1. **Who cares?**

* Individuals : for their awareness of depression, and seek for individual happiness
* Professionals : Healthcare (mental health-specialized) clinicians and researchers for measuring early signs, diagnosis and treatment of mental illness
* Society : how socio-economic circumstances of individuals likely to affect the development of mental illness

1. **3 version of questions**

* Inductive: From mental health reddit threads data, how it reflects an individual's mental illness by their behavior and emotion?
* Deductive: When people with mental illness post/comment on reddit threads, is it predictable their negative behavior/emotion from their posts?
* Abductive: Can mental illness symptoms be measured by individual behavior/emotion on social media platforms (reddit threads)?

1. **Express question in 3 ways and justify**

* **Descriptive: Can verbal expressions on social media primarily examine the user’s mental health and reflect their behaviors?**
* **Relational: Is there any correlation between a user's mental illness and posting negative expressions on social media?**
* **Causal: Does mental illness can cause negative verbal expression/behavior on social media?**
* **Our choice is**

1. **What is your unit of analysis? Justify**

Unit of analysis: social media activities specifically subreddits on mental health to quantify individual behavior/emotion. For examples, posts and comments on depression, bipolar, suicide, and anxiety.

1. **Is your question cross-sectional or longitudinal and why?**

Cross-sectional: analysis of negative words of reddit threads at one point in the time, and draw conclusion on individual’s mental state (measuring if one is suffering from mental illness such as depression, anxiety, bipolar, adhd)

1. **Goldilocks**

- Too broad: What are the effects of using social media on individuals’ health?

- Too specific: What is the percentage of tweets that indicates negative sentiments in the US?

- Just right: Can mental health disorders be predicted by social media activities/behavior?

- Justification: This question adequately points out which data will be collected and analyzed and which conclusion to be made after that. It also calls for an appropriate discussion if needed

1. **Feasibility**

* How long? : Currently, we need to gather the dataset regarding to mental illness reddit threads, and after that we need to build a model based on what we collected
* Is it ethical: It should be ethical, but it’s still debatable since we need access to individuals' mental health records and will present it in class, will consider a different route if this data cannot be obtained or if we deem it too personal and cannot be anonymized
* Who is on the critical path: During the data collection, we reached out to georgetown - for Reddit self-reported depression diagnosis dataset. This dataset is the reddit posts of app. 9000 users who have claimed to have been diagnosed with depression and app. 107,000 matched control users. However, they are only allowed to share with research purposes so they are on our current critical path. If we cannot collect this dataset, we need to find an alternative dataset to measure an individual's mental illness.
* How much it will cost?: for our data collection, it does not cost any but we need the time for collecting the threads dataset regarding to mental illness
* Is it appropriately scoped?: Our scope is in right balance that using particular subreddit regarding to mental health - depression, anxiety, bipolar, suicide. We aim to analyze their expression on social media to recognize their mental illness. As people with negative behavior are highly predictable to write or react negatively on social media as well. Also, reddit is the online social interaction where people can express their feelings

1. **You can't lose?**

* We expect the answer to our question to be “yes" since humans are prone to use social media as an outlet for emotions because it's accessible, fast and easy (in the sense that no one is directly looking at them) (insert sources) so any social media activities with negative undertones would likely indicate a bad state of mind, which can potentially act as an early sign of mental illness
* If the answer is “no", we will look into reformulating the question to finding a correlation between social media activities and mental health with an additional interference (i.e. covid…), so that out conclusion would still be meaningful and can lead to a discussion