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CS 257

Project Proposal

## Working Title

Loneliness and Isolation in the United States

## Website Summary

This site will allow users to investigate the relationships between loneliness and isolation, other habits and lifestyle choices, and general happiness and contentment, in order to encourage thinking about how these things impact each other and our daily lives.

## Dataset Summary

**Name and Authorship:** Kaiser Family Foundation/The Economist Poll: Survey on Loneliness and Social Isolation in the United States, the United Kingdom, and Japan (US) by The Economist/Henry J. Kaiser Family Foundation

**About:** A 50 question survey on loneliness and isolation conducted on adults. Also includes information on race, gender and income in addition to the questions on isolation.

**Link:** https://ropercenter.cornell.edu/ipoll/study/31115454

**Local Copy** was downloaded on April 16, 2021.

**Date and Scope:** April 18, 2018 - May 23, 2018. United States.

**Terms of Use:**

"Research may not be re-disseminated without written permission. The results of any analyses conducted on the data may, however, be published with appropriate acknowledgments and source citation. " - The Code Book

**Suggested Citation:**

The Economist/Henry J. Kaiser Family Foundation. Kaiser Family Foundation/The Economist Poll: Survey on Loneliness and Social Isolation in the United States, the United Kingdom, and Japan (US), 2018 [Dataset]. Roper #31115454, Version 2. Social Science Research Solutions (SSRS) [producer]. Cornell University, Ithaca, NY: Roper Center for Public Opinion Research [distributor]. doi:10.25940/ROPER-31115454

# Intended Audience/User Roles

***Social scientists:*** This website will be useful for social scientists (such as psychologists, economists, etc.) who are interested in researching mental health trends in the United States, specifically social scientists interested in how loneliness and isolation impacts people. Social scientists can use this site to explore potential areas of research or to find data for a particular topic. The goals of a social scientist are to find clear, accurate data. They will likely use graphs and visualizations as a jumping off point to further explore the raw data and any studies involved themselves, since they likely have a background in interpreting some form of data.

> ***Psychologists:*** A psychologist researching mental health and how it is impacted by loneliness would be primarily interested in looking at the data regarding how people feel, not necessarily the information about what they do and how that impacts their loneliness. Their goals on this website would be to be able to search through the data focusing on the information on how the survey-takers felt regarding their loneliness without having to go through the unnecessary data on things like how often they participate in activities.

> ***Therapists:*** A therapist researching the patient's mental health level would be primarily interested in knowing other cases that are similar to the patient and therefore informing the patient that they are not alone on this mental health issue.Their goals on this website would be to show visualized and processed graphs to patients so that patients could understand that there are other people who feel the same as they do. Thus, they will be more willing to receive therapy and medicine if needed.

> ***Economists:*** An economist researching how mental health trends have impacted people would want to use this website to compare this data from 2018 to data from similar surveys from other years. Since different surveys from other years might have different questions, an economist would want to be able to quickly find which questions asked on this survey overlap with others and how, in order to be able to visualize a trend and then assess what it means.

***Activists***: Activists concerned about mental health issues in the US may find this data relevant to their interests. They may use the information as well as infographics to educate themselves and others. Given that the goal is to appeal to a wide audience, the graphs and data should be easily accessible and simple to understand. They may still have interest in the raw data, but likely only to construct their own graphs in a different style or format. To

this end, some degree of customization for the graphs may be helpful, but not totally necessary.

> *Mental Health Activist:* Mental health activists would use this website to find out some mental health problems from the dataset that take a relatively large portion of the  population. Their goal on this website could be to  generate graphs that are easier for outsiders/ funding donors to understand, and emphasize on the large population that potentially need help. Therefore, they could raise awareness and convince more people to help people that have mental health issues or donate money to the organization .

> *Community Organizer:* A community organizer would want to use this website to prove to members of their community that they will be happier people if they are out and about and participating in the activities that the community organizer has planned. Their goal on the website would be to find data related to how the way people feel is impacted by how often they spend time in their community. Since they are not interested in how family or other activities influence isolation, they want to be able to ignore those types of questions and get straight to the data on social events that they can present to the members of their community.

