

# Happiness in US\*

## Analysis of the Effects of Demographic Factors during 1972 to 2021

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## 1 Introduction

This analysis aims to gain a deeper understanding of the overall well-being and quality of life of people living in the United States by exploring the factors that contribute to happiness. While happiness is a subjective and personal concept, its impact on society is objective and significant. Identifying the factors that contribute to happiness is crucial for policymakers and individuals alike in making informed decisions that improve the quality of life for everyone.

To achieve this, we focus on three main research questions:

- 1) What are the trends of levels of happiness through the years 1972 to 2021?
- 2) What are the significant factors that affect the level of happiness people feel in society?
- 3) How do these factors contribute to the trend of the levels of happiness through the years 1972 to 2021?

We hypothesize that factors such as education, social isolation, and work status will have an average impact on happiness levels, while demographic features such as race and gender will have a lesser impact.

To provide readers with necessary background information, Section 2 outlines the survey data and collection methodology. In Section 3, the report presents the insights derived from analyzing the data. Section 4 provides a summary of the findings and outlines plans for further exploration of the dataset. Understanding the root causes of different levels of happiness can help policymakers and society develop effective strategies to improve citizens' quality of life. This analysis aims to provide valuable guidance for individuals to improve their satisfaction with life.

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\*Code and data are available at: [LINK](#).

## 2 Data

### 2.1 Source and Methodology

Our study is based on data collected from the US General Social Survey (GSS). The GSS is a nationally representative cross-sectional survey conducted since 1972, aimed at collecting data on contemporary American society to monitor and explain trends in opinions, attitudes, and behaviors.

One of the unique features of the GSS is that it adapts questions from earlier surveys, enabling researchers to conduct comparisons for up to 80 years. Moreover, the GSS has taken great care to maintain survey methodology as comparable as possible over time, including keeping the same sampling approach and question wording. This approach helps to minimize potential changes due to variations in methodology and supports the study of trends in public opinion in the United States over time.

The use of the GSS dataset in our research provides a robust and nationally representative sample of Americans, allowing us to examine the relationship between education and life satisfaction. This data source is widely recognized in the academic community for its comprehensive coverage of contemporary American society and its long-term approach to monitoring public opinion trends.

To conduct this analysis, we utilized the R programming language and various packages for data cleaning, exploration, and visualization. The raw data was obtained as a Stata file and imported into R using the Haven package. The dataset included responses from 60,092 survey participants to 568 survey questions. To clean and analyze the data, we used the tidyverse and dplyr packages. To visualize the data, we utilized the ggplot2 package.

### 2.2 Survey Frame and Weakness

Our survey has been carefully edited to improve upon existing questions from the original questionnaire and to add new questions that better capture the happiness of people in the USA. Specifically, we have addressed potential biases in questions and expanded the options to provide a more detailed exploration of the relationship between race and happiness. Additionally, we have added questions that focus on employment situations, income, COVID-19, mental health, future life aspirations, sense of fulfilment, and attitudes towards happiness.

We believe that our survey will provide a more comprehensive and nuanced understanding of the factors that contribute to happiness in the USA. By improving the survey questions, we hope to provide policymakers and individuals with valuable insights into how to improve overall well-being and foster a happier society.

## 2.3 Strength and Weakness of Dataset

The strength of the GSS data is that the GSS uses a large and representative sample of the US population, which allows the broader population to contribute to the data set to eliminate the regional bias that might be caused in different provinces in the US. Meanwhile the GSS data has been conducted consistently over a long period of time, allowing researchers to track changes especially in social attitudes. The GSS also uses standardized questions and methods, making it easier to compare data across different time periods and populations.

The GSS data also has noticeable weakness. For example, while it covers a wide range of topics, it may not capture all relevant factors for a particular research question. Meanwhile, with any survey, the GSS is subject to response bias, where certain individuals may be more or less likely to participate or answer certain questions. And the data only counts the US population, certain subgroups may be underrepresented or overrepresented in a sample.

