Anxiety vs Diabetes

Project 3 - APIs and NLP

Suelem Lee

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Best Hot New Top ...

371

r/Anxiety · Posted by u/charliesmith24 15 hours ago 2

Finally registered myself to get vaccinated Health

I've been holding it off for so long. Everyone in my family is anti-vaxx and everyday my mom would show me some article or video explaining why the vaccine is bad. I've been so afraid to get it, but with my new job, I don't think I have a choice. Covid cases are going up like crazy and I work in the mall, lots of Karen's will come in without a mask, people will pull down their mask to cough or sneeze, kids wipe they're boogers on the clothes or shelves, etc. I caught covid once already and was lucky to have only minor symptoms, but I worry I won't get that lucky again.

43 Comments Award Share Save ...

177

r/diabetes · Posted by u/DamnRightRichard 14 hours ago

Am i the only one? Humor

9 Comments Award Share Save ...

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“Results from this meta-analysis provide support that diabetes is associated with an increased likelihood of having anxiety disorders and elevated anxiety symptoms.”

From the article “Association of diabetes with anxiety: A systematic review and meta-analysis”
published by Journal of Psychosomatic Research

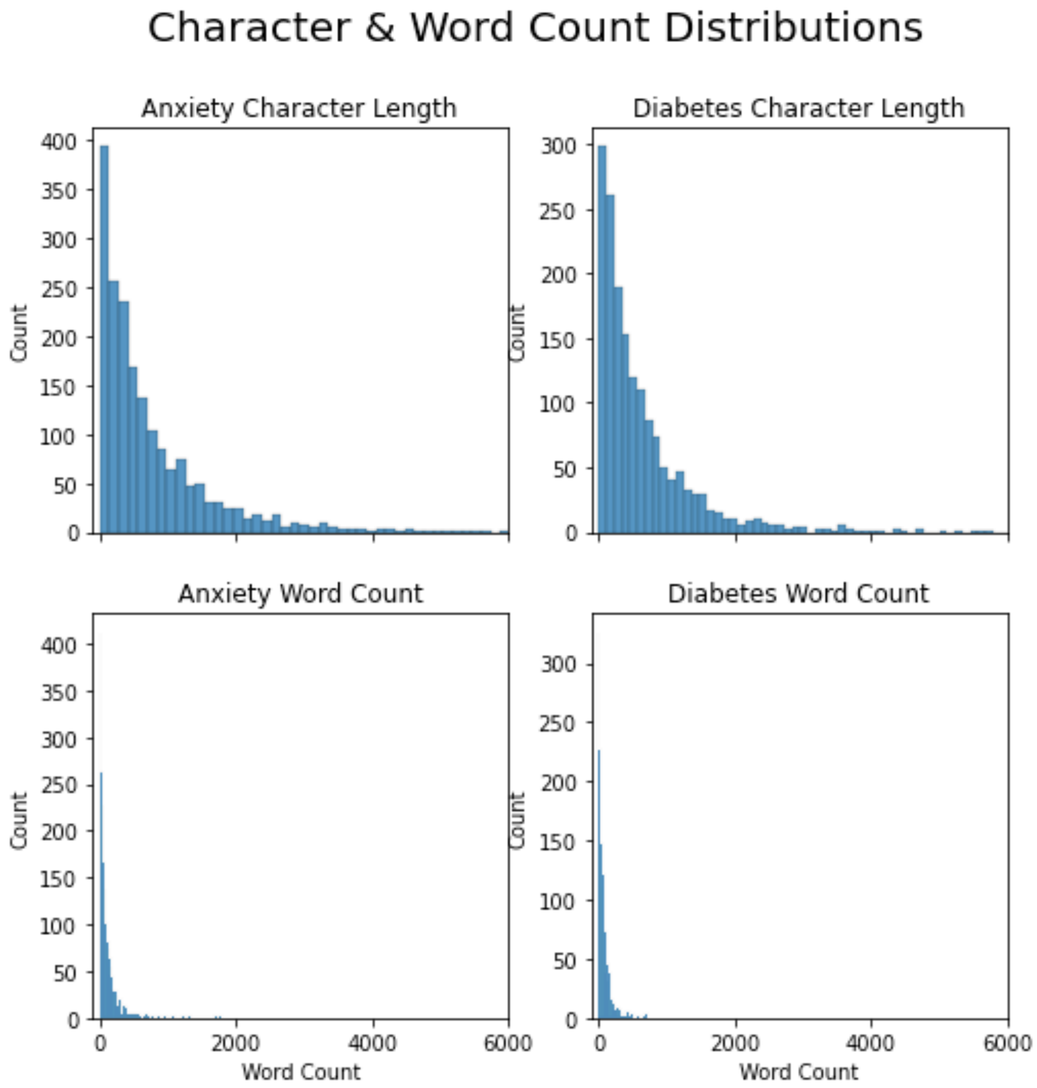
Problem Statement:

“GRIGSBY ETAL, FOUND THAT 40% OF PATIENTS WITH DIABETES HAVE HEIGHTENED ANXIETY SYMPTOMS AND THAT OVERALL PREVALENCE OF ANXIETY DISORDERS REPORTED IN THIS REVIEW LIES AT 14%

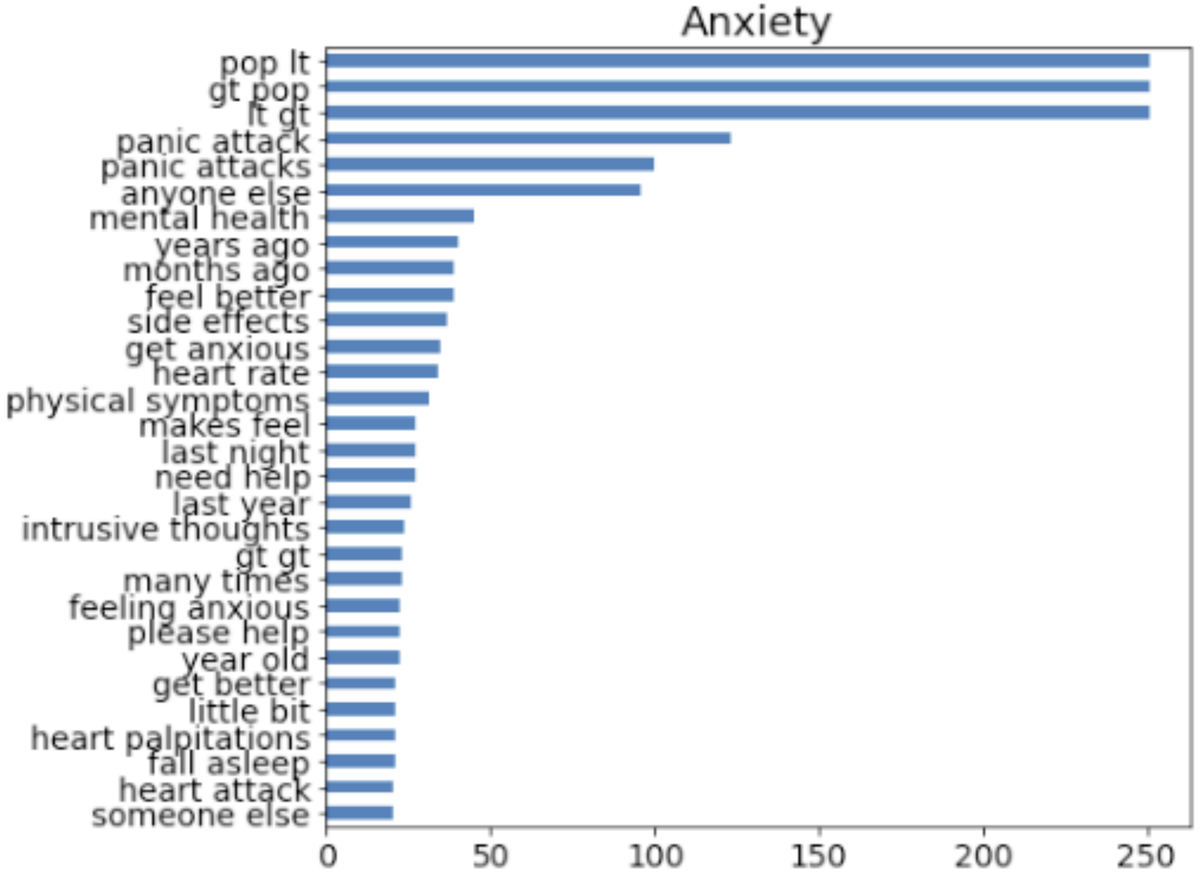
IS THIS CORRELATION ALSO REFLECTED ON SUBREDDITS POSTS?

