EXAMINING THE RELATIONSHIP BETWEEN WEALTH AND HAPPINESS FOR COLLEGE STUDENTS

by

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Modern college students are faced with a massive amount of financial stress while completing their time at university. Small wealth events, both expected and unexpected, can have large affects on the happiness of students. This thesis seeks to outline and understand the relationship between wealth and happiness for college students. I used secondary research to define and explain pertinent societal and interpersonal forces. Additionally, a primary research study I conducted provides first hand explanation for how wealth events affect students and non-students differently. Overall, a clearer view of the wealth-happiness relationship for college students is revealed.

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Introduction

Why Write This Thesis?

Many people claim that college represents “the best four years of a person’s life.” While this may be an exaggeration, for young adults in the United States, college represents a time of great personal and educational growth. Students develop habits that can last them a lifetime. Colleges, themselves, seek to cultivate learning environments that promote creativity, critical thinking, and the open exchange of ideas. Beyond educational pursuits, students can use college as a time to learn how to live on their own, build meaningful interpersonal relationships, and set the foundation for a successful adult life.

In the four years that I have been at the University of Oregon, I have witnessed all of the positive college experiences mentioned above. Yet I have also witnessed the intense amount of stress that can be placed upon college students. Some of this stress can be result from difficult exams, late night studies, and the natural rigors of a higher education. However, another major stressor I have personally witnessed, and of which I have heard countless stories, is that of financial burden. I have spent nights texting into the early morning hours with friends wondering how they will pay their next month’s rent. I’ve seen individuals struggle to decide whether they can work another shift and forgo their mounds of schoolwork for another day. I know students who have taken terms away from school simply because they could not afford three more months of tuition. For most four-year university students, their time spent at college does not come without the stress of juggling finances. For many, this stress detracts, distracts, and takes away from the true mission that colleges strive to create.

One morning while I was still in the process of deciding on what I was going to write my thesis, I had a lively debate with friends around the breakfast table. It centered around whether money itself leads to happiness. My argument, in support of the relationship, was inherently simple: in a capitalistic society, money is the necessary vehicle to achieving one's goals and needs. Doesn’t every person know the joy of finding a five-dollar bill on the ground? That momentary joy, that unexpected money brings, cannot be denied. However, my friend brought up great points in rebuttal. Our education system preaches learning for the sake of knowledge. Students are taught to pursue a degree they are passionate about rather than solely looking at potential salaries. In addition, there are many activities that require little to no financial investment that can bring a person joy and happiness. Our debate itself ended that morning, but for myself, the purpose of my thesis was born.

The focus of my thesis became to describe and define aspects of this wealth-happiness relationship for college students. In contrast to other wealth-happiness studies that I had read in my psychology classes, which focused on annual income levels, I instead wanted my thesis to investigate the immediate relationship between personal wealth events and the impacts they have on the happiness and well-being of college students. How does an expected expenditure, like a rent payment, or the unexpected expense of an extra book, affect the happiness of a college student immediately after the event occurs? I also wanted to investigate the social psychological theories and cultural forces that could lead to wealth events which affect college students more than the general public.

The inherent goal of this thesis is not to win a breakfast table debate. The goal is to educate and inform. My hope is that it can be a resource, both for future college students, and those who are supporting them, either financially or morally. College is a hectic time. In four years, young adults go from dependent high school students to independent working adults. For many, the stress of these four years makes up more of their college experience than their education does. My hope is that this thesis can help to change that. If college students can understand the financial stress that comes from everyday events of school life, and prepare for this stress, it will enable them to take full advantage of their time spent at university. For those supporting college students, my goal is that this thesis will allow them to understand that even though they have lived through college, their perception and understanding of the financial stressors faced by today's students may be inaccurate and based off a faulty comparison. If I happen to win a breakfast table debate as well, that is just a bonus.

The Hypothesis

Moving forward, this thesis will center around a central hypothesis. This hypothesis is that the happiness of college students is more affected by wealth events than the general public predicts and perceives it to be. This hypothesis draws from two central tenants. The first is that the happiness of college students, due to multiple internal and external factors, is more susceptible to being affected by wealth events than the happiness of the general public. This tenant is rooted in societal factors, internal psychological workings, and the evolving college environment, all of which will be explained in the secondary research section of this thesis. The second tenant is that the general public underestimates and incorrectly perceives how wealth events affect the happiness of college students. This inaccurate perception can be directly attributed to the general public incorrectly understanding today's college environment, and drawing from memories of a university experience that is incredibly different from that of the modern college.

Thesis Structure

This thesis will consist of two primary sections. First is a section to synthesize secondary research around the wealth-happiness relationship for college students. This section includes discussions of past psychological theories, behavioral differences between college students and the general population, changes in societal forces, and differences in perception. The goal of this section will be to generate reasons for, and support, this thesis's hypothesis. The second section will consist of a primary research study, its results and a discussion of these findings. The goal of this section will be to test empirically this thesis's hypothesis, and analyze whether the results of the primary survey support or refute the hypothesis, and towards what directions of future research they point.

Secondary Research Analysis and Synthesis

A Working Definition of Happiness and Wealth

For different individuals, happiness can be defined in a variety of ways. Biologists might define happiness by focusing on the release of the reward chemical dopamine in an individuals' brain. For the purpose of this thesis and its research, happiness will be examined through a social psychological lens. Distinguished social psychologist Sonja Lyubomirsky provided a great working definition of psychology in her 2007 book "The How of Happiness", defining happiness as "the experience of joy, contentment, or positive well-being, combined with a sense that one's life is good, meaningful, and worthwhile" (Lyubomirsky, 2007, 32). Moving forwards in this thesis, this definition will serve as an outline for how happiness will be viewed. The choice to view happiness through a social-psychological lens was more appropriate given the nature of the primary research conducted in this work, and enabled the wealth-happiness relationship to be examined alongside other prevalent societal forces in modern culture.

Within Lyubomirsky's definition lie references to multiple modern and historical psychological theories that will be discussed in this paper. Positive well-being can be directly found in the first levels of Maslow's Hierarchy of Needs. A meaningful and worthwhile life are the goal of Self-Determination Theory and autonomy. All of these positive experiences will however be viewed through their interaction with wealth. Many psychological theories view human needs and their fulfillment through an abstract lens. The purpose of the secondary research behind this paper is to examine wealth as a vehicle for fulfillment, and subsequently, happiness. Whereas many other studies around happiness and wealth examine the correlational relationship between the two, this thesis will attempt to define and explain potential drivers behind a direct relationship, and the ways that this direct relationship differs amongst individuals. For the sake of clear definition, wealth will be defined for the rest of this thesis as a person's accrued assets, with a primary focus on immediate wealth (cash, savings and other financial assets). Events focused on the immediate alteration of a person's wealth will focus on either expenses that require immediate payments, or influxes of cash that immediately increase an individual's wealth.

Psychological Theories

Introduction

In this section of the thesis, two psychological theories will be used to explain why college students are likely to be more affected by immediate changes in personal wealth. These two theories focus on need fulfillment and personal autonomy, two factors important to a person's happiness. While neither of these theories directly explains the relation between wealth and happiness as a whole, they do describe drivers behind happiness. By viewing monetary wealth as a force impacting these drivers, it's subsequent impact on happiness can be postulated.

Maslow's Hierarchy of Needs

Maslow's Hierarchy of Needs provides a great basis for insight into what brings human beings satisfaction, and what humans actually need to live fulfilled lives. While Maslow's Hierarchy is a bit dated in terms of current Psychological theories, (being published in 1943), it does provide a baseline and context for not only the relationship between wealth and happiness, but also many other psychological theories. The potential impacts of wealth can be easily seen in relation to the different levels of Maslow's hierarchy. Maslow's hierarchy of needs breaks down human needs into five different levels, often arranged in a pyramid (See Figure 1**).** For a person to be able to advance up the pyramid, and reach for their next "level" of needs, they must first fulfill those on their current level. Individuals not able to meet their needs are likely to experience distress, and consequently unhappiness.

Figure 1: Maslow's Hierarchy of Needs

An article by Saul Mcleod, a Professor of Psychology at the University of Manchester, provides more context on the importance of Maslow's different levels of needs. He describes the first four levels of Maslow's Hierarchy (Physiological Needs, Safety Needs, Love and Belonging Needs, Esteem Needs) as deficiency needs (Mcleod, 2020, 3). Mcleod states that "Deficiency needs arise due to deprivation and are said to motivate people when they are unmet. In addition, the motivation to fulfill such needs will become stronger the longer the duration they are denied. For example, the longer a person goes without food, the more hungry they will become.” Many things we consider as basic human rights, such as food, water, shelter, and safety, are found categorized as deficiency needs. In the context of a capitalist society, all of these require money and wealth to be fulfilled. For college students and other low-income individuals who do not have established savings, immediate changes in their wealth can have larger effects on their ability to meet these deficiency needs.

According to Maslow’s hierarchy, only once a person has fulfilled these first four levels of needs can they focus on the final level of Maslow’s hierarchy, Self-Actualization. Mcleod describes Self Actualization as a Growth Need. These needs “do not stem from a lack of something, but rather from a desire to grow as a person” (Mcleod, 2020, 5). In the context of a college setting, these growth needs could be viewed as a student’s desire to learn and pursue the college education they are paying thousands of dollars a year to access. Students unable to meet their growth needs and capitalize on the education they are paying for are likely to experience distress and unhappiness.

