

Changes in Human Values and its implications in Europe*

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20 March 2022

Abstract

Human values are a very important factor of what makes up a person's personality so any survey that is used to analyze them is quite important in today's world of technology and social science. This paper analyzed the data about human values from the European Social survey with multiple participating European countries. Using the data obtained, we found that members of individualistic societies tended to break away from what was considered the cultural norm whereas collectivist societies tended to hold traditions and cultural standards in greater regard. This is important as in many societies, those who hold onto what used to be considered the cultural norm in the past tend to treat concepts such as the LGBTQ with disdain.

1 Introduction

How do we best determine the value a person places on their ethics? That is one of the questions that the European Social survey was designed to answer and the results obtained from that survey are the focus for this paper. The European Social survey was a survey conducted in various countries in Europe. In the survey, participants were handed a questionnaire and their answers were recorded. The data obtained from the survey was used to make several conclusions. The goal of this paper is to discuss the survey and the results obtained from it in an analytical manner so that the strengths and weaknesses of the survey can be shown. An important factor in every human's life is the value they place on their ethics. Their human values decide their personalities and their everyday actions. This is why we conducted an analysis of a survey designed to measure human values so that we can obtain a better understanding of what affects the human values of a person.

The main focus of this paper are the countries of the United Kingdoms, Norway, Sweden, Denmark, Germany and France because of their relatively high quality of life thus allowing us to see how a person without any major impediments to life such as poverty or starvation would behave. The structure of this paper will first discuss the variables and data used specifically for the analysis of the survey and will then discuss the results obtained. Using the survey data, we constructed tables of summary statistics and used various bar charts and histograms to find out what motivates human values and how various variables can affect it. The results we obtained showed us that members of individualistic societies tended to break away from cultural norms and standards unlike members from collectivist societies.

However, while conducting analysis several strengths and weaknesses were noticed in the essay. These strengths and weaknesses will be discussed in great detail in the discussion section. One example of a weakness is that the survey did not account for the effect of age on human values. With these strengths and weaknesses in mind, a supplementary survey was designed in order to make up for any gaps in the original survey and improve the quality of the analysis. Analysis was done using R (R Core Team 2020), specifically the ggplot (Wickham 2016) and tidyverse (Wickham et al. 2019) packages. In addition to these, other packages such as bookdown (Xie 2020), kableExtra (Zhu 2020), here (Müller 2020), knitr (Xie 2021), modelsummary (Arel-Bundock et al. 2022), janitor (Sam Firke 2021), reshape2 (Wickham 2007) and ggthemes (Jeffrey B. Arnold 2021) were used in this paper.

*Code and data are available at:<https://github.com/avi868/Analysis-of-ESS-Human-Values-Survey>

2 Data

Since 2002, around 1500 face-to-face interviews were conducted in participating countries. Participants were selected via strict random sampling. This sample represents the residential population of residents ages 15 and over in a country. In the case of non-response, another participant would be randomly selected until we have achieved 1500 respondents per sample per country. The first round of interviews took place in 2002 and since then, 38 countries have participated at least once and 15 have participated in all rounds. Europe consists of 44 countries so this survey covers a relatively good percentage of the number of countries.

The survey takes place in rounds where each round consists of around 200 questions. While the number of questions seems large, it allows for gaining detailed information. The downfall of this may be that respondents may get tired of answering questions after a while and may affect their answers. As of 2018, 9 rounds have been completed with over 425,000 interviews. Difference in languages are accounted for by having the questions translated as precisely as possible. Within this survey is a 21-item measure of human values which constitute the Human Value Scale. These 21 survey items are ranked from 1 to 10 with 1 representing the respondent is very much similar in behavior to a proposed behavior in a given question. In contrast, 6 represents the respondent is not like the behavior in the question while 7,8,9 essentially give us no response to the question. This scale was developed to better understand the moral values of the respondent. These questions asks respondents to rate their agreement on topics such as equality, wealth, public behavior and adherence to traditions to name a few. Each round focuses on specific topics, for instance round 1 mostly measures immigration and citizenship. However, all rounds cover core human values topics such as views on crime, religion etc. The scale assumes that all humans has the same 10 basic values, born out of evolution, but differ in how important we consider each as a guiding principle in our life. To see this clearly, more individualistic countries tend to view getting rich as one of the most influential motivators in life while collectivist countries regard maintenance of tradition, helping others etc., as more influential than getting rich. These differences in human values undoubtedly affect the real world- individualistic countries(Western Europe) has less crime, war and is richer than collectivist European countries.

It should also be noted that the more important a value is, the more it influences behavior, policies etc. In the real world, values between liberals and conservatives are wildly different and the party in power can implement laws etc., based on their values. Therefore, this survey holds an important value in analyzing and perhaps predicting future behavior, laws and policy in Europe.

3 Results

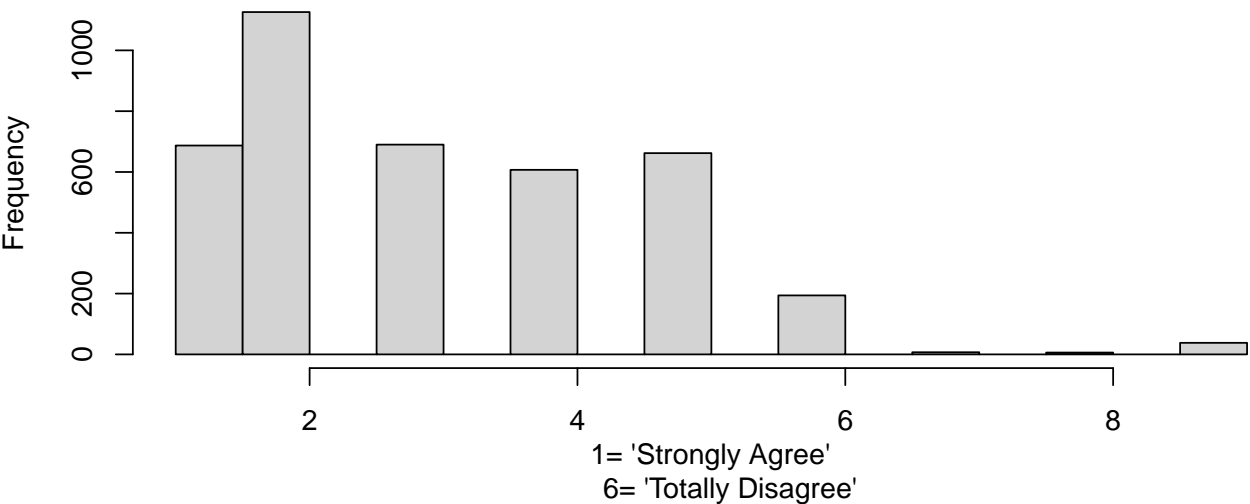
The basis of the human value scale is to determine peoples values in a quantitative way. Questions on the topic of the LGBT community along with political views (such as people's views on immigration) were administered and it was found that respondents' answers varied across countries in Europe. This is no surprise as the current literature shows individualistic countries (Western Europe) seems to have a more accepting view of the LGBT community rather than collectivist countries (Bettinsoli, Suppes, and Napier 2020). Members of individualistic societies tend to break away from cultural norms and standards. Consistent with the survey, the histograms reflect that respondents from the UK (which is considered Western Europe) tend to care less about traditions and customs as opposed to respondents from Greece which is a more collectivist society.

