Happiness Does Not Cause Altruism: A review of US General Social Survey data*

Sebastian Rodriguez, Randall Ni, Iz Leitch March 16, 2023

The relationship between happiness and altruistic behaviors has been the subject of much research, with some studies suggesting a positive correlation and others finding no significant relationship. This paper examines the existing literature on the topic in addition to the survey results provided by NORC's General Social Survey (GSS) of United States residents and analyzes the data to draw conclusions. Based on the available evidence, it appears that there is little to no relationship between happiness and altruistic behaviors, suggesting that individuals may engage in altruistic acts for reasons other than personal happiness.

Table of contents

| 1 | Introduction | 2 |
|---|---|--------------|
| 2 | General Social Survey Data 2.1 Happiness and Donating to the Homeless | |
| 3 | Discussion | 8 |
| 4 | Inclusive Acknowledgements | 9 |
| 5 | Appendix 5.1 Appendix A: Supplementary Survey | 10 10 |
| 6 | References | 12 |

^{*}Code and data supporting this analysis is available at: https://github.com/seb646/happiness-and-altruism

1 Introduction

There is an implied correlation between emotions of happiness and altruistic behaviors. Happiness is a question of an individual's well-being, determined by emotional stability, feelings of satisfaction, and countless immeasurable qualitative factors. Happiness is also subjective, varying by an individual's definition of the term in addition to other factors like time of day, a given situation, and more. Altruism is a far more measured metric: while types of altruism differ, altruistic actions themselves are defined and can be quantified. Generally, a leading presumption is that feelings of happiness give a person the security and ability to take altruistic actions.

Researchers have long sought to find a relationship between happiness and altruism, leading to mixed results. Some scholars argue that a "strong correlation exists" between the two, with caveats like "so long as they are not overwhelmed by helping tasks" (Post 2005). One investigation, focusing on university-aged people, found a "significant relationship" between happiness and altruism, going so far as to say that happiness "has a crucial role in creating altruism" (Ali and Bozorgi 2016). Other scholars argue that happiness has no bearing on altruistic behavior, and instead other feelings, like elevation, contribute to altruistic acts (Schnall, Roper, and Fessler 2010). These differing opinions are echoed throughout the research community, with evidence to support both hypotheses.

Despite general feelings that happiness leads to altruism, there is an important question of whether there is actual causation or a mere correlation between the two social measures. This paper investigates levels of happiness against two specific altruistic acts: donating food or money to the homeless and giving directions to strangers. Specifically, this paper aims to interrogate the relationship between happiness and altruism using data from the NORC's General Social Survey (GSS) of United States residents.

The findings revealed little evidence to support any relationship between happiness and altruism. Using survey results from 2002, 2004, 2012, and 2014, the data shows that there is no definitive link between feelings of happiness and altruistic acts. The survey data showed that, when feelings of happiness increased, it did not necessarily lead to the two altruistic acts studied in this paper. Although no link was found, it is worth noting that the question of happiness and altruism was not the purpose of these surveys. Both happiness and altruism were measured in the general survey, but it did not seek to study their relationship nor did it provide supplementary questions to aid in such a research endeavor. Further studies should explicitly seek to question the public's feelings of happiness against their altruistic behavior.

2 General Social Survey Data

The primary source for data in this study was the United States General Social Survey (GSS), conducted by the University of Chicago's NORC with funding from the National Science Foundation. The GSS has been in operation since 1972, with consistent sampling and questioning that allows researchers to view and predict trends in data. The survey includes recurring and topical modules, with each participant receiving a subset of these modules.

While the GSS consists of hundreds of questions covering a plethora of topics, this study examined three specific questions:

- 1. "Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?"
- 2. "During the past 12 months, how often have you... given directions to a stranger?"
- 3. "During the past 12 months, how often have you... given food or money to a homeless person?"

Question 1 allows participants to respond with "Very happy", "Pretty Happy", "Not too happy", and a variety of abstentions. Questions 2 and 3 sought to examine the frequency of altruistic action, providing responses ranging from "More than once a week" to "Not at all in the past year", with a variety of abstention options.

