Higher Levels of Education in the U.S. May Positively Correlate to Greater Levels of Financial Satisfaction and Social Worth*

An Analysis of 2021 U.S. General Social Survey Data

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The American Dream suggests that success can be attained through hard work, but the extent to which education is necessary for achieving financial stability and social status remains uncertain. This report aims to examine the relationship between education and one's overall well-being by analyzing data from the 2021 United States General Social Survey. More specifically, we investigate the correlation between level of education, self-ascribed social class, and financial satisfaction. Our findings reveal that these relationships are varied and complex, indicating that higher education does not necessarily guarantee a linear path to success.

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*Code and data are available at: https://github.com/cthierst/gss_education_analysis.git

1 Introduction

In the United States, the concept of the American Dream has been deeply ingrained in the national consciousness for decades. It is the idea that through hard work and determination, anyone can achieve success and upward mobility regardless of their background and other significant, uncontrollable factors. Within this notion, education is often perceived as one of the key factors in achieving the American Dream, with many individuals in the United States believing that a degree is necessary for financial stability and social status. But does this belief reflect reality? We analyzed data from the 2021 United States General Social Survey to examine the relationships between education level, self-perceived social class, financial satisfaction, and job satisfaction and how they relate to an individual's overall sense of well-being.

We will first discuss the source of our data, its biases, and review the sampling and key features including our estimand of 1,567 responses of the 3,731 complete responses received from male and female US citizens, not living in institutional housing, and who are over the age of 18. Then, we will discuss our results through the lens of the American Dream, Social Class, and Financial Satisfaction. Our findings were surprisingly complex and multifaceted, revealing that the relationships between these variables are not as straightforward as one might think.

A key insight that we found was that despite higher education (Bachelor and Graduate degrees) being positively associated with both financial satisfaction and self-perceived social class in the GSS data, the majority of respondents across all education levels still identified themselves as "working class" or "middle class", suggesting an influence of the American idealism of "hard work". Moreover, our results indicated that job satisfaction levels varied significantly among respondents, regardless of their level of education – indicating that higher education doesn't necessarily guarantee job satisfaction. Such findings raise significant tension between the ideal of the American Dream and its relationship to education. Our results suggest that the idea that a degree in higher education can put individuals towards a linear path to success and upward mobility is flawed.

Finally, we will take a look at the limitations and weaknesses of our findings in this paper and review the next steps on this particular topic. All in all, by examining the GSS survey

data, we can shed light on the larger societal implications of the so-called American Dream, question existing assumptions and beliefs, and provide an insightful contribution to the ongoing discourse surrounding education and success in the United States.

2 Data and Methods

2.1 Data Management

This paper utilizes the R statistical programming language (R Core Team 2020), along with several packages, tidyverse (Wickham et al. 2019), here (Müller 2020), janitor (Firke 2021),and dplyr (Wickham et al. 2022). All figures in this paper have been created using the packages ggplot2 (Wickham 2016) and the tables have been created using knitr (Xie 2023) and kableExtra (Zhu 2021). The color styles in graphs have been created using the RColorBrewer packages (Neuwirth 2022).

2.2 Source

All data within this paper are extracted from the 2021 United States General Social Survey (GSS). This survey consists of a series of nationally representative cross-sectional interviews and collects data on contemporary American society in order to explain trends in opinions, attitudes and behaviors and monitor these trends (Davern et al. 2021). Since it began tracking trends in public opinion in 1972, the GSS has used in-person data collection as its primary method of data collection but in 2021, it moved to an address-based sampling method with a focus on web and web-based self-administered questionnaires (Davern et al. 2021).The 2021 GSS was conducted from December 1, 2020 to May 3, 2021, and was processed in accordance with standard NORC procedures (Davern et al. 2021).

2.3 Sampling

The 2021 GSS samples adults over the age of 18 in the United States who do not live in institutional housing (Davern et al. 2021). This GSS was released in three batches, the first consisted of 10,091 addresses, the second consisted of 10,000 addresses and the third consisted of 7,500 addresses (Davern et al. 2021). From these three releases, 1,271 completed the survey from the first batch, 1,391 completed the survey from the second batch, and 1,069 completed the survey from the third batch (Davern et al. 2021). Meaning that there was an overall response yield of 13.5% or 3,731 complete responses from the 27,591 total surveys released (Davern et al. 2021).