More relevant seems to be the immigration views of a country's population in Europe given the current situation in Ukraine, Palestine etc. This is also calculated as part of the Human Values Scale. Poland took in more refugees than any other country in Europe with more than 1.4 million while the UK took less than 2000 as of March 11th 2022 and has been criticized for taking so few. While the distance from Ukraine may play a part in this disparity of welcoming refugees, the beliefs of the population of a country may also play a role. The Human Values Scale quantifies the desirability of immigration. While this is a difficult concept to quantify, the ESS proposes individualistic behaviors is the best predictor of a country's willingness to accept immigrants(or currently refugees). In this survey, the most notable individualistic trait to analyze would be the importance to help others and care about their well-being. It was seen that the UK showed

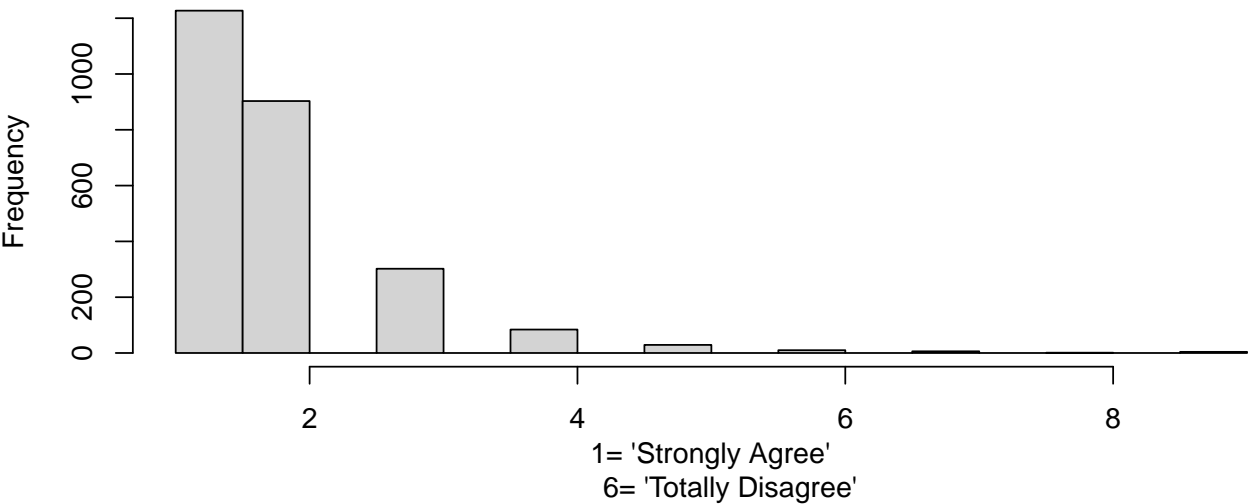
more willingness to help others as compared to Poland in Figure ??, but it would be wise to take this with a grain of salt as according to psychologists from the University of London, 90% of British people think of themselves as being part of the nicest 50% of the population.

This section also attempts to show the comparison in human values over the 9 rounds of the ESS survey. In Figure ??, it was noticed that there was a slight decrease in respondents' view of tradition. In 2020, there seemed to be less people that think tradition is important compared to 2002. People that hold tradition in high regard tend to limit their career and personal growth (Guan et al. 2016). In relation to this, is Figure ??, which shows a decrease in the importance of following rules from 2002 to 2019. This result shows that over time, people seem to pursue personal development rather than sticking with traditional roles. A real world example of this can be seen in the increase in women in STEM fields. See the appendix for a comprehensive table of the variables measured in this survey.

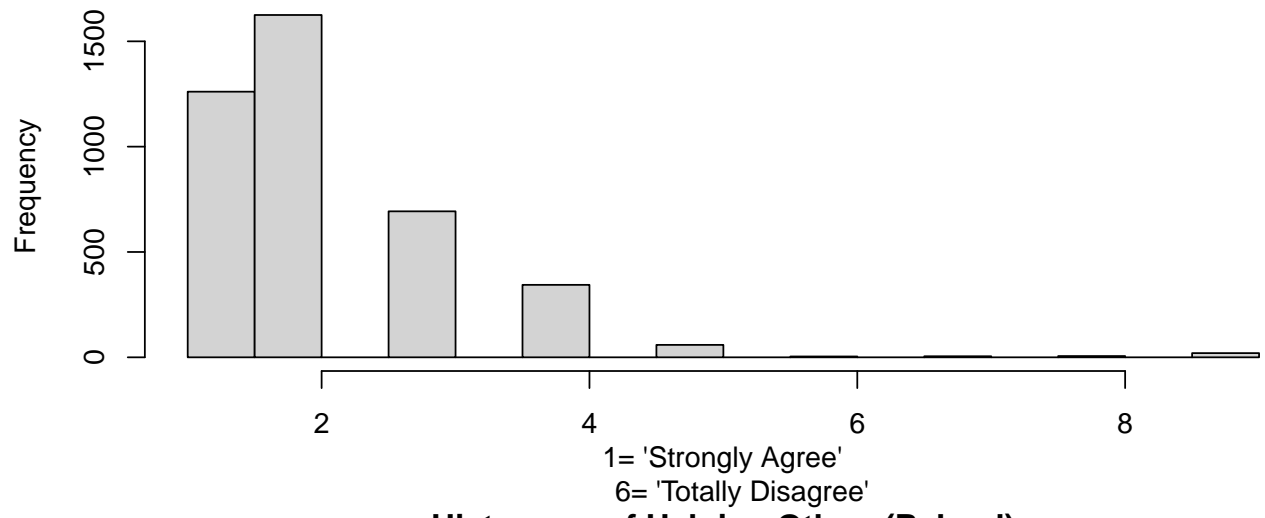
Histogram of Conforming to Tradition(UK)



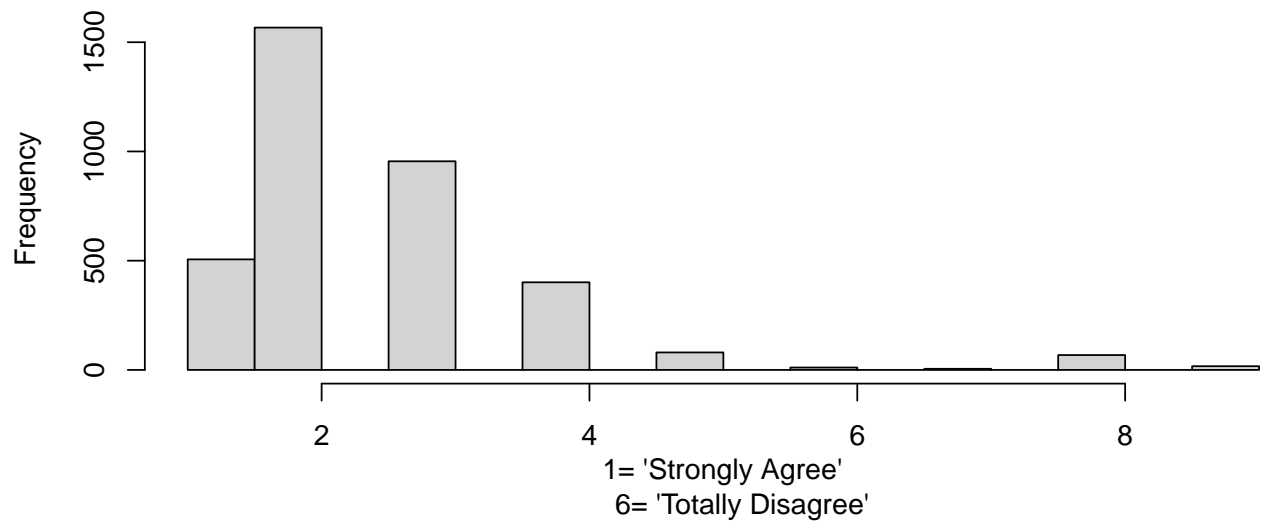
Histogram of Conforming to Tradition(Greece)



Histogram of Helping Others(UK)

