

Analyzing College Students' Finances and How They Were Impacted By COVID-19

by  
Patricia Hummel

A thesis presented to the Honors College of Middle Tennessee State  
University in partial fulfillment of the requirements for graduation from the  
University Honors College

Spring 2021

Thesis Committee:

Dr. Keith Gamble, Thesis Director

Dr. Ennio Piano Thesis Committee Chair

Analyzing College Students' Finances and How They Were Impacted By COVID-19

by Patricia Hummel

APPROVED:

---

Dr. Keith Gamble, Thesis Director  
Chair, Economics and Finance, Jones College of Business

---

Dr. Ennio Piano Thesis Committee Chair  
Assistant Professor, Economics and Finance, Jones College of  
Business

**Acknowledgments:**

I extend my gratitude to Middle Tennessee State University for allowing me to further my education under full scholarship. Without their generosity, I would not have been able to achieve all that I have done, including this project. I also extend this gratitude to URECA for funding my research as I gathered valuable data regarding the pandemic's impact on our student population.

I would also like to acknowledge my thesis advisor, Dr. Keith Gamble, who has been extremely helpful and a pivotal part of this project's success.

Last, I would like to thank my mother, Michelle Hummel, for allowing me to become all that I am and encouraging me to pursue all that I want to do and all that I wish to be. Without her guidance, I would not be where I am today.

**Abstract:**

The introduction of COVID-19 led to a plethora of questions regarding its impact on finances. The purpose of the proposed study is to analyze the finances of college students at Middle Tennessee State University by means of a survey. Doing so will contribute to the knowledge currently being gathered regarding the effect of COVID-19 and will determine if the students in question have indeed advanced their financial understanding and finances in the duration of the ongoing pandemic.

The survey for the study was developed using Qualtrics and approved by the Institutional Review Board (IRB) in October 2020. The intention of the survey is to compare the finances of college students attending Middle Tennessee State University both before and after the introduction of COVID-19 as a means to determine if the students have gained more financial understanding due to the financial concerns and assistance that surfaced during the pandemic. The survey is targeted towards three factors: financial literacy, budgeting, and impact of COVID-19 financial assistance.

## Table of Contents

<b>Introduction.....</b>	<b>1</b>
<b>The Big Three.....</b>	<b>2</b>
<b>Job Status During Pandemic.....</b>	<b>3</b>
<b>Federal Financial Aid.....</b>	<b>3</b>
<b>Thesis.....</b>	<b>4</b>
<b>Research Questions.....</b>	<b>5</b>
<b>Methodology.....</b>	<b>5</b>
<b>Survey Composition.....</b>	<b>6</b>
<b>1. Pre-COVID-19.....</b>	<b>6</b>
<b>2. Post-COVID-19.....</b>	<b>7</b>
<b>Results.....</b>	<b>8</b>
<b>Testing Financial Literacy.....</b>	<b>8</b>
<b>Financial Data.....</b>	<b>13</b>
<b>Pre-COVID-19 Data.....</b>	<b>17</b>
<b>Post-COVID-19 Data.....</b>	<b>20</b>
<b>Job Status During Pandemic.....</b>	<b>24</b>
<b>Financial Aid During Pandemic Data.....</b>	<b>26</b>
<b>Conclusion.....</b>	<b>30</b>
<b>References.....</b>	<b>33</b>
<b>Appendix A: Survey.....</b>	<b>35</b>
<b>Appendix B: IRB Exemption Form.....</b>	<b>48</b>

## List of Figures

<i>Figure 1:</i> Q1: Do you consider yourself to be financially literate?.....	8
<i>Figure 2:</i> Q2: How would you rate your ability to handle your finances?.....	9
<i>Figure 3:</i> Q3: Have you ever taken a finance course?.....	10
<i>Figure 4:</i> Q4: Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow? .....	11
<i>Figure 5:</i> Q5. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?.....	12
<i>Figure 6:</i> Q6. Please tell me whether this statement is true or false. “Buying a single company’s stock usually provides a safer return than a stock mutual fund.” .....	12
<i>Figure 7:</i> Q12: Do you consider yourself to be financially independent?.....	14
<i>Figure 8:</i> Q13: Do you pay 50% or more of your bills and/or living expenses?.....	15
<i>Figure 9:</i> Q14: How do you pay for your college education?.....	16
<i>Figure 10:</i> Q7: Before COVID-19, Did you commit to a budget?.....	17
<i>Figure 11:</i> Q9: Before the impact of COVID-19, did you consider yourself financially stable?.....	19
<i>Figure 12:</i> Q10: Before COVID, what was your earned Income?.....	20
<i>Figure 13:</i> Q19. After COVID, what was your earned income?.....	21
<i>Figure 14:</i> Q20. Do you commit to a Budget?.....	22
<i>Figure 15:</i> Q21. Have you noticed a change in your spending habits since the introduction of COVID-19?.....	22

<i>Figure 16:</i> Q26. Have you noticed any additional expenses since the introduction of COVID?.....	24
<i>Figure 17:</i> Q16. Were you laid off from your job due to COVID-19?.....	25
<i>Figure 18:</i> Q17. Did you file for Unemployment due to COVID-19?.....	25
<i>Figure 19:</i> Q18. Were you an essential Worker?.....	26
<i>Figure 20:</i> Q23. Did you qualify for the \$1200 stimulus check, and was it helpful to your financial situation?.....	27
<i>Figure 21:</i> Q24. Did you receive money from MTSU under the CARES Act, and was it helpful to your financial situation?.....	28
<i>Figure 22:</i> Q25. Did people in your family, excluding yourself, qualify for the \$1200 Stimulus Check, and was it helpful to your financial situation?.....	29

## **List of *Tables***

<i>Table 1:</i> Q11: Determine the source(s) of your income.....	14
<i>Table 2:</i> Q15: Determine the percentages of your debt.....	16
<i>Table 3:</i> Q8: Pre-COVID: Determine what percentage of your income was dedicated to these areas.....	18
<i>Table 4:</i> Q22. After COVID-19: Determine how much of your income was dedicated to each area.....	23



**Introduction:**

College students are infamously regarded by their lack of financial literacy and the overall mismanagement of funds. Such an assumption has been questioned and proven true in a variety of studies from Middle Tennessee State University's own study "Analyzing Financial Literacy Among Undergraduate Students and Current Methods of Increasing Financial Literacy" by Montgomery Barreto to Dr. Daniel Zapp's "Money Matters on Campus." However, previous studies have not had the opportunity to determine if the occurrence of a global event could shift the financial abilities of college students to a more knowledgeable position.

The global pandemic did not affect the students at Middle Tennessee State University until March of 2020. The campus closed following an extension of spring break, and when it was over, many of the students were forced to advance their understanding and change their financials in order to adapt to the pandemic and the new challenges it sowed.

One significant challenge that arose from COVID-19 was the lack of data. Given the overall technological advancement of the last century, comparing the pandemic to previous plagues (Spanish Influenza, Bubonic plague, etc.) would be insufficient as the spread of COVID-19 was swift and the global impact was severely heightened. The overall impact of COVID-19 has been monitored on a macroeconomic level as many countries have developed stimulus packages to distribute to their citizens and other developing countries. Undergraduate education has been affected as many colleges and universities adapted to remote learning environments.

**The Big Three:**

In order to determine if the students have gained understanding from the pandemic, it was imperative to test their overall financial literacy and compare it to previous studies conducted. “The Big Three” are a set of three questions developed by Olivia Mitchell and Annamarie Lusardi. Initially, the questions were developed to determine if the participants had adequate enough knowledge to prepare for retirement. The questions were as follows:

The questions were designed to measure numeracy, financial understanding regarding inflation, and general knowledge of stocks. While broad in nature, the questions allow for an adequate analysis of an individual’s financial understanding. Admittedly, the nature of the questions, multiple-choice, allows for the potential of guessing the correct answer. Of which, Mitchell and Lusardi implied that “empirical analysis to the advanced financial literacy questions should take into account that these measures can be noisy proxies of true financial knowledge levels” (Lusardi and Mitchell, 2011).

**Job Status During Pandemic:**

The pandemic severely affected the workforce in the U.S. *The Wall Street Journal* reported that by June 2020 over 20 million jobs had been lost since the pandemic hit the United States. By August 2020, Forbes had reported that over 57.4 million people had filed for unemployment. It is currently unclear how much job loss affected college students. Given that college students typically work part-time jobs, one would assume

that they occupied many “essential” jobs during the pandemic, thus being more immune to the severe layoffs that occurred as the pandemic grew within the U.S. Surveying the participants regarding these matters should shed some light on how the students at Middle Tennessee State University were affected.

### **Federal Financial Aid:**

The United States Federal Government as of March 2021 has issued three stimulus payments to the public. The following study will refer only the first payment. The first stimulus amounted to \$1200.00 per independent who filed their taxes in the year 2019. This funding could expand to \$2,400 if a couple filed jointly, with an additional \$600 per child in the household. In order to qualify for the first stimulus, one must have been an independent who made less than \$99,000 or \$198,000 if jointly filed (AARP). The term independent refers to a person who is not claimed under another’s taxes and can pay more than half of their expenses. Alternatively, if an individual is under 24 years old, a full-time student, single with no children, or has half or more of their expenses paid by their parent or legal guardian, they can be claimed on the parent or legal guardian’s taxes (IRS). Under these qualifications, many college students are labelled as independent, thus not qualifying for the first stimulus.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act was created to assist college students and their universities in their efforts to combat financial issues resulting from the pandemic. However, in order to qualify, one must have filed a Free Application for Student Aid or FASFA and be eligible for federal aid in order to receive

funding. Further specifications disqualify non-enrolled students, international students, undocumented students, and solely distance-learning students (CARES Act Student Emergency Aid Grant FAQ & Required Reporting Requirements).

### **Thesis:**

The intention of the survey is to compare the finances of college students attending Middle Tennessee State University both before and after the introduction of COVID-19 as a means to determine if the students have gained more financial understanding due to the financial concerns and assistance that surfaced during the pandemic.

### **Research Questions:**

The survey is targeted towards three factors: financial literacy, budgeting, and impact of COVID-19 financial assistance.

1. Have the students of Middle Tennessee State University advanced their overall financial literacy in comparison to previous studies conducted?
2. Has the introduction of COVID-19 led to an increased use of budgets as a means to organize the students' finances?
3. How effective was the federal and collegiate financial assistance given during the pandemic?

**Methodology:**

The study consists of the analysis of a campus-wide survey regarding the financials of college students and how they were impacted by COVID-19. The survey was developed using Qualtrics software and was made available to MTSU students via anonymous link. The CITI training required for the survey was completed in September 2020, and the survey received IRB approval on October 22nd, 2020.