## 2.4 Variables

The 6 variables we selected from GSS for this research listed as follow:

Race: the race respondent considered themselves are

Happy: the happiness levels people felt at that moment

Degree: the highest degree respondents had till that time

Wrkslf: the employment status of the respondents

Marital: the marital status of respondents

Sex: the sex respondents considered themselves are

## 3 Results

### 3.1 Overall Happiness

Over the past five decades, Figure 1 shows there has been an overall increase in happiness levels in the United States, though with significant fluctuations. Further analysis of this trend reveals that happiness is influenced by various factors, such as macroeconomic conditions, social changes, and personal circumstances.

For instance, in the early 1990s, there was a considerable rise in happiness due to political and economic changes, such as the end of the Cold War, the emergence of neoliberalism, and the rise of a new Democratic Party (Levine (1994)). In contrast, the dot-com crash of the early

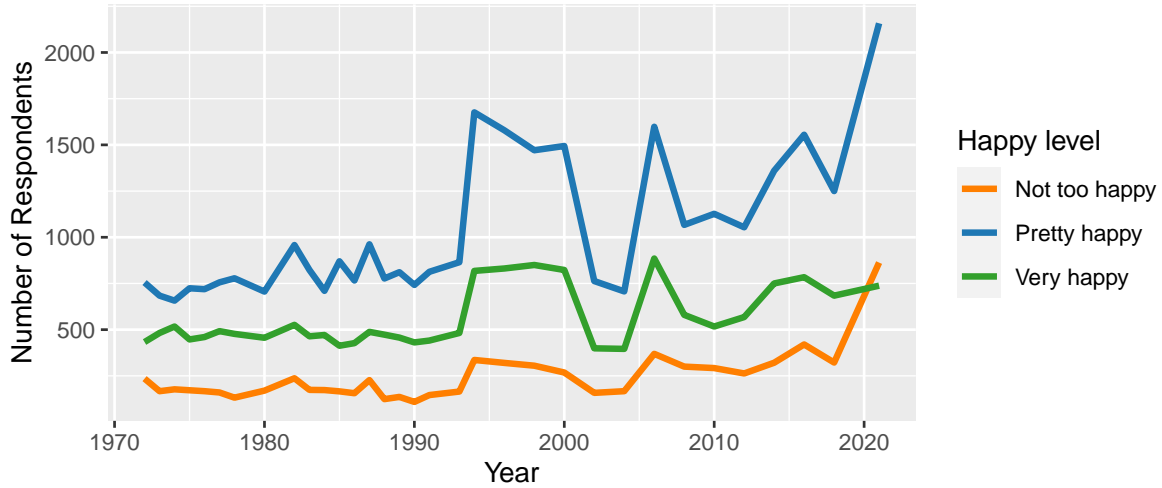


Figure 1: Changes in happiness levels from 1972 to 2021

2000s led to a sharp decline in happiness levels that persisted until the economic recovery brought it back up to pre-crash levels.

However, the global financial crisis and recession of 2007-2009 resulted in another decrease in happiness, as it impacted people’s quality of life. More recently, the COVID-19 pandemic has had both positive and negative effects on happiness levels. While social isolation and economic uncertainty have decreased happiness, increased family and leisure time have had positive effects.

We will examine how demographic factors such as sex, race, marital status, degree, and employment status influence happiness and why as follow.

### 3.2 Sex

In this analysis, we examined Figure 2, which compares the proportion of different education levels for each sex group from 1972 to 2021. We observed that the distribution of overall happiness levels remains consistent over time, with “pretty happy” being the most common response for both male and female groups.

A slight difference was noted in the mid-1970s, where the female group appeared slightly happier than the male group. However, the overall trends in happiness levels for both groups align with the trends shown in Figure 1.

It is worth noting that our analysis is limited to the data presented in the figures, and further investigation may be required to understand any potential underlying factors contributing to these trends.