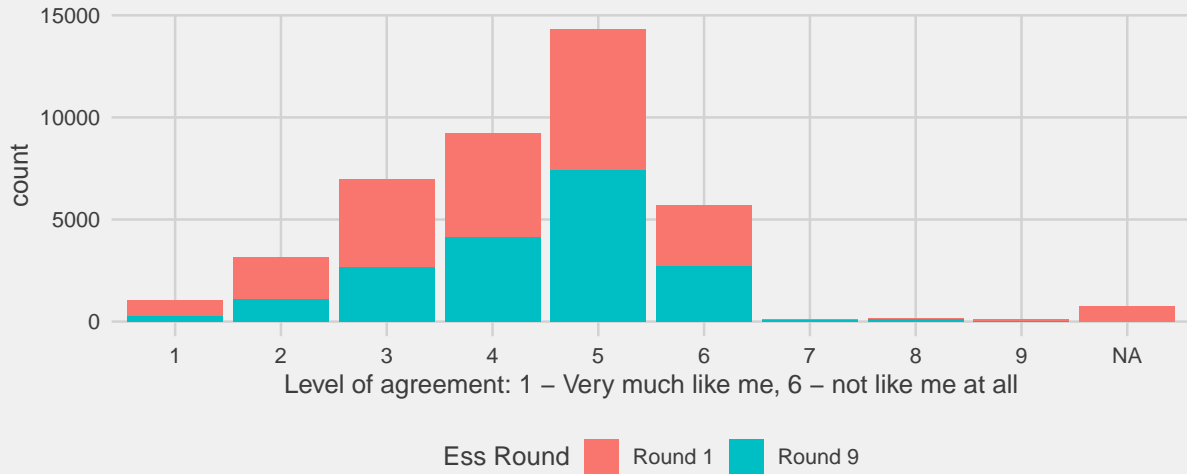


Histogram of Helping Others(Poland)



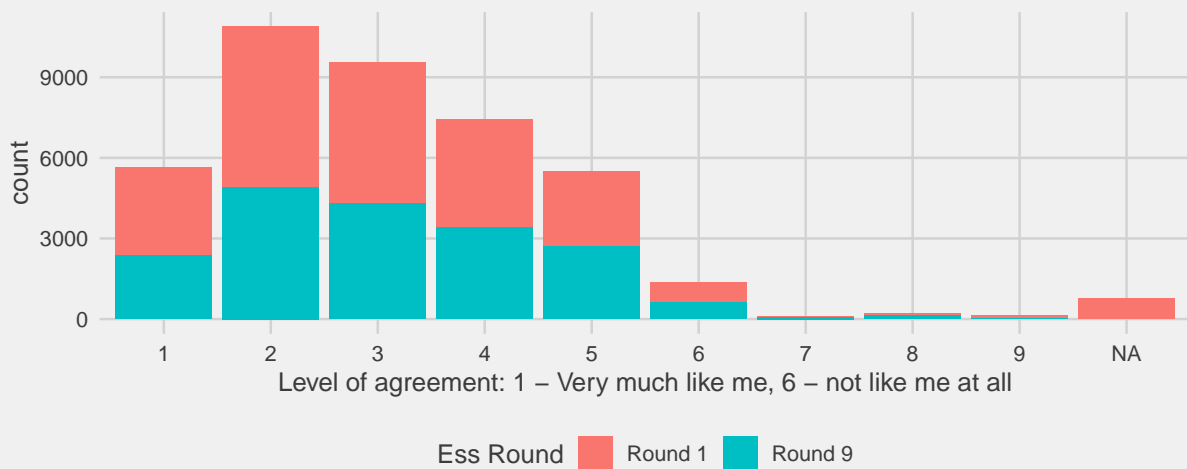
Importance of being rich, having money and expensive things

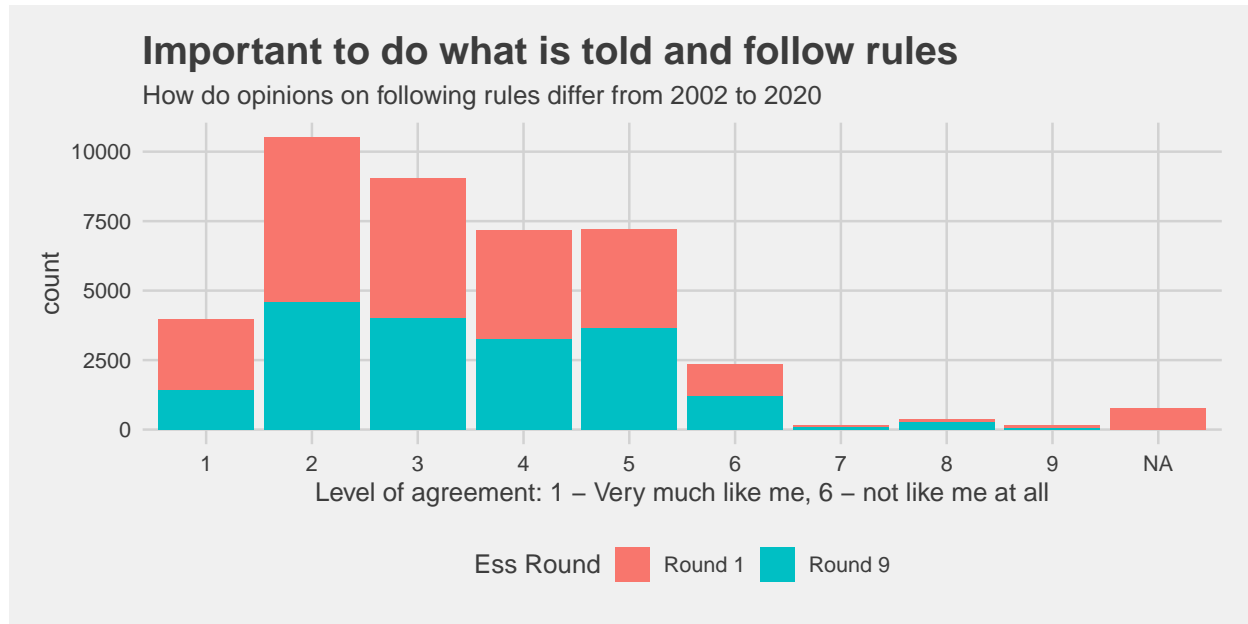
How does desire for wealth differ from 2002 to 2020