The survey became available to the student population in mid-November 2020. In order to gain participants, both email and verbal announcements were utilized. It is available electronically and consists of thirty questions, including an informed consent page that participants must see and check the correct boxes to proceed with the survey. The participants are meant to be Middle Tennessee State University students, who are 18 or older.

All responses were analyzed using the graphs produced by Qualtrics. After the survey is closed, Qualtrics' built-in "Data & Analysis" and "Report" were used to analyze the data in its entirety. All answers were analyzed to determine the validity of the posed hypothesis: College students at MTSU have gained a better understanding of finances due to the challenges and financial strains that occurred due to the introduction of COVID-19.

**Survey Composition:**

The survey consists of two sections: Pre-COVID and Post-COVID. Doing so allowed for a better comparison as we follow the changes in budgets and the overall allocation of funds as students combat the effects of the global pandemic.

## **1. Pre-COVID**

The questions begin with a self-assessment of their financial knowledge followed by the “Big Three” questions developed by Director Annamaria Lusardi and Professor Olivia S. Mitchel in their paper titled, “Financial Literacy Around the World”. Using these questions allowed for an adequate test of basic financial questions and allows for a comparison of MTSU’s students to the participants in their study.

The following questions referred to budgeting, including a measure of inflows and outflows in a given month. The participants are also asked to determine their dependency on outside sources to supplement their incomes and pay their bills. Financial dependency can play a significant role in one’s experience with handling finances. More specifically, those with lower dependency are more likely to have advanced knowledge of handling their finances given that they have no backing of funds to purchase their necessities or to handle their debt.

On that note, the final question for Pre-COVID determined the student’s debt, if any exists. According to a study conducted in 2019, roughly fifty-four percent of college students in America took on some form of debt to pay for school (Kurt). It is likely that the current study will support this with some deviation.

## **2. Post-COVID**

To begin, the questions refer to job status. COVID-19 led to a large number of lay-offs and a drastic increase in unemployment and a heavier reliance on essential workers. One pending notion regarding the likelihood of many essential workers being

college students will be answered with these questions. Budgets were determined similarly to the Pre-COVID section and were followed by questions regarding the usefulness of government-endorsed funding, such as the Stimulus Check and the CARES Act.

The Stimulus Check and the CARES Act are heavy topics for debate at Middle Tennessee State University due to the large influx of claims stating that most of the students did not receive any much funding, if any, from these. Many of the students at MTSU wanted some form of refund from the University due to the disruption of their education and living situations. Survey responses will show if they received the funds and if they were useful to the recipients.

The final question allowed for individualized responses to COVID-19's impact. While there is no intent to analyze this section, it is sure to shed some light on our student population's journey as they battled the pandemic.

## Results:

### Testing Financial Literacy:

#### Confidence in Financial Understanding:

The first indicator of financial strength can be determined by allowing the individual to gauge their own financial abilities. Three questions were developed:

Q1: Do you consider yourself to be financially literate?

Q2: How would you rate your ability to handle your finances?

Q3: Have you ever taken a finance course?

The first two questions are entirely based on an individual's opinion regarding their pasts dealing with financials. The third serves to determine if the student actively sought out the opportunity to gain understanding of personal finance.

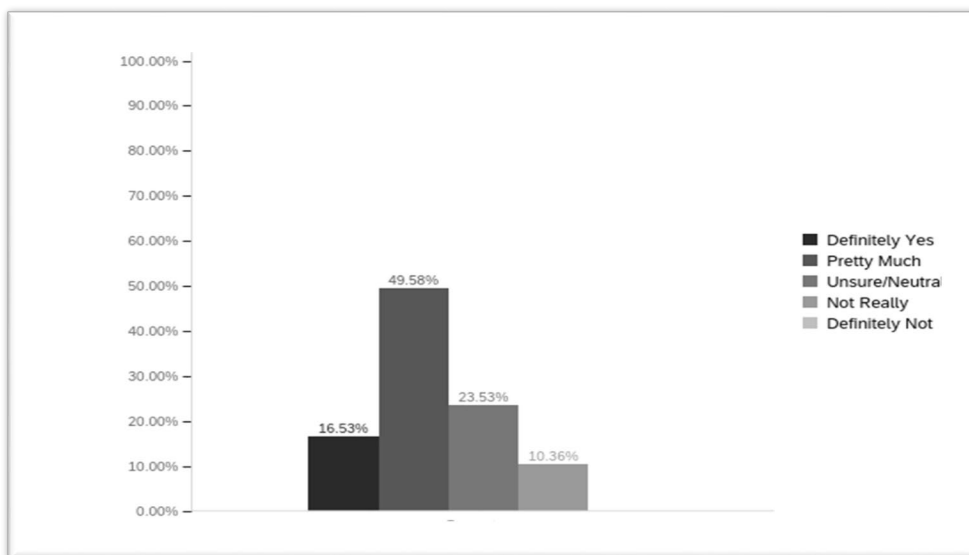
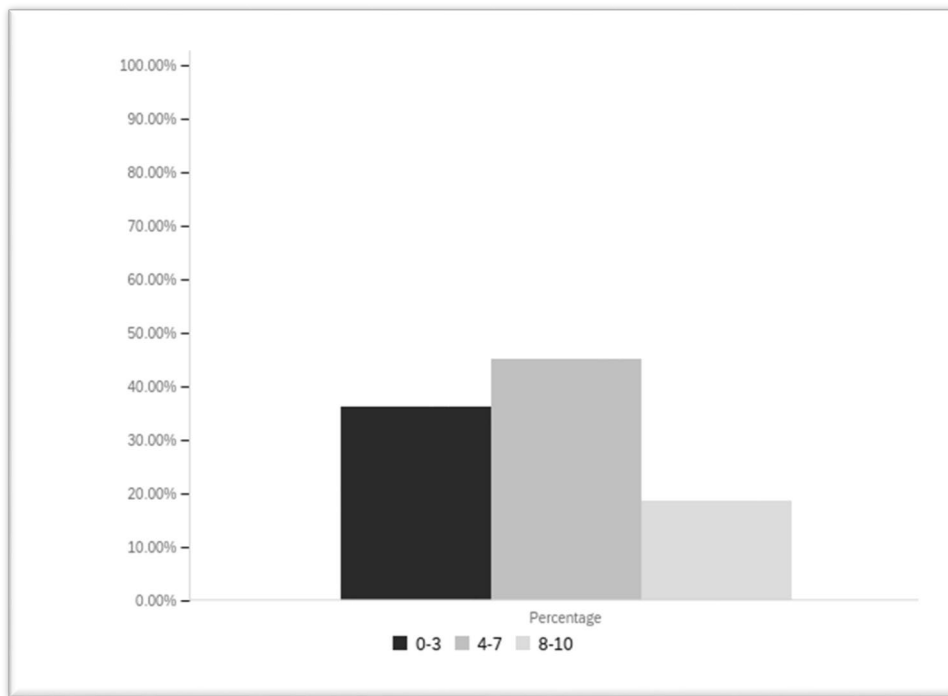


Figure 1: Q1: Do you consider yourself to be financially literate?





*Figure 2: Q2: How would you rate your ability to handle your finances?*

*Figure 1* and *Figure 2* represent the confidence levels of college students regarding their financial literacy and understanding. As shown in *Figure 1*, the majority of responses indicate confidence in financial literacy as 49.58% responded with “Pretty Much” and 16.53% responded with “Definitely Yes”. “Unsure/Neutral” and “Not Really” received 23.53% and 10.36% respectively.

*Figure 2* indicated a mainly detractive or passive response as 36.34% of the students ranged between 0 and 3, 45.07% ranged between 4 and 7, and 18.59% ranged between 8 and 10.

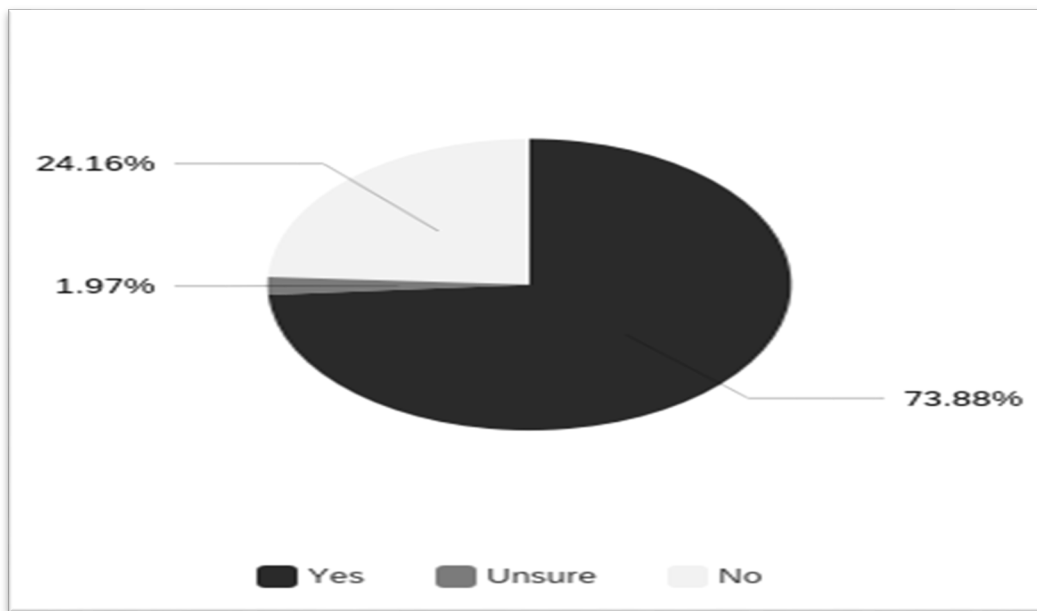


Figure 3: Q3: Have you ever taken a finance course?

Overall results from the survey suggest that while 73.88% of the student had taken a personal finance course over the course of their academic career, only 66.1% consider themselves to be financially literate.

Confidence in one's ability to handle their finances was significantly lower as only 18.59% of the students rated their financial strength between eight and ten. The majority at 45.05% remained passive, gauging themselves between four and seven. With results such as these, a conclusion can be drawn that the students overall do not possess confidence in their ability to manage their finances nor in financial literacy. Responses to the Big Three questions showed promising results.

The Big Three questions are as follows:

Q4: Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

Q5: Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

Q6: Please tell me whether this statement is true or false. “Buying a single company’s stock usually provides a safer return than a stock mutual fund.”