The survey's question about happiness was the only variable that tracked general happiness with the most complete set of data. Other options included happiness of marriage, happiness in relation to "today" (the day the survey was taken), and a sparsely collected "how happy would you say you are, on the whole." The other datasets either did not relate to this study's research question or lacked the data to provide meaningful insights.

Questions about altruism had a significantly greater range when compared to questions about happiness. The survey's questions on altruism ranged from social actions to financial donations. The two questions selected for study, giving directions to strangers and giving food or money to the homeless, offered the greatest range of representative responses—it combined both social and financial altruism.

2.1 Happiness and Donating to the Homeless

Assisting those in need is the most fundamental definition of altruism, and donating to the homeless is perhaps the best representation of altruism. Donating to the homeless—whether in the form of money or food—requires empathy and true care for the well-being of others. While it can be considered a form of financial altruism, donating to the homeless goes far beyond other acts of financial altruism, like donating to charities. Donating to the homeless requires direct interactions with a homeless person. These interactions can be more difficult, there are time and physical restrictions that may prevent this form of altruism. However, this form of altruism represents the most direct and personal altruistic action a person can take.

The first graph (Figure 1) charts the number of people who identified as "Very happy" or "Pretty happy" versus the number of people who donated food or money to a homeless person at least or more than 2 times per year. This frequency of altruistic action was selected as a baseline due to the possible restrictions that come with this action. For example, as explored earlier, financial and other barriers may prevent this type of altruism. The graph charts these two variables against the years 2002, 2004, 2012, and 2014.

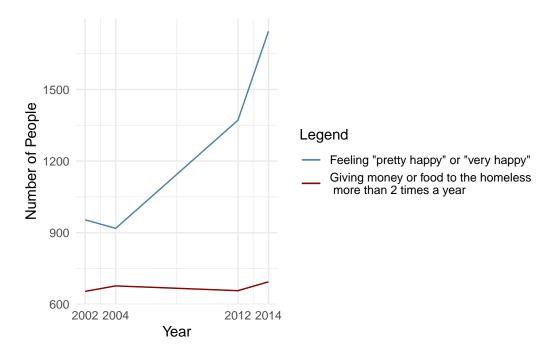


Figure 1: Happiness vs Giving Food or Money to the Homeless

The second graph (Figure 2) charts the number of people who identified as "Not too happy" against the number of people who did not donate food or money to a homeless person or only did so once a year. This "negative" view of unhappiness and non-altruistic behavior contrasts the previous graph and was intended to provide insight as to whether feeling not happy impacted a lack of altruistic behavior.

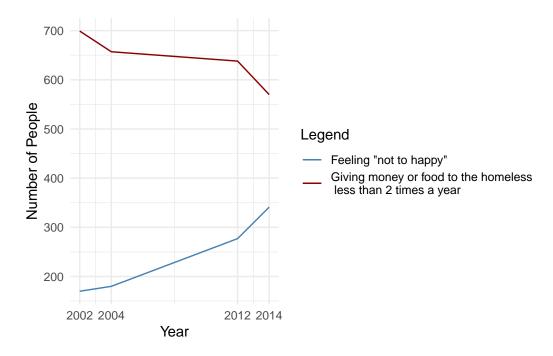


Figure 2: Unhappiness vs. Not Giving Food or Money to the Homeless

Charting both happiness versus altruism and unhappiness versus non-altruistic tendencies revealed that there was no significant correlation between the two variables. Between 2002 and 2004, general happiness increased while this altruistic action decreased. However, between 2012 and 2014, both happiness and donations to the homeless increased, but they did not do so at the same or even a similar rate so it is insufficient in providing meaningful insights.

2.2 Happiness and Giving Directions to Strangers

Altruism comes in a diverse range of actions—it represents more than financial or physical donations. A significant portion of the altruistic questions of the GSS relates to social altruism, questioning whether people donate their own time and energy to improve the well-being of others. Stopping to help a stranger comes with drawbacks: it is potentially dangerous, it consumes time, and it disrupts a person's routine. It also represents an arguably less important act when compared to helping the homeless—the stakes are lowered, and it is less necessary to society. Taking the time to stop and help a stranger when they are not in dire need requires an elevated altruistic sense that transcends mere obligation.