Important to try new and different things in life

How do opinions on trying out things differ from 2002 to 2020





4 Discussion

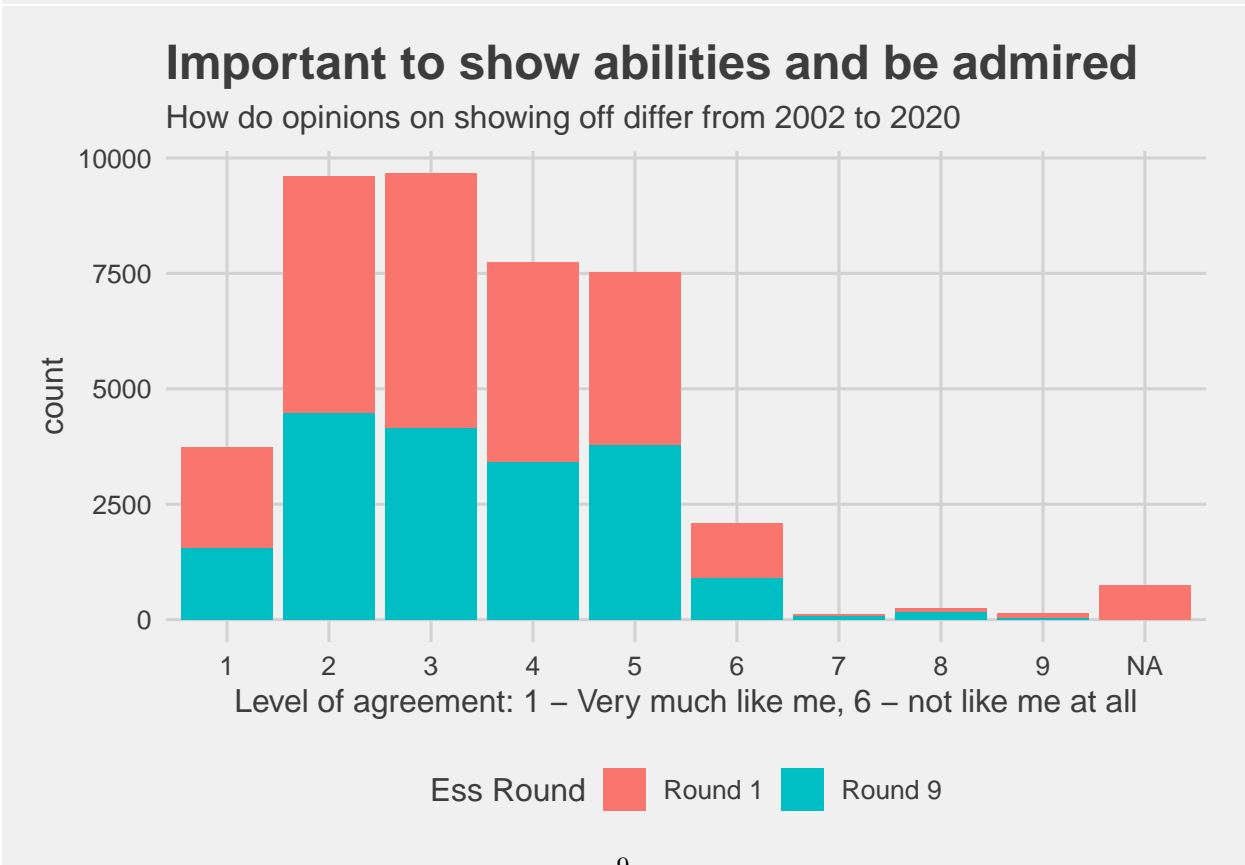
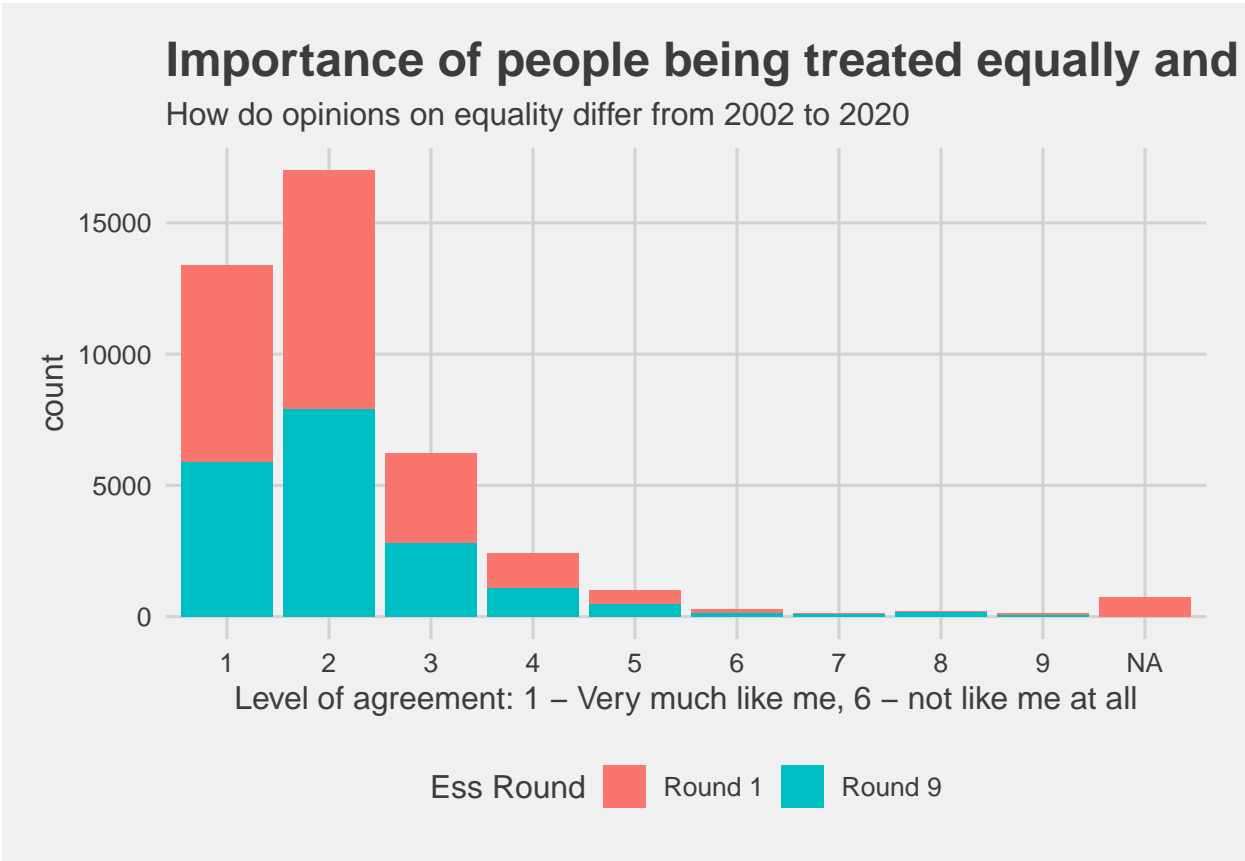
In this paper, changes in human values through multiple factors are explored, whether it be between age groups, sexes and even time periods. Throughout the paper, each question pertaining to human values was explored extensively in order to determine if any of the above mentioned factors had any factors would have an effect on how humans felt towards these values. Since all the data pertaining to human values were categorical, visualization of data was done with bar charts, showing the distribution of categorical variables in an easy to interpret way for readers. Through exploration of the survey, data regarding human values for the selected countries indicates there are no significant differences on opinions regarding the majority of human values from 2002 to 2020. This is unsurprising as according to the Journal of Medical Ethics there are a “series of core values around which most people would agree. These are unlikely to change over long time periods” (Calman 2004). These core set of values’ effect can be seen in most of the distributions of responses for questions as they remain constant. There are, however, a couple of questions that contain differing response distributions from 2002 vs 2020, indicating they may not solely be affected by our core set of values. One of these questions, ipsuces (Important to be successful and that people recognize achievements), has a more disagreeing set of responses in 2020 versus 2002. This potentially suggests Europeans in the selected countries are less materialistic now than they were 18 years ago, which is supported by a study finding that people are beginning to spend less on material goods and more on experiences (Ormerod 2016). Overall, this data supports the notion that society has a set of core beliefs that most adhere to, however, certain values may be privy to change. As this analysis was conducted on regions who share societal norms, it would be interesting to further explore how two dissimilar societies’ responses to these questions differ.

Upon further exploration, age was determined to have an effect on certain human values indicating different age groups may have differing opinions on certain topics. The following questions’ response distributions were most prominently affected by age: imptrad and ipsuces. Imptrad (Important to follow traditions and customs) has a stark difference in responses between those under and above the age of 55. Those under the age of 55 generally place less importance on tradition and customs while those above view these as an important part of their set of beliefs. This is supported by a study conducted on personal and cultural values for older and younger Chinese adults in which it was found that older participants placed a higher importance on culture than younger participants (Fung 2013). When looking at the responses between ages for ipsuces (Important to be successful and that people recognize achievements), it is evident that participants in the 25–44-year age group view success as more important than other participants. This notion is supported

by a 2015 study conducted in Germany, Switzerland and the UK in which they found “the link between life satisfaction and income is strongest in 30–50-year-olds, while it’s only weakly correlated in older people and young adults” (Worland 2015). The data from the survey somewhat supports the notion that people’s values change as they age, “values that suited you as a child change as you become a young adult, form relationships and make your way in the world” (*Values and Morals Clarification: Value Changes*, n.d.).