Self Determination Theory

The belief that self-actualization and personal fulfillment can only be achieved once more basic needs are met is reflected in a common human motivation theory known as Self Determination Theory. Self Determination Theory focuses on three basic human Psychosocial desires: autonomy, competence, and relatedness (Center for Self Determination Theory, 2020). All three of these desires can be seen in the context of the collegiate environment, but, the former two, autonomy and competence, are especially important in the world of higher academia. According to Self Determination Theory, the desire for autonomy and competence would be the drivers behind students achieving and learning in the higher education.

Author Dan Pink focused specifically on the idea of Autonomy in a TED Talk he gave in 2009. While the talk focuses on motivation in the corporate landscape, the principles can be easily translated to the world of education. Pink cites multiple studies that support the idea that intrinsic motivation is key to individuals acting with true autonomy, and that true autonomy is linked to greater production, innovation, and work-fulfillment (Pink, 2009). Translated to the world of collegiate education, this means that true autonomy is key in order for students to capitalize on their education.

Yet Dan Pink states that for intrinsic motivation to be met, extrinsic motivators must first be met. Pink directly states that “money must not be issue” in order for workers to act with true autonomy and reach higher levels of self-actualization. In the corporate context, the money issue is solved through adequate pay. For college students, this money issue is not so easily resolved. According to Dan Pink and Self Determination Theory, college students will be prevented from acting autonomously if the financial stressors are not addressed or solved. Without this autonomy, university students will fail to maximize and benefit from their time at college. Whether in a business or educational environment, an individual’s life is significantly impacted when monetary issues represent a basic, deficiency need.

Inferring the Impact of Wealth

What Maslow’s Hierarchy of Need and Self Determination Theory do not highlight, and miss within the aforementioned context of a capitalist culture, is that wealth and money are the underlying vehicle that facilitates the satisfaction of most deficiency needs. Money allows individuals to eat, drink, and sleep with a roof over their head. The satisfaction of these needs is what enables individuals to feel happiness. A student unable to make rent, or pay for groceries, will be unable to satisfy their basic deficiency needs. Unhappiness will spawn directly from this lack of satisfaction. On top of this, these students will also be unable to satisfy their growth needs, and will not be able to pursue the self-fulfilling education that many collegiate universities stand to promote. According to Self Determination Theory and Dan Pinks, if money IS an issue, then students will not be able to generate internal motivation or act with autonomy. Their education and self-actualization will likely go unachieved, and more unhappiness will spawn from this reality.

Summary

The two above theories provide a framework for how wealth can impact the drivers behind happiness in the context of a college environment. While all individuals are subject to the need fulfillment underlying both theories, there are specific forces and events faced by college students that cause their happiness to be more extremely impacted by immediate changes in personal wealth. These forces are both internal, characterized by behavioral differences amongst college students, and societal, driven by changes in culture and the cost of college. Subsequent sections of this thesis will highlight specific examples of these forces.

Age Related Drivers

Lack of Financial Education

In examining the wealth happiness relationship amongst college students, the behavioral tendencies of young adults must be examined closely. For many college students, university represents their first experience living away from parents and guardians, supporting themselves financially, and being in full control of their schedule and activities. According to a study conducted by ING Direct, the largest direct bank in the United States, over 83% of teens “admit they don’t know much about personal finance” (Tuggle, 2012). These late teens and those in their early twenties, living on their own at college, are often forced to make financial decisions from an uninformed and unexperienced point of view. These decisions, if incorrect, can further amplify the negative effects that wealth can have on their happiness.

Impulsivity and Conspicuous Spending

In direct relation to a culture of instant gratification (which will be discussed later), young adults are also the most likely to make impulsive decisions in pursuit of short-term gratification. According to a 2015 study conducted by four European Professors of Psychology, impulsive individuals are far more likely to take short term payoffs, regardless of whether they are presented with options for larger payoffs at a later time (Bialaszek, 2015). For college students, these impulsive decisions come with real world financial ramifications, often for the first time in their lives.

In addition to being impulsive, college students are more likely to spend conspicuously in order to satisfy their need for in-group affirmation. Conspicuous spending is defined as non-essential spending, usually in-place-of, or superseding, essential expenses. According to a 2008 study conducted at the University of Otago, young adults were more likely to conspicuously spend, with "non essential consumption seen as 'deserved' and a 'reward' for behavior such as studying or working" (Penman, 2008, Para. 3). Furthermore, the study's results indicated that "Social pressure is found to be the key driver of consumption choices in this group, with the majority of spending decisions made impulsively" (Penman, 2008, Para. 4). College students are more likely to purchase the shirt all their friends have or spend outside their budget to go to a concert that all their friends will be attending. Conspicuous spending can be explained by re-examining Maslow's hierarchy. One of the deficiency needs outlined by Maslow was the need for belonging. For college students, this means approval from their peers. College students feel pressure to behave and consume in the same ways as their peers in order to receive this approval, whether it is large purchases, like clothing or events, or even smaller purchases, like drinks at the same bars. Conspicuous spending can be directly linked to a need for belongingness and external affirmation.

Summary

For many College students, their time spent at college represents their first time living on their own, and most students are living without proper financial education. This lack of financial knowledge, combined with tendencies to be impulsive and spend irrationally and intense peer pressures to meet in-group habits and behaviors, can lead many college students into precarious financial situations. Combined with the fact that these college students are unlikely to have accumulated savings in the first place, and many of these individuals may find themselves struggling to make the necessary payments to promote their wellbeing. Expenditures and cash savings, whether expected or not, can be forecasted as having larger emotional impacts, pointing to a more volatile relationship between wealth and happiness for college students.

Instant Gratification

Closely related to the concepts of impulsivity and maturity, instant gratification can be viewed as a behavioral driver behind the actions of college students that expose them to increased financial risk. While impulsivity can be linked to the younger age of college students, instant gratification is a larger cultural force that has arisen along-side advancement and usage increases in mobile and computer technology and information availability.

Information Availability

The increasing prevalence of a culture of instant gratification can be cited as having an effect on the relationship between wealth and happiness for younger generations. Social media, instant messaging, in addition to online grading and e-commerce have all vastly affected the process and rate at which younger generations communicate and receive information. College age individuals can view grades immediately after exams, receive paycheck deposits directly into their bank account, and make online purchases with the click of a button. These changes have changed the focus for many young people entirely towards the short term, instant results or feedback. Paying for a concert ticket or shirt in the short term may be prioritized over ensuring enough money is saved for next month's rent. Student loan debt recently topped $1.41 trillion, an increase of almost 120% over the last 10 years (Fields, 2019). In a world where college costs more than ever, not being able to focus on longer term expenses can be critically harmful to a college student's well-being.

Balancing Instant Gratification and Patience

Avner Ofner, an economics professor and historian at Oxford University, alternatively cites the importance of avoiding instant gratification in the pursuit of happiness. In his book, The Challenge of Affluence, Ofner states, "Well-being ... requires a sustainable balance between the present and the future … This also requires a personal capacity for commitment. Call this capacity prudence" (Ofner 2006, 3). In a culture that has become increasingly focused on short term goals and instant gratification, prudence and commitment have been stressed less and less to younger generations. Author and Lecturer Richard Reeves confirmed this, and wrote that "The "commitment strategies" required to balance immediate pleasures with the sacrifices necessary for lifelong well-being … are harder to form in an era of constant novelty" (Reeves 2006). Not learning these commitment strategies and having them undermined by modern culture and technology has left many members of the younger generations with short minded viewpoints.

According to Ofner's assertions, well-being, a primary aspect of happiness, is only achieved through a balance of the present and future. When examining a group of individuals like college students, who have been previously described in this thesis as having actions and focuses aimed towards short term pleasures, a clear imbalance can be seen. According to Ofner, this imbalance would likely decrease well-being, and subsequently decrease happiness. When paired with other forces outlined in this thesis, including a lack of financial education and monetary security, the tendency of college students to focus on instant gratification can be attributed as a driver behind their happiness's susceptibility to fluctuations in personal wealth.

Summary and Practical Expression

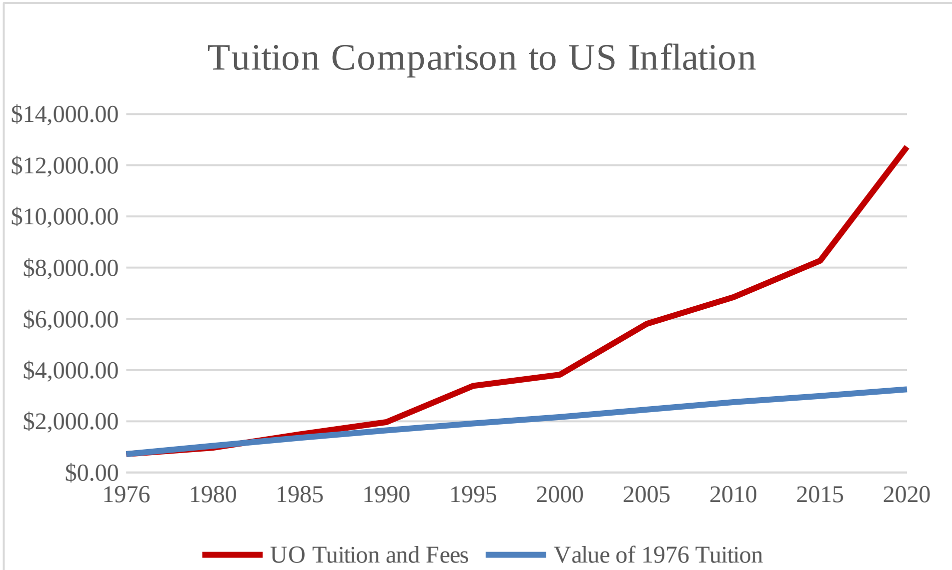
In the terms of this thesis and its primary study, this focus upon instant gratification would be reflected by college students being more affected by immediate wealth increases and decreases. Long term promises of wealth may feature as second fiddle to immediate influxes. College students would likely view the outflow of money for a necessity, such as rent, as being an immediate downfall, whereas older generations may instead process the payment as a promise of safe shelter for the next month. The primary research survey of this thesis has been specifically designed to examine immediate reactions to wealth related events, and to compare those reactions directly between individuals currently enrolled in higher education and those out of college.