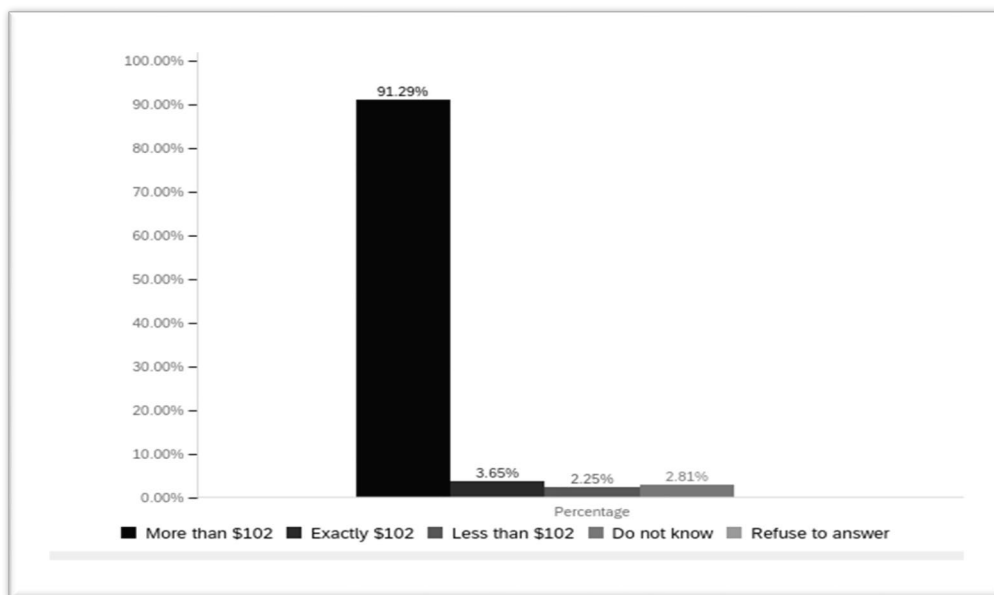


Figure 4: Q4. Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

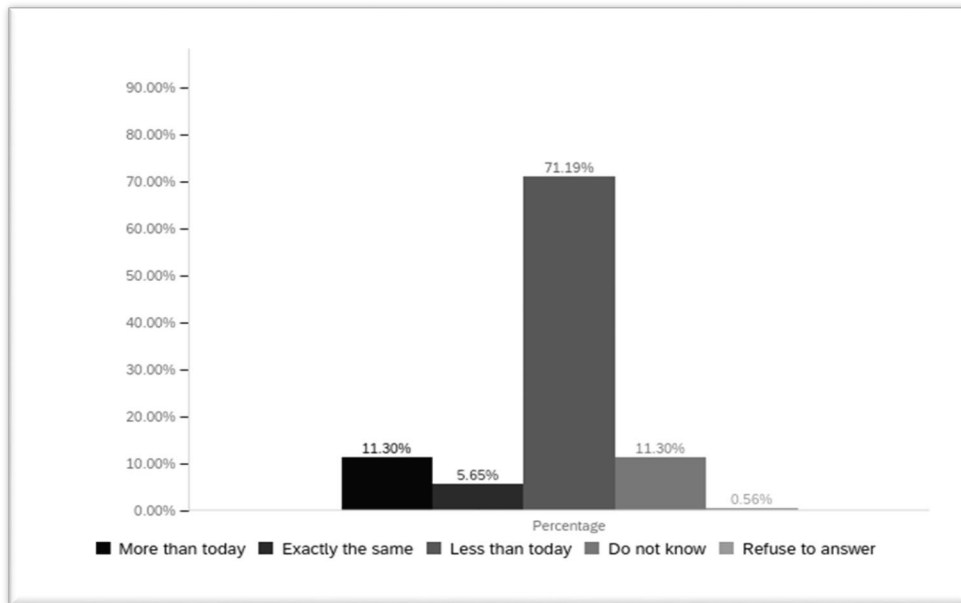


Figure 5: Q5. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

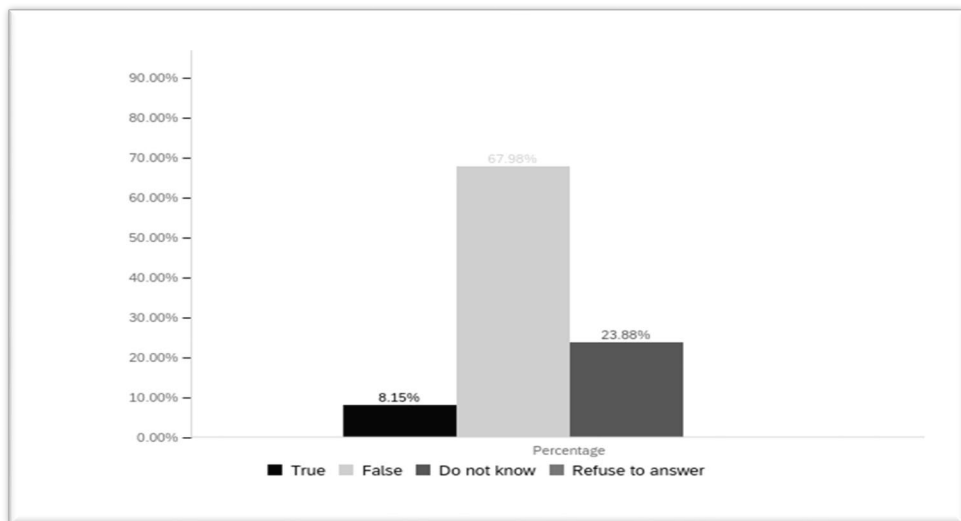


Figure 6: Q6. Please tell me whether this statement is true or false. "Buying a single company's stock usually provides a safer return than a stock mutual fund."

Participant responses to the Big Three were overall positive as 91.29% responded correctly to Q4 (shown in *Figure 4*). 71.19% responded correctly to Q5, and 67.98% responded correctly to Q6 as shown in *Figure 5* and *Figure 6*, respectively. In total, 53.33% of the students answered all three question correctly.

### **Financial Data:**

In order to adequately assess the students' financial understanding, one must develop a sense of their personal budgets in regard to incomes, expenses, financial independency status, method of paying for college, and debts.

The data collected in this section corresponds to questions 11 through 15.

Q11: Determine the source(s) of your income.

Q12: Do you consider yourself to be financially independent?

Q13: Do you pay 50% or more of your bills and/or living expenses?

Q14: How do you pay for your college education?

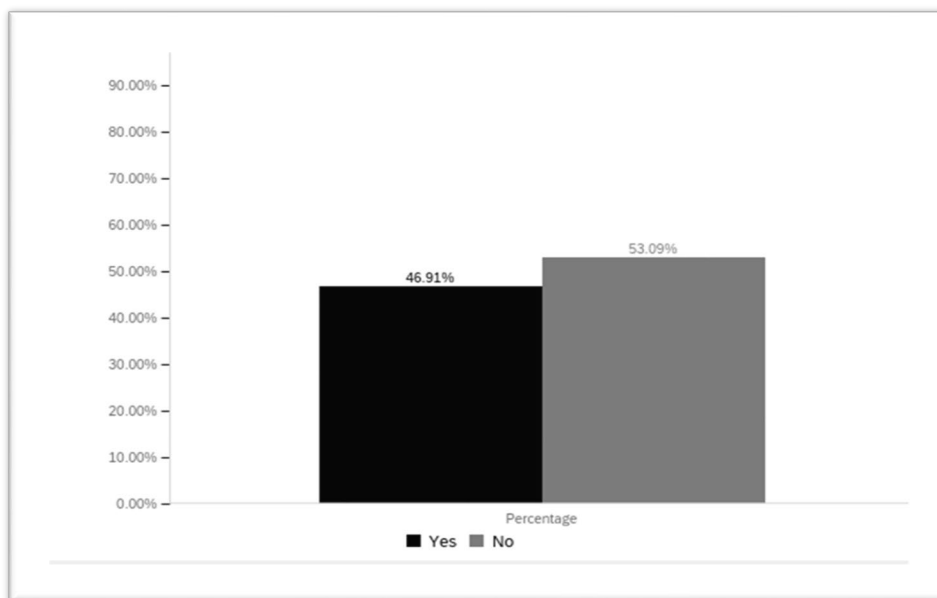
Q15: Determine the percentages of your debt.

*Table 1: Q11: Determine the source(s) of your income.*

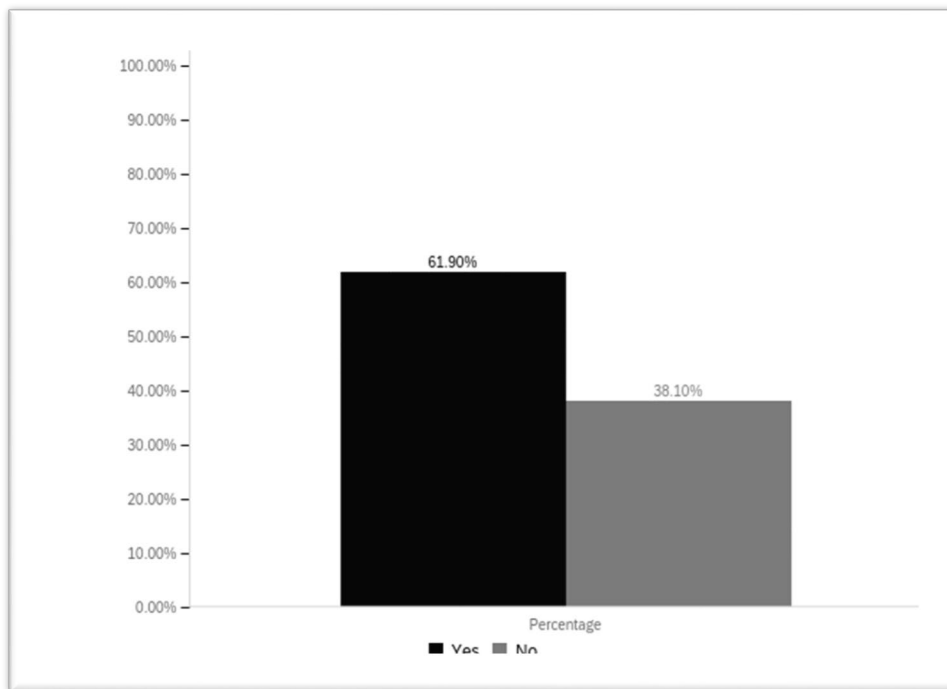
Field	Mean
Job	68.03
Loan	3.41
Scholarship	10.23
Parents/Legal Guardians	14.51
Other	3.81

Showing rows 1 - 5 of 5

As shown in *Table 1*, 68.03% of the students had a job to serve as their source of income following with 31.96% relying on external sources of income, such as scholarships, loans, parents or legal guardians, and others.



*Figure 7: Q12: Do you consider yourself to be financial independent?*



*Figure 8: Q13: Do you pay 50% or more of your bills and/or living expenses?*

Responses to Question 12, as shown in *Figure 7*, report that 53.09% of the students do not consider themselves to be financially independent, thus relying on external sources of income to pay for their expenses. This notion continues in *Figure 8* as 38.10% of the participants rely on these external sources to cover over half of their bills and overall living expenses.