> *Animal Rights Activist:* Even activists not entirely focused on mental health and isolation can use this data set. An animal rights activist campaigning for their local animal shelter would use this data to prove that a large number of Americans feel lonely in order to advocate for adoption of animals. Their goals are to find some eye-catching graphs about how loneliness makes people less content, in order to prove their point and convince people who are feeling isolated to go and visit their local animal shelters for a new friend.

*Politicians/policymakers:* Politicians may find this data useful in order to argue for and refine policies concerning mental health issues. The policymaker could be interested in warfare policies or health care promotions, and some graphs generated from the dataset could be supportive to their policy. Since politicians will likely want the data they find to be relevant and easily presentable, the fact that this site will display graphs comparing two different questions will likely appeal to them as something that can quickly and easily be presented to an audience in order to prove a point.

> *Leftist Senator Campaigning for Government-funded mental health care:* A senator campaigning for government-funded mental health would use this website in order to gather data on how people feel about mental health and how they would like their mental health issues to be helped. Their goals would be to find data on both how people are feeling in regards to their mental health and how the government has helped them in the past or how they would like to be helped in the future. They want

to be able to find data on these things that is easily presentable and can be used to help prove their point that the government needs to be involved in mental health care.

**School Board Member advocating for more counsellors in schools for faculty and students:** A school board member advocating for more counsellors in school would use this website to infer the possible mental health issues that faculty and students could have, and learn more information about mental health problems in the webpage. His goal is to show the graph and related information on mental health so that he could communicate with other members to emphasize the fact that mental health is being ignored at school and the importance of hiring more counsellors.

**Anti-Drug Policy Maker Making A New Campaign:** An anti-drug policy maker beginning work on a new campaign would use this website to search for things that might be connected to drug use. Their goal is to quickly look at how different aspects of mental health and isolation might impact the likelihood of using drugs, in order to decide what to base their campaign around. They want to clearly see what impacts drug use to the highest degree in order to begin their proper research into organizing their campaign.

**Students**: Students are people who are being educated and they might be learning about loneliness and isolation in class. In addition to students who are studying within the realm of the social sciences, students who struggle with loneliness and isolation during the tumultuous years of youth might also find an interest in this dataset. Students may use this information to find interesting relationships between two variables after looking at the plot. They may also find the graphs or data useful for papers, presentations, or other projects. Since students are often busy, they want to be able to quickly access easily understandable representations of the data, but might also have an interest in the raw data behind the graphs.

**See other sub-categories:** Students can fit into basically any of the other subcategories, whether they are social science students, campus activists, or political science students.

# Personas

*Name:* Rachel Lukas

*Descriptor:* Junior Psychology Major

*Quote:* "Becoming active in extracurricular group activities is probably the best thing to happen to my mental health. If it wasn't for the communities that I found in orchestra and being a volunteer tutor, I would be lost and struggling, and I want to help build communities like that so that others like me can find their true selves."

*About:* Rachel is a Junior Psychology major at the University of Minnesota. She struggled with depression in High School, and wants to become a therapist in order to help people like her. In addition to her interest in psychology, Rachel enjoys spending time volunteering and participating in club activities. Her involvement in social circles outside of class is what drew her to research the impacts of isolation on mental health.

*Attitude:* Rachel is interested in finding new research topics from the data and graph; willing to play around with the website and willing to spread the information about the website. She is more likely to browse for a comparison that fits her topic of choice than seek one out directly, and because of her passion in the subject is quick to fall down a rabbit hole of investigating potentially interesting comparisons.

*Goals:* Rachel is a very busy person. While she does feel passionate about psychology and the issues she is researching (in this case, the impacts of loneliness and social isolation) she is also taking other classes, volunteers at a local Middle School, and plays the viola. She wants to be able to quickly look at how different aspects of people's lives influence their loneliness in order to find the right data to use for her research, so that she can have time to hang out with her friends between all her activities.