The Increasing Financial Burden of College

Introduction

The previous two sections of this thesis have primarily focused on internal psychological drivers and behavioral characteristics that could lead college students to be more affected by immediate wealth changes. However, in application, these internal drivers directly interact with the increasing financial cost of college. This section will examine the increasing cost of college, and how it affects both college students, and the perceptions of non-college students.

The Rising Cost of Tuition



In order to accurately understand the stress that monetary related events place upon current college students, one must first understand the escalating cost of college itself. This cost, as it has increased over time, has placed more and more stress on college students, and their families. To use the University of Oregon as an example, the annual tuition and fees for an in-state student in 1976 was $714 (University of Oregon Registrar, 2014). In 2020, forty-four years later, this same number came in at $12,720, an increase of 1866% (College Tuition Compare, 2020). College is not as affordable to young adults in 2020 as it was almost 50 years ago, when many parents and grandparents of current college students were achieving their college degrees. Figure 2 provides a comparison between the rising cost of tuition and the value of the dollar according to inflation.

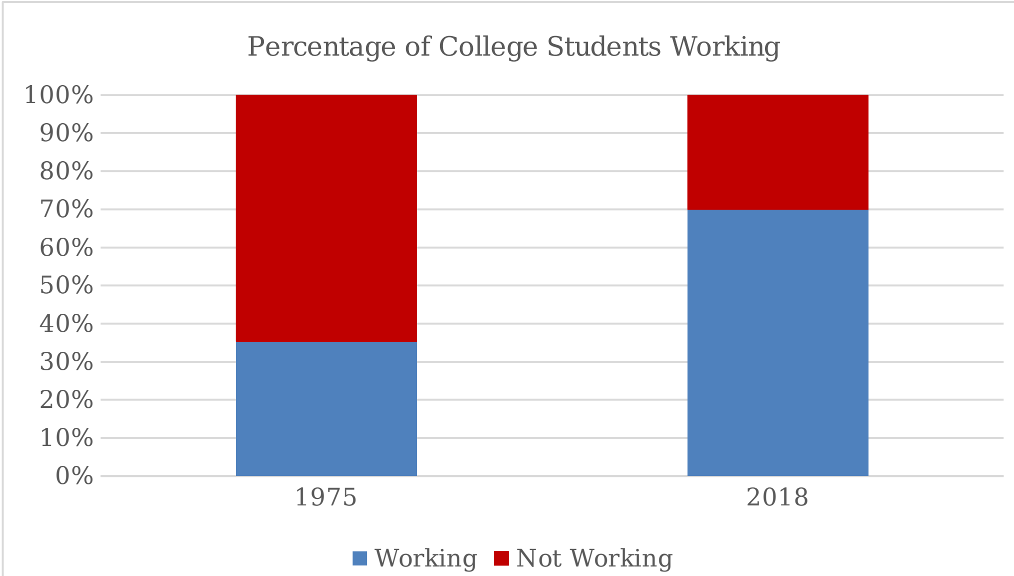
Figure 2: Tuition and Inflation Comparison

In 1976, a student could work 40 hours a week for 3 summer months, at the Oregon minimum wage of $2.30 per hour, and easily make the money necessary to pay for the next year's tuition (The Oregonian, 2014). In 2020, a student would have to work 40 hours a week at minimum wage for 28 weeks in order to solely meet the cost of tuition and fees for the next scholastic year. Additionally, all of these pertain solely to an in-state, public institution. The costs of out of state or private colleges are exorbitantly higher. Lastly, the above numbers do not consider the cost of room and board, and allow for no personal expenditures.

Work Amongst College Students

For most college students, to only work a summer job and have it cover the next year of school is not a viable option. Young adults pursuing their college degrees in 2020, if they are not lucky enough to have scholarships, or familial support, must instead turn to extensive loans, or grapple with working part time while they attend their classes. The weekly or monthly return of a paycheck is the only thing that allows many students to pursue a higher education. For a large majority of college students, budgets are spread thin, and unplanned or unexpected expenses can be catastrophic. According to a 2018 report from Georgetown University, almost 70% of college students work, with more than a quarter of all college students working full time (St. Amour, 2019). The current cost of attending a four-year university has forced college students to rely heavily on work income to meet their educational expenses. Combine a part time work schedule with a full-time course load, studying, and homework, and suddenly a college student’s time becomes stretched quite thin. Little time remains for exercise, leisure, or any activities that promote the emotional and personal well-being of the student, important factors for their happiness.

Differences in Perception



While the increase in the cost of college cannot be denied, what must also be considered is the effect that this increase has had on the outside perception of college life. According to the National Center for Education Statistics, in 1975 only 35.3% of full-time college students worked, with less than 5% working full time (NCES, 2012). A comparison to 2018 is featured in Figure 3. For many parents and grandparents of current college students, working during college was not necessary, and the financial stress of college was not as great as it is today. Many of these individuals, may in fact attribute their college experiences as being similar in nature to what current students are going through. The financial stress that current students face is not present in the memories of earlier generations. This perception is not ill-intended, but can have harmful effects on current college students.

Figure 3: Percentages of Students Working

This rosy memory of the college experience, while rooted in a lower cost of an education, can be accentuated by the mechanics behind personal memory. According to a study published in the *Journal of Experimental Psychology: General,* older adults, in comparison to younger individuals, are more likely to remember positive images versus negative ones (Charles, 2003). What this points to is an inclination for older individuals to favor positive memories over negative ones. The study supports an idea coined as "socioemotional selectivity", which is a theory that centers around the idea that "as people get older and become more aware of more limited time left in life, they direct their attention to more positive thoughts, activities and memories" (Charles 2003, 2). Older adults might be more inclined to remember solely the positive aspects of their college experience, and neglect to remember the moments of high stress, frustration or sadness. Combine this with the fact that many of these same individuals did not face equivalent financial stress during their four years in higher education, and many members of the older generation may be inclined to underestimate or even discredit the stress that current college students are experiencing.

Summary

As a whole, the above changes in the cost of college, combined with natural differences in perception, lead to potentially harmful differences in perceptions. Current college students, regardless of the financial compensation they receive, face a much higher college financial burden. To cope with this, a larger percentage of these individuals are working while attending school. This increased financial burden creates a culture where money is a greater stressor. In contrast, the older generation of past students, who already are likely to remember their college experience in a much more positive light, draw on experiences of college that feature a much smaller financial burden. This difference in experience and memory can lead to significantly different opinions about the modern college experience. It may also lead older individuals and those who attended school in the past to severely underestimate the impact of wealth on modern college students.

Previous Studies around Wealth and Happiness

Introduction

To this point, this thesis has attempted to look, in an abstract nature, at some of the forces that may cause college students to react more extremely to changes in personal wealth. There is, however, an extensive amount of past research that has been done on the link between personal wealth and happiness. While these studies have a variety of procedures and populations, they have for the most part focused on the link between income level and happiness. Whereas the primary research study for this thesis will focus on immediate changes in wealth, the alternative focuses of these studies do feature results and discoveries that can be applied as relevant to this thesis. Four specific studies are discussed below.

Gallup and Harvard University Polls

In modern research settings, many psychologists have attempted to solve the relationship between wealth and happiness. The majority of this research is on working age individuals, and mostly relates to sustained wealth (such as an annual income). One study, conducted by the Gallup Organization, was designed to test the effects of income on emotional well-being (the emotional quality of an individual's everyday experience —the frequency and intensity of experiences of joy, stress, sadness, anger, and affection that make one's life pleasant or unpleasant) and life evaluation (the thoughts that people have about their life when they think about it). The study found that Americans' emotional well-being rose logistically with income until a level around $75,000, after which, happiness no longer increased with rises in income (Kahneman, 2010). The study stressed how low income, and the financial difficulties that arise along with it, had a tendency to exaggerate the stresses of every-day life.

In a similar self-report study, conducted by Harvard University researchers, Americans with a net worth from $1.5 million to $15 million were asked about their own satisfaction in life. The study's findings refute those found by the Gallup Organization, as Harvard research found that individuals with wealth of $8 million or more were more satisfied with life that those with between $1.5 and $7.9 million (Donnelly 2018). However, this increase in happiness is only reported as marginal. Additionally, the study found that millionaires who had earned their own wealth reported themselves as significantly happier than those who had their wealth given to them.

