We Need to Talk: Analyzing How Reddit Talks About Mental Health

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Goals

Understand how (young) people talk about and cope with mental health

Why?

- Guide further research
- Provide better care/coping strategies

Methods/Tools

- Got 4500 posts and comments from Suicide, Depression, and Anxiety Subreddits
- Stored posts and comments in mongoDB on AWS
- Removed "identifying words" , and lemmatized
- Analyzed topics with Count and TF-IDF Vectorizer and LDA and NMF
- Analyzed polarity with VADER

Topic Modelling: Posts

Used TFIDF with NMF, n_grams(1,3), 5 topics:

Lost/Can't Relate: dont want know life cant people friend get dont know even think thing go help

Story/Temporal: year time got day didnt felt started back would went week told month one

Medical/Panic: panic attack breathing symptom heart help day get going calm disorder first body

Feeling: feel like like feeling make normal dont feel dont something make feel really thought

Asking for help/similarity: anyone else anyone else experience get anyone help medication wondering really taking

Topic Modelling: Comments

**Used count with NMF, n_grams(1,2), 4 topics:**

Temporal/Relating: feel get like go time really year day want well know feel like week make work bad life try last still

Get Help/Medicine: take get help work go thing medication well try make time doctor also start good need really bad day one

General Relating: panic attack go feel like thought time help life heart know one get first day really experience year bad

People/Relating: people like make friend life know feel thing think one say way help talk want someone go even get time

Polarity: Comments and Posts
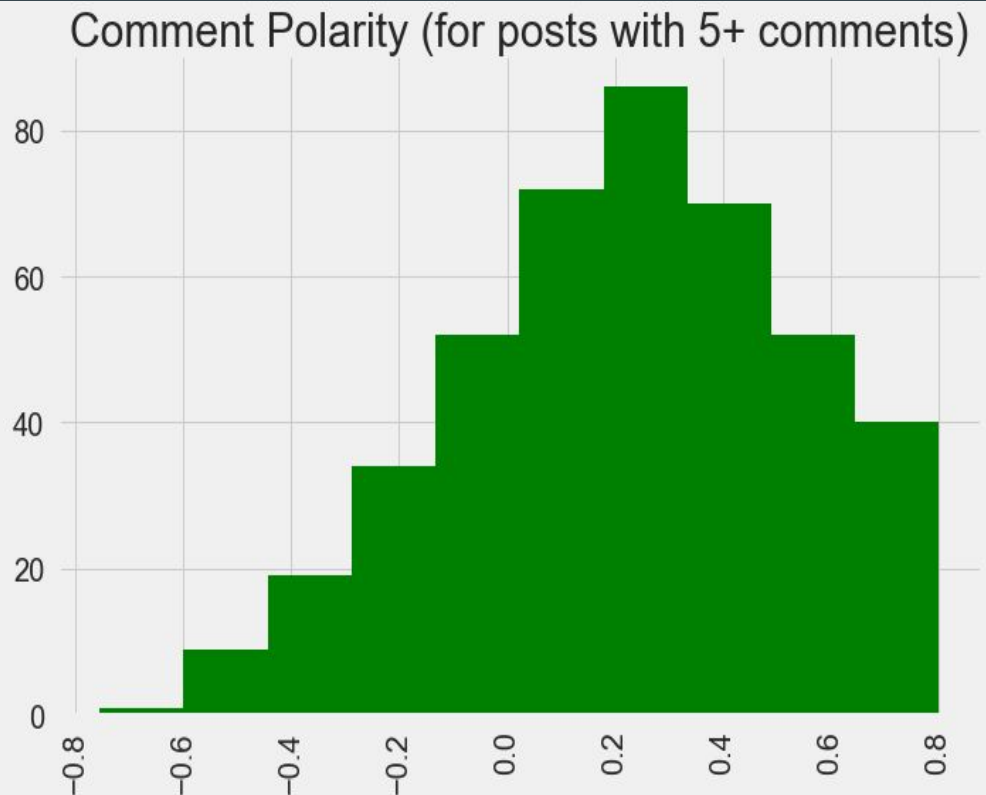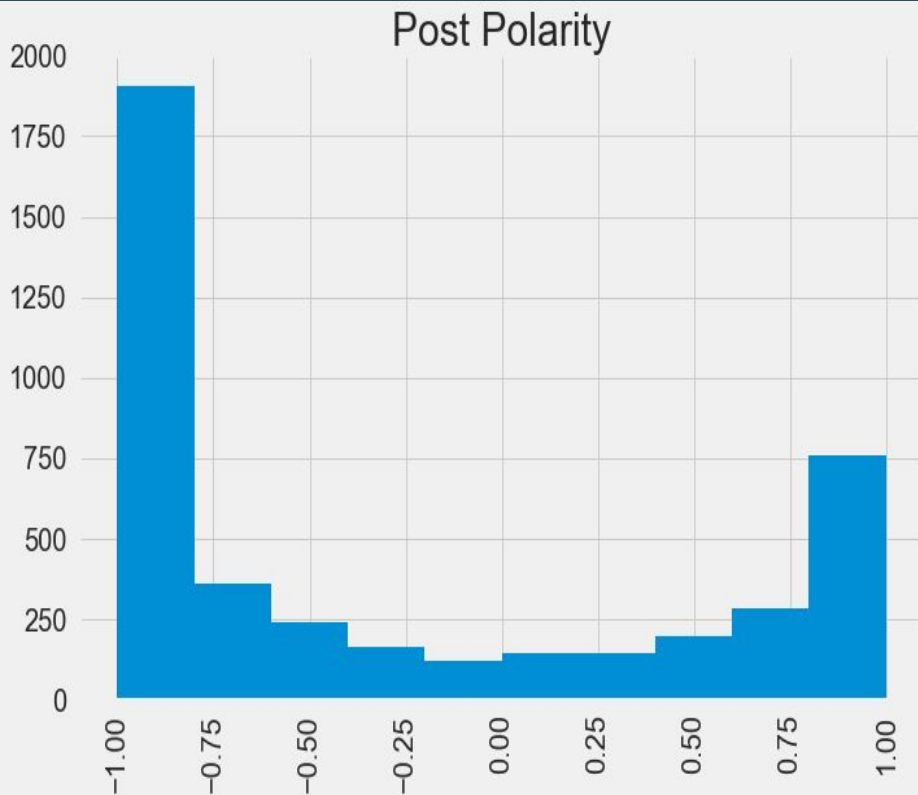
Interesting Findings