2.4 Key Features

This paper is assessing our estimand of 1,567 responses of the 3,731 complete responses received which represents 42% of the complete respondents and only 5.7% of the total surveys released. Respondent's to the 2021 GSS are males or female US citizens, not living in institutional housing, who are over the age of 18 (Davern et al. 2021). In our analysis we removed 2,164 responses to account for unanswered or not applicable responses. We did this to ensure that the data used in this paper is complete and representative of all variables. The variables we selected for our analysis can be seen in Table 1 and their measurement levels can be seen in Table 2. Responses were measured using likert scales which measured respondents opinions to the questions being asked.

Table 1: Variable Descriptions

Variable	Variable Description
class	Self-ascribed class of the respondent
degree	Highest level of education achieved by respondent
finrela	Self-ascribed ranking of respondnet when compared to other US households
satjob	Level of satisfaction with the work respondents do
satfin	Level of satisfaction with the job respondents have

Table 2: Variable Measurements

Variable	Variable Measurement
class	Lower Class, Working Class, Middle Class, Upper Class
degree	Less Than High School, High School, Associate / Junior College, Bachelors, Graduate
finrela	Far Below Average, Below Average, Average, Above Average, Far Above Average
satjob	Very Satisfied, Moderately Satisfied, A Little Dissatisfied, Very Dissatisfied
satfin	Pretty Well Satisfied, More or Less Satisfied, Not Satisfied at All

2.5 Bias and Ethics

It is important to note that observations from the 2021 GSS may be influenced by social trends due to the world around them, such as the COVID-19 pandemic along with methodological shifts that occurred for this survey. As the GSS changed to a full web-based survey in this year, answers could have been impacted. This is why we have chosen not to compare previous survey results. Additionally, as this survey was completed online, there is a higher rate of non-response. To control for this the 2021 GSS adjusted population totals to ensure that the weighted totals were able to match closely to the U.S Census Bureau estimates by sex, age, education, race, ethnicity, and region of the country (Davern et al. 2021). Additionally due to the online nature of the survey in 2021, household enumeration was not possible and so households had to identify the adult with the most birthday (Davern et al. 2021). This could have resulted in respondent selections occurring at the household level or missing some

household residents such as people living abroad, adult children, etc. (Davern et al. 2021). More bias can occur from sampling error in which the sample conducted from this survey could not be representative of the US population (Davern et al. 2021). Although, the US GSS does control for this by conducting tests of significance to look for trend differences estimates (Davern et al. 2021).

3 Results

When looking at Figure 1, we can see that the majority of respondents have only completed their high school diploma with the next highest response category being bachelor's degree and the third being graduate degrees. Generally respondents who identified as having their bachelor's degree or graduate degree reported being more likely to be "above average" and "far above average" than respondents who reported having an associate or junior college degree or lower. Interestingly, a large portion of respondents with higher levels of education still reported themselves as "average" when comparing themselves to other US families. Yet in Figure 1, we can see that at almost all levels of education, the majority of respondents rank themselves as "average" or lesser. The only group in which this is false, is in the group of respondents who have graduate degrees. In this group the majority rank themselves as "above average" or higher. Additionally, the rate at which those with less than a high school diploma and high school diplomas self-report ranking when compared to other US households decreases substantially at every measuring point as ranking increases. Importantly, we can see that at each level of education, there are respondents who rank themselves as "above average" making it appear that there may be other factors that are relevant in how respondents rank themselves.

Figure 2 demonstrates that all respondents are likely to rank themselves as "moderately satisfied" or higher in job satisfaction regardless of level of education. Interestingly we can see that there is a level of dissatisfaction at from each. group of respondents alluding to the idea that education level may not guarantee job satisfaction. This is especially clear when comparing those with bachelor's degrees to those with high school diplomas as each have similar levels of satisfaction and dissatisfaction.

Figure 3 demonstrates that most respondents are "more or less satisfied" or higher when discussing their degree of financial satisfaction. Importantly, we can see that those with higher levels of education have higher rates within their group of being "pretty well satisfied" with their financial standing, than those with lower levels of education. Additionally, we can see that those with associate or junior college level education are the most balanced in all levels of financial satisfaction, alluding to the idea that a specific type of degree is influential in how respondents may respond.