Purdue Universities Contrasting Results

A 2018 study from Purdue University refutes this $75,000 income level, and points to multiple potential holes in the original research (Jebb, 2018). The study focuses on subjective well-being (SWB). SWB is a life evaluation approach that falls within the hedonistic domain, meaning that it centers happiness around maximization of pleasure and minimization of pain or discomfort (Albuquerque, 2010). The study found three separate income levels, each of which optimized “happiness” according to a different SWB testing method. Additionally, the study accounted for cultural and demographic differences, a factor cited as being absent in previous wealth-happiness research (Jebb, 2018). For the life evaluation test, a test focused around a person's own evaluation of their happiness in comparison to their surrounding world, an optimal income level of $95,000 was found in the United States (Jebb, 2018). For negative affect satiation, a longitudinal test focused on the evaluation and minimization of negative emotional feelings, the optimal income level was $75,000 (Jebb, 2018). Lastly, for positive affect satiation, a longitudinal test focused on the evaluation and maximization of positive emotional feelings, an income level of only $60,000 was found as optimal (Jebb, 2018). The study also found that as educational levels increased, so did the income level necessary to reach maximization for each of the three tests.

Most importantly, the study conducted by Purdue University touches on the mechanics that lead to the prevailing logistic curve found in wealth-happiness studies. The study cites that at lower income levels, wealth and money serve to satiate basic human needs for survival, such as shelter and food, both of which a person's SWB (Jebb, 2018). This idea is reminiscent of Maslow’s hierarchy of needs, referenced later in this thesis. According to the study, as income levels rise, wealth becomes less associated with need satiation and more directed towards desire-based pursuits (Jebb, 2018). In these cases, social income comparisons become increasingly prevalent and important, and can lead to the introduction of new negative effects of additional wealth. These social comparisons can begin to reduce SWB (Jebb, 2018). Lastly, in support of wealth as a vehicle to happiness, the study found that a higher income lead to greater levels of happiness only in regions where the wealth could be put to use for social comparison (Jebb, 2018). That is, in poorer regions where infrastructure may not exist for the abundance of personal wealth, and social comparisons cannot be drawn, high levels of wealth lead to no additional happiness.

Work on the Impact of Mindset

Recent work on the relationship between wealth and happiness has also revealed that the way an individual thinks about wealth and money may have an effect on their relationship between happiness and wealth. A study conducted by Binghamton School of management found that people who viewed wealth as an indicator of a happy life (known as happiness materialism) were less happy in their pursuit of wealth than people who viewed wealth as a sign of success (known as success materialism) (Steig, 2019). This study did not, however, focus on any specific correlation between income level and happiness.

This study, centered around on an opinion-based self-report survey, seemingly ignores any correlation between incremental wealth increases and happiness, and instead focuses on a larger mental attitude. Where the study seems to err is in its inherent link between wealth and materialism. For many low-income individuals, wealth is not a vehicle for material consumption. Instead, wealth provides the promise of safety and security, of food and shelter. A person without the ability to pay next month's rent is more-likely to view additional wealth as a source of security and happiness. A person who has safety in their current wealth standing is afforded the luxury of viewing additional wealth as a sign of their success, and not a satisfaction of immediate survival needs.

Applying these Studies to the College Demographic

In this thesis, the focus of the wealth happiness relationship will be centered around the lowest end of the scale. A 2016 National Postsecondary Student Aid study, conducted by the National Center for Education Statistics, reported that 98.1% of dependent undergraduate college age students earned less than $20,000 annually, while 71.5% of independent undergraduate students earned in the same range (Urban Institute, 2016). The median incomes for the two groups were $3,900 and $13,800 respectively (Urban Institute, 2016). College students do not have the time or the ability to earn large annual incomes. Therefore, the effects of small wealth influxes and expenditures have a greater relative impact on their financial well-being.

Takeaways from all of these past wealth-happiness studies can then be extrapolated to the college population. College students are more likely to fall, wealth wise, into the radically steeper part of the logistic curve referenced in the Gallup study (see figure 4 below).

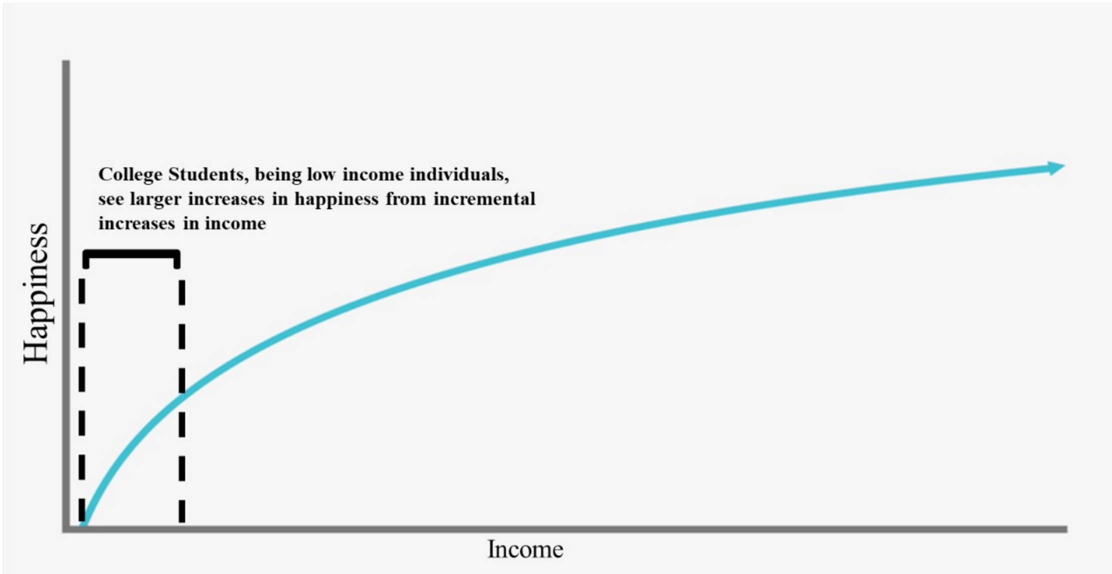


Figure 4: The Logistic Wealth Happiness Curve

increases or decreases in wealth are more likely to have larger effects on their happiness. Yet Harvard's study of millionaires may also have application to college students. While not millionaires, it is possible that the principle of self-made wealth, which leads to greater happiness, may also apply to college students. Students who pay their own way through school, solely responsible for their own financial wellbeing, may be more likely to appreciate the effects that incremental wealth increases can have on them. Purdue's study ties most directly to the college student experience. Individuals in college are most likely focused on the need-fulfillment aspect of their subjective well-being, like paying their rent, or buying their food. The prospect of additional wealth to them represents an opportunity to meet these needs. Additionally, college students who are on their way to achieving higher levels of education, as referenced in the Purdue study, may expect and require higher income levels to satisfy their needs. This may be attributed directly to the time and capital that these individuals have invested in order to complete their educations.

Primary Research Study

The Purpose for Mixed Method Research

For the sake of this thesis, a mixed research method was selected. The goal of this method was to provide a psychological background for the link between wealth and happiness, and a history of past research on the relationship between the two. By referencing past wealth-happiness studies, this thesis will be able to reference results obtained amongst a greater diversity of populations, featuring more widespread socioeconomic levels, and a larger disparity of demographics. These past studies and the body of secondary research as a whole provide a backbone for this thesis's primary research survey. Without the context provided by the secondary research, the self-report survey would lack a way to support its external validity; hence, a mixed research method was a necessity for the purpose of this thesis.

Primary Research Methods

Study Design and Technology Used

The primary research, self-report survey conducted for this thesis was designed to highlight the differences in thought and opinion between college students and the general public in relation to immediate wealth changes. A self-report survey was chosen as the method of research as it was easy to distribute, offered zero threat to participants, and allowed for the accumulation of a larger data-pool over a shorter period of time. The survey was broken into three main sections, one focused on demographics, another focused on real-life wealth events, and a final section allowing participants to self-report their own feelings towards wealth.

The survey was conducted through the online survey service Qualtrics, and allowed participants to answer anonymously. Anonymous participation was selected so that participants could feel free to express their thoughts without a fear that their answers would be linked to their identity. In order to accurately synthesize the results of the survey, data was transferred (again without identifiers) to excel. Statistical analysis program SPSS was used to run the tests highlighted in the results and discussion sections of this survey.

Distribution, Population and Anonymity

In order to distribute the survey, word of mouth and social media were used primarily to spread awareness. Participants were offered no physical incentive for completing the survey, but were given contact information so that they could follow up on the thesis findings. It must be acknowledged that because word of mouth was primarily used to spread the survey and reach new participants, the majority of the surveys population likely came from the geographic area surrounding the University of Oregon. Because participant identifiers were removed from data in order to streamline research approval and protect the anonymity of participants, the actual geographic distribution cannot be confirmed for sure. That being said, the survey received 302 responses. Of these 302 responses, exactly 50 percent identified themselves as college students, with 49 percent identifying as non-college students and 1 percent choosing not to respond. This even spread amongst college students and non-college students allows for easy comparisons to be made between the two groups, and can counteract some potential effects of the law of small numbers (a law claiming that overblown conclusions are often made from small amounts of data points). Conclusions made on the comparison between college students and non-college students are being made on near identical populations, and not vastly mismatched sample sizes.