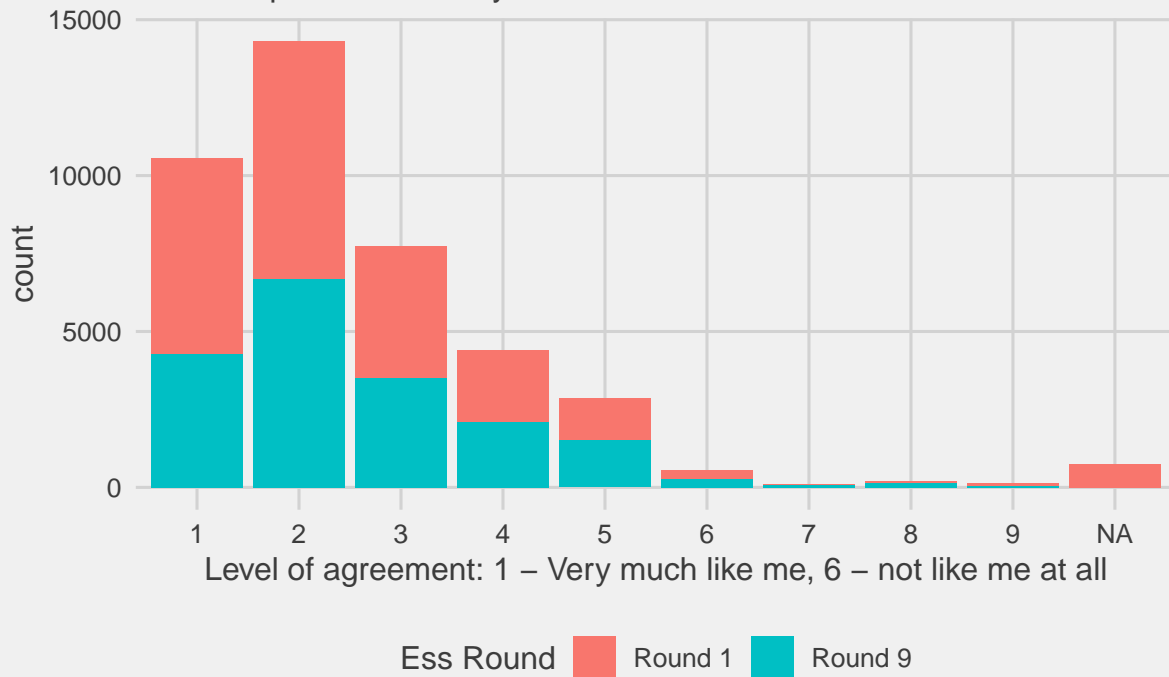
A weakness of this exploration was that the variables used were all factorial and thus exploration and visualization of the data was somewhat limited. This, however, was a sacrifice that was made to improve the quality of survey responses as free responses oftentimes lead to lower quality data. Additionally, representation of each age group was not equal which in turn could lead to biases in the analysis, resulting in misleading results. A change that could have improved the analysis of this survey and thus the paper would have been if the human value questions had respondents give a score (1-100) on their level of agreement with the statement. This would have allowed for a more in-depth analysis as it would have allowed for analysis of numerical variables. Additionally, collecting more data on under-represented groups would allow for better credibility of results.

Appendix



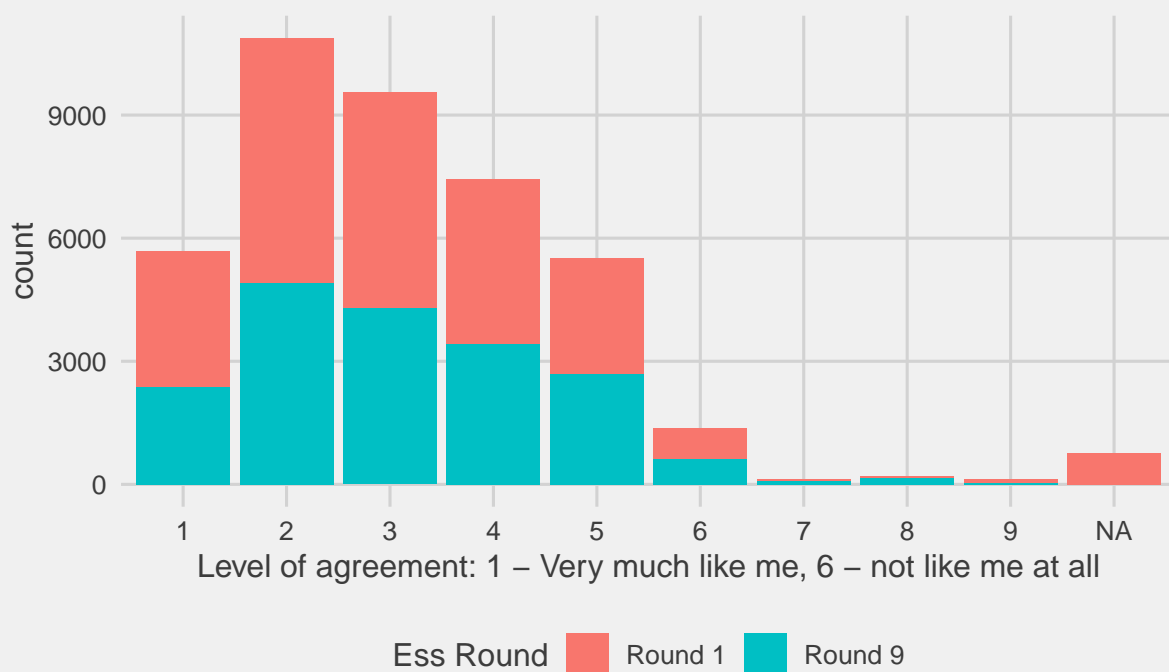
Important to live in secure and safe surrounding

How do opinions on safety differ from 2002 to 2020



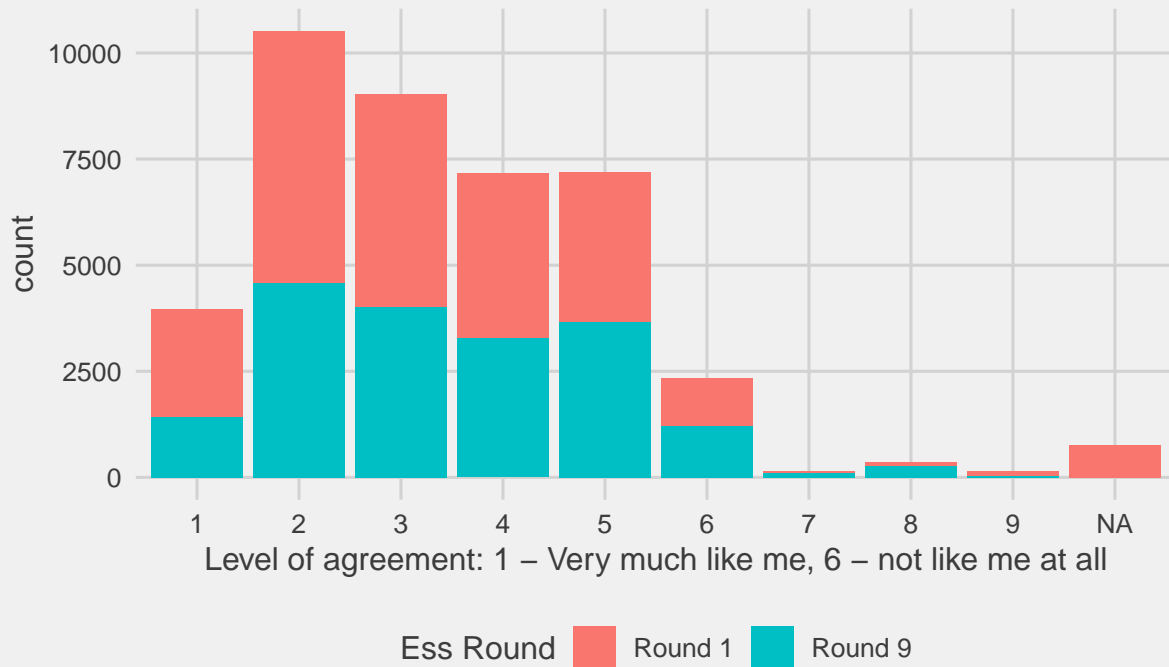
Important to try new and different things in life