By looking at Figure 4 we can see that those with graduate and bachelor's degrees are much more likely to describe themselves as "upper class" than "lower class." Interestingly, in all levels of education, most respondents ranked themselves as either "working class" or "middle
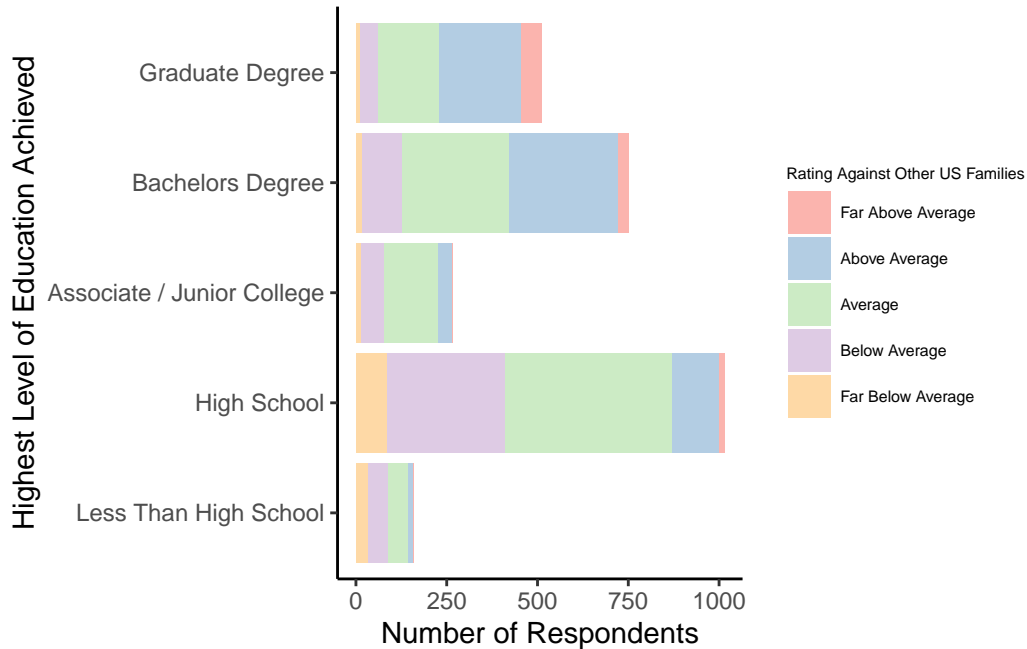
Figure 1: Respondent's Self-Ascribed Financial Ranking Against Other US Families by Their Highest Level of Education Achieved

class" this could be influenced by American idealism of "hard-work" or how respondent's see themselves among their peers which is also subjective. Additionally, only a very small number of those with associate or junior college degrees and lower education levels describe themselves as "upper class," ranging from 0 to 10% of respondents from these groups.

4 Discussion

4.1 The American Dream

The United States is built upon individualism, which trickles into their definitions of financial security, happiness, and overall fulfillment and satisfaction in life. Well-being of individuals within the United States therefore, is tracked and monitored through a variety of different factors. The aim of this investigation is to determine whether higher educational achievement influences respondent's perceptions of their social class, degree of financial satisfaction and job satisfaction. These factors were chosen because of their significance with regards to the American Dream, a concept that is built off a linear pattern of behavior in terms of economic security. Hustle culture is popular within the United States as an extension of the American
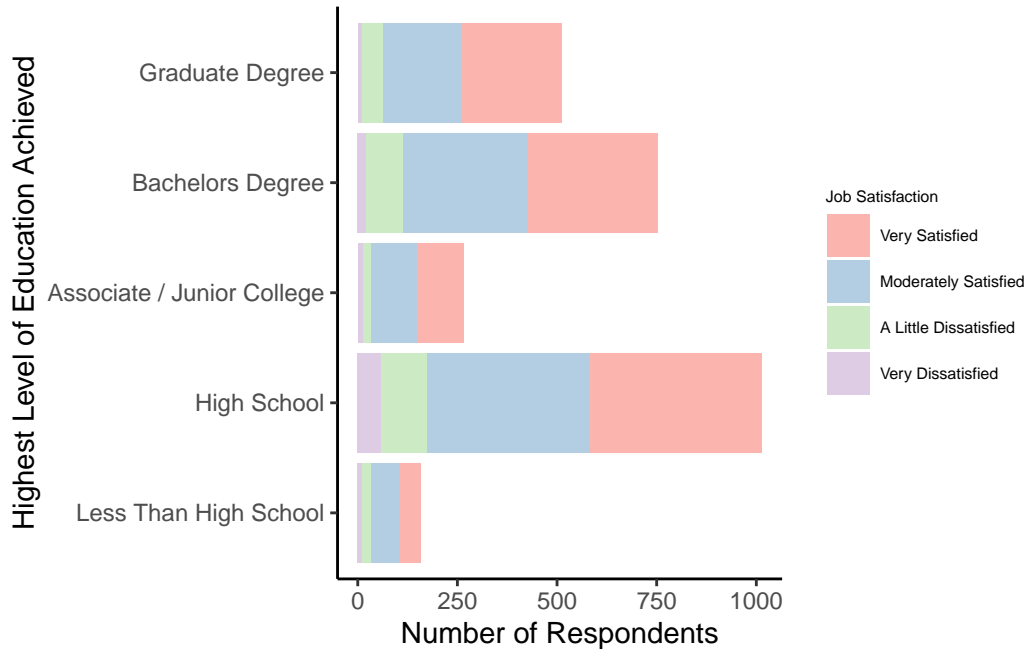
Figure 2: Respondent's Degree of Job Satisfaction by Their Highest Level of Education Achieved