In order to also keep participants somewhat blind to the true purpose of the survey, the focus of the underlying thesis was left intentionally ambiguous. This is

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Hello my name is Jacob Hillman and I am a Senior Clarks Honors College Student at the University of Oregon. The survey you are about to participate in will serve as primary research for my Senior Thesis for the Clarks Honors College. My thesis is investigating a comparison between college students and the general public. I am conducting this research with the aid of my staff supervisor, Eric Boggs, head of the Honors Business Program here at the U of O. Participation in this survey is completely voluntary. By choosing to participate, your anonymous answers will help to provide me and my thesis with a data-pool from which to draw further conclusions and comparisons to existing scholarly research. The following survey will ask a series of non-invasive questions, and any question can declined to be answered individually. Again, anonymity is ensured, and survey answers cannot be tracked back to the participants identities.

If you have any further questions, feel free to contact me at jhillman@uoregon.edu. Thank you again for your help! By choosing to continue this survey you allow your anonymous answers to be used as data.

exhibited in the Consent Form Question provided to every participant at the beginning of their survey (See Figure 5 below).

Figure 5: Informed Consent Form

The goal of anonymous participation and an ambiguous survey purpose, was to prevent socially desirable responding. Socially desirable responding occurs when research participants respond in ways that are deemed most socially acceptable. In the case of this thesis, if participants were aware of the underlying hypothesis of the thesis, they may have responded with answers intended to prove the hypothesis true.

Self-Report Validity

The validity of using a self-report method in psychology is well-established, but does lend itself to some holes. The use of random question ordering and elimination of double-barreled questions in this thesis's primary research survey serve to promote its internal validity. In terms of construct validity, the usage of a specific Likert scale provides one of the most accurate self-report methods. Additionally, well-designed self-report surveys are held in the psychological community as having high construct validity. That being said, where this experiment and thesis lacks is in its external validity. The findings of this survey come solely from a self-report aspect, and have yet to be replicated in a real world or experimental situation. Future research using the findings of the self-report survey would increase the external validity of this thesis's findings.

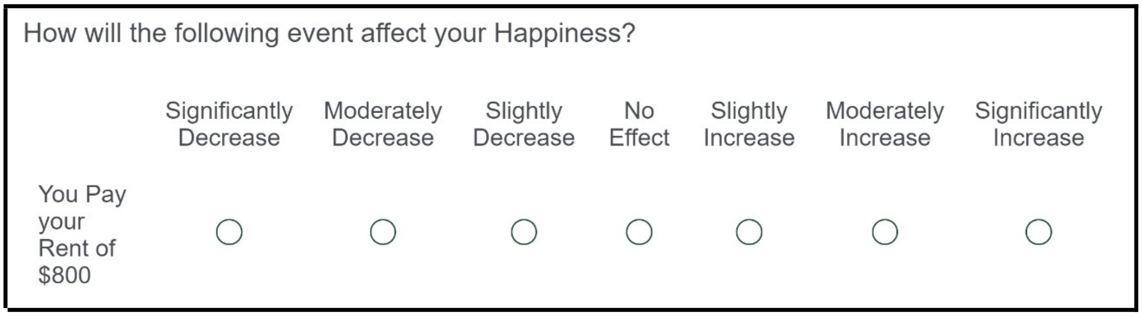
Survey Sections

Demographics

The demographic section of the survey featured questions designed to segregate the population of participants. Participants answered questions about their age, their current status as a college student, how they are paying for their college, their familial financial background, and their current job status. The goal of these questions was to create factorial variables that could be cited as important in their impact on participants' answers to the real-life, wealth-event questions. Most importantly, this section allowed participants to be segregated by whether they were college students or not. By segregating participants in this way, the survey can compare the answers of actual college students against what non-college-students perceived an accurate answer to be.

Wealth Happiness Question Section

The next section of the survey was the most critical in understanding the relationship between wealth and happiness for college students. Survey participants were first primed with instructions to put themselves in the mind of a college student. They were asked to respond to twenty-two life events with how they thought it would affect their happiness as a college student. Participants responded on a seven-point Likert scale, ranging from "Significantly Decrease Your Happiness" to "Significantly Increase Your Happiness" (See Figure 6)**.**


How will the following event affect your Happiness?

	Significantly Decrease	Moderately Decrease	Slightly Decrease	No Effect	Slightly Increase	Moderately Increase	Significantly Increase
You Pay your Rent of $800	○	○	○	○	○	○	○

Figure 6: Example Question with Likert Scale

The life events included some monetary related events (paying rent, finding $20, receiving a parking ticket) and some non-monetary related events (receiving an A on an exam, parents sending you cookies, your college sports team beating its rival). Events were presented to each participant in a randomized sequence in order to prevent issues of ordnance and increase the internal validity of the survey. The scoring of the Likert scale went as such; “Significantly Decrease Your Happiness”, the lowest response that could be given, was scored as negative 3 (-3). “No Effect” was scored as a zero (0), and “Significantly Increase Your Happiness”, the highest response that could be given, was scored as a three (3). In between scores were assigned accordingly, with a unit of 1 being used as a constant scalar. Decreases of happiness were scored as a negative in order to allow for the Likert scores to be more easily understood as numerical values.

In the context of many other wealth-happiness studies, the relationship between wealth and happiness is often looked at through a correlational lens. The hope of this survey was to examine a more direct relationship. By segregating each individual event and forcing participants to respond as to how each event would affect happiness, directionality between the event and the corresponding change in happiness can be established. Events are segregated primarily into Wealth Events and Non-Wealth Events. By subsequently segregating the survey population into college students and non-college students, the interaction between event type and student status can be examined.

The specific life related events have been chosen for a variety of reasons, each one to simulate a different wealth related concept. Categorizations for these different events can be found below, along with a few examples of each. Some events may fall under multiple categories:

Immediate Expected Expenditures: (Rent Payments, Grocery Expenses):

These events represent immediate wealth expenditures for college students, but also represent expenditures that are expected and/or recurrent. These expenses are often planned for when/if a student budgets out their expenses. In the survey, these questions include payments of different amounts for comparison.

Immediate Unexpected Expenditures: (Parking Tickets, Additional Class Expenses):

These events involve an immediate expenditure that is not expected or recurrent. These expenditures are often not planned for when/if a student budgets out their expenses. In the survey, these questions include payments of different amounts for comparison.

Immediate Expected Inflows of Wealth: (Paychecks):

These events are expected inflows of wealth and would be awaited by college students, and also are often expected and/or recurrent. These expenses are often planned for when/if a student budgets out their expenses. In the survey, these questions include payments of different amounts for comparison.

Immediate Unexpected Inflows of Wealth: (Money on the Ground, Money from Parents):

These events involve immediate inflows of wealth that are unexpected for college students. These inflows would often not be planned for when/if a student budgets their expenses. In the survey, these questions include payments of different amounts for comparison.

Events Increasing Potential for Future Wealth: (Increases in Wages):

These events do not represent an immediate increase or decrease in wealth for college students. They do however represent an event that may increase the future potential for college students to increase their wealth. They are usually unexpected.

Comparison Events: (Fights with Significant Others, Good/Bad Exam Grades):

The following events are not monetary related, but instead were put into the survey to provide comparison and context for the monetary related events. These events are common amongst college students, and help provide real world comparators to ground the Likert Scale scores recorded on the monetary related events.

Opinion Section

The final section of the survey allowed for participants to answer a few open-ended questions about the relationship between wealth and happiness. The first question simply asked participants to respond as to whether they believe there is a direct relationship between wealth and happiness. Participants were then given the opportunity to explain their answer. Finally, participants were asked at what annual income level they believe they would be happy. This section of the survey was placed last as it gave greater insight as to the purpose of the research survey. If it had come before the wealth events, it may have revealed the surveys purpose to participants, contaminating their subsequent answers.

Future Corrections of Procedures

There were a few changes to the procedures of this primary research survey that would need to be altered in the case of future research in order to promote greater external and construct validity. These changes must be acknowledged before results are listed and discussed, and they could have potential impacts on findings.

Question Priming

There were multiple times throughout the primary research survey where potential question priming could have led to greater clarity for survey participants. Before the wealth-happiness questions were answered, participants could have been primed with a clearer happiness definition. By providing participants with Sonja Lyubomirsky's happiness definition stated earlier in this thesis, the self-report survey could have ensured greater continuity amongst survey participants. By not specifically defining happiness, the survey allowed personal bias to affect responses. While this bias could be viewed as inherent to perception of happiness, a clearer definition of the concept could have increased construct validity for the survey.

In addition, question priming could have been beneficial in relation to the family financial background question in the demographic section of the survey. While socioeconomic classes were listed, they were not linked directly to numerical income levels. Without this anchoring, participants were unlikely to have the same definitions for these classes. Consequently, people with vastly different socioeconomic backgrounds could have categorized themselves in the same class.

Question Answering

In the opinion section of the survey, participants were asked to self-report an income level at which they believed they would be happy. This section was left with a short answer box. Consequently, answers ranged from short sentences to specific numbers. In the future, it would have been more beneficial if this question required a simple numerical answer, or no answer at all. Participants who believed there was no specific income level could choose to not answer, while participants who did believe in a specific income level could have provided a simpler numerical answer. This format would have allowed for easier analysis of data, and created a more uniform answer type amongst survey participants.