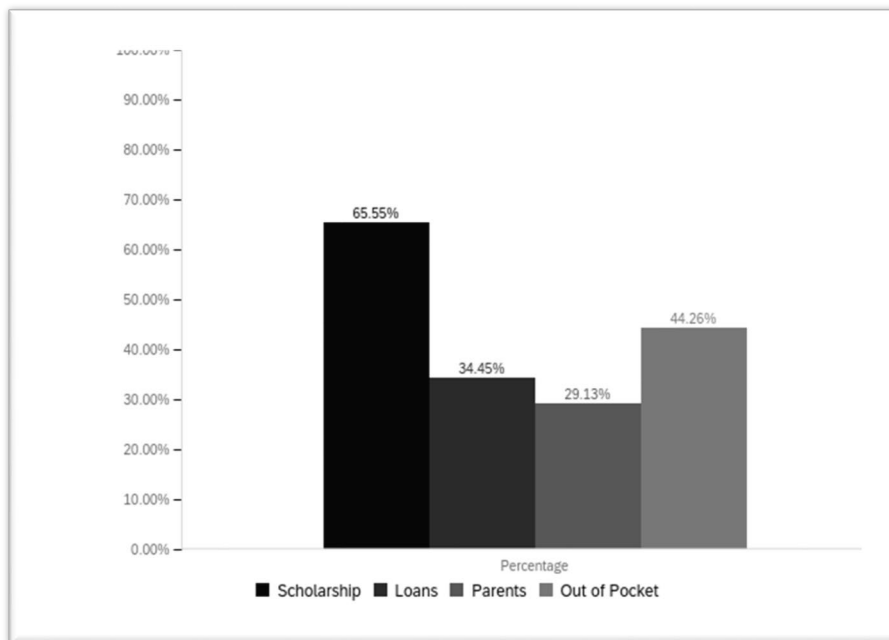


Figure 9: Q14: How do you pay for your college education?

Table 2: Q15: Determine the percentages of your debt.

Field	Mean
Student Loans	29.82
Personal Loans	2.02
Mortgage/Car Loans	15.98
Credit Cards	7.04
None.	45.14



*Figure 9* shows that 65.55% of the students' college expenses are paid by utilizing scholarships followed by 44.26% being paid out of pocket, 34.45% being paid by loans and 29.13% being paid by parents or legal guardians. Of these methods, loans contribute to the students' debt. *Table 2* correlated with the previous results as 29.82% had student loans, 2.02 from personal loans, and 45.14% reported having no debt even after paying for college tuition and other additional school-related expenses.

### **Pre-COVID-19 Data:**

This section centered around the use of budgeting to organize data and was created to be compared to Post-COVID-19 Data.

It is composed of four questions.

Q7: Before COVID-19, Did you commit to a budget?

Q8: Pre-COVID: Determine what percentage of your income was dedicated to these areas. Bills (Rent, Car, Insurance, loans, etc), Necessities (Groceries, Toiletries (Not Makeup), Supplies), Miscellaneous Goods, Savings.

Q9: Before the impact of COVID-19, did you consider yourself financially stable?

Q10: Before COVID, what was your earned Income?

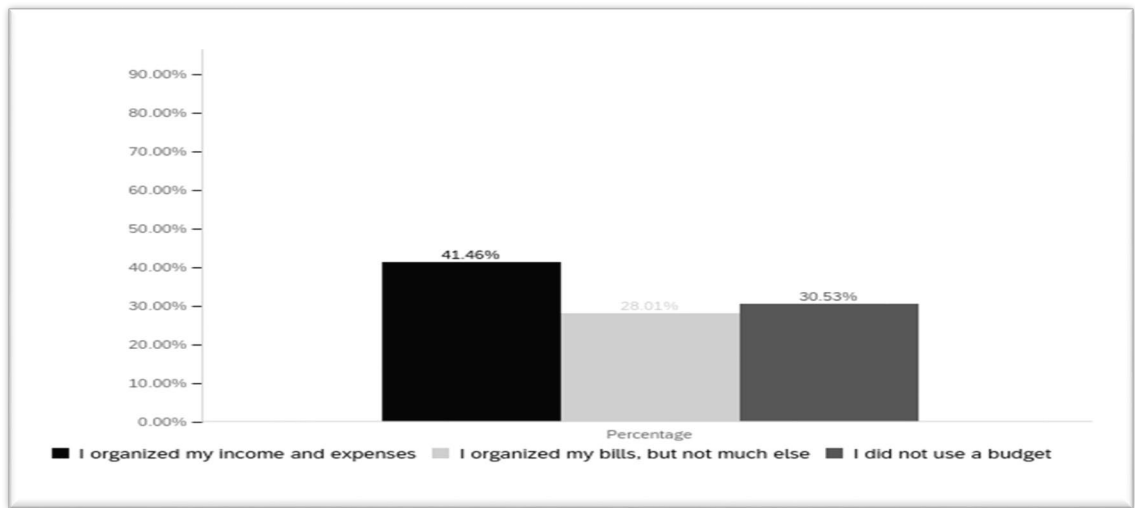


Figure 10: Q7: Before COVID-19, Did you commit to a budget?

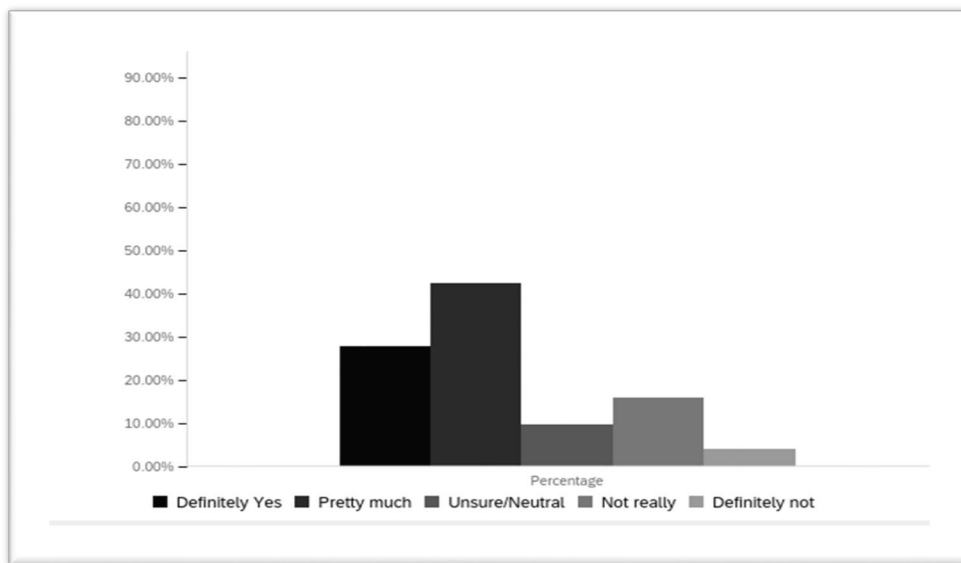
Figure 10 shows that the impact of COVID-19, 41.46% of students utilized a full budget, 28.01% organized only bills, and 30.53% did not commit to a budget to organize their finances.

Table 3: Q8: Determine what percentages of your income was dedicated to these areas.

Area	Percentage
Bills(Rent, Car, Insurance, loans, etc)	33.69
Necessities(Groceries, Toiletries(Not Makeup), Supplies)	22.19
Miscellaneous Goods( Subscriptions, Social Events, Decor, Non-essential Electronics, etc)	19.11
Savings	25.01

Showing rows 1 - 4 of 4

*Table 3* shows the majority of expenses were sown from bills such as rent, car payments, insurance, and loan payments at 33.69%. After bills, savings accounted for 25.01 of their income. Necessities such as groceries, toiletries, and supplies accounted for 22.19%, and miscellaneous goods such as subscriptions, social events, décor, and non-essential electronics accounted for the remaining 19.11%.



*Figure 11: Q9: Before the impact of COVID-19, did you consider yourself financially stable?*

*Figure 11* had positive results as 42.58% answered “Pretty much” and 27.73% answered “Definitely Yes” regarding their financial stability. Following these results were 9.8% voting “Unsure/Neutral”, 15.97% voting “Not Really” and 3.92% voting “Definitely not”.

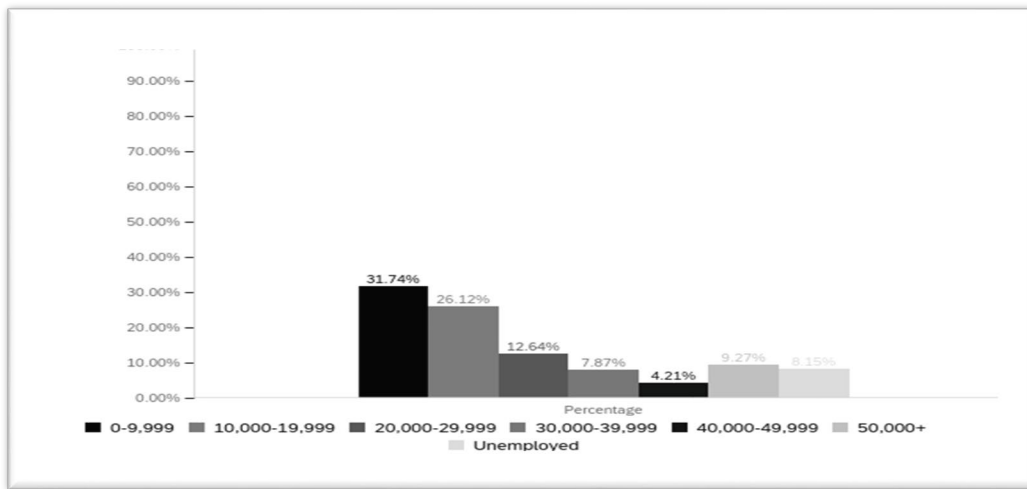


Figure 12: Q10: Before COVID, what was your earned Income?

Figure 12 showed that earned income before the introduction of COVID-19 was predominantly between 0 and 20,000 dollars at 57.86%. Incomes that exceeded 20,000 were significantly lower at 33.99%, and 8.15% percent of the students were unemployed.

### Post-COVID-19 Data:

The questions developed for this section were made to be comparable to the questions in the Pre-COVID-19 section.

Q19. After COVID, what was your earned income?

Q20. Do you commit to a Budget?

Q21. Have you noticed a change in your spending habits since the introduction of COVID-19?

Q22. After COVID-19: Determine how much of your income was dedicated to each area. Bills (Rent, Car, Insurance, loans, etc.), Necessities (Groceries, Toiletries (Not Makeup), Supplies, Miscellaneous Goods (Subscriptions, Social Events, Decor, Non-essential Electronics, etc.), Clothing (Face Masks, gloves, etc.), Savings.

Q26. Have you noticed any additional expenses since the introduction of COVID?