The first graph (Figure 3) charts the number of people who identified as "Very happy" or "Pretty happy" versus the number of people who gave directions to a stranger at least or more than 2 times per year. Like donating to the homeless, this baseline was selected because of the possible restrictions that come with the action. Not everyone is in a position to give directions to a stranger, either because they live in a low-traffic, low-tourist area or because of other time restrictions. The graph charts these two variables in the years 2002, 2004, 2012, and 2014.

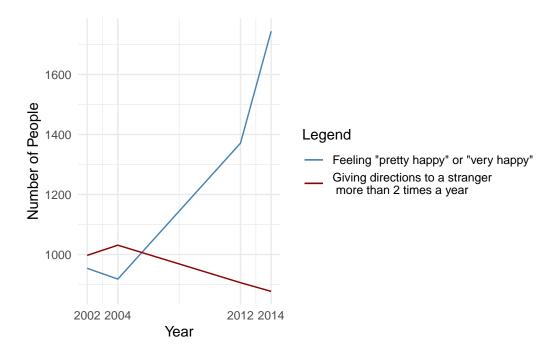


Figure 3: Happiness vs Giving Directions to Strangers

The second graph (Figure 4) charts the number of people who said they were "Not too happy" against the number of people who did not give directions to strangers or only did so once a year. Highlighting this "negative" frame of the question seeks to understand if there is a correlation between a lack of happiness and non-altruistic behavior.

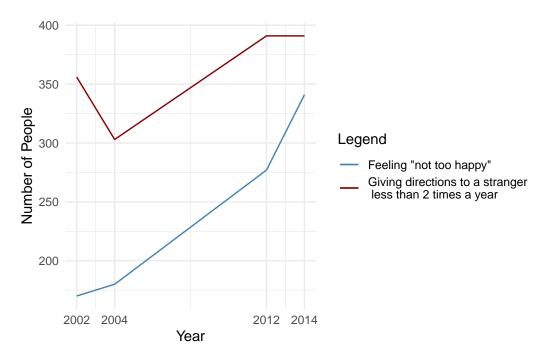


Figure 4: Unhappiness vs. Not Giving Directions to Strangers

Charting happiness against the altruistic tendency to give directions to a stranger revealed that there was no significant correlation between happiness and altruism. In fact, the data shows that the opposite was true in this specific case. Between 2002 and 2004, feelings of happiness decreased while the act of giving directions to a stranger increased. Between 2012 and 2014, the number of people who gave directions to a stranger decreased steadily while there was a statistically significant number of people who reported feeling "Pretty happy" or "Very happy." When examining the negatives of both scenarios (unhappiness and not giving directions to a stranger), both the number of people who felt unhappy and the number of people who did not give directions significantly increased.

3 Discussion

Applying the U.S. General Social Survey (GSS) to this study came with significant limitations. The most notable limitation was that the survey was not intended to reveal a connection between happiness and altruism. The general nature of the survey meant that the questions were ambiguous and did not seek further detail from the participant. For example, while it asked the participant to label their happiness, the cause of their happiness—or unhappiness—was not clear. Further, altruistic questions were only asked in certain years: 2002, 2004, 2012, and 2014. This limited data set did not give the breadth of data that this study desired, although it was enough to make a preliminary determination on the relationship between happiness and altruism.

The GSS questions also came with certain biases that may have skewed results. For example, in relation to altruism and giving directions to a stranger, it is important to ask: how often is the participant given the opportunity to perform this act? While many people in the United States live in a city or in high-traffic, high-tourist areas, a great number of people live in rural areas where they are not given such an opportunity. To the same extent, the question of opportunity is similar for donating food or money to the homeless. It is necessary to understand why a person did not donate to the homeless. Did they not have the opportunity because they do not live in an area that has a significant number of homeless people? Did they not have the financial means to donate at that time? Did they have the desire to donate, but did the act of traveling to an ATM or restaurant outweigh their altruistic urge? This context would reveal significant insight into the situations surrounding these altruistic actions and help determine whether the altruistic nature existed and the person simply lacked the means to follow through.