Dream, because the idea that an individual must work hard in order to reap the benefits in terms is what drives culture within America.

According to Economic Security and the American Dream, the rewards of the American Dream included owning a home, having access to quality health care, having a job that enables an individual to support their family, and having a secure and stately retirement (Rank and Hirschl 2014)**.**These are the fundamentals in terms of how Americans generally define their well-being in society. However, no matter how linear an American's personal development or educational journey may be, it is simply impossible to be able to guarantee the rewards that the American Dream has to offer. But the ideals of living in the United States, has a powerful impact on culture, and how individuals view themselves and their position within society, but how they fare in comparison to those around them.

The assumption in general is a higher degree of education translates to an overall greater quality of life or well-being, greater job satisfaction, higher social class, etc. However, we found that this was not necessarily the case. Overall, out of our participants that completed the survey, the largest group had only completed high school, and the second largest group had completed a bachelor's degree. The level of education was compared to a few variables: self-ascribed social class, financial satisfaction, job satisfaction, and financial ranking against other families in the US.
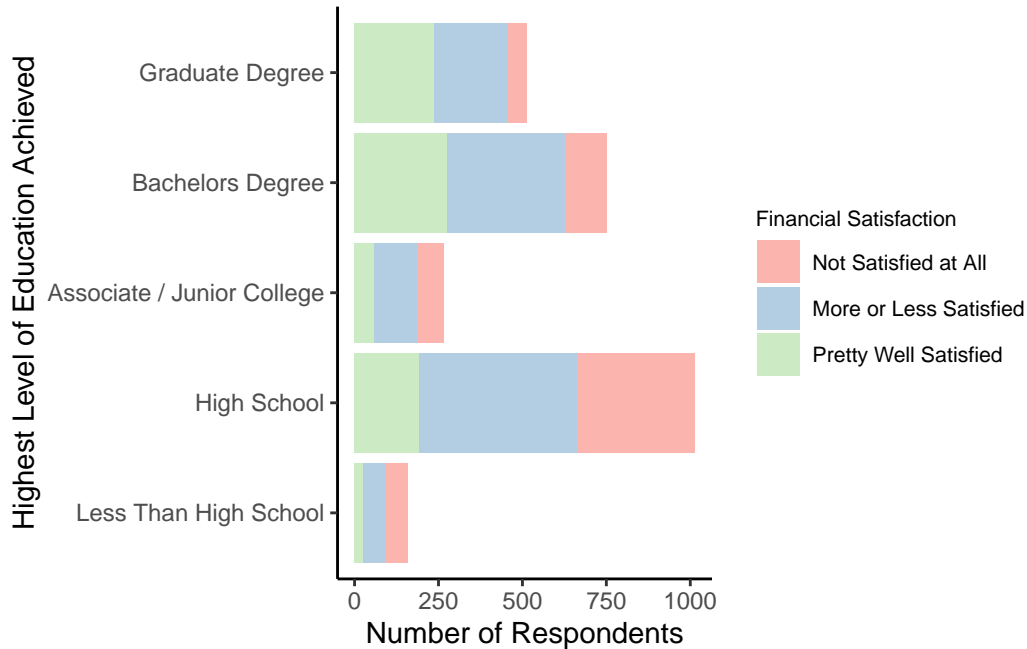
Figure 3: Respondent's Report of Financial Satisfaction by Their Highest Level of Education Achieved