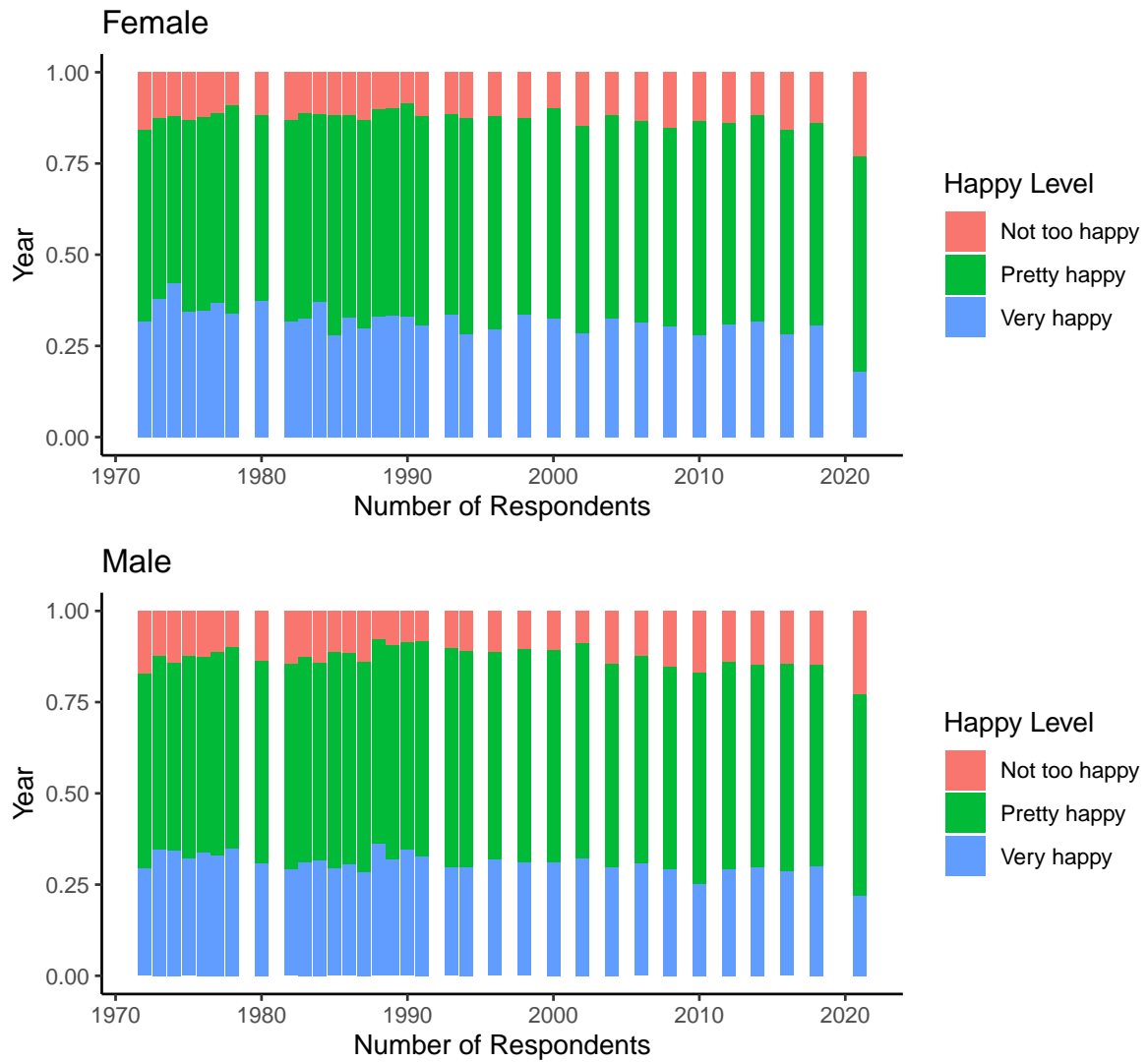


Figure 2: Trends in happiness levels for different genders from 1972 to 2021

### 3.3 Race

In Figure 3, we present the trends in happiness levels among different racial groups in America from 1972 to 2021. The figure shows that white people consistently report higher levels of happiness than other racial groups over the period, although this could be due to survivorship bias as the majority of respondents in the GSS dataset are white. It is important to note that all racial groups have become less happy in 2021, possibly due to the COVID-19 pandemic.

Notably, the figure shows that black people have experienced drops in happiness levels in specific years, including 1980, 2008, and 2021. These drops in happiness levels may reflect the impact of significant events or social phenomena that occurred during those years and that disproportionately affected the happiness of the black race. Further research may be needed to explore the reasons for these trends and to determine the extent to which they are influenced by factors such as racism, economic inequality, and political events.