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*Name:* Richard Anderson

*Descriptor:* Assistant to a Pro-Gun Rights Senator

*Quote:* "Honestly, this is just a stop on the road for me. If it gets me on the Senator's good side, I'll do it. Well, if it won't hurt my future career, that is."

*About:* Richard works for a senator from Arkansas who is passionate about the Second Amendment. The increase in mass shootings in the U.S. has called into question our current gun laws, and Richard's boss feels that this poses a threat to the Second Amendment.

Because Richard wants to get a promotion, he wants to provide the senator with research supporting the relationship between mental health and mass shootings.

*Attitude:* Working quickly and likely sifting through a wide range of potential sources to find one that his boss will like most. He's not the only person assigned to this task, so he needs his data to condense into a short and hard-hitting line.

*Goals:* Find (and cherrypick if he has to) data about declining mental health in the U.S. so he can help his boss argue that mental health issues are the cause of increased mass shootings. Will likely not be taking graphs directly, but rather referencing the data therein in a speech. Because speeches do not often cite sources, the veracity or applicability of the data is less important than the emotional impact

# User Stories

As a psychology major I want to find data related to how perceived isolation impacts happiness so that I can write a paper about the psychological impact of loneliness.

- Select variables on the scroll bar to find the relationship between social isolation and happiness should return graphs, tables, etc.
- Search results should present said graphs/tables in such a way that they can be downloaded and cited.
- Find information on where the dataset came from
- Easily cite the data

As a social scientist, I want to search for data related to my field so that I can explore potential areas of research.

- Search for relationships on different variables that specifically deal with questions that I am interested in
- Be able to see which of the survey questions are related to each other (similar questions should be near each other in the dropdown menu).
- Find information on where the dataset came from

As a news reporter, I want to insert reliable data and plots related to loneliness so that I can write a convincing news piece about loneliness and isolation brought by COVID 19.

- Select variables on the scroll bar to find the relationship between social isolation and happiness should return graphs, tables, etc.
- Search results should present said graphs/tables in such a way that they can be downloaded and cited.
- See where the data came from to ensure that it is reliable

As a therapist I want to find data on how more social interactions help people feel less lonely so that I can help a client struggling with feeling isolated find ways to cope.

- Select variables on the scroll bar to find the relationship between any variables that the patient is concerned with and should return all cases via a scatter plot.
- Search results should present graphs/tables in such a way that they can be downloaded and cited.
- Link a specific page to show to others

As a politician I want to cherry-pick data so that I can argue for cutting mental health funding.

- Select variables on the scroll bar to find the relationship between the two variables that I concern should return graphs that can be downloaded and cited.
- The statistical information should be able to show on the graph so that numbers could also support my claims.
- Should be able to choose how the data is presented in some way (type of graph to better show the contraction, color to emphasize the difference, etc)

As a youtuber, I want to find clean and useful graphs concerning mental health so that I can make a video essay about the topic.

- Select variables on the scroll bar to find the relationship between social isolation and happiness should return graphs, tables, etc.
- Search results should present said graphs/tables in such a way that they can be downloaded and cited.
- Should be able to choose how the data is presented in some way so that it fits my channel theme.
- Should be able to clearly see what the data is based on the graph alone (labeled axes, etc)