4.2 Social Class

However, in some cases, the positive correlation between higher education and overall subjective well-being is more prominent - resulting in significant tension in our data of consideration. Researchers have investigated the relationship between education and one's subjective well-being, with several studies indicating that a higher level of education may be positively associated with greater levels of happiness. This relationship may be explained by the fact that education can impact one's self-ascribed social class, which in turn can influence their notion of happiness. Higher education is assumed to provide individuals with better job opportunities, higher income, better access to resources, and greater social mobility - placing people on the path towards a successful American Dream and resulting in a higher sense of one's social status. As a result, these individuals might experience greater life satisfaction, which contributes to their overall sense of happiness and security.

In a 2020 article published in the Journal of Personality and Social Psychology, authors Siyu Yu and Steven L. Blader examined the impact of status and social class on subjective well-being (SWB). They found that often times social class addresses fundamental psychological needs, such as autonomy, mastery, respect, and occupational prestige, and they proposed that individuals in higher social classes experience greater levels of status and power, leading to higher SWB (Yu and Blader 2019). Conversely, individuals in lower social classes feel lower
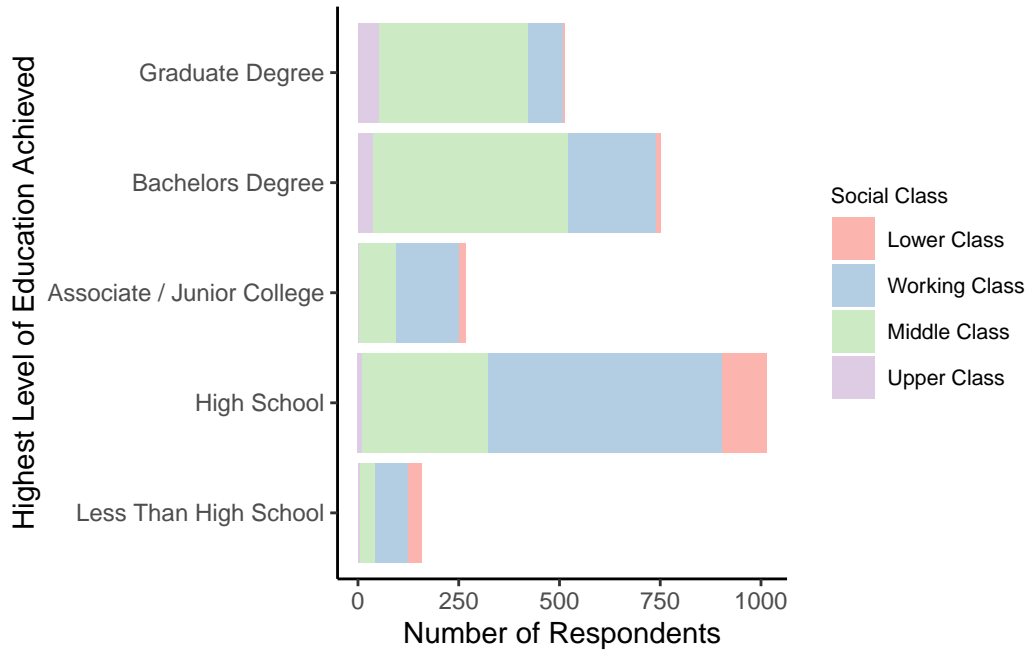
Figure 4: Respondent's Self-Ascribed Social Class by Their Highest Level of Education Achieved

levels of status and power, resulting in lower levels of SWB. This insight is evident in Figure 3, where we found that individuals holding Bachelors and Graduate Degrees are proportionally more satisfied with their financial situation, with the large majority selecting "Pretty Well Satisfied" and "More or Less Satisfied" than those selecting "Not Satisfied at All". Out of the 426 responses indicating a "Pretty Well" financial satisfaction, 69% of responses were individuals holding Bachelor and Graduate degrees while only 31% held Associate/Junior college, high school, and less than high school levels of education. In comparison, those who only completed up until the high school level of education have the most responses of "Not Satisfied at All". 70% out of the 390 "Not Satisfied At All" responses were individuals who completed high school education or lower, while only 30% of those holding Bachelor and Graduate degrees indicated a low financial satisfaction.