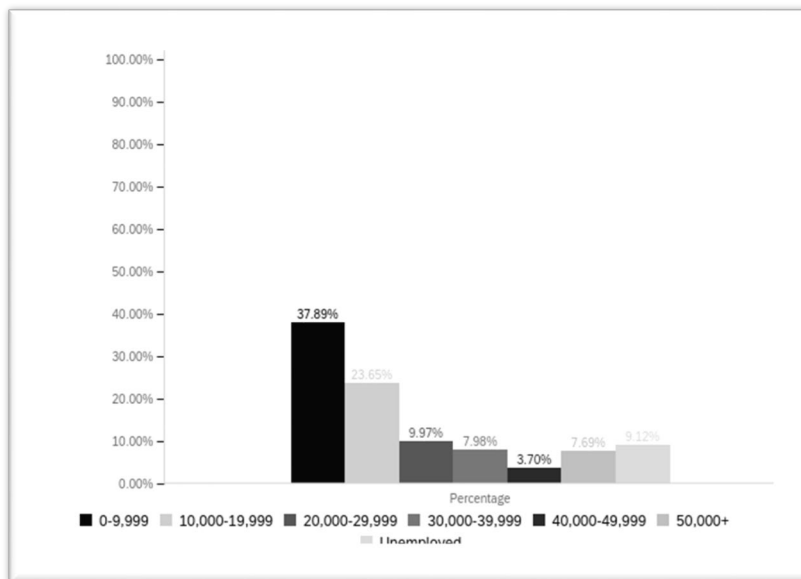


Figure 13: Q19. After COVID, what was your earned income?

Figure 13 showed that 37.89% of the students earned between \$0 and \$9,999, 23.65% earned between \$10,000 and \$19,999, 9.97% earned between \$20,000 and 29,999, 7.98% earned between \$30,000 and \$39,999, and 3.7% earned between \$40,000 and \$49,999, 7.69% earned more than \$50,000, and 9.12% were unemployed.

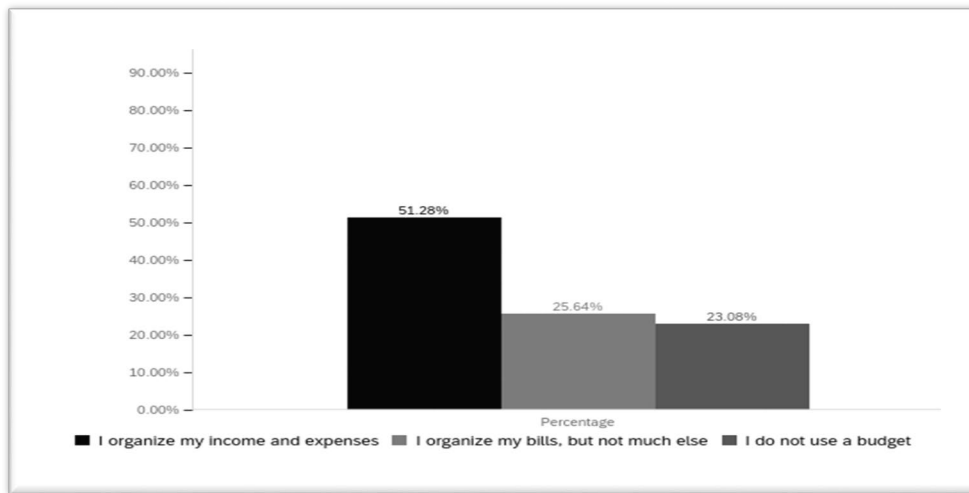


Figure 14: Q20: Do you commit to a Budget?

Figure 14 showed that after the introduction of COVID-19, 51.28% of the students utilized a full budget, 25.64% organized their bills only, and 23.08% did not commit to a budget to organize their finances.

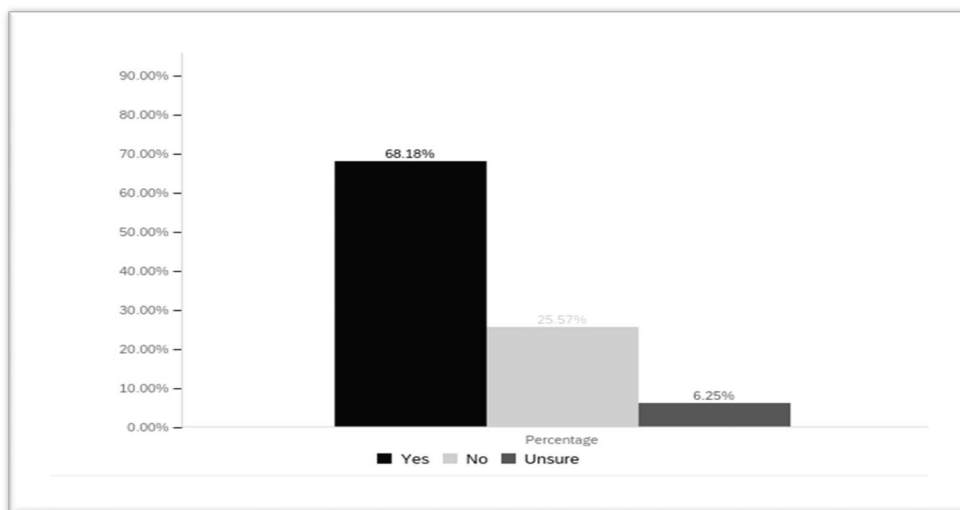


Figure 15: Q21. Have you noticed a change in your spending habits since the introduction of COVID-19?

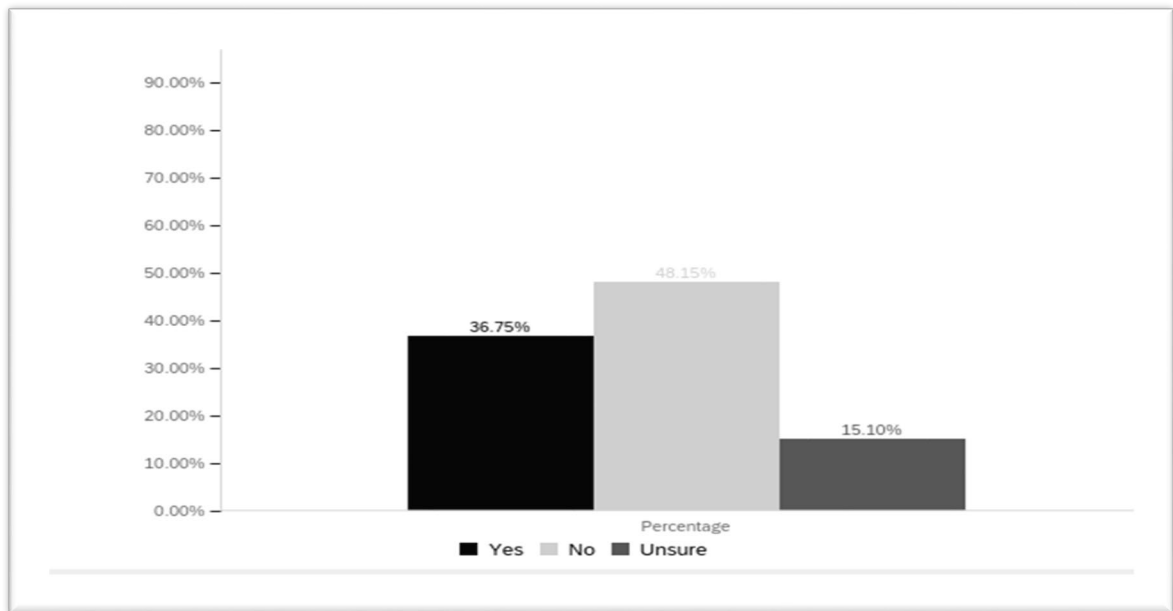
*Figure 15* represents the students' responses to whether or not they have seen a change in their spending habits since the pandemic began. Of which, 68.18% answered "Yes", 25.57% answered "No", and 6.25% answered "Unsure".

Table 4: Q22. After COVID-19: Determine how much of your income was dedicated to each area.

Field	Mean
Bills(Rent, Car, Insurance, loans, etc)	34.71
Necessities(Groceries, Toiletries(Not Makeup), Supplies	21.79
Miscellaneous Goods( Subscriptions, Social Events, Decor, Non-essential Electronics, etc)	13.65
Clothing(Face Masks, gloves, etc)	5.68
Savings	24.16

Showing rows 1 - 5 of 5

*Table 4* shows the areas in which the students' incomes were dedicated. Bills including rent, car payments, insurance and loan payments accounted for 34.71%. Necessities such as groceries, toiletries, and supplies accounted for 21.79%. Miscellaneous goods such as subscriptions, social events, décor, and non-essential electronics accounted for 13.65%. Clothing, including face masks and gloves, accounted for 5.68%. Lastly, savings accounted for 24.16%



*Figure 16: Q26. Have you noticed any additional expenses since the introduction of COVID?*

*Figure 16* shows that when asked if they have noticed additional expenses since the pandemic began, 36.75% of the students answered “Yes”, 48.15% answered “No”, and 15.10% answered “Unsure”.

### **Job Status During Pandemic Data:**

The questions in this section target whether or not the students were essential workers and if they were affected by the layoffs that occurred during the pandemic

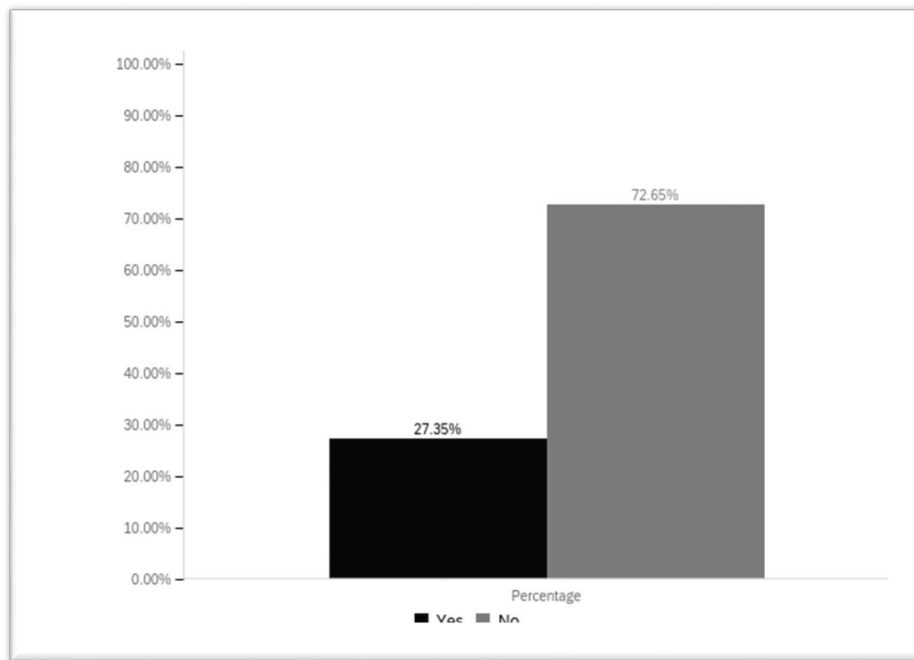
There are three questions for this section:



Q16. Were you laid off from your job due to COVID-19?