Results

Demographics

In order to accurately assess the results of the primary research study, the demographics of the survey must first be understood. Overall, 282 survey participants were of age, fully participated, and were included in the statistical analysis. Of these participants, 60 percent identified as being between the ages of 18-24, and 38 percent identified as being over the age of 35. Seventy two percent of participants identified as female. Fifty percent of participants identified as college students, with 83 percent of students identifying as being upperclassmen. In terms of family demographics, more than two thirds of participants identified their familial socioeconomic background as being middle class or higher. A full list of survey participant demographics can be found in Appendix 1**.**

Scoring

Moving forwards, scoring and results from the life events sections of the survey will be discussed. These results will also include interactions found between group means on the life event questions and demographic differences. In order to accurately score the Likert scale provided for the life events section, text responses were converted to numerical answers in the following way:

- Significantly Decrease Happiness = -3
- Moderately Decrease Happiness = -2
- Slightly Decrease Happiness = -1
- No Effect on Happiness = 0
- Slightly Increase Happiness = 1
- Moderately Increase Happiness = 2
- Significantly Increase Happiness = 3

The absolute value of a response indicates the severity of the events effect on happiness, while the positivity or negativity of the response indicates where the event increased or decreased happiness.

Repeated Measures ANOVA

The main goal of this primary research survey was to compare the responses of college-students and non-college students. The hypothesis of this thesis is that college-students are more affected by wealth events than the general population. For this to be supported by the results of the Repeated Measures ANOVA, college students would see a smaller difference than Non-College students between their Mean Absolute Wealth Responses for wealth events and non-wealth events. In order to calculate this mean absolute wealth response, the responses for the 13 wealth related events were converted to numerical values, and their absolute values were averaged. From there comparisons could be made across different samples taken from the survey population.

To track the statistical importance of wealth events, a two by two independent variable repeated measures ANOVA was run. The first factor of the ANOVA was Student Status. This factor was a between-subjects factor, as participants in the survey were either college students or not. The second factor was Event Status (whether events were Wealth related or not). This factor was a within-subjects variable, as all participants produced responses for both wealth events and non-wealth events. The dependent variable in the ANOVA was Mean Absolute Happiness Response.

In support of the hypothesis of this thesis, there was a significant interaction between Event Status and Student Status. Event Status on its own had a significant effect on Mean Absolute Happiness Response, $F(1, 280) = 118.169$, $p < 0.000$. However, the interaction between Event Status and Student Status was also significant, $F(1, 280) = 8.5$, $p = 0.004$. Both of these are significant at error levels of 5%.

As seen in Figure 7 below, the significant interaction between Event Status and Student Status lead differences in means between the groups. Compared to Students, Non-Students saw a significantly greater difference between their mean absolute happiness response to wealth events and non-wealth events. While the two groups responded similarly to non-wealth events, college students responded more extremely to wealth events than non-students did, causing the difference between their mean absolute happiness responses to the two types of events to be considerably smaller.

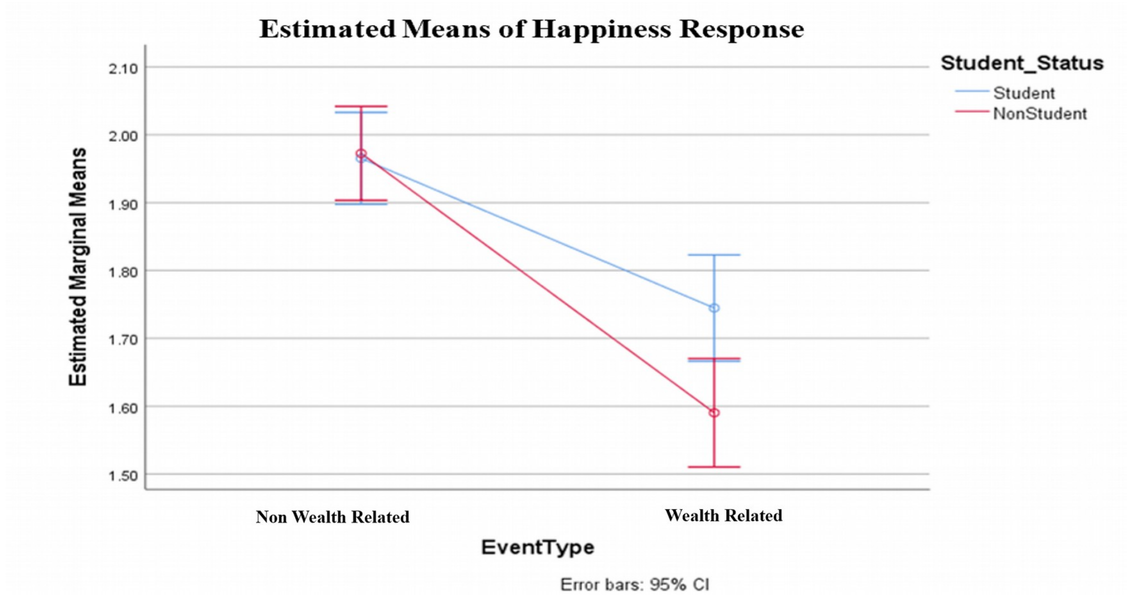


Figure 7: Group Mean Happiness Responses

While the ANOVA supported the theory that there was a significant reaction between Event Status and Student Status, additional tests needed to be run to further support the difference in marginal group means across the two events statuses. Simple effect tests were run on top of the ANOVA in order to further emphasize that there were differences in means. In order to support the hypothesis that the happiness of college students is more affected by wealth events than that of non-college students, the Simple Effects tests would need to return that the marginal means for the groups on wealth events are significantly different, while the marginal means on non-wealth events are not.

Pairwise Comparisons

Measure: MEASURE_1

EventType	(I) Student_Status	(J) Student_Status	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	Student	NonStudent	-.007	.049	.881	-.104	.090
	NonStudent	Student	.007	.049	.881	-.090	.104
2	Student	NonStudent	.154*	.057	.007	.042	.266
	NonStudent	Student	-.154*	.057	.007	-.266	-.042

Figure 8: Pairwise Comparison for Group Means

*EventType 1 Represents Non-Wealth Events, and EventType 2 Represents Wealth Events

As seen in the above figure, these expected results came true. The null hypothesis for the pairwise comparison would be that there is no significant difference between the marginal group means. According to the pairwise comparison, the marginal mean for college-students on wealth events was significantly higher than that of non-college students (p = 0.007). Therefore, the null hypothesis can be rejected for this comparison, and the response of college students can be viewed as statistically significantly higher. In contrast to this, there was no significant difference between the marginal means for the two groups in response to non-wealth events (p = 0.881). Therefore, the null hypothesis is accepted for this comparison, implying that the marginal group means are the same in response to non-wealth events.

As a whole, the ANOVA and its following simple effects tests point to two clear trends outlined in the survey results: the happiness's of college students and non-college students are similarly affected by non-wealth events, while for wealth events, the happiness of college students is significantly more affected than the happiness of non-college students. With the responses towards non-wealth events as moderation, and identical experimental procedures to both groups, these conclusions can be viewed as supporting the overall hypothesis of this survey.

Comparing Familial Help

In order to better understand whether familial help had a significant effect on the way that the happiness of college students was affected by wealth events, another ANOVA was performed. This ANOVA coded students into two separate groups, those who were receiving familial help in paying for their college, and those that were not. If the stress of paying for college were to cause the happiness of college students to be more affected by wealth events, then a significant interaction would have been found between the Familial Help variable and the event status variable. There was however no such effect. Students who were paying for college without any familial help reported more extreme responses to both wealth events and non-wealth events, as seen in Figure 9. These differences were not statistically significant however, and firm conclusions cannot be drawn from the comparison.

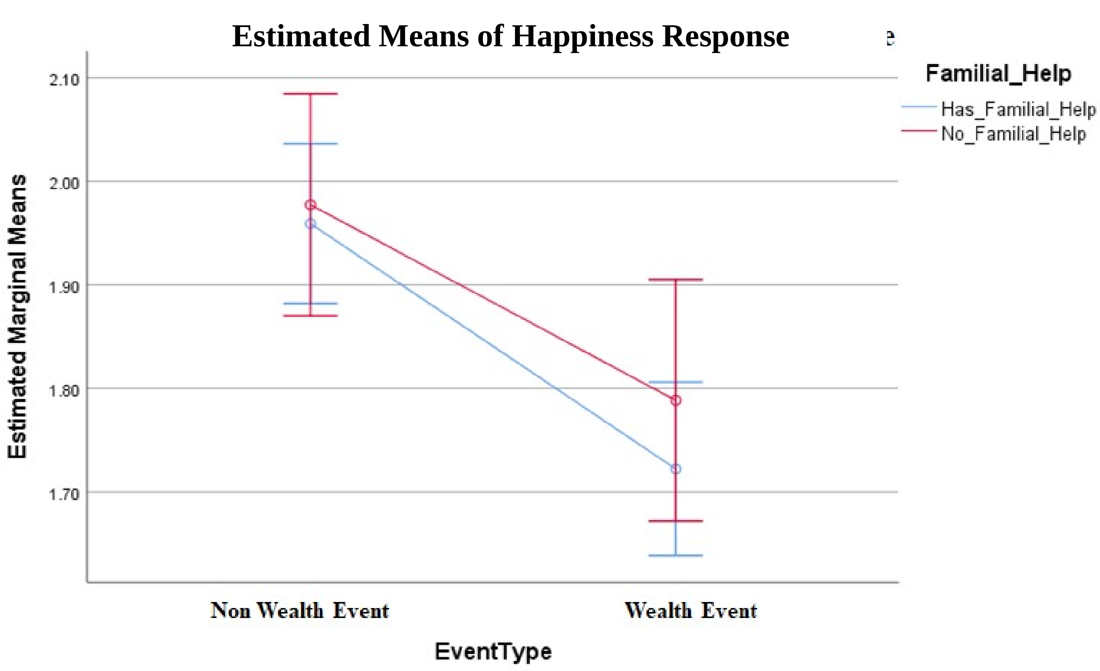


Figure 9: Group Responses for Familial Help Status

Individual Event Differences: Independent Sample T Tests

Across the entire survey, when specific life-event questions were treated as independent samples, there were 9 events over which the mean average happiness response was statistically significant between college students and non-college students. Of these, seven were wealth related events. In order to draw conclusions from these T-Tests, they must be viewed as independent tests, and results cannot be combined across tests, as error stacking would occur. That being said, the 7 events and their statistical descriptions are listed below in Figure 10. (Descriptive Statistics for every event can be found in Appendix 2).