How do opinions on trying out things differ from 2002 to 2020



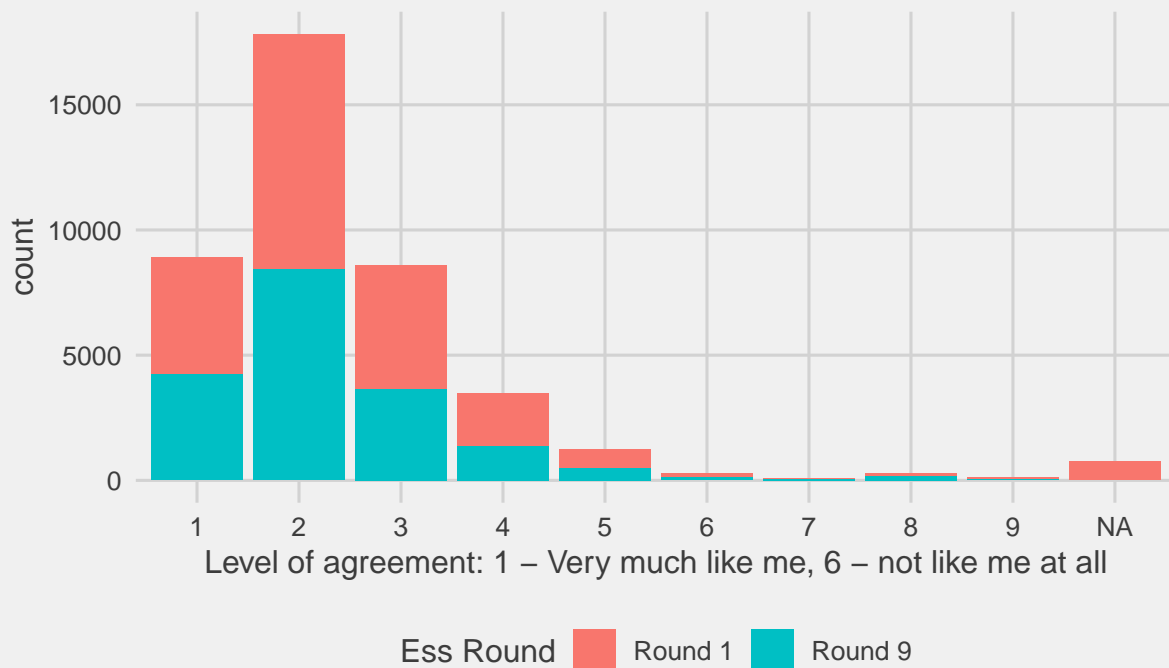
Important to do what is told and follow rules

How do opinions on following rules differ from 2002 to 2020



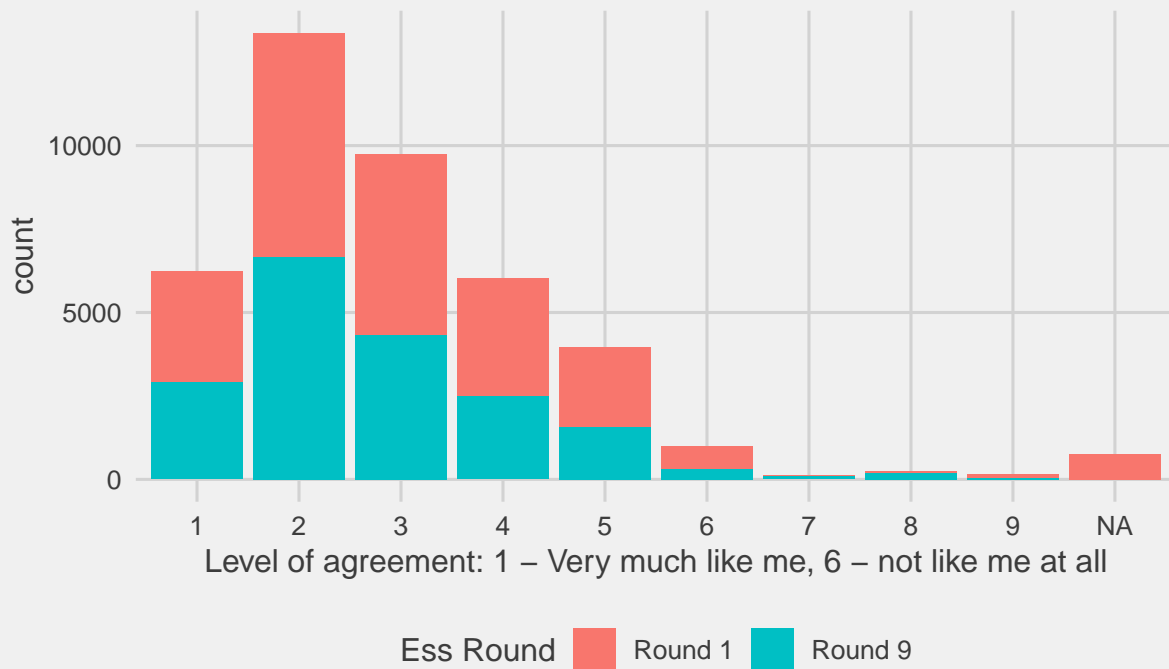
Important to understand different people

How do opinions on understanding people differ from 2002 to 2020



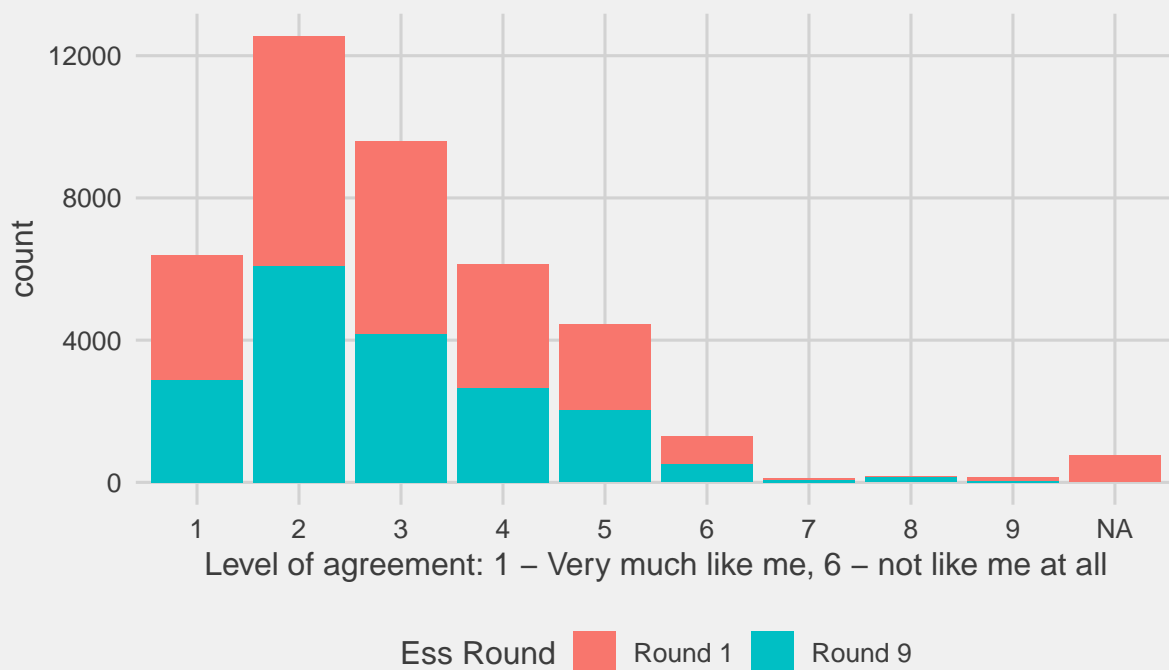
Important to be humble and modest, not draw a