Q17. Did you file for Unemployment due to COVID-19?

Q18. Were you an essential Worker?



*Figure 17: Q16. Were you laid off from your job due to COVID-19?*

*Figure 17* shows that 72.65% of the students were not laid off from their jobs due to the COVID-19. Alternatively, 27.35% were laid off due to the pandemic.

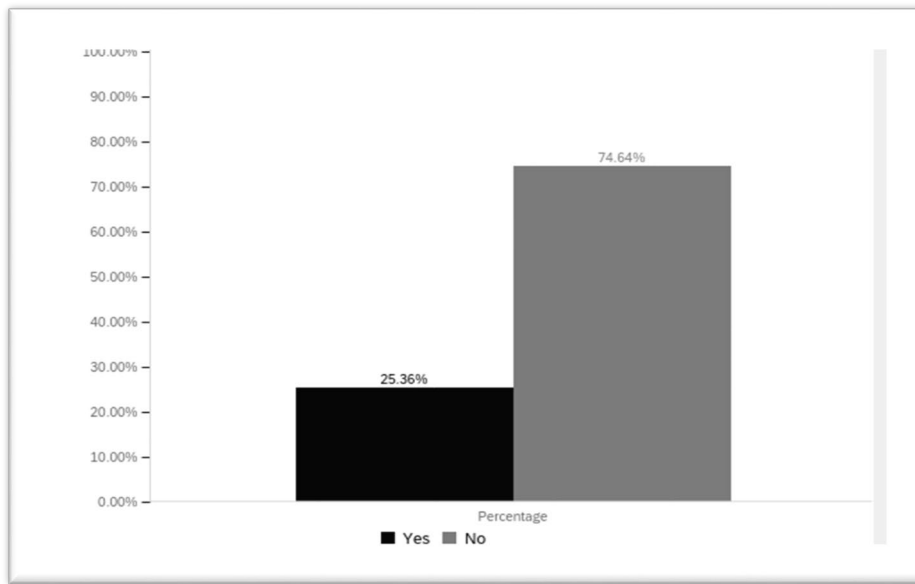


Figure 18: Q17: Did you file for Unemployment due to COVID-19?

Figure 18 results show that 74.64% of the students did not file for Unemployment during the pandemic, and 25.36% had to file for unemployment benefits.

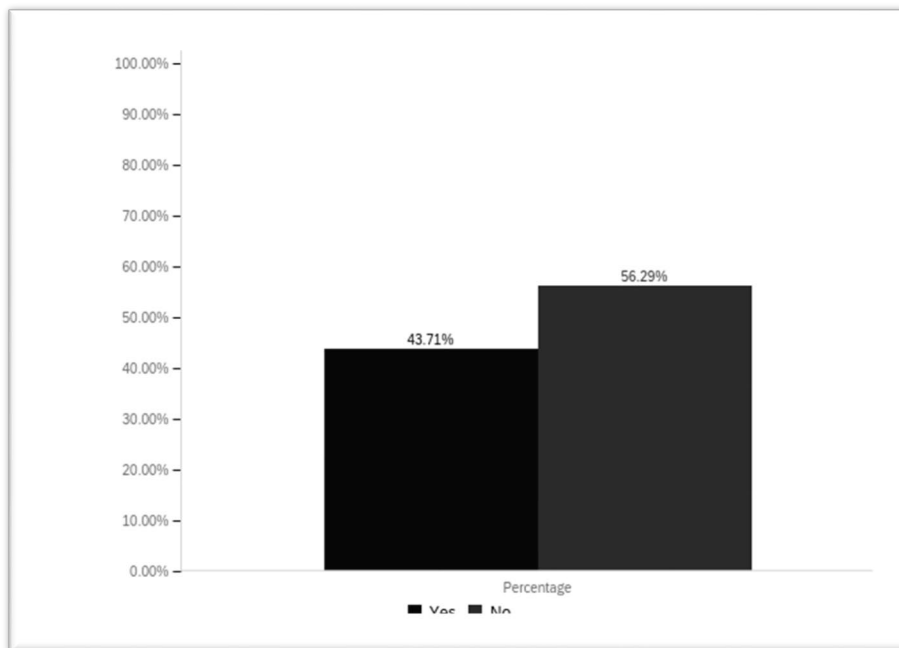


Figure 19: Q18: Were you an essential Worker?

*Figure 19* shows that 43.71% of the students at Middle Tennessee State University were essential workers during the pandemic and 56.29% of the students were not.

### **Financial Aid During Pandemic Data:**

The following questions were developed during the first stimulus period and payments from the CARES Act and answer two questions: did the students receive either payment and were they helpful?

There are three questions for this section.

Q23. Did you qualify for the \$1200 stimulus check, and was it helpful to your financial situation?

Q24. Did you receive money from MTSU under the CARES Act, and was it helpful to your financial situation?

Q25. Did people in your family, excluding yourself, qualify for the \$1200 Stimulus Check, and was it helpful to your financial situation?

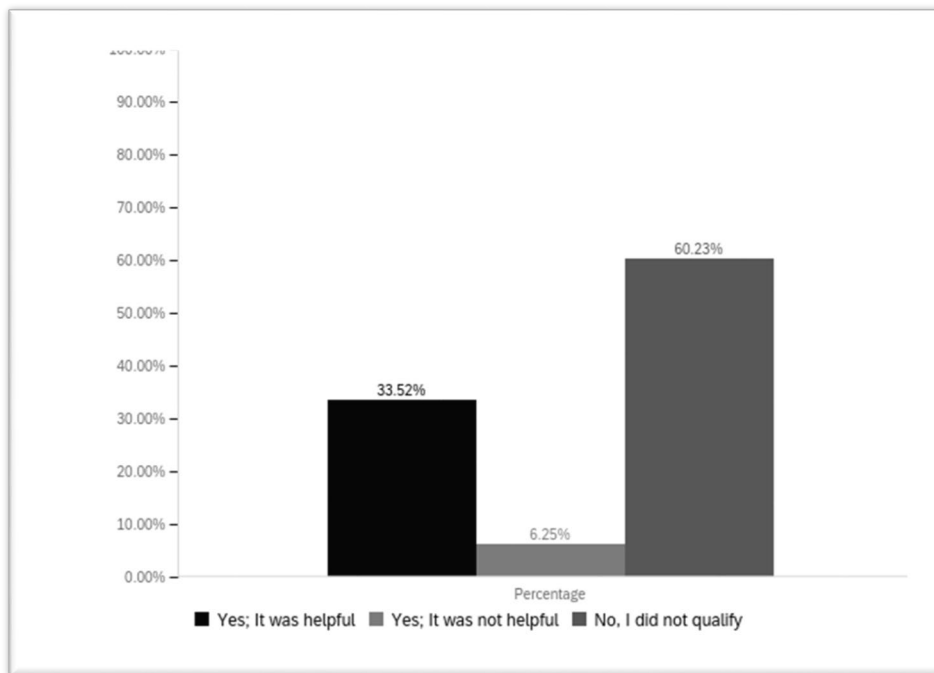
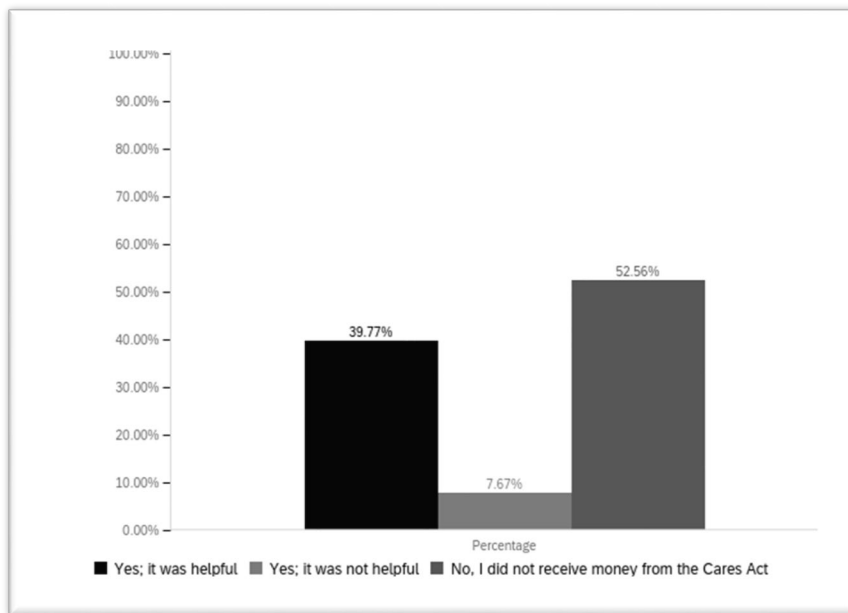


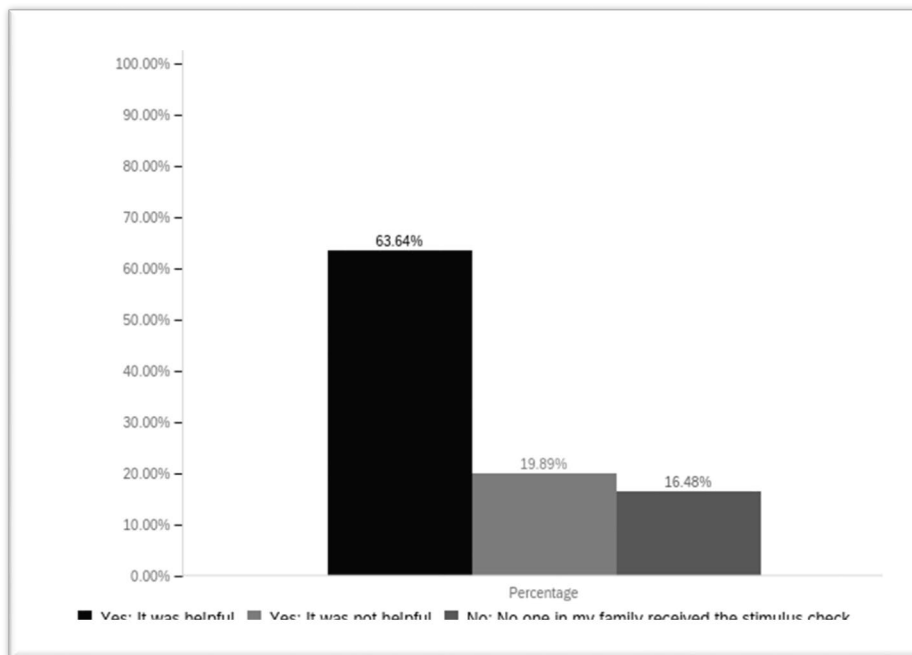
Figure 20: Q23. Did you qualify for the \$1200 stimulus check, and was it helpful to your financial situation?

