide a summary of the study and review this study's results. Discussion of the results of the study and conclusions are provided. This chapter also provides an overview of study limitations and recommendations for future research and practice.

Summary of the Study

The study utilized a questionnaire completed by the target population utilizing Dew and Xiao's FMBS (2011) issued electronically through email for the student to complete through Qualtrics. Participants were asked questions measuring an overall financial management behavior scale, as well as cash management, credit management, savings management, and insurance management on a scale from 1 (Never) to 5 (Always). The questionnaire asked five questions regarding the participant perception of overall financial management, cash management, credit management, savings management, and investment management and could respond on a scale of "Strongly Disagree" to "Strongly Agree." Those responding with "Agree" or "Strongly Agree" were categorized their perceived parental financial behaviors as "Good." Those responding with "Disagree" or "Strongly Disagree" were categorized their perceived parental financial behaviors as "Bad." Those responding with "Don't Know" were left as their perceived parental financial behaviors as "Don't Know." The data was then analyzed for completeness and any incomplete responses were removed. SPSS 22.0 was utilized to calculate frequencies, measures of central tendencies, and standard deviation on all demographics. To answer the following research questions, a Kruskal-Wallis non-parametric one-way ANOVA on ranks tests was conducted with the following key findings.

1. Did a significant relationship exist between a student's perception of their parent's overall financial behaviors and the student's actual financial behaviors?
2. Did a significant relationship exist between a student's perception of their parent's money management behaviors and the student's actual financial behaviors?
3. Did a significant relationship exist between a student's perception of their parent's credit management behaviors and the student's actual financial behaviors?
4. Did a significant relationship exist between a student's perception of their parent's savings and investment behaviors and the student's actual financial behaviors?
5. Did a significant relationship exist between a student's perception of their parent's insurance management behaviors and the student's actual financial behaviors?

Conclusions

When asked overall how students perceived their parent's financial behaviors, results did not indicate a relationship, however, specific areas of financial health resulted in more direct relationships. This indicates that students may compartmentalize parent's financial behaviors and see a difference between overall financial health versus being successful in specific financial management. For example, a student may find their parent successful with money management or credit management, but not necessarily overall successful with finances. This may also indicate that students' view financial wealth as being overall financially successful. Although their parent may be good at managing credit or insurance, they may not be financially wealthy or financially independent, therefore students did not view their parents' overall management as good.

After conducting this research, it seems that perceptions of parental financial behaviors do not impact the students' actual behaviors when comparing the same two behaviors from parent

and student. This was consistent among most of the categories with perceived parents' savings management showing the only significant relationship to students' actual savings management. Some extraneous factors may have impacted some of the results. Since good money management was more strongly found within the results, this could indicate that students' do not have experience with credit and insurance, whereas they have previously analyzed their own savings and money management. Students' also may never have considered previously their parents' usage of credit or insurance financial behaviors resulting in unclear or "Don't know" responses. Students' may have also received financial knowledge from outside sources. Peer relations, other family members, prior education, financial literacy education, etc. may have impacted the student's actual financial behaviors compared to their parents'.

Overall perceived parents' money management. Firstly, the researcher sought to discover a relationship between overall financial behaviors shown by students and whether or not they considered their parents to have good or bad financial behaviors. By calculating an overall score of student's behaviors from the Financial Management Behaviors Scale (FMBS) and whether or not they perceived their parent's behaviors as "Good," "Bad," or "Don't Know," there was not significant relationships overall. However, parents' perceived behaviors did impact a students' credit, savings, and insurance management. This suggests that positive or negative financial modelling in the home does not impact a students' ability to manage their finances overall, however, specific behaviors were impacted. Students' money management was also not impacted by the perception of "Good" or "Bad" overall perceived parental financial management.

Perceived Parents' Money management. Interestingly, parents' perceived money management did not have a direct significant impact on a students' actual money management.

However, there was a significant difference in students' savings management. More specifically, the Kruskal-Wallis test indicated that there were significant differences in those students that perceived their parents' money management to be "Bad," versus those that perceived their parents' money management to be "good." There was also no direct impact of a parents' perceived financial management and the students overall management, insurance management, or credit management.