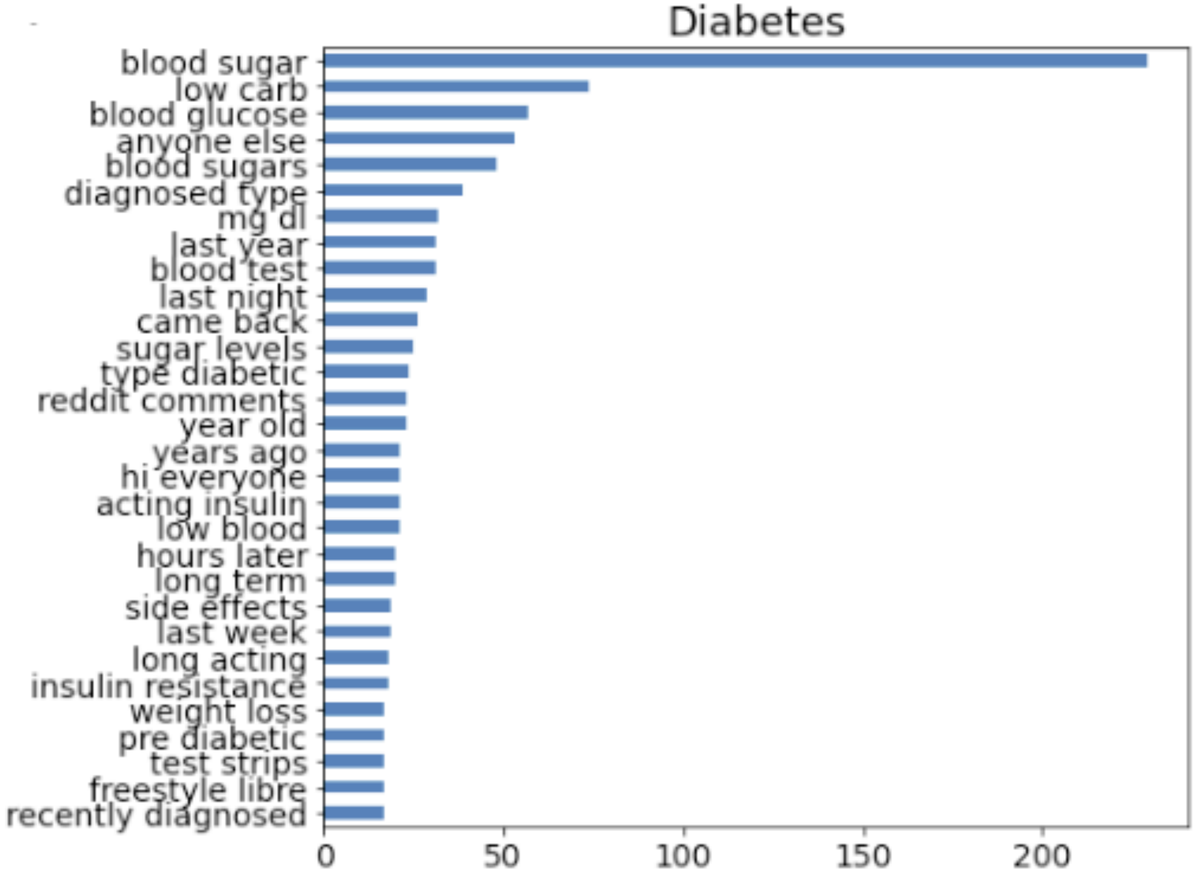
Word count and character count

- Anxiety: 101 words