Another important consideration is whether the GSS is an effective tool in answering this question. It was an effective tool—to an extent. The GSS provided a surface-level baseline to measure both happiness and altruistic actions. It collected self-reported levels of happiness and self-reported acts of altruism. This was enough to determine that there was rarely a correlation and no causation between happiness and altruism in the United States at the time of these surveys. However, it creates questions about altruistic intent and intrinsic definitions of happiness, while simultaneously providing a platform for further research.

While this study suggests a lack of a relationship between happiness and altruism, the limitations that come from the General Social Survey (GSS) questions make it difficult to investigate the question further.

4 Inclusive Acknowledgements

Land Acknowledgement

We wish to acknowledge the land on which this data was collected and analysed. For thousands of years, it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.

This statement was originally prepared in consultation with First Nations House and the Elders Circle for use at the University of Toronto (*Land Acknowledgement* n.d.).

Data Acknowledgement

The data used in this paper was obtained through the General Social Survey (GSS), a project of the independent research organization NORC at the University of Chicago, with principal funding from the National Science Foundation. This paper uses three data sets from the NORC's GSS:

- General Happiness¹
- Has Given Directions to a Stranger²
- Has Given Money or Food to a Homeless Person³

Resources Acknowledgment

The primary tool used to analyse data in this paper is R, an open-source statistical programming language (R Core Team 2022b). The paper also uses a number of R packages, including: dplyr (Wickham et al. 2022), foreign (R Core Team 2022a), ggplot2 (Wickham 2016), here (Müller 2020), janitor (Firke 2021), kableExtra (Zhu 2021), knitr (Xie 2023), lubridate (Grolemund and Wickham 2011), readr (Wickham, Hester, and Bryan 2022), RColorBrewer (Neuwirth 2022), scales (Wickham and Seidel 2022), and tidyverse (Wickham et al. 2019).

¹General Happiness data is available at: https://gssdataexplorer.norc.org/variables/434/vshow

 $^{^2} Has\ Given\ Directions\ to\ a\ Stranger\ data\ is\ available\ at:\ https://gssdataexplorer.norc.org/variables/2886/vshow \\ ^3 Has\ Given\ Money\ or\ Food\ to\ a\ Homeless\ Person\ data\ is\ available\ at:$

5 Appendix

5.1 Appendix A: Supplementary Survey

Researchers have long sought to find a connection between happiness and altruistic actions. Some studies show that happiness may lead to greater levels of altruism, while others fail to find a relationship between the emotion and subsequent action. With homelessness on the rise and a growing separation between socio-economic classes, it is important to discover the leading causes of altruism.

By participating in this survey, you consent to us collecting your basic information and understand that we will be using your responses in our study. The survey is anonymous, we will not collect or share any personal identifiable information. The survey is also voluntary, and you may withdraw at any time.

If you have any questions or concerns, feel free to contact Sebastian Rodriguez (s [dot] rodriguez [at] mail [dot] utoronto [dot] ca).

- 1. On a scale of 1-5, how happy do you feel right now?
 - a. Very happy
 - b. Pretty happy
 - c. Happy
 - d. Not too happy
 - e. Unhappy
- 2. How often have you given directions to a stranger in the past year?
 - a. More than once a week
 - b. Once a week
 - c. Once a month
 - d. At least 2 or 3 times in the past year
 - e. Once in the past year
 - f. Not at all in the past year
- 3. How often are you given the opportunity to give directions to a stranger?
 - a. More than once a week
 - b. Once a week
 - c. Once a month
 - d. At least 2 or 3 times in the past year
 - e. Once in the past year
 - f. Not at all in the past year
- 4. If did not give directions to a stranger, did you want to?
 - a. Yes