In addition, when looking at Figure 4, we found that there are more individuals holding Bachelor and Graduate degrees who have identified themselves as Upper and Middle class in proportion to those with lower levels of education. 89% of those who selected "Upper Class" and 68% of "Middle Class" held Bachelor and Graduate degrees. Among the 676 responses for "Working Class", 471 of those held high school level of education and lower, making up 70% of the responses. In sum, we found that both the research and data point to a link between higher social class and greater perceived levels of life satisfaction.

Overall, there seems to be a significant relationship between the data in education, social class,

and one's perceived well-being. Education may serve as an important factor in determining an individual's social class as it can unlock opportunities for resources and mobility, which in turn can positively impact their sense of status and overall happiness. At the same time, while higher levels of education may be generally associated with greater levels of overall well-being, this relationship may not always be a cause and effect correlation. Subjective well-being may be further influenced by other factors such as personal values, cultural background, and social support. It is important to consider these important nuances when examining the data and making assumptions in order to develop a more comprehensive understanding of how variables interact and impact individuals' lives. This will be further explored in the weaknesses, ethics, and bias section of this paper.

4.3 Financial Satisfaction

Financial satisfaction as a result of hard work is the core principle within the American Dream, and as a result, Americans are known for their work culture. Researchers have tried to investigate the differences between work culture within Europe as well as within the United States and have narrowed it down to a variety of factors that contribute to the culture as it is today. Despite the fact that the economies and societal frameworks of Europe and America are very similar, the approach to work within the United States is very different. The number of hours worked per year for the average American was about 17% higher than the hours per year for the average European. (Clement 2003) For this reason, financial satisfaction and social class are very prevalent within the American definition of well-being. Job satisfaction ties very closely this idea in the pursuit of the American Dream.

The second largest group of participants who had completed the survey had completed a bachelor's degree. In general, while a higher level of education improves access to better job opportunities, the process is not as linear as it may seem. According to Figure 1, while the number of individuals who have a graduate degree is not as high as the group that has completed a bachelor's degree, the reported financial ranking against other families was proportionately very similar for both groups. The majority for both groups claimed to be average or above average. There was still a significant number of individuals who had chosen below average, even for the group with the highest level of education.

A similar notion exists when comparing an individuals level of education with their job satisfaction. According to Figure 2, as the education level rises so does the number of people who are proportionately more satisfied with their jobs. However, job satisfaction is fleeting, it is simply a reflection of the current state, and not an overall indication of cumulative job satisfaction. According to Figure 3, financial satisfaction rises with an increased level of education, but the group that claims dissatisfaction is a significant number in the bachelor's and graduate degree groups. It remains a minority, but it is significant nonetheless. This points towards the un-attainability of the American Dream, in that despite the greater level education and increased access that comes with it, it does not guarantee increased job satisfaction, or a higher financial satisfaction.

4.4 Limitations and Weaknesses

There are several limitations to this paper. One weakness is that our insights rely on data from the General Social Survey (GSS), which is a cross-sectional survey that collects data at a single point in time. Although it can be helpful in investigating associations between variables and developing hypotheses, the GSS is not capable of establishing causation between variables and has potential for selection bias if participants are not representative of the population of interest (Wang and Cheng 2020). In addition, due to changes in the questions asked over time, the GSS has limited capacity to make exact comparisons - as in the data analyzed in our study, which was collected during a period when the survey was conducted entirely online, which necessitated modifications to the question format in order to accommodate the new platform. Above all, due to the nature of the data being self-reported responses, it may not fully capture the dynamic and complicated nature of the ways in which various levels of education affect one's overall well-being. The General Social Survey responses are subject to influence by a myriad of external factors including recall bias, in which participants may have left out important details when reporting about their subjective experiences.

Another potential ethical concern is that our paper may inadvertently reinforce the concept of the American Dream, which suggests that higher education is a key factor to achieving happiness and success in life. This concern is particularly relevant in Section 4.2, where we analyze the data as-is without taking into account the presence of systemic inequalities such as racism and economic inequality that can significantly limit access to one's education and social mobility. Moreover, the sample survey in the GSS may not fully represent the experiences of more marginalized groups, which point to the need for further research and survey strategies that incorporate more diverse perspectives.

In sum, while our paper provides valuable insights on the relationship between education and one's perceived well-being, it is important to consider the limitations, ethical concerns, and potential biases in the data and interpretation of our insights and findings.