- Diabetes: 76 words

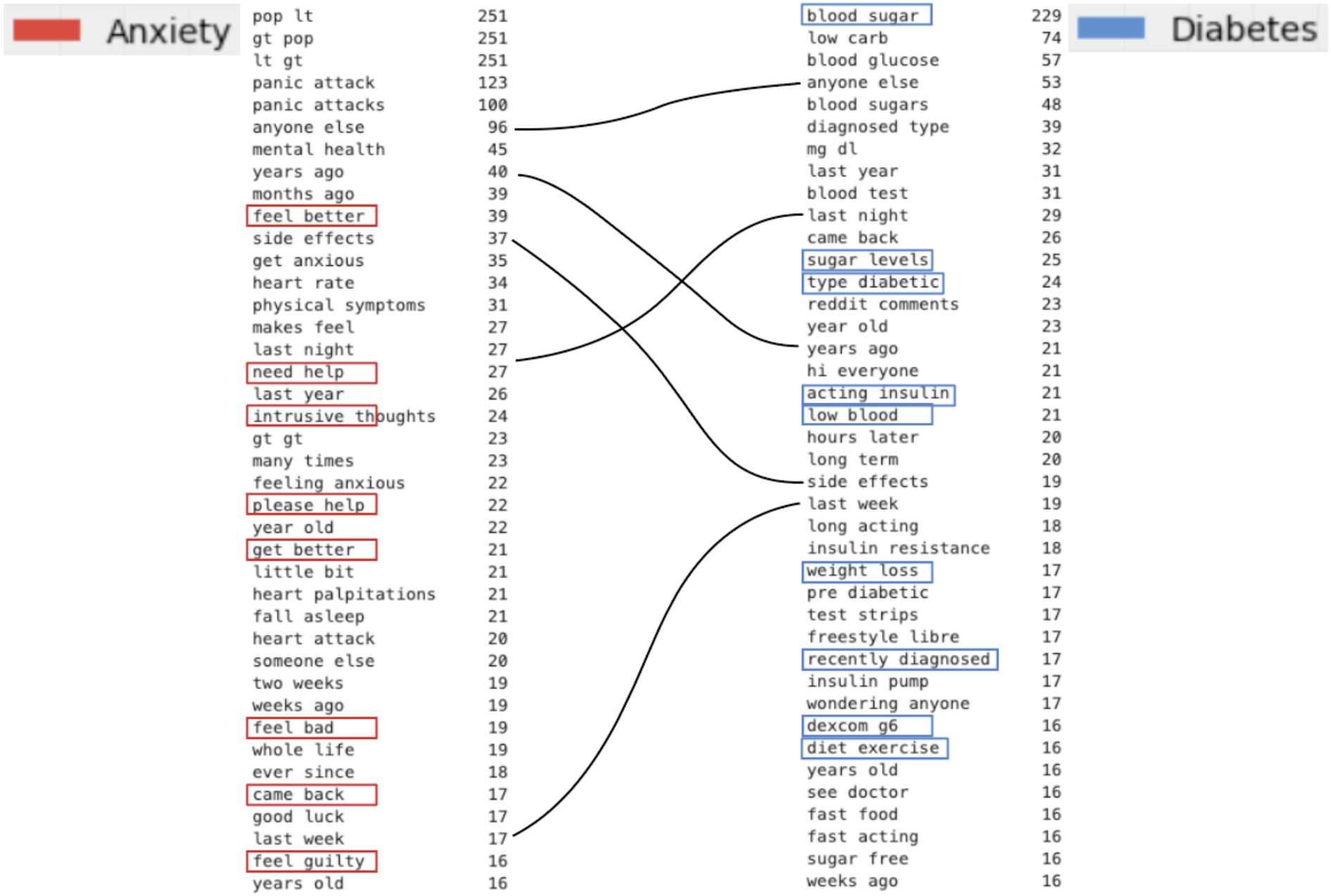


20 Most Used Coupled words