How do opinions on humbleness differ from 2002 to 2020



Important to have a good time

How do opinions on having fun differ from 2002 to 2020



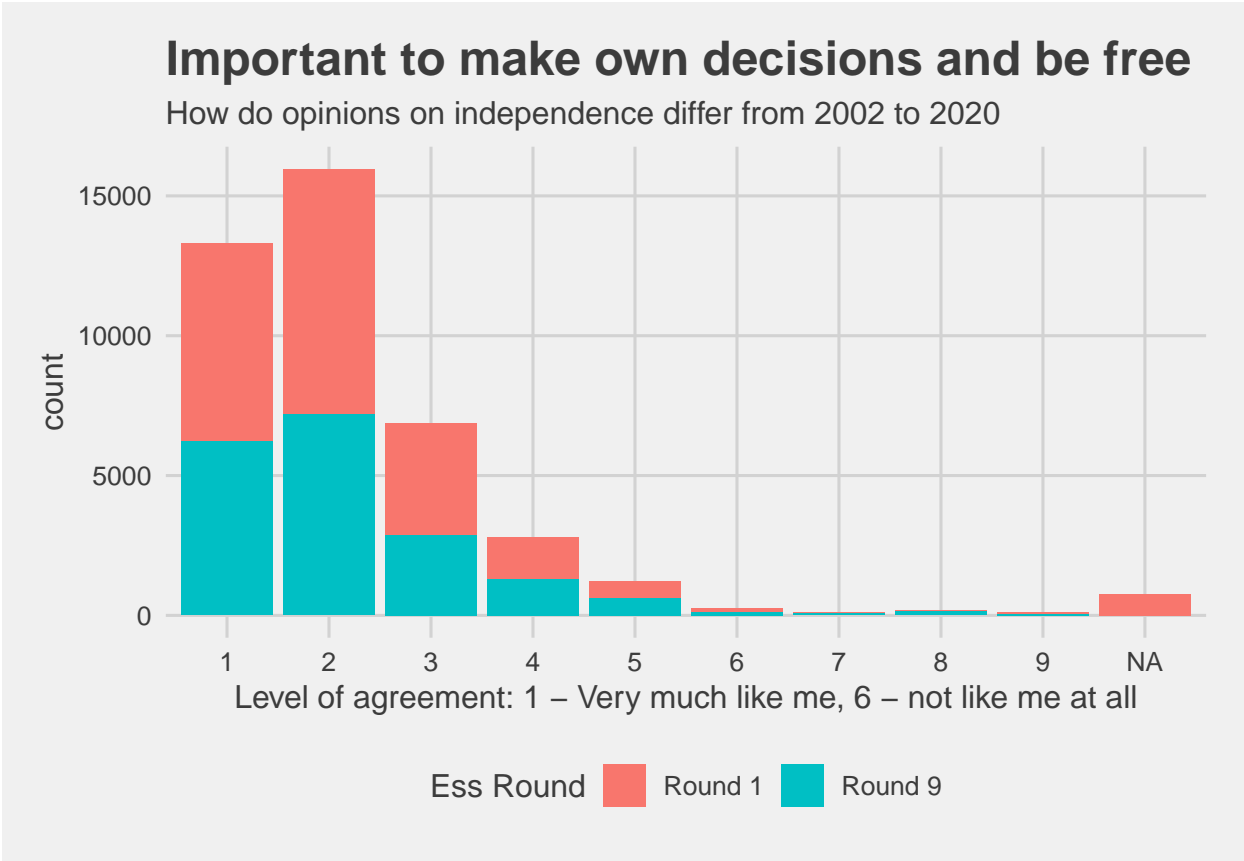


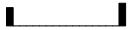




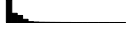
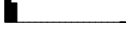


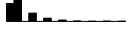




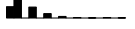



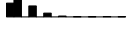





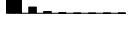
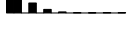




Table of summary statistics for Euro_data

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max	
cedition	1	0	1.0	0.0	1.0	1.0	1.0	
cseqno	41610	0	173 474.6	115 658.6	1.0	167 321.5	386 620.0	
edition	2	0	5.0	1.8	3.0	6.6	6.6	
idno	32760	0	1 807 011.5	10 493 956.0	1.0	39 289.5	93 609 136.0	
dweight	3554	0	1.0	0.4	0.1	1.0	5.1	
pspwght	12743	0	1.0	0.5	0.0	0.9	6.9	
pweight	21	0	1.4	1.1	0.3	0.9	3.2	
anweight	12745	0	1.4	1.5	0.0	0.9	22.0	
agea	86	0	52.5	63.6	14.0	48.0	999.0	
ipcrtiv	10	2	2.6	1.3	1.0	2.0	9.0	
imprich	10	2	4.3	1.3	1.0	5.0	9.0	
ipeqopt	10	2	2.1	1.2	1.0	2.0	9.0	
ipshabt	10	2	3.4	1.5	1.0	3.0	9.0	
impsafe	10	2	2.5	1.4	1.0	2.0	9.0	
impdiff	10	2	3.1	1.5	1.0	3.0	9.0	
ipfrule	10	2	3.3	1.5	1.0	3.0	9.0	
ipudrst	10	2	2.4	1.2	1.0	2.0	9.0	
ipmodst	10	2	2.8	1.4	1.0	3.0	9.0	
ipgdtim	10	2	2.9	1.4	1.0	3.0	9.0	
impfree	10	2	2.2	1.2	1.0	2.0	9.0	
iphlppl	10	2	2.2	1.1	1.0	2.0	9.0	
ipsuces	10	2	3.4	1.5	1.0	3.0	9.0	
ipstrgv	10	2	2.5	1.4	1.0	2.0	9.0	
ipadvnt	10	2	4.0	1.5	1.0	4.0	9.0	
ipbhprp	10	2	2.8	1.4	1.0	2.0	9.0	
iprspot	10	2	3.3	1.5	1.0	3.0	9.0	
iplylfr	10	2	1.9	1.1	1.0	2.0	9.0	
impenv	10	2	2.1	1.2	1.0	2.0	9.0	
imptrad	10	2	2.8	1.5	1.0	2.0	9.0	
impfun	10	2	3.0	1.5	1.0	3.0	9.0	

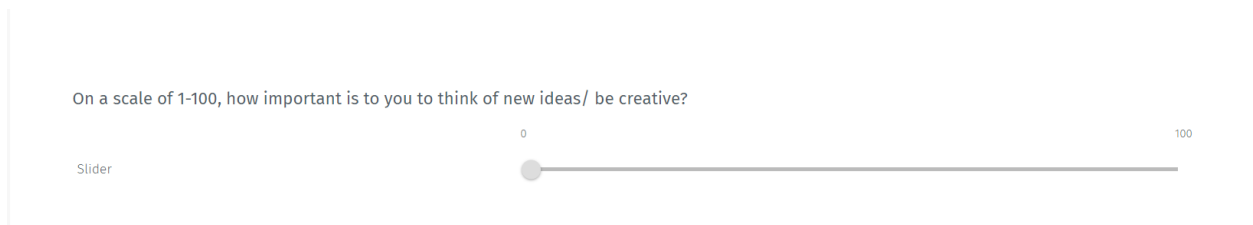
.1 Introduction to supplementary Survey

Link to supplementary survey:

<https://www.questionpro.com/t/AVFtJZrskH>

In these times, great emphasis is placed on human values and many cultural norms/ societal standards are slowly becoming obsolete. This is why we wish to gain a deeper insight into what drives the human values of a person. Please complete the survey (follow the link) to the best of your ability. This should take only a few minutes. Your feedback would be greatly appreciated. In keeping with the University of Toronto's code of ethics, this supplementary survey does not break any ethical rules and maintains anonymity.