### 3.4 Degree

The trends in happiness levels across different education groups from 1972 to 2021 are presented in Figure 4. It can be observed that individuals with a graduate and above education experience report the lowest levels of the “not too happy” response option and have the highest proportion of respondents selecting the “very happy” option across the years. Conversely, individuals with less than a high school education have the highest proportion of respondents selecting the “not too happy” response option among the different education groups over the years.

### 3.5 Employee Type

In general, there may not be significant differences between being self-employed or being employed by someone else in terms of overall trends and distribution. However, upon closer examination of Figure 5, it becomes apparent that self-employed individuals tend to report higher levels of happiness than those who are employed by others. This could be attributed to several factors, such as the flexibility of their work schedule, the ability to reduce commute time, and fewer relationship issues. Overall, these benefits may contribute to a greater sense of control over one’s work and personal life, which can positively impact overall happiness levels.

### 3.6 Marital Status

Figure 6 indicates that married individuals are more likely to report higher levels of happiness, with a greater proportion of respondents selecting “Pretty happy” and “Very happy” compared to those in other marital status categories. Interestingly, the proportion of respondents selecting “Very happy” in other groups is comparatively lower. Additionally, the distribution

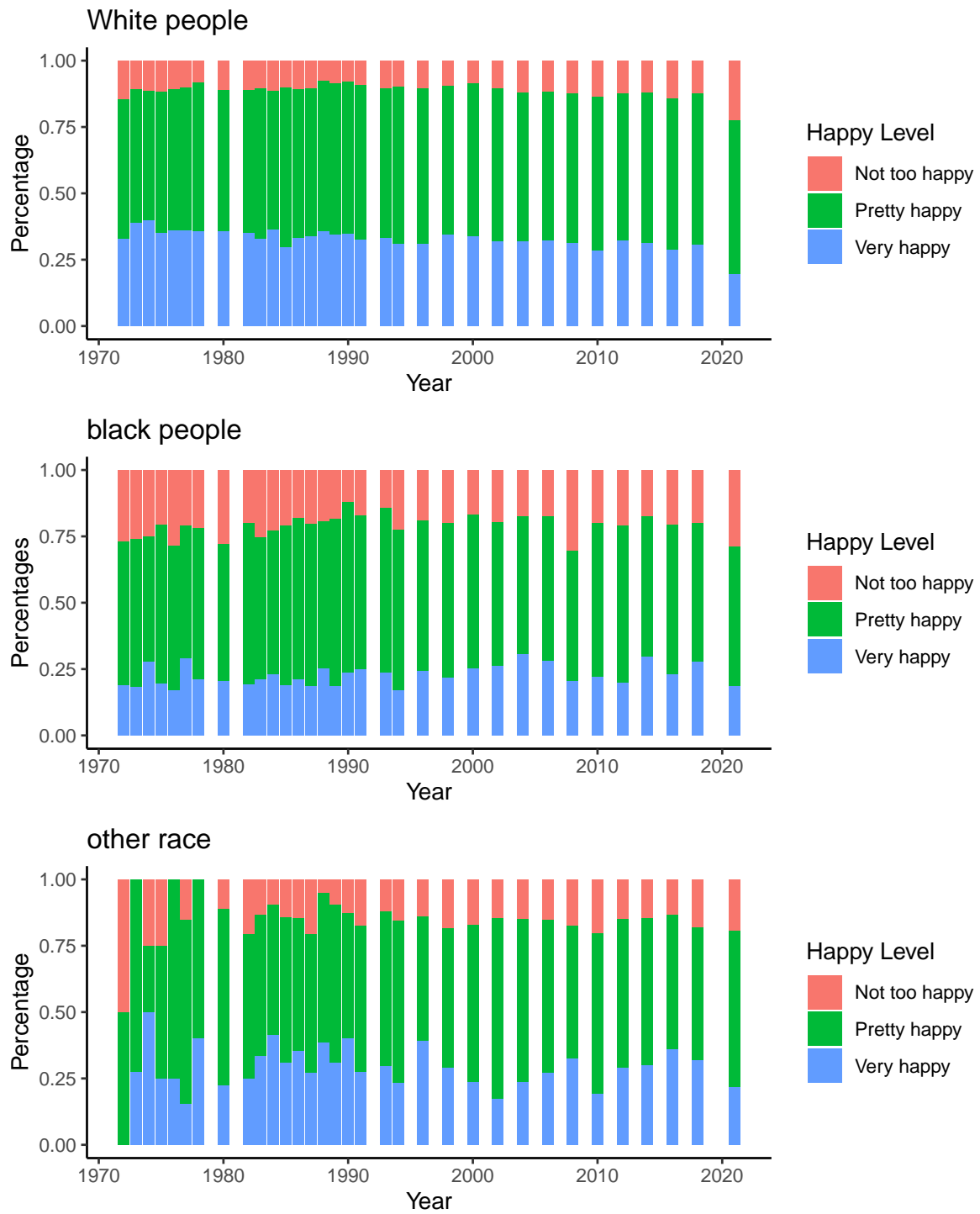


Figure 3: Trends in happiness levels for different races from 1972 to 2021

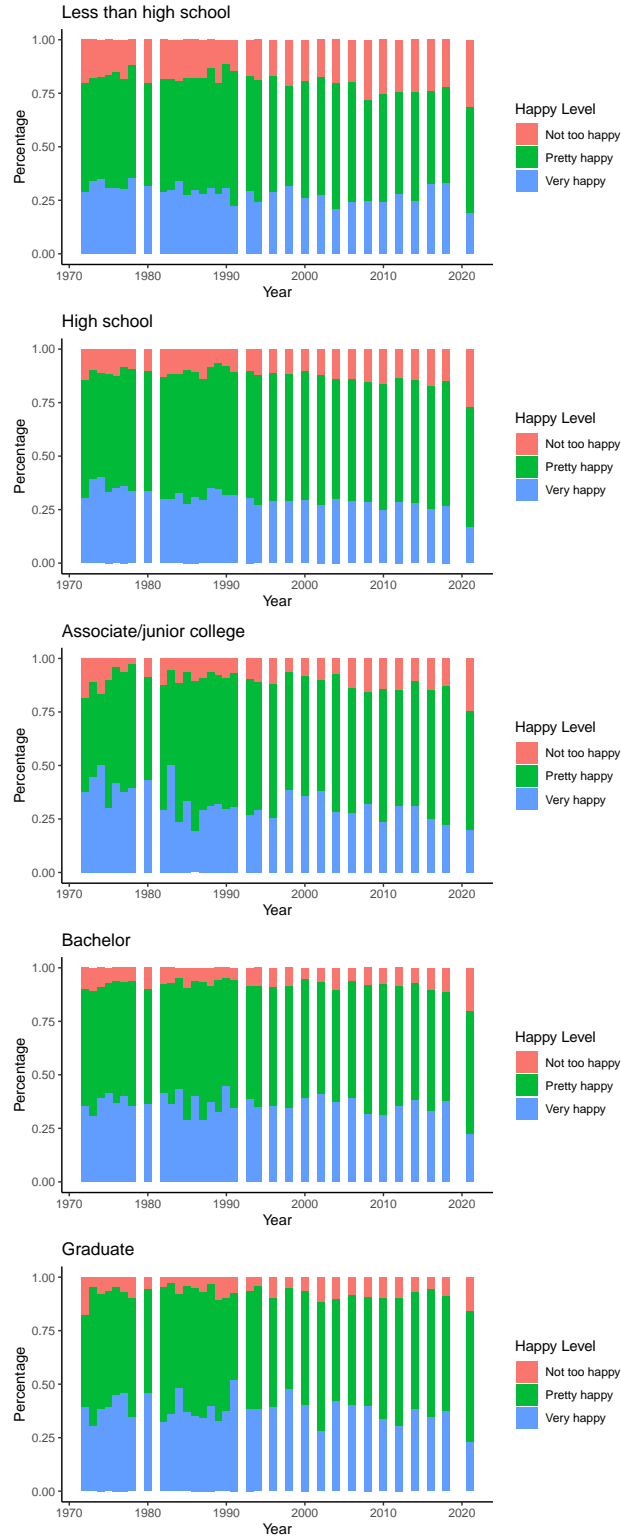


Figure 4: Trends in happiness levels for different degrees from 1972 to 2021



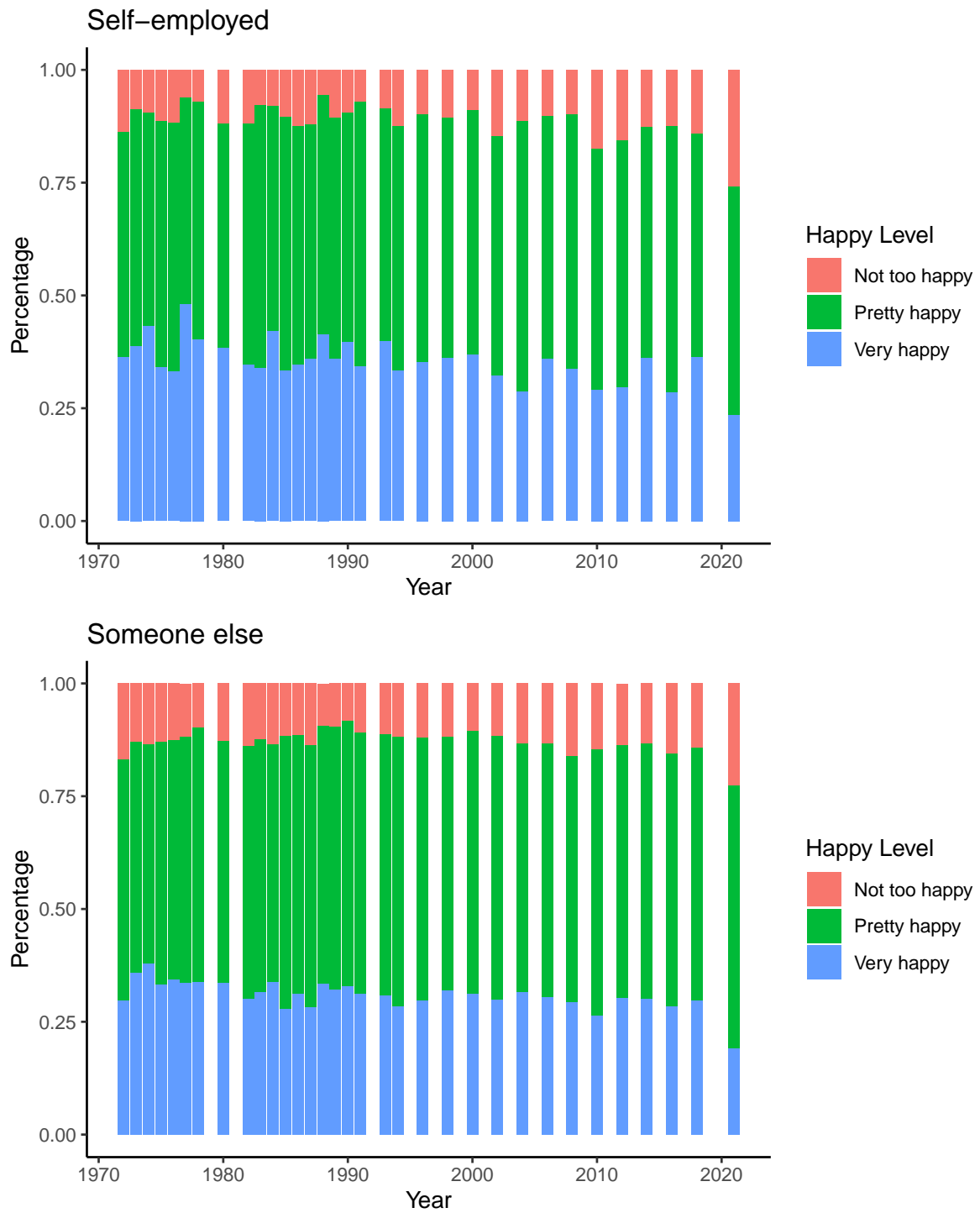


Figure 5: Trends in happiness levels for different employee type from 1972 to 2021