Event	College Student Mean	Non-College Student Mean	P Value of T Test
Paying $800 for Rent	-1.03	-0.18	<0.001
Receiving a Paycheck	1.93	1.5	<0.001
Spending $50 on Groceries	-0.41	-0.05	<0.001
Getting a Flat Tire	-2.14	-1.75	0.002
Receiving a $1 Per Hour Raise	1.65	1.24	0.011
Receiving a $2 Per Hour Raise	2.23	1.99	0.03
Finding $20 On the Ground	1.91	1.67	0.0306

Table 1: Mean Happiness Responses for Individual Wealth Events

Again, these T-Tests must be viewed as independent tests in order to prevent increasing the tolerated error for data analysis. They do reveal which specific events college students and non-college students differed most significantly upon.

Additional Student Versus Non-Student Comparisons

Another large difference in opinion between college students and non-college students occurred over the annual income necessary to achieve happiness. Amongst those individuals in each population that believed there was a direct link between wealth and happiness, non-college students believed they needed a significantly larger annual income to make themselves happy. Non-College students believed they needed \$141,941 annually, while college students believed they needed only \$82,155 to be happy. After accounting for outliers in each group, a t test returned a p value less than 0.0001, implying that the difference in means was statistically significant. Additionally, the Cohen's D for the test (0.816) implied that the effect was of a medium, almost large, size.

Belief in a Wealth-Happiness Relationship

In one of the final questions on the survey, participants were asked to self-report whether they believed in a direct relationship between wealth and happiness. Amongst college students, 62.5% of individuals responded "yes", and 36.1% responded "no" as to whether they believed there was a direct relationship between wealth and happiness. These percentages were similar to those for non-college students, where 59.9% responded "yes" and 38% responded "no". A Chi Squared Comparison of these two groups and their percentages returned a p value greater than 0.05, implying that there was no statistical difference between the two groups. This similarity points towards the fact that a belief in a wealth-happiness relationship remains constant across age groups.

Discussion

A Comparison of Students Versus Non-Students

The results from the primary research survey of this thesis reveal insight into the perceptual differences between college students and non-college students about the relationship between wealth and happiness. For all the life event questions, participants were moderated by instructions telling them to “answer how the following events would affect the happiness of a college student”. The hope for these instructions was to moderate the point of view from which all participants were responding. By forcing all participants to answer how the life-events would affect a college student, perceptions of different demographic groups can be ascertained and measured. College students could respond to the survey with their own beliefs, and non-college students could respond with their beliefs of what the college experience is, using a combination of their own experiences and beliefs that have changed since they attended university.

The findings of the Student Status ANOVA support this thesis’ hypothesis. The survey attempted to level the response conditions across college students and non-college students. In spite of this, college students still responded more extremely to wealth events. On first glance, this difference in response could be explained by citing that college students simply are more affected by all life events, and that their amplified response to wealth events can simply be attributed to impulsivity and immaturity. However, there were multiple factors of the ANOVA that contradicted this assertion. As mentioned above, there was no significant main effect of student status. This implies that an individual's mean absolute response did not differ significantly based solely on student status (see Appendix 3). Additionally, when testing for simple effects of the ANOVA, the marginal means for students and non-students were not significantly different for non-wealth events. Taking into account both of these differences, what can be ascertained is that the two separate populations from the survey, college students and non-college students, only differed in their happiness responses to wealth events. Because of this, the wealth events themselves can be viewed as the driver behind this difference. This then supports this thesis' hypothesis.

Where additional research could be conducted is on which of the hypothesis' two tenants specifically drives this difference in response. Did college students respond more extremely because of an internal difference in their own reaction to wealth events? Or, did non college students underestimate the happiness response of college students due to a misperception of the college experience? Using the results of this thesis alone, this question cannot be answered. Future studies could potentially solve this dilemma. A longitudinal study that follows both college students and non-college students as they go about their lives and experience similar wealth events would allow for direct comparison over the responses to these events.

In addition, if a future pair of surveys were run on a new set of participants, one with experimental conditions similar to the one in this thesis, and another that asked participants to put themselves in the mindset of a post-college individual, contrasting experimental conditions could be created. From this, a mean response based on both prompted mindsets could be created. If the marginal responses were similar across the two conditions, then difference in the inherent reactions of the groups could be targeted.

However, if the marginal means differed across the perception conditions, then the perceptions themselves could be focused on as driving forces.

Overall, the ANOVA results for this thesis provide an excellent starting block in support of the hypothesis that the happiness of college students is more extremely affected by wealth events than the general public predicts and perceives it to be. The ANOVA supports this overall trend with a high statistical degree of certainty. For the sake of this thesis, the primary research study and its results can be viewed as supporting the overarching hypothesis. In addition, by examining differences on specific events, the importance of forces outlined in the secondary research section can be ascertained.

Similarities and Differences of Belief

While college students and non-college students responded differently to the impact of wealth events, the actually responded similarly in their belief in a wealth happiness relationship. As reported in the results section, 62.5 percent of college students and 59.9 percent of non-college students believed in a direct relationship. The difference between the two population proportions was not statistically significant. What this points to, is that, despite the many other differences that existed between the two participant populations, college students and non-college students both believed in a direct relationship between wealth and happiness at a similar rate. That being said, a longitudinal study that asked individuals whether they believe in such relationships before, during, and periodically after college, would help to discover whether a belief in this relationship frequently changes during a person's life.

Interestingly enough, while the two groups believed in a wealth-happiness relationship at the same rate, they had very different ideas of what income levels would be necessary for them to be happy. Amongst participants who reported that they did believe there was an income level that would make them happy, Non-College students reported a mean income almost $60,000 higher than that of college students. This difference exists even once outliers for both groups were accounted for. Even the median response for non-college students ($100,000) was $15,000 higher than that of college students. This finding, contrasted by the fact that college itself has become increasingly more expensive, paints an intriguing picture for college students. Despite the fact that the happiness of these individuals is more affected by immediate changes in their wealth, they actually perceive a lower level of income as being adequate for them to be happy.

The Importance of Work

While large widespread claims cannot be made using individual T Test comparisons for specific events, these tests can point towards trends. The results of the primary research survey point to the fact that college students appreciate their jobs, and the financial stability they provide, increasingly more than non-college students can perceive. College students answered that both a $1 per hour and a $2 per hour raise would have significantly larger impacts on their happiness than non-college students perceived there to be. In addition, college students projected that their happiness would be affected significantly more by receiving their paychecks. These three events constituted all of the job-related events on the survey. What these results point towards is a clear appreciation amongst college students towards their jobs.

As previously discussed in the secondary research section, more and more college students are working while going to school. For the survey population, 61 percent of college students reported having a job. While this number is less than the percentage reported working by Georgetown University's survey (70 percent), it is still far greater than the percentage reported as working in 1975 (35 percent), and indicates that the students of this survey are following the trend of working more and more while they pursue their education. In making an assumption based on the results of the T-Tests ran on the three work related events, it can be assumed that college students also perceive events in relation to these jobs as having a more extreme impact on their happiness.

While these tests point towards the increased importance of jobs for college students, additional proof would be needed to make a concrete claim as to whether jobs insulated the happiness of college students against the effects of wealth events. For the survey, there was no significant difference in happiness responses between college students who had jobs and college students who did not have jobs. Future research comparing these two populations on a larger scale would likely help to reinforce the importance of work to college students.

Holes in the Data and Future Areas of Research

One of the largest holes in the survey data was an even distribution of socioeconomic backgrounds amongst survey participants. As seen in Appendix 1, the predominant portion of survey participants reported as coming from middle to upper class socioeconomic backgrounds. For many individuals, socioeconomic background could heavily impact a variety of factors in their ability to pay for college, including scholarships received, levels of family help, and even the colleges individuals decide to attend.

This lack of diversity in terms of socioeconomic background could also have affected the ANOVA for Familial Help Status. By sampling a population that features a larger variety of socioeconomic backgrounds, it is likely that a greater number of individuals paying for their college without familial help would be found. This could potentially create a different comparison, and might result in larger or more significant differences between the groups in terms of their responses to wealth events. Logically, an assertion could be made that students who are paying for college without familial help would report their happiness as being more affected by wealth events. And while this was found true in the ANOVA, the difference between those receiving familial help, and those not, was not statistically significant. In order to further test this subject, and potentially prove the logic behind the assertion, a larger test pool with a more diverse socioeconomic background would be necessary and important.