- b. It depends on the day
- c. It depends on the time I have in the moment
- d. No
- 5. If you had the desire but did not give directions to a stranger, what prevented you from doing so?
 - a. I do not live in an area with a lot of strangers asking for directions
 - b. I did not have the time to help
 - c. I did not know enough about the area to be helpful
 - d. Another factor beyond my control prevented me from helping
- 6. How often have you donated food or money to a homeless person in the past year?
 - a. More than once a week
 - b. Once a week
 - c. Once a month
 - d. At least 2 or 3 times in the past year
 - e. Once in the past year
 - f. Not at all in the past year
- 7. How often are you given the opportunity to donate to a homeless person?
 - a. More than once a week
 - b. Once a week
 - c. Once a month
 - d. At least 2 or 3 times in the past year
 - e. Once in the past year
 - f. Not at all in the past year
- 8. If did not donate to a homeless person, did you want to?
 - a. Yes
 - b. It depends on the day
 - c. It depends on the money and resources at my disposal
 - d. No
- 9. If you had the desire but did not donate to a homeless person, what prevented you from doing so?
 - a. I do not live in an area with a lot of homeless people
 - b. I did not have the time to help
 - c. I did not have the money or resources to help
 - d. Another factor beyond my control prevented me from helping

Thank you for participating in this survey! Your responses will greatly aid our effort to understand altruism and whether happiness has any impact on the behavior. If at any time you wish to withdraw from this survey, please contact Sebastian Rodriguez (s [dot] rodriguez [at] mail [dot] utoronto [dot] ca).

6 References

- Ali, Raziyeh Meyzari, and Zahra Dasht Bozorgi. 2016. The Relationship of Altruistic Behavior, Empathetic Sense, and Social Responsibility with Happiness Among University Students. Practice in Clinical Psychology. Vol. 4. http://jpcp.uswr.ac.ir/article-1-262-en.html.
- Firke, Sam. 2021. Janitor: Simple Tools for Examining and Cleaning Dirty Data. https://CRAN.R-project.org/package=janitor.
- Grolemund, Garrett, and Hadley Wickham. 2011. "Dates and Times Made Easy with lubridate." *Journal of Statistical Software* 40 (3): 1–25. https://www.jstatsoft.org/v40/i03/.
- Land Acknowledgement. n.d. University of Toronto. https://indigenous.utoronto.ca/about/land-acknowledgement.
- Müller, Kirill. 2020. Here: A Simpler Way to Find Your Files. https://CRAN.R-project.org/package=here.
- Neuwirth, Erich. 2022. RColorBrewer: ColorBrewer Palettes. https://CRAN.R-project.org/package=RColorBrewer.
- Post, Stephen G. 2005. Altuism, Happiness, and Health: It's Good to Be Good. International Journal of Behavioral Medicine. Vol. 12. https://doi.org/10.1207/s15327558ijbm1202_4.
- R Core Team. 2022a. Foreign: Read Data Stored by 'Minitab', 's', 'SAS', 'SPSS', 'Stata', 'Systat', 'Weka', 'dBase', ... https://CRAN.R-project.org/package=foreign.
- ——. 2022b. R: A Language and Environment for Statistical Computing. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.
- Schnall, Simone, Jean Roper, and Daniel M. T. Fessler. 2010. Elevation Leads to Altruistic Behavior. Psychological Science. Vol. 21. https://doi.org/10.1177/0956797609359882.
- Wickham, Hadley. 2016. *Ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag New York. https://ggplot2.tidyverse.org.
- Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D'Agostino McGowan, Romain François, Garrett Grolemund, et al. 2019. "Welcome to the tidyverse." *Journal of Open Source Software* 4 (43): 1686. https://doi.org/10.21105/joss.01686.
- Wickham, Hadley, Romain François, Lionel Henry, and Kirill Müller. 2022. Dplyr: A Grammar of Data Manipulation. https://CRAN.R-project.org/package=dplyr.
- Wickham, Hadley, Jim Hester, and Jennifer Bryan. 2022. Readr: Read Rectangular Text Data. https://CRAN.R-project.org/package=readr.
- Wickham, Hadley, and Dana Seidel. 2022. Scales: Scale Functions for Visualization. https://CRAN.R-project.org/package=scales.
- Xie, Yihui. 2023. Knitr: A General-Purpose Package for Dynamic Report Generation in r. https://yihui.org/knitr/.
- Zhu, Hao. 2021. kableExtra: Construct Complex Table with 'Kable' and Pipe Syntax. https://CRAN.R-project.org/package=kableExtra.