5 Future Research

More research into this topic is important as it helps us gain a more substantial understanding of American ideals and how certain indicators may influence the rate at which individuals are achieving them, or not achieving them. Further research into this topic should explore more specific questions about attitudes towards work, type of work, income, and comparing respondent situations to close acquaintances to better understand American perspectives. We have provided a supplementary survey in Section A that would further build on the US GSS data in relation to our topic. Additionally, future research should be conducted over a period of time using the same survey and methodology to collect obtain information that is verifiable and encompasses a larger population of the United States.

A Appendix

A.1 Supplementary Survey

The supplementary survey is available: here

Exploring Attitudes Towards Work and Financial Satisfaction

Background

You are being asked to participate in a supplementary survey to the United States General Social Survey.

Purpose

The purpose of this research survey is to gain further insight into the relationship between educational achievement and self-described career and financial satisfaction to better understand how American's view their achievement of the "American Dream".

Study Procedures

Participation in this study involves giving honest responses to an online multiple-choice and scale based survey. This survey will take approximately 15 minutes to complete

Benefits

There are no direct benefits from participating in this research survey. You will not be compensated for participating and there is no cost associated with your involvement.

Risk

There is little to no mental or physical risk to you in completing this survey.

Voluntary Participation

You are under no obligation to participate in this survey. You may opt-out of the survey at any time without penalty. If you would like to withdraw your data from our research please email chloe.thierstein@mail.utoronto.ca within 2 months of your participation with the exact time that you filled out the survey and all data you provided will be deleted immediately. After 2 months, all data will be anonymized and we will not be able to remove your responses.

Confidentiality and Anonymity

The results of our research will be used to further analyze the effects of educational attainment on self-description career and financial satisfaction. Your name and any other identifying details will not be used nor will it be stored with your data. The anonymized data collected will be stored on the GSS website.

Consent

By completing this survey you consent to the collection and use your data.

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1. How many years has it been since you were in formal education?

   Mark only one oval.

   ◯ 1-2 years

   ◯ 3-5 years

   ◯ 6-10 years

   ◯ 10 + years

   ◯ I am currently enrolled in formal education

   ◯ N/A

2. What is your employment type?

   Mark only one oval.

   ◯ Self-employed

   ◯ Fulltime

   ◯ Part Time

   ◯ Casual

   ◯ Fixed-term Contract

   ◯ Apprenticeship

   ◯ Internship

   ◯ N/A

   ◯ Other: _____

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3. What is your current job position?

Mark only one oval.

◯ Entry Level

◯ Junior Associate

◯ Senior Associate

◯ Management

◯ Unemployed

◯ Other: _____

4. Did you need your education to get your current job?

Mark only one oval.

◯ Yes

◯ No

◯ N/A

5. How important is your education level to your level of financial satisfaction?

Mark only one oval.

◯ Very Important

◯ Moderately Important

◯ Not Important

◯ Don't Know

6. Do you believe that educational achievement has the power to change your social class?

Mark only one oval.

◯ Yes, definitely

◯ Yes

◯ Somewhat

◯ No

◯ Not at all

7. How much do you (individually) make per year?

Mark only one oval.

◯ Less than 10,000

◯ 10,000 - 30,000

◯ 31,000 - 60, 000

◯ 61,000 - 90, 000

◯ 91,000 - 120, 000

◯ 120,000 - 200,000

◯ 201,000 +

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8. How much money per year would allow an individual need to make to be financially secure in the United States

    Mark only one oval.

    ◯ 30,000 - 60, 000

    ◯ 61,000 - 90, 000

    ◯ 120,000 - 200,000

    ◯ 201, 000 - 250,000

    ◯ 251 - 300, 000

    ◯ 400K+

9. What social class would you say your parents belong in?

    Mark only one oval.

    ◯ Lower Class

    ◯ Working Class

    ◯ Middle Class

    ◯ Upper Class

    ◯ Don't Know

10. How satisfied are you with your manager?

    Mark only one oval.

    ◯ Very Satisfied

    ◯ Moderately Satisfied

    ◯ A Little Dissatisfied

    ◯ Very Dissatisfied

    ◯ I do not have a manager

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11.   Would a higher salary increase your job satisfaction?

Mark only one oval.

◯ Yes

◯ No

◯ Don't Know

12.   Would more vacation time increase your job satisfaction?

Mark only one oval.

◯ Yes

◯ No

◯ Don't Know

Thank you for completing the supplementary survey!

Your responses have been recorded.

Google Forms

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