Perceived Parents' Credit management. Similar to money management, there was not a significant direct impact in a parents' perceived credit management and a students' actual credit management. However, there were significant differences in students' savings management and their overall financial behaviors. Specifically, pairwise comparisons indicated a significant difference in those that reported their parents' credit management to be bad compared to those that considered their parents credit behaviors to be good across both categories. Credit management resulted in the second lowest aggregate score on the FMBS at 1086, supporting research done by Borden et. al (2007) 33% of students with one or more credit cards have accumulated an average amount of debt over \$1000. There were no significant differences between perceived parents' credit management and students' money management or insurance management

Perceived Parents' Savings management. A student's ability to save and their savings management was most strongly impacted by how they viewed their parent's financial behaviors. Those that viewed their parents' behaviors as "Good" compared to those that viewed their parents' behaviors as "Bad" significantly impacted the students' savings management. Students savings management behaviors were significantly affected by parents perceived overall savings management behaviors. Pairwise comparisons showed there was significant differences between

students who perceived their parents' savings management as "Good" compared to those that perceived their parents' savings management as "Bad." Students overall financial management behaviors were also significantly affected by perceived overall parent savings management. However, there were no significant differences in students credit management behaviors, money management behaviors, or insurance management behaviors and perceived overall parent savings management.

Perceived Parents' Insurance management. Although perceived insurance management did not significantly affect student insurance management or credit management behaviors, it had the greatest impact on students' actual financial behaviors across the board. Overall student financial management was significantly impacted with ad hoc pairwise comparisons finding significant differences between "Don't Know" and "Good," student money management behaviors were also impacted with ad hoc pairwise comparisons finding no significant differences between "Good," "Bad," or "Don't Know," and students' savings management were impacted with pairwise comparisons indicating there was a significant difference between students who reported "Don't Know" compared to those that perceived their parents' insurance management as "Good."

Discussion

Previous research on student's financial behavior indicated that student's perception of these behaviors had lasting effects on their ability to maintain their finances through young adulthood and beyond (Shim et. al, 2009). This research contradicted this suggestion slightly as overall perceived financial behaviors from the parents did not seem to have an impact on the students' actual financial behaviors, including overall behaviors, money management, credit management, savings management, or insurance management. However, when broken down

into specific behaviors, there were significant differences in the data shown. Whether or not a student saw these behaviors as positive or negative as Shim et. al. suggested, the specific behaviors seemed to have a more lasting and significant impression than overall good or bad. In summary, the research agreed with Shim et. al. that there was an impact of parents' behaviors, it was just not within the same categories or similar behaviors from parent to student. Other research indicated similar data, that there were consistencies in financial behaviors through generations, and when looking at specific behaviors, this research supports this idea (Tang, 2017 & Hilgert, Hogarth, & Beverly, 2003). Research surrounding parental modelling has been researched extensively and indicates a relationship between how students learn based on how their parent has influenced and supported them (Brueck, Mazza, & Tousignant, 2012; Engberg & Wolniak, 2010; Kim, 2014; Ross, 2016). Therefore, it can be assumed that parental modeling is a valuable resource in students learned behavior of their finances and how to continue, or discontinue those behaviors, through young adulthood.

Limitations

This research was conducted at one mid-sized 4-year public institution in the Midwest with a small sample of 173 fully completed surveys. Results may have shown greater differences with a larger population size or across multiple institutions. Since the questionnaire utilized certified university emails, it is likely that a number of students do not regularly check their university accounts despite university policy to do so. Many students may utilize personal accounts more regularly. Measures were taken to ensure that the target demographic was targeted through email, however, some demographic characteristics could not be measured prior to emailing the questionnaire. Whether or not a student was married or worked full time had to be answered on the questionnaire, resulting in disqualified respondents, had there been an option

to only send the email to qualified participants, there may have been a higher response rate for complete data. Although 289 students took the survey, only 173 responses could be used due to incomplete surveys or students not fitting the target demographic.

This research utilized self-reporting by the student, since it measured students' perception of their parent's behaviors, whether or not a parent had actual good or bad financial behaviors could have been less accurate than if this were reported by the parent themselves. Future research could consider opening the questionnaire to be completed by both student and parent to include the parent's perspective on their respective financial behaviors across all categories.

Recommendations for Future Research

Although perceived self-evaluation of financial behaviors has shown to be a true indicator of actual behaviors (Allgood and Walstad, 2016), this does not necessarily indicate that the students' perception of their parents will be a reliable indication of actual behaviors. Future research could include actual behaviors demonstrated by the parent and witnessed by the student rather than a Likert scale. For example, "My parent paid all their bills on time", "My parent saved money from every paycheck". Utilizing specific questions from the FMBS for the parent may have been a better indication of "Good" vs. "Bad" as opposed to an overall perception of general topics. Also, as previously discussed, having access to parent's actual FMBS score and having them complete the scale rather than rely on perception from students, more complete data could be found to show which behaviors impact a student the most.