Summary

Overall, the results of the primary research survey point towards a clear difference between college students and non-college students. While the two groups react similarly to non-wealth related events, they differ entirely in how they believe wealth events affect their happiness. According to the survey, college students and their happiness are more affected by these wealth events. Because the two groups responded similarly on neutral non-wealth events, the difference can be ruled out as not directly and solely due to differences in impulsivity or emotionality differences between the two populations.

What the survey does not immediately explain is exactly why these two groups differ. Differences in responses to job related questions point towards the idea that college students value their jobs more. College students also believe that they need a lesser level of income to be happy, despite the groups believing in a direct relationship between wealth and happiness at the exact same rate. However, due to skewed socioeconomic backgrounds in the survey population and a lack of additional experimental research on top of the original survey, no clear reason can be drawn as to why exactly college students and their happiness are more affected by immediate changes in personal wealth.

Turning to the secondary research and societal forces mentioned earlier in this survey can help to provide some explanation and context. As outlined earlier, the cost of college has rapidly increased over the last few decades. Tuition and fees have grown at a rate far greater than the minimum wage and inflation. College in 2020 is simply not as affordable for students as it was 30-40 years ago, when the parents of many college students achieved their higher educations. This increased cost has put a greater stress on college students. More students are working during school, and student debt has skyrocketed in the United States. Because students are experiencing more stress around the concept of money, any small increase or decrease in their wealth is more likely to affect their happiness.

There are many underlying factors that can help explain the link between wealth and happiness for college students. Some of these same factors may explain why non college students may underestimate the impact that wealth events can have on a college student's happiness. For students, a lack of wealth can be the main reason they struggle with to fulfill their needs. Whether these needs are basic and essential for survival, such as shelter or food, or higher-level, such as self-achievement needs, a lack of money can represent a barrier to fulfillment and consequently a detriment to happiness. As self-determination theory outlines, when money presents itself as a barrier, individuals are unable to achieve true autonomy, and cannot pursue self-actualization. For most higher education universities, students achieving self-actualization is a primary goal.

Stacked on top of these internal psychological forces are a variety of societal changes that can further stress the financial wellbeing of college students, and consequently their happiness. More and more young people in the United States lack the financial education necessary to manage their money wisely. The pressure of in group spending can lead college students to make purchases out of their normal budget in order to feel "a part" of their group. In being forced to deal with this pressure, alongside a culture of instant gratification, college students are unlikely to have the patience or the knowledge to manage their wealth wisely. Consequently, their happiness is more likely to be susceptible to immediate changes in their personal wealth. Accumulate all of these factors, and college students represent individuals who are extremely stressed by their finances, and individuals whose happiness is more affected by any small change personal wealth.

Conclusion

At the beginning of my thesis, I stated that my goal was education and information. While all the above theories and findings are inherently interesting and informative by themselves, they need practical application. My primary research study provides the introduction to a line of research that can further illuminate how the happiness of college students is directly affected by their own wealth. That being said, there is opportunity for additional work to be done on the topic.

I, personally, have witnessed the stress of money in college. While my financial situation has included support from my family and the university, I have witnessed friends and colleagues struggle to find money to meet their basic needs. I am hopeful that this thesis can be a resource to college students. From its results, along with the conglomerate secondary research, college students will be able to better understand the reasons behind their stress, and that they are not alone in experiencing it. It is my hope that from this understanding, students can better prepare for the stresses of college, and adjust their actions accordingly.

However, the findings of this thesis can serve more than just college students. The conclusions and findings of this thesis should open a discussion for those individuals who are helping support college students, whether they be parents, family members, teachers, counselors or others. The first thing these individuals can do is begin to understand that the college environment has changed, and that financial stressors are different. The second step is helping college students to seek out the information and education they need. The better students can understand and manage financial decisions and stress, the happier they will be.

Colleges seek to support and develop “well rounded” students-students who seek to learn beyond the coursework, and develop themselves as human beings, and academics. The more that we as a society can support these individuals and help to ease their financial stress, the happier and healthier our college students will be. The happier and healthier they are, the more they will gain from their college experience.

Appendices

Appendix 1: Full Description of Participant Demographics

Upon the survey's completion, there were 304 participants who finished it in entirety. Of these 304, 302 self-identified as being over the age of eighteen and were allowed to participate fully.

<u>Age Related Demographics</u>

Age wise, 59.5 percent of participants identified as being between the ages of 18 and 24, 38.2 percent of participants identified as being over the age of 35, and 1.6 percent of participants identified as between the ages of 25 and 34

<u>Gender Related Demographics</u>

The survey featured a predominant number of female participants, with 72 percent of survey participants identifying as female, and 26 percent identifying as male. This difference remained somewhat steady for both college students (70% vs 29%) and non-college students (74% vs 24%)

<u>College Student Status Demographics</u>

- Of survey participants, 50 percent identified as college students, and 49 percent identified as non-college students.
- Of these college students, 53 percent identified as attending an in-state four-year school, 40 percent identified as attending a four-year out-of-state school, and 5.3 percent identified as attending Community College
- Of these college students, 53 percent identified as being fourth year students, 29.8 percent identified as third year students, 11.3 percent identified as second

year students, 2.6 percent of participants identified first year students and 2.6 percent identified as beyond fourth year students

- College students were asked how they are paying for their education, and were allowed to list as many answers as they needed. The following are the most popular answers, and the percentage of students that indicated
    - Familial Help - 66.9%
    - Scholarship - 58.3%
    - Student Loans - 29.8%
    - Paying for their own college - 21.9%
- Among college students, 78.8 percent indicated that they had no job arranged for after college, and 21.2 percent identified that they did. Amongst fourth year students, only 30 percent of individuals identified as having jobs arranged after college.

<u>Employment Related Demographics</u>

- Amongst all participants, 68.5 percent identified as currently having jobs, and 30.5 percent identified as not currently being employed. Amongst college students, 61 percent identified as having jobs, and amongst non-college students, this percentage rose to 77 percent.
- All participants who identified as having a job were asked how many hours a week they work. The following were the most popular answers, with percentages listed for the general survey population, and then specifically for college students
    - 40+ Hours a Week - 33.7% (1.1% of College Students)

- 10-20 Hours a Week - 25.4% (45.7% of College Students)
- 20-30 Hours a Week - 16.6% (26.1% of College Students)
- 30-40 Hours a Week - 12.7% (2.2% of College Students)
- 0-10 Hours a Week - 11.7% (25% of College Students

<u>Familial Socioeconomic Status Demographics</u>

All participants were asked to self-identify their family's financial backgrounds according to five pre-determined socioeconomic classes. The following were the most popular responses, with the percentages listed for the general population, and then specifically for college students

- Upper Middle Class- 46.3% (48.3% of College Students)
- Middle Class - 28.7% (29.8% of College Students)
- Upper Class - 14% (13.9% of College Students)
- Working Class - 8.7% (7.3% of College Students)
- Lower Class - 0.7% (0.7% of College Students)

Appendix 2: Descriptive Statistics for all Survey Events

Life Event	College Students		Non-College Students		Statistically Different?
	Mean	Standard Deviation	Mean	Standard Deviation	
You pay rent costing $800*	-1.03	1.27	-0.18	1.27	Yes
You receive a $50 parking ticket*	-1.99	0.84	-1.90	1.04	No
You receive a $100 parking ticket*	-2.49	0.83	-2.31	0.92	No
You find $10 on the ground*	1.57	0.82	1.48	1.00	No
You find $20 on the ground*	1.91	0.84	1.67	1.01	Yes
Work gives you a $1 per hour raise*	1.65	0.83	1.24	1.23	Yes
Work gives you a $2 per hour raise*	2.23	0.76	1.99	1.08	Yes
Your parents send you $50 for groceries*	1.83	0.84	1.88	1.02	No
You receive an A on your midterm	2.50	0.74	2.38	0.95	No
You receive a D on your midterm	-2.52	0.68	-2.41	1.00	No
You buy a new shirt you’ve wanted*	1.52	0.75	1.38	0.85	No
You get in a fight with your significant other	-2.28	1.02	-2.38	0.72	No
Your college sports team beats its rival	1.22	1.14	1.71	1.15	Yes
Your roommate surprises you with dinner	2.19	0.73	2.08	0.86	No
You receive your paycheck from work*	1.93	0.83	1.50	1.05	Yes
Your car gets a flat tire*	-2.14	0.78	-1.75	1.08	Yes
Your parents send you cookies	1.91	0.84	1.83	0.92	No
Your class requires an additional textbook costing $75*	-1.47	0.86	-1.38	0.93	No
You go for a hike because it is sunny	2.16	0.83	2.13	0.93	No
It rains all day	-0.84	1.03	0.78	0.93	No
Your friend has a birthday party	1.79	0.77	1.53	1.03	Yes
You spend $50 on groceries*	-	0.88	-	0.90	Yes

	0.41	0.05	

Table 2: Descriptive Statistics for all Survey Events

Wealth Related Events are denoted with * after the event description

Appendix 3: Main Effect Statistical Importance for Student Status ANOVA

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	1863.688	1	1863.688	6424.003	.000
Student Status	.761	1	.761	2.625	.106
Error	81.232	280	.290		

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