Grabbed the 800 most polarizing (positive and negative) posts

Sampled 20 posts from each group

- "Positive": More optimistic, solution-oriented, neutral tone
- Negative: Ranting, explicit language/graphic

Hypotheses:

More Positive people at different place of coping process?
Or better adept at fixing problem?

Difference in Wording between Negative and Positive Polarity Submissions
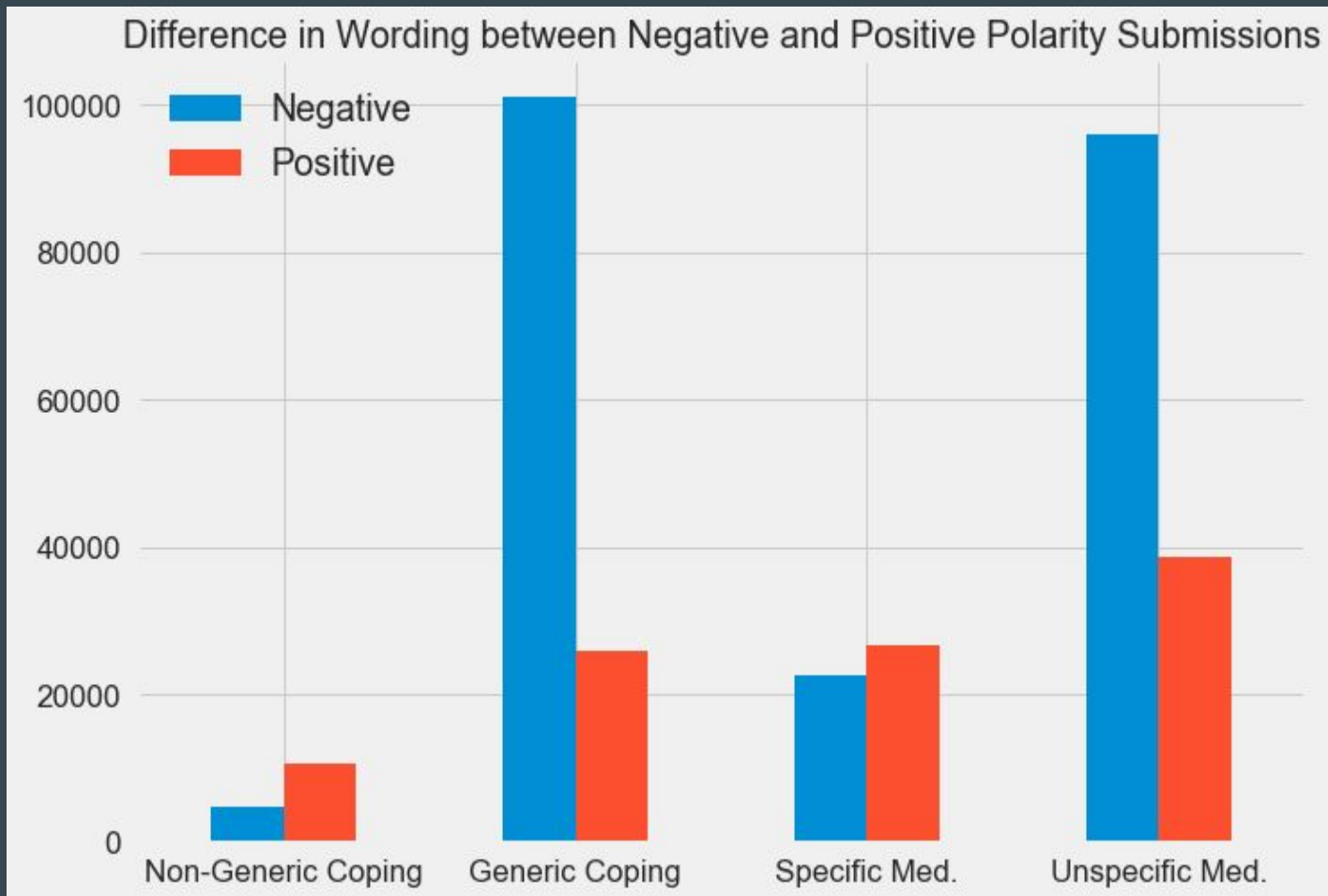
Further Research

- Ascertain "helpful" vs "unhelpful" posts/comments
- Follow users over a period of time
- Better analyze polarity