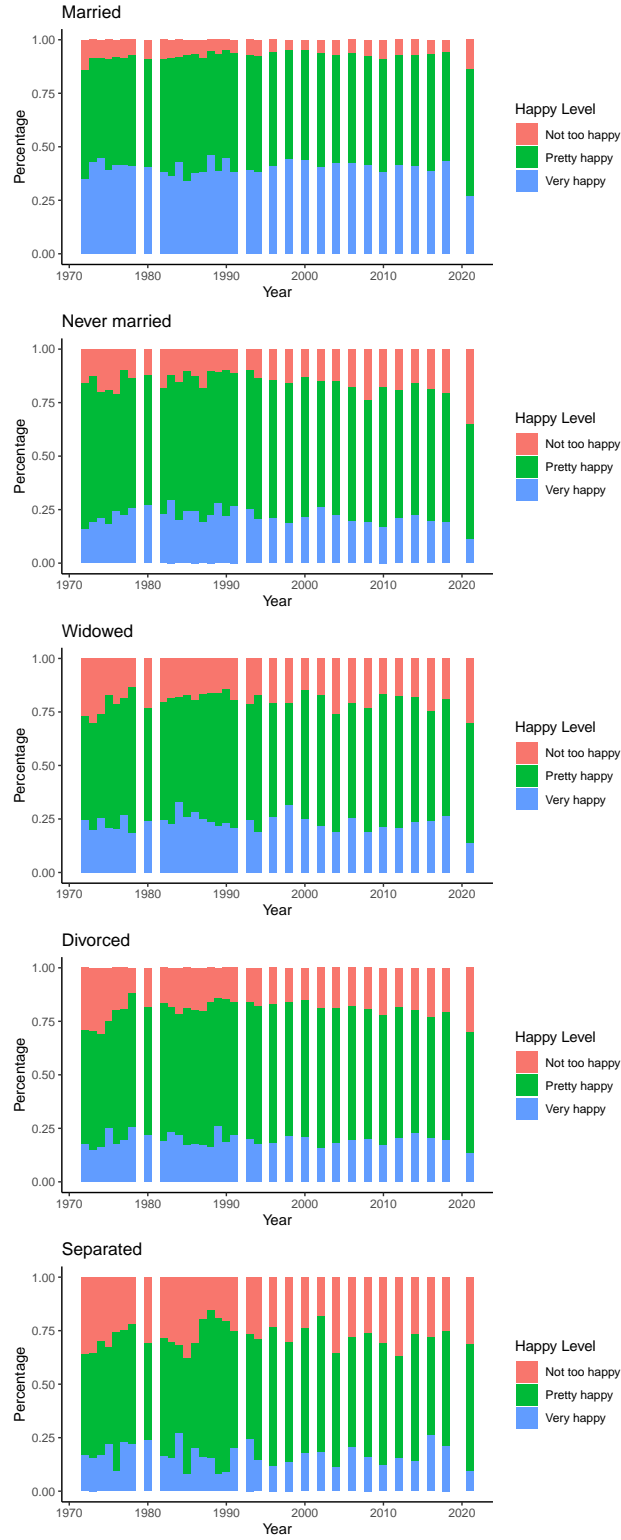


Figure 6: Trends in happiness levels for different marital status from 1972 to 2021

of happiness levels in the married group appears to be more stable and consistent over time compared to the other groups.

It is worth noting that the COVID-19 pandemic had a significant impact on people's happiness levels, and married people's level of happiness was more stable during this time. This may be attributed to the stability and security that marriage can provide during times of uncertainty.

## **4 Discussion**

### **4.1 Race and Levels of Happiness**

Upon analyzing Figure 2, we observed that the overall distribution of happiness levels appears to be similar across different racial groups. However, there was a significant increase in the proportions of happiness levels reported by individuals identifying as Black or belonging to other racial groups during 1970 to 1990. This suggests that race identity may potentially influence people's happiness levels within a society. Individuals from diverse racial and ethnic groups may experience varying degrees of social and economic disadvantage, discrimination, and prejudice, which can impact their overall sense of well-being and happiness, leading to a major decrease or increase in self-reported happiness levels.

Research has shown that individuals who identify as racial minorities often experience more stress and lower levels of life satisfaction than those who identify as members of the dominant racial group (Frederick et al. (2022)). This can be due to factors such as experiences of racism, lack of representation in positions of power, and limited access to resources and opportunities. However, it is important to note that the impact of race identity on happiness is complex and multifaceted. The relationship between race and happiness can be influenced by factors such as social support, cultural identity, and personal values. Moreover, individual differences in personality, life circumstances, and coping strategies can also play a significant role in shaping the relationship between race identity and happiness. Therefore, while race identity can be a relevant factor in determining people's level of happiness, it is important to consider the context and individual differences in any analysis of this relationship.