Figure 20 shows that only 38.77% of the students who participated in the survey received money from the first stimulus, and 6.25% of them did not find it useful to their financial situations. Of the participants, 60.23% did not qualify for the stimulus.



*Figure 21: Q24. Did you receive money from MTSU under the CARES Act, and was it helpful to your financial situation?*

*Figure 21* shows that 39.77% of the student received funding through the CARES Act and found it to be helpful to their financial situation. 7.67% of the students received funding but did not find it helpful. Lastly 52.56% did not receive money from the CARES Act.



*Figure 22: Q25. Did people in your family, excluding yourself, qualify for the \$1200 Stimulus Check, and was it helpful to your financial situation?*

*Figure 22* shows that 83.53% of the participants' family members received the stimulus, and 63.64% found it to be useful to their financial situations. Of all the participants, only 16.48% had no stimulus recipients within their household.

**Conclusion:**

While Middle Tennessee State University's students were overall neutral when gauging their financial capabilities; they scored within range at 53.33% on the Big Three Questions, developed by Olivia Mitchell and Annamarie Lusardi, when compared to previous studies such as Montgomery Barreto's study of which two separate samples scored 55.63% and 41.4% respectively.

"Money Matters on Campus" declared that 35% of their adult participants had taken a personal finance course; Students at Middle Tennessee State University scored significantly higher at 73.88%. Though a promising result, it is likely that such a high percentage was due to the survey being advertised within a variety of courses within the Jones College of Business.

Main sources of income among the students come from parents or legal guardians, scholarships, and jobs. Results from the study reveal that 53.08% of the students do not consider themselves to be financial independent from their studies, and 38.10% rely on their parent or legal guardian to supplement their income in order to pay for their expenses. Given the qualifications of tax dependency, these 38.10% of participants would be considered dependents so long as they are under the age of 24.

The main method of paying for college tuition was through scholarships followed in descending order by out-of-pocket funds, loans, and parents or legal guardians. In conjecture to these results, the most significant amounts of debt were from student loans, which totaled approximately 29.82% of the students' overall debt.

Before the introduction of COVID-19, only 41.46% of the students utilized a full budget to organize their finances, with 28.01% only budgeting bills, and 20.53% not organizing their finances at all. According to the survey, these areas changed significantly during the pandemic as the students utilizing a full budget have increased by 9.82%. Student who only budget their bills have decreased by 2.37% and those who do not commit to a budget increased by 2.55%. Overall, there has been a positive change in the financial understanding of college students at Middle Tennessee State University as more students have committed to organizing their finances.

While financial assistance was offered during the pandemic, many college students at Middle Tennessee State University were not eligible to receive them. The most significant reason for ineligibility among college students was their dependency status, given that full-time students as well as adults under 24 are often claimed under their parent's or legal guardian's taxes.

The majority of college students at Middle Tennessee State University were not affected by the job layoffs that occurred during the pandemic as reported by 72.65% of the participants. Similarly, 74.64% of the participants did not file for unemployment due to the pandemic. The results from the survey also showed that 56.29% of the students were not essential workers, of which 9.12% of the participants reported being unemployed during the pandemic, as shown in *FIGURE 16*. More data will need to be collect in order to determine all areas of employment for the students at Middle Tennessee State University as there is currently a significant gap between employed, essential, and unemployed students.



The matter of dependency was not an issue under the CARES Act, thus an additional 7.67% of the students were able to receive funding in comparison to the stimulus. There were barriers to receiving funding through the act as well, as one must not only have filed for FASFA but also had to have been deemed eligible for federal financial aid.

With the results of the survey, it can be determined that the students at Middle Tennessee State University did gain financial understanding as more students utilized budgeting after the pandemic began as opposed to before the introduction of COVID-19. A significant number of students were not affected by the mass layoffs that occurred, thus allowing their sources of income and billings to remain relatively stable. That being said, those who were affected financially by the pandemic were likely at a loss in regard to federal aid as most of the students did not qualify for the initial stimulus nor did they qualify for funding through the CARES Act.

## References:

- Barreto, Montgomery. "Analyzing Financial Literacy Among Undergraduate Students and Current Methods of Increasing Financial Literacy." *Middle Tennessee State University*, 2019.
- "CARES Act Student Emergency Aid Grant FAQ & Required Reporting Requirements." *Coronavirus*, HSC, 15 Jan. 2021, [www.unthsc.edu/coronavirus/cares-act-student-emergency-aid-grant-faq-required-reporting-requirements/#:~:text=The%20federal%20government%20has%20established,Federal%20Student%20Aid%20\(FAFSA\).](http://www.unthsc.edu/coronavirus/cares-act-student-emergency-aid-grant-faq-required-reporting-requirements/#:~:text=The%20federal%20government%20has%20established,Federal%20Student%20Aid%20(FAFSA).)
- "IRS Tax Year 2020 1040 and 1040-SR Instructions." *IRS*, Internal Revenue Service, 2020, [www.irs.gov/pub/irs-pdf/i1040gi.pdf](http://www.irs.gov/pub/irs-pdf/i1040gi.pdf).
- LUSARDI, A., & MITCHELL, O. (2011). "Financial literacy around the world: An overview." *Journal of Pension Economics and Finance*, 10(4), 497-508.  
doi:10.1017/S1474747211000448
- Terrell, Kenneth. "Stimulus Checks: Who Is Eligible and When Will You Get Them?" *AARP*, 2021, [www.aarp.org/politics-society/advocacy/info-2020/coronavirus-stimulus-checks.html#:~:text=Call%20the%20IRS%20toll%2Dfree,filed%20jointly%20will%20receive%20%242%2C400.](http://www.aarp.org/politics-society/advocacy/info-2020/coronavirus-stimulus-checks.html#:~:text=Call%20the%20IRS%20toll%2Dfree,filed%20jointly%20will%20receive%20%242%2C400.)

Zapp, Daniel. "Money Matters On Campus." *Everfi*, 2019, [everfi.com/wp-content/uploads/2019/05/MoneyMatters-2019.pdf](https://everfi.com/wp-content/uploads/2019/05/MoneyMatters-2019.pdf).

## **Appendix A: Survey**

IRB Primary Investigator: Patricia Hummel

PI Department & College: Economics and Finance, Jones College of Business

Faculty Advisor: Keith Gamble

Protocol Title: Analyzing College Students' Finances and How They Were Impacted By COVID-19

Protocol ID: 21-1053 2q      Approval Date: 10/22/20      Expiration Date:  
10/31/2021

### **Information and Disclosure Section**

1. **Purpose:** This research project is designed to: compare the finances of college students at Middle Tennessee State University both before and after the introduction of COVID-19 as a means to determine if the students have gained more financial understanding due to the financial concerns and assistance that surfaced during the pandemic.

2. **Description:** Completion of a survey.

3. **Duration:** The whole activity should take about 5-10 minutes. The participants must at least take 0 minutes. Here are your rights as a participant: Your participation in this research is voluntary. You may skip any item that you don't want to answer, and you may stop the survey at any time. If you leave an item blank by either not clicking or entering a response, you may be warned that you missed one, just in case it was an accident. But you can continue the study without entering a response if you didn't want to answer any questions. Some items may require a response to accurately present the survey.

4. **Risks & Discomforts:** There are minimal risks to participating in this survey. No sensitive data will be collected. No personally identifiable data will be collected.
5. **Benefits:** Researchers will have better data regarding MTSU student's personal finance knowledge and the best methods for improving student's knowledge on personal finance. Some students, in participating classes, may obtain extra credit for completing this survey. Withdrawal is permitted at anytime.
6. **Identifiable Information:** You will NOT be asked to provide identifiable personal information.
7. **Compensation:** None
8. **Confidentiality:** All efforts, within reason, will be made to keep the personal information private, but total privacy cannot be promised. Your information may be shared with MTSU or the government, such as the Middle Tennessee State University Institutional Review Board, Federal Government Office for Human Research Protections, if you or someone else is in danger or if we are required to do so by law.
9. **Contact Information.** If you should have any questions about this research study or possibly injury, please feel free to contact Patricia Hummel by telephone 615-561-0623 or by email [pjh3f@mtmail.mtsu.edu](mailto:pjh3f@mtmail.mtsu.edu) OR my faculty advisor Keith Gamble at 615-494-8613 or [Keith.Gamble@mtsu.edu](mailto:Keith.Gamble@mtsu.edu). You can also contact the MTSU Office of Compliance via telephone 615-494-8918 or by email to [compliance@mtsu.edu](mailto:compliance@mtsu.edu). This contact information will be presented again at the end of the survey.

PRS Participant Response Section (Please select all that apply.)

- I have read this informed consent document pertaining to the above identified research. (1)
- The research procedures to be conducted are clear to me. (2)
- I confirm that I am 18 years or older. (3)
- I am aware of the potential risks of the study. (4)

Consent By clicking below, I affirm that I freely and voluntarily choose to participate in this study. I understand I can withdraw from this study at any time without facing any consequences.

- No, I do not consent. (1)
- Yes, I consent. (2)

Q1. Do you consider yourself to be financial literate?

- Definitely Yes (1)
- Pretty Much (2)
- Unsure/Neutral (3)
- Not Really (4)
- Definitely Not (5)

Q2. How would you rate your ability to handle your finances?

- 0 (0)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)

Q3. Have you ever taken a finance course?

- Yes (1)
- Unsure (2)
- No (3)

Q4. Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- More than \$102 (1)
- Exactly \$102 (2)
- Less than \$102 (3)
- Do not know (4)
- Refuse to answer (5)

Q5. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

- More than today (1)
- Exactly the same (2)
- Less than today (3)
- Do not know (4)
- Refuse to answer (5)



Q6. Please tell me whether this statement is true or false. “Buying a single company’s stock usually provides a safer return than a stock mutual fund.”

- True (1)
- False (2)
- Do not know (3)
- Refuse to answer (4)

Q7. Before COVID-19, Did you commit to a budget?

- I organized my income and expenses (1)
- I organized my bills, but not much else (2)
- I did not use a budget (3)

Q8. Pre-COVID: Determine what percentage of your income was dedicated to these areas(Must add up to 100)

Bills(Rent, Car, Insurance, loans, etc) : \_\_\_\_\_ (1)

Necessities(Groceries, Toiletries(Not Makeup), Supplies) : \_\_\_\_\_ (2)

Miscellaneous Goods( Subscriptions, Social Events, Decor, Non-essential Electronics, etc) : \_\_\_\_\_ (3)

Savings : \_\_\_\_\_ (4)

Total : \_\_\_\_\_

Q9. Before the impact of COVID-19, did you consider yourself financially stable?