# Team Contract

1. What are the goals of our team? What do you, as a team, want to gain from this project experience? What goals and skills do you want to attain and/or hone? Start your contract with a goals statement.
   - Our goal is to create an effective website that analyzes our data in an original way, and fulfills the acceptance criteria.
   - We want to gain the experience of working as a team and collaborating with each other.
   - We know that we will probably be working with graphing, so we want to gain skills in using the Python graphing library.
   - We want to practice the web design principles that we have talked about over the past few weeks, to create a website that is good to look at and easy to interact with.
   - We want to be able to use GitHub fluidly and without having to dedicate time to thinking about each thing we need to do.
   - We want to become more comfortable working with and interpreting data sets.
2. What are the strengths of our team and its members? Individually, think about the strengths you bring to the project. These could include technical strengths ("I am really good at finding bugs in code", "I organize my code really well", "I can find answers very efficiently by searching") and broader life skills strengths ("I take excellent notes", "I am an excellent listener", "I like to find and build consensus when there's disagreement"). If you already know some of your teammates and/or have worked with them previously, feel free to add to their strengths. List these out for each team member in your contract.
   - Emmy - I am generally a pretty patient person and tend not to get frustrated, even if a problem takes a long time (I think this makes me pretty good at problem solving and big fixes). I also have some background in digital art, which I think might come in handy for front-end design. (that's awesome!!!)
   - Kai - I have spent a lot of time banging my head against coding problems, so have gotten pretty good at it.
   - Kiefer: I have worked with graphing/datasets in python before. Also, I feel like I can look at issues from many different perspectives and I have a relatively open mind.
   - Nina - I have experience with data visualization and I am patient with bugs. I also like creative works and making things look good. I also had experience leading discussion in a team.
3. How will we capitalize on the strengths of each member? Think about your team goals and how each person might contribute to achieving them based on their strengths. Does assigning roles make sense for your team, or perhaps rotating roles?

Note that exact roles and responsibilities will likely change over the lifetime of this project, and that's ok.

- We will have defined roles, but they will be subject to change as we discover what each team member is good at/enjoys. We all seem to enjoy problem solving, so we all want to take turns with handling the more coding-intensive roles.

4. What are the rules that will guide your team? Specifically:
   - When will your team meet? What time, how often, for how long, where?
     i. Class times + try and meet 2 other times at least an hour a week via zoom. We acknowledge that our schedules can be chaotic, so these times will be flexible.
   - What roles will members take on in your meetings? Is someone responsible for setting agendas, taking notes, facilitating discussions, etc?
     i. Nina is going to be our primary facilitator, and Emmy will make sure to take notes. We feel like we should all work together for setting agendas.
   - How will you communicate with each other? (to share work, to ask questions, notify the group if someone is running late or if someone will miss a meeting, etc)
     i. Slack
   - How will you make sure communication stays respectful? (How does your team define "respectful"?)
     i. When talking over zoom and other platforms, do not yell at each other. When sending written messages, make sure that your meaning can be understood. Understand that it is okay to disagree, but do not belittle others for having different ideas.
   - What are the rules for dealing with a teammate who hasn't been communicating? How frequently should team members communicate / check in?
     i. Use the ping/@ function on Slack in order to make sure that teammates have been notified of especially important issues. If someone has not responded to a ping, use email to make sure that they have heard. We will check in during our meetings, other than that we should be sure to answer direct questions when they are posed in slack (like when to meet).
   - What technologies will you use to support team meetings and work? (Google Drive, Hangouts, Zoom, Facetime, etc)
     i. Google Drive, Zoom
   - How will you make decisions? (Unanimous, consensus, majority rule, by assigned roles, etc.)

- i. Majority rule-- we should try our best for things to be unanimous, but if we cannot agree then the majority rule wins.
  - How will you divide the work?
    - i. We want to try our best to work together as a full team as much as possible, especially as we get a feel for things. As we get more confident, or have scheduling issues, we will split up with the goal of making work as even as possible.
  - How will you ensure that everybody participates meaningfully? How will you make sure that everyone's contribution is valued?
    - i. Make sure that everyone is open to different ideas as well as constructive criticism, and that no one is spoken over in discussions (or has their code/work deleted or written over).
  - What expectations do you have for satisfactory participation? (How much time will each group member spend per week on project activities?)
    - i. Everyone should be present for our full team meetings, which will help hold us accountable for all contributing. We will take into account Amy's time estimates, but we understand that if we are working as a full group it might take a bit longer than split up.
  - What process will you follow if someone does not live up to their responsibilities and/or meet the standards for work set by the team?
    - i. Speak with them about it, and if that doesn't work talk to the prof.
  - How will you address conflict or deal with disagreements within the team?
    - i. By discussion, voting, and reaching out to our prof in increasing order of severity.