Recommendations for Financial Programming

Since this research suggests a relationship between perceived behaviors and active student behaviors, this suggests a need for increased financial knowledge and literacy. As knowledge is passed through generationally, good financial behaviors need to continue to be

modelled in order to continue positive growth. Financial literacy for adults would increase the impact of the modeling behaviors they are able to pass on to their students' before they enter independent living situations. These positive behaviors would then continue to be passed along through generations.

Recommendations for Higher Education

Financial literacy on college campuses would benefit many of these financial best practice behaviors. For institutions that currently utilize financial literacy programming, research similar to this would be helpful in indicating problem areas and room for expansion in certain types of financial literacy behaviors. Further research into how students' have previously learned or how they would like to gain more knowledge would be critical in expanding these types of programs also. Since financial behaviors can be passed on generationally, improved programming to support positive financial behaviors and break negative habits for young adults would benefit the generations before they continue. If young adults can begin and maintain positive habits before starting families of their own, there is a higher chance that financial literacy and strong financial behaviors would be able to flourish and continue.

Summary

This chapter outlines the conclusions of the research including conclusions of students' overall financial management, money management, credit management, savings management, and insurance management. A discussion of the findings is included along with limitations to the study and recommendations for future research, financial programming, and higher education.

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Appendix A

1a. Current grade class?

Freshman

Sophomore

Junior

Senior

Post-baccalaureate

Graduate

2a. What is your age?

Fill in

3a. Which of the following best describes your enrollment?

Full time (12+ hours)

Part-time (<12 hours)

4a. Which of the following best describes your current employment status?

Work full-time (32+ /week)

Work part-time (<32 /week)

Permanently sick, disabled, or unable to work

Unemployed or temporarily laid off

Retired

5a. Which of the following best describes your current living arrangements?

On-campus with roommate(s)

On-campus-single

Off-campus-roommate(s)

Off-campus-single

Commute from family home

Commute other, explain:

6a. Prior to attending Eastern Illinois University, where did you live?

With parent/guardian

Other, explain:

7a. Marital Status

Married

Single

Separated

Divorced

Widowed/Widower

8a. What is your sex?

Male

Female

Other

9a. What is your ethnicity?

American Indian or Alaska Native

Asian

Black or African American

Hispanic

International

Multiple

Native Hawaiian or Other Pacific

Other (unknown/not reported)

White

Appendix B

1b. My parent demonstrated good financial behaviors.

Strongly disagree

Disagree

Don't Know

Agree

Strongly agree

2b. My parent demonstrated good savings management.

Strongly disagree

Disagree

Don't Know

Agree

Strongly agree

3b. My parent demonstrated good money management.

Strongly disagree

Disagree

Don't Know

Agree

Strongly agree

4b. My parent demonstrated good credit management.

Strongly disagree

Disagree

Don't Know

Agree

Strongly agree

5b. My parent demonstrated good insurance management.

Strongly disagree

Disagree

Don't Know

Agree

Strongly agree

Appendix C

Please indicate how often you have engaged in the following activities in the past six months:

1=never, 2=seldom, 3=sometimes, 4=often, 5=always

Money management

- 1c. Comparison shopped when purchasing a product or service
- 2c. Paid all your bills on time
- 3c. Kept a written or electronic record of your monthly expenses
- 4c. Stayed within your budget or spending plan

Credit management

- 5c. Paid off credit card balance in full each month
- 6c. Maxed out the limit on one or more credit cards
- 7c. Made only minimum payments on a loan

Savings and investment management

- 8c. Began or maintained an emergency savings fund
- 9c. Saved money from every paycheck
- 10c. Saved for a long-term goal such as a car, education, home, etc.
- 11c. Contributed money to a retirement account
- 12c. Bought bonds, stocks, or mutual funds

Insurance management

Please rate your behavior regarding insurance within the past year on a scale of 1-5:

1=never, 2=seldom, 3=sometimes, 4=often, 5=always

- 13c. Maintained or purchased an adequate health insurance policy

14c. Maintained or purchased adequate property insurance like auto or homeowner's insurance

15c. Maintained or purchased adequate life insurance