The following images are screenshots of our survey.

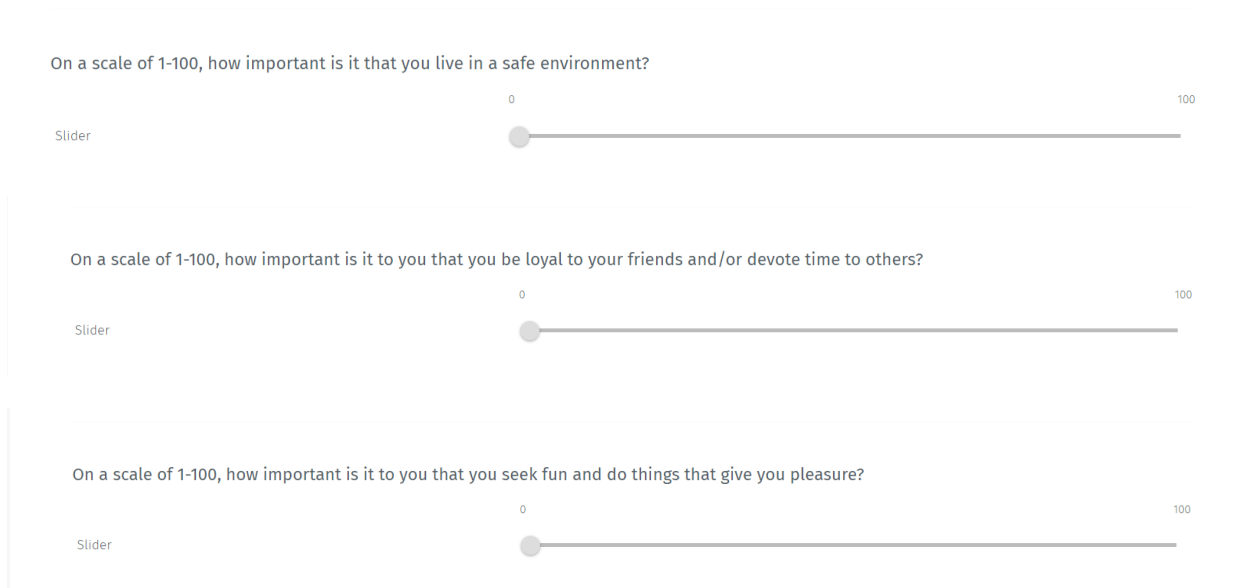


On a scale of 1-100, how important is to you to think of new ideas/ be creative?

Slider

0 100

Figure 1: sample



On a scale of 1-100, how important is it that you live in a safe environment?

Slider

0 100

On a scale of 1-100, how important is it to you that you be loyal to your friends and/or devote time to others?

Slider

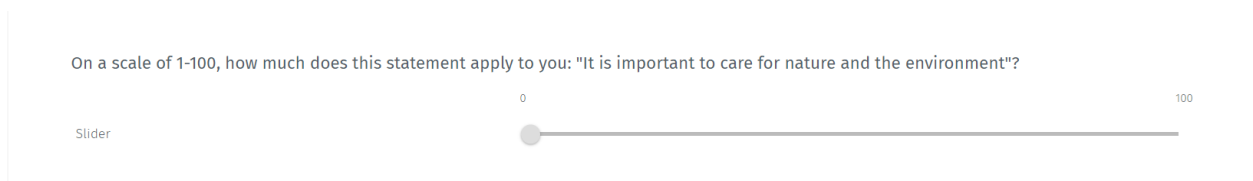
0 100

On a scale of 1-100, how important is it to you that you seek fun and do things that give you pleasure?

Slider

0 100

Figure 2: sample



On a scale of 1-100, how much does this statement apply to you: "It is important to care for nature and the environment"?

Slider

0 100

On a scale of 1-100, how important is it that you get respect from others?



On a scale of 1-100, how important is it to you that you behave properly



On a scale of 1-100, how important is it to you that you seek excitement and lead an exciting life?



Can you please enter your date of birth?

Month ▼ Day ▼ Year ▼

Lastly, what country do you live in?

|

A References

- Arel-Bundock, Vincent, Joachim Gassen, Nathan Eastwood, Nick Huntington-Klein, Moritz Schwarz, Benjamin Elbers, and Grant McDermott. 2022. *Modelsummary: Summary Tables and Plots for Statistical Models and Data: Beautiful, Customizable, and Publication-Ready*. <https://cran.r-project.org/package=modelsummary>.
- Bettinsoli, Maria Laura, Alexandra Suppes, and Jaime L Napier. 2020. "Predictors of Attitudes Toward Gay Men and Lesbian Women in 23 Countries." *Social Psychological and Personality Science*. Sage Publications Sage CA: Los Angeles, CA.
- Calman, K C. 2004. *Evolutionary Ethics: Can Values Change*. *Journal of Medical Ethics*. Institute of Medical Ethics. <https://jme.bmj.com/content/30/4/366>.
- Fung, Helene H. 2013. *Aging in Culture*. *OUP Academic*. Oxford University Press. <https://academic.oup.com/gerontologist/article/53/3/369/838556>.
- Guan, Pianpian, Alessandra Capezio, Simon Lloyd D Restubog, Shari Read, Jennifer Ann L Lajom, and Min Li. 2016. "The Role of Traditionality in the Relationships Among Parental Support, Career Decision-Making Self-Efficacy and Career Adaptability." *Journal of Vocational Behavior* 94: 114–23.
- Jeffrey B. Arnold, Bo Werth, Gergely Daroczi. 2021. *Ggthemes: Extra Themes, Scales and Geoms for 'Ggplot2'*. <https://CRAN.R-project.org/package=ggthemes>.
- Müller, Kirill. 2020. *Here: A Simpler Way to Find Your Files*. <https://CRAN.R-project.org/package=here>.
- Ormerod, Peter. 2016. *Believe It or Not, Brits Are Becoming Less Materialistic* | Peter Ormerod. *The Guardian*. Guardian News; Media. <https://www.theguardian.com/commentisfree/2016/dec/26/britain-less-materialistic-consuming-less-sharing-more>.
- R Core Team. 2020. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Sam Firke, Chris Haid, Bill Denney. 2021. *Janitor: Simple Tools for Examining and Cleaning Dirty Data*. <https://CRAN.R-project.org/package=janitor>.
- Values and Morals Clarification: Value Changes*. n.d. *Mental Help Values and Morals Clarification Value Changes Comments*. MentalHelp.net. <https://www.mentalhelp.net/self-help/values-and-morals-changes/#:~:text=People's%20values%20tend%20to%20change,your%20way%20in%20the%20world>.
- Wickham, Hadley. 2007. "Reshaping Data with the reshape Package." *Journal of Statistical Software* 21 (12): 1–20. <http://www.jstatsoft.org/v21/i12/>.
- . 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*. Vol. 4. <https://doi.org/10.21105/joss.01686>.
- Worland, Justin. 2015. *Money Happiness: Income Matters Most to People in This Age Group*. *Time*. <https://time.com/3687865/income-age-happiness/>.
- Xie, Yihui. 2020. *Bookdown: Authoring Books and Technical Documents with r Markdown*. <https://github.com/rstudio/bookdown>.
- . 2021. *Knitr: A General-Purpose Package for Dynamic Report Generation in r*. <https://yihui.org/knitr/>.
- Zhu, Hao. 2020. *kableExtra: Construct Complex Table with 'Kable' and Pipe Syntax*. <https://CRAN.R-project.org/package=kableExtra>.