- Definitely Yes (1)
- Pretty much (2)
- Unsure/Neutral (3)
- Not really (4)
- Definitely not (5)

Q10. Before COVID, What was your earned Income?

- 0-9,999 (1)
- 10,000-19,999 (2)
- 20,000-29,999 (3)
- 30,000-39,999 (4)
- 40,000-49,999 (5)
- 50,000+ (6)
- Unemployed (7)

Q11. Determine the source(s) of your income( Must Add Up to 100)

Job : \_\_\_\_\_ (1)

Loan : \_\_\_\_\_ (2)

Scholarship : \_\_\_\_\_ (3)

Parents/Legal Guardians : \_\_\_\_\_ (4)

Other : \_\_\_\_\_ (5)

Total : \_\_\_\_\_

Q12. Do you consider yourself financially independent? (In reference to parents/legal guardians)

- Yes (1)
- No (2)

Q13. Do you pay 50% or more of your bills and/or living expenses?

- Yes (1)
- No (2)

Q14. How do you pay for your college education? (Choose One or More)

- Scholarship (1)
- Loans (2)
- Parents (3)
- Out of Pocket (4)

Q15. Determine the percentages of your debt( If you have no debts, put 100 in the None category)

Student Loans : \_\_\_\_\_ (1)

Personal Loans : \_\_\_\_\_ (2)

Mortgage/Car Loans : \_\_\_\_\_ (3)

Credit Cards : \_\_\_\_\_ (4)

None. : \_\_\_\_\_ (5)

Total : \_\_\_\_\_

**End of Block: Finances: Pre-COVID-19**

---

**Start of Block: After-Covid**

Q16. Were you laid off from your job due to COVID-19?

- Yes (1)
- No (2)

Q17. Did you file for Unemployment due to COVID-19?

- Yes (1)
- No (2)

Q18. Were you an essential Worker?

- Yes (1)
- No (2)

Q19. After COVID, What was your earned income?

- 0-9,999 (1)
- 10,000-19,999 (2)
- 20,000-29,999 (3)
- 30,000-39,999 (4)
- 40,000-49,999 (5)
- 50,000+ (6)
- Unemployed (7)

Q20. Do you commit to a Budget?

- I organize my income and expenses (1)
- I organize my bills, but not much else (2)
- I do not use a budget (3)

Q21. Have you noticed a change in your spending habits since the introduction of COVID-19?

- Yes (1)
- No (2)
- Unsure (3)

Q22. After COVID-19: Determine how much of your income was dedicated to each area.

Bills(Rent, Car, Insurance, loans, etc) : \_\_\_\_\_ (1)

Necessities(Groceries, Toiletries(Not Makeup), Supplies : \_\_\_\_\_ (2)

Miscellaneous Goods( Subscriptions, Social Events, Decor, Non-essential Electronics, etc) : \_\_\_\_\_ (3)

Clothing(Face Masks, gloves, etc) : \_\_\_\_\_ (4)

Savings : \_\_\_\_\_ (5)

Total : \_\_\_\_\_

Q23. Did you qualify for the \$1200 stimulus check, and was it helpful to your financial situation?

- Yes; It was helpful (1)
- Yes; It was not helpful (2)
- No, I did not qualify (3)

Q24. Did you receive money from MTSU under the CARES Act, and was it helpful to your financial situation?

- Yes; it was helpful (1)
- Yes; it was not helpful (2)
- No, I did not receive money from the Cares Act (3)

Q25. Did people in your family, excluding yourself, qualify for the \$1200 Stimulus Check, and was it helpful to your financial situation?

- Yes; It was helpful (1)
- Yes; It was not helpful (2)
- No; No one in my family received the stimulus check (3)

Q26. Have you noticed any additional expenses since the introduction of COVID?

- Yes (1)
- No (2)
- Unsure (3)

Q27. Is there anything you would like to share about your experience navigating the pandemic?

---

---

---

---

---

**End of Block: After-Covid**

---



## Appendix B: IRB Approval

### IRB

#### INSTITUTIONAL REVIEW BOARD

Office of Research Compliance,

010A Sam Ingram Building,

2269 Middle Tennessee Blvd Murfreesboro, TN 37129 FWA: 00005331/IRB Regn.. 0003571



### IRBN007 – EXEMPTION DETERMINATION NOTICE

Thursday, October 22, 2020

Protocol Title **Analyzing College Students Finances and How They Were Impacted By COVID-19**

Protocol ID **21-1053 2q**

Principal Investigator **Patricia Hummel** (Student)

Faculty Advisor Keith Gamble

Co-Investigators NONE

Investigator Email(s) *pjh3f@mtmail.mtsu.edu; keith.gamble@mtsu.edu*

Department/Affiliation Economics and Finance

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review Board (IRB) through the **EXEMPT** review mechanism under 45 CFR 46.101(b)(2) within the research category **(2) Educational Tests, surveys, interviews or observations of public behavior** (Qualtrics Survey). A summary of the IRB action and other particulars of this protocol are shown below:

or observations of public behavior (Qualtrics Survey). A summary of the IRB action and other particulars of this protocol are shown below:	
IRB Action	EXEMPT from further IRB review***
Date of Expiration	10/31/2021 Date of Approval: 10/22/20
Recent Amendment:	NONE
Sample Size	<input checked="" type="checkbox"/> ONE HUNDRED (100)
Participant Pool	<input type="checkbox"/> Healthy adults (18 or older) - MTSU Students
Exceptions permitted	Online consent followed by internet-based survey using Qualtrics is (Qualtrics links on file).
Type of Interaction	Virtual/Remote/Online Interview/survey

In person or physical– Mandatory COVID-19 Management  
(refer next page) *Mandatory Restrictions* **1. All restrictions for exemption apply.**

**2. The participants must be 18 years or older.**

**3. Mandatory ACTIVE informed consent. Identifiable information including, names, addresses, voice/video data, must not be obtained.**

**4. NOT approved for in-person data collection.**

*Approved IRB Templates* *IRB Templates:* Online Informed Consent

*Non-MTSU Templates:* Recruitment Email & Verbal  
recruitment script

*Research Inducement* NONE

*Comments* NONE

\*\*\*Although this exemption determination allows above defined protocol from further IRB review, such as continuing review, MTSU IRB will continue to give regulatory oversight to ensure compliance.

IRBN007 (Ver: 2.0; Rev: 08/14/2020)  
Institutional Review Board, MTSU

FWA: 00005331  
FWA: 00005331

IRB Registration. 0003571  
IRB Registration. 0003571

**Summary of the Post-approval Requirements:** The PI and FA must read and abide by the post-approval conditions (Refer “*Quick Links*” in the bottom):

- **Final Report:** The Faculty Advisor (FA) is responsible for submitting a final report to close-out this protocol before **10/31/2021**; if more time is needed to complete the data collection, the FA must request an extension by email. **REMINDERS WILL NOT BE SENT. Failure to close-out (or request extension) may result in penalties** including cancellation of the data collected using this protocol or withholding student diploma.
- **Protocol Amendments:** IRB approval must be obtained for all types of amendments, such as:
  - Addition/removal of subject population and sample size.
  - Change in investigators.
  - Changes to the research sites – appropriate permission letter(s) from may be needed.
  - Alternation to funding.
  - Amendments must be clearly described in an addendum request form submitted by the FA.
  - The proposed change must be consistent with the approved protocol and they must comply with exemption requirements.

□ **Reporting Adverse Events:** Research-related injuries to the participants and other events, such as, deviations & misconduct, must be reported within 48 hours of such events to [compliance@mtsu.edu](mailto:compliance@mtsu.edu).

- **Research Participant Compensation:** Compensation for research participation must be awarded as proposed in Chapter 6 of the Exempt protocol. The documentation of the monetary compensation must Appendix J and MUST NOT include protocol details when reporting to the MTSU Business Office.

- **COVID-19:** Regardless whether this study poses a threat to the participants or not, refer to the COVID-19 Management section for important information for the FA.

#### **COVID-19 Management:**

The FA must enforce social distancing guidelines and other practices to avoid viral exposure to the participants and other workers when physical contact with the subjects is made during the study.

- The study must be stopped if a participant or an investigator should test positive for COVID-19 within 14 days of the research interaction. This must be reported to the IRB as an “adverse event.”
- The FA must enforce the MTSU’s “Return-to-work” questionnaire found in Pipeline must be filled and signed by the investigators on the day of the research interaction prior to physical contact.
- PPE must be worn if the participant would be within 6 feet from the each other or with an investigator.
- Physical surfaces that will come in contact with the participants must be sanitized between use
- **FA’s Responsibility:** The FA is given the administrative authority to make emergency changes to protect the wellbeing of the participants and student researchers during the COVID-19 pandemic. However, the FA must notify the IRB after such changes have been made. The IRB will audit the changes at a later date and the PI will be instructed to carryout remedial measures if needed.

#### **Post-approval Protocol Amendments:**

The current MTSU IRB policies allow the investigators to implement minor and significant amendments that would not result in the cancellation of the protocol’s eligibility for exemption. ***Only THREE procedural amendments will be entertained per year (changes like addition/removal of research personnel are not restricted by this rule).***

#### **Date Amendment(s) IRB Comments**

NONE    NONE.            NONE

#### **Post-approval IRB Actions:**

The following actions are done subsequent to the approval of this protocol on request by the PI or on recommendation by the IRB or by both.

Date	IRB Action(s)	IRB Comments
NONE	NONE.	NONE

#### **Mandatory Data Storage Requirement:**

All research-related records (signed consent forms, investigator training and etc.) must be retained by the PI or the faculty advisor (if the PI is a student) at the secure location mentioned in the protocol application.

The data must be stored for at least three (3) years after the study is closed.

Additionally, the Tennessee

IRBN007 – Exemption Notice (Stu)

Institutional Review Board, MTSU  
0003571

FWA: 00005331

IRB Registration.

State data retention requirement may apply (*refer “Quick Links” below for policy 129*).

Subsequently, the data may be destroyed in a manner that maintains confidentiality and anonymity of the research subjects. **The IRB reserves the right to modify/update the approval criteria or change/cancel the terms listed in this notice.** Be advised that IRB also reserves the right to inspect or audit your records if needed.

Sincerely,

Institutional Review Board  
Middle Tennessee State University

Quick Links:

- Post-approval Responsibilities:  
<http://www.mtsu.edu/irb/FAQ/PostApprovalResponsibilities.php>
- Exemption Procedures: <https://mtsu.edu/irb/ExemptPaperWork.php>
- MTSU Policy 129: Records retention & Disposal:  
<https://www.mtsu.edu/policies/general/129.php>