### **4.2 Education levels and Happiness**

### **4.3 Marital Status and level of Happiness**

### **4.4 Weakness**

##Next Steps

#### **4.5 First discussion point**

If my paper were 10 pages, then should be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

#### **4.6 Second discussion point**

#### **4.7 Third discussion point**

#### **4.8 Weaknesses and next steps**

## A Appendix

A link to our survey exploring what will affect happiness in US can be found in the footnotes below.<sup>1</sup>

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<sup>1</sup><https://forms.gle/ZAoN1uFc9Gc24anh8>

# What will Affect Happiness in the US?

Welcome to this survey on the factors that affect happiness in the United States of America. This survey aims to investigate the factors that affect happiness in the United States. We hope to gain insights into the complex interplay of social, economic, cultural, and personal factors that shape happiness in American society. Your input will help us better understand the factors that influence happiness in the US.

If you have any questions, please do not hesitate to contact us at:

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junwei.zhang@mail.utoronto.ca

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Thank you for your participation!

 fffaustinefan@gmail.com (未分享) [切换帐号](#)



What gender do you consider yourself?

- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Non-binary
- ☐ Genderqueer
- ☐ Genderfluid
- ☐ Two-spirit
- ☐ Intersex
- ☐ Agender
- ☐ Androgynous

- ☐ Bigender
- ☐ Pangender
- ☐ Demigender
- ☐ Third gender
- ☐ Other/Prefer not to disclose

What is your highest degree?

- ☐ Less than high school
- ☐ High school
- ☐ Associate/junior college
- ☐ Bachelor's
- ☐ Graduate

Are/Were you self-employed or do/did you work for someone else?

- ☐ Self-employed
- ☐ Someone else

What is your current employment situation?

- ☐ Full Time
- ☐ Part Time

☐ Self-employed

☐ Unemployed

Have you ever taken any college-level science courses before?

☐ Yes

☐ No

What race do you consider yourself?

☐ White

☐ American Indian or Alaska Native

☐ Asian

☐ Black or African American

☐ Two or more races

☐ Native Hawaiian or Other Pacific Islander

☐ 其他: \_\_\_\_\_

How do you think the COVID-19 pandemic has affected your overall happiness and well-being?

☐ Significantly decreased my happiness and well-being

☐ Somewhat decreased my happiness and well-being



- ☐ Had no effect on my happiness and well-being
- ☐ Somewhat increased my happiness and well-being
- ☐ Significantly increased my happiness and well-being

How often do you go for psychological counseling?

- ☐ Once a week
- ☐ Bi-weekly
- ☐ Once a month
- ☐ As needed

What is your annual household income before taxes?

- ☐ Under \$49,020
- ☐ \$49,020 - \$98,040
- ☐ \$98,040 - 151,978
- ☐ \$151,978 - \$ 216,511
- ☐ Over \$ 216,511

What do you consider your marital status?

- ☐ Married
- ☐ Widowed

- ☐ Divorced
- ☐ Separated
- ☐ Never married

What factors contribute the most to your happiness? (Select all that apply)

- ☐ Strong personal relationships
- ☐ A fulfilling career
- ☐ Financial stability
- ☐ Pursuing hobbies or interests
- ☐ Good physical health
- ☐ Community involvement and social connectedness
- ☐ Mental and emotional health
- ☐ Other

Are you optimistic or pessimistic about your future on a scale from 1- 10?

	1	2	3	4	5	6	7	8	9	10	
Very optimistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very pessimistic

On a scale of 1-10, how would you rate your overall sense of purpose or fulfillment in life?

	1	2	3	4	5	6	7	8	9	10	
Very poor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very strong

Thank you for participating in this survey! Your feedback will help us to understand happiness in the US. :)

## B Additional details

## References

- Frederick, David A., Tania A. Reynolds, Carlos A. Barrera, and Stuart B. Murray. 2022. "Demographic and Sociocultural Predictors of Face Image Satisfaction: The u.s. Body Project i." *Body Image* 41: 1–16. <https://doi.org/https://doi.org/10.1016/j.bodyim.2022.01.016>.
- Levine, Rhonda F. 1994. *Gender and Society* 8 (4): 632–34. <http://www.jstor.org/stable/189825>.