Top coupled used words

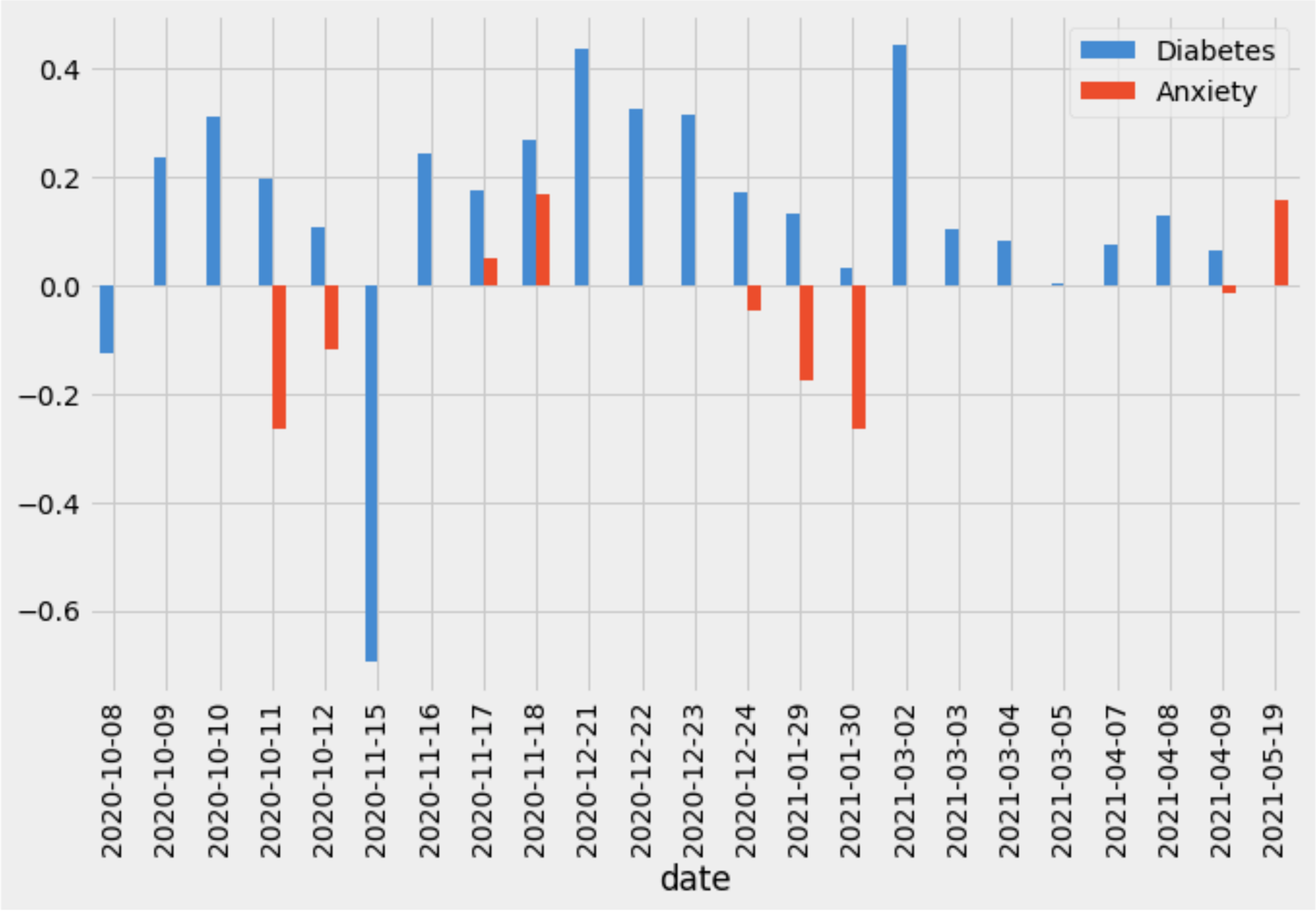


Time related words:

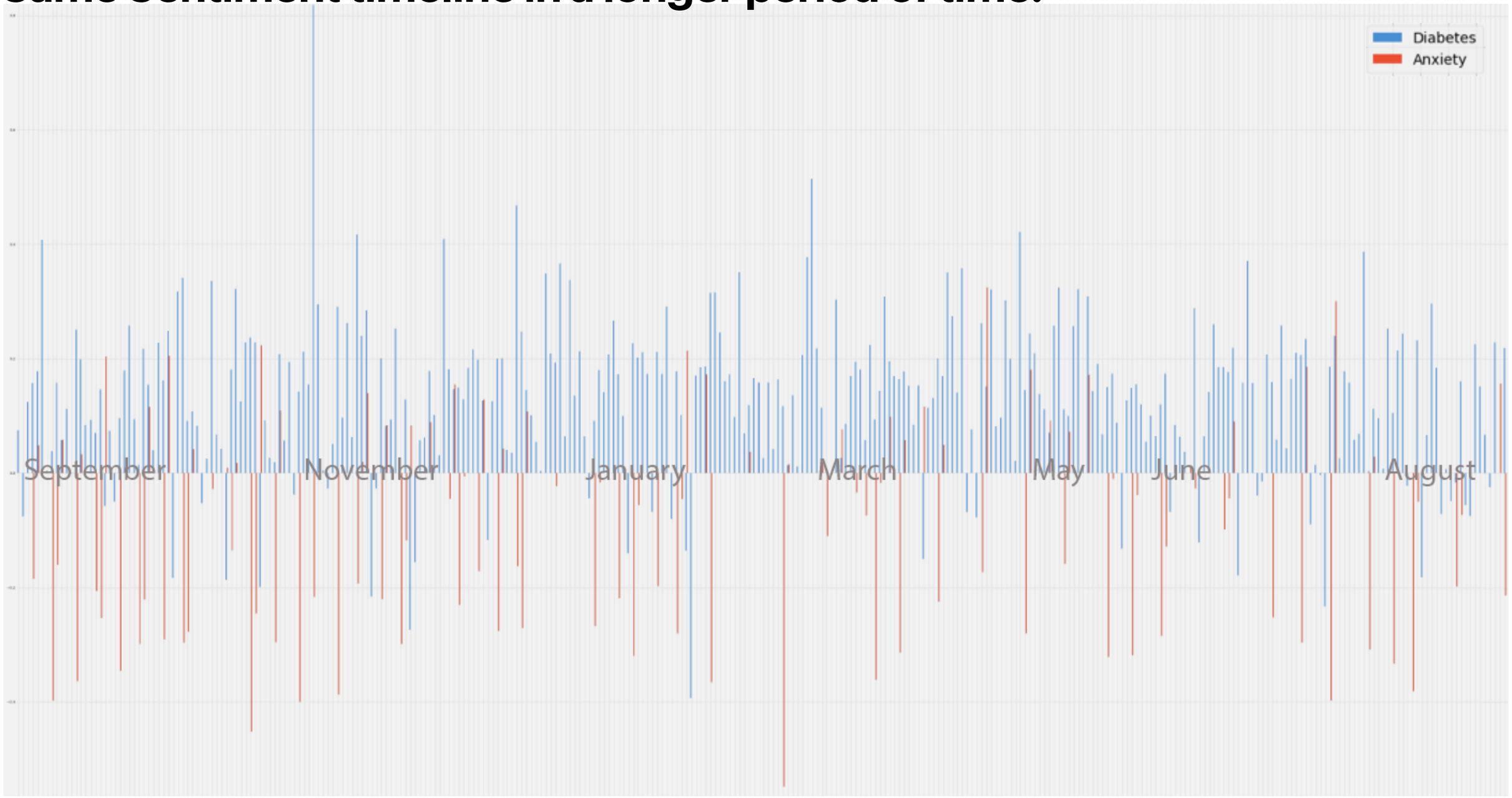
Different points of maturity towards their conditions

Anxiety:	**Diabetes :**
9th: years ago	7th: last year
10th: month ago	9th: last night
	15th: years ago
	19th: hours later

Sentiment timeline:



Same Sentiment timeline in a longer period of time:



Predictions

MULTINOMIAL NAIVE BAYES

MultinomialNB with TfidfVectorizer:

{'tvec__max_features': 5000,
'tvec__ngram_range': (1, 1),
'tvec__stop_words': 'english'}

Test score: 0.892

MultinomialNB with CountVectorizer:

{'cvec__max_df': 0.9,
'cvec__max_features': 5000,
'cvec__min_df': 3,
'cvec__ngram_range': (1, 1)}

Test score: 0.896

RANDOM FOREST

Random Forest: (larger dataset)

{'rf__max_depth': None,
'rf__max_features': 'sqrt',
'rf__n_estimators': 80,
'tvec__max_features': 2000,
'tvec__ngram_range': (1, 3),
'tvec__stop_words': 'english'}

Test score: 0.878

Random Forest: (small dataset)

{'rf__max_depth': None, 'rf__max_features':
'sqrt', 'rf__n_estimators': 100,
'tvec__max_features': 2000,
'tvec__ngram_range': (1, 2),
'tvec__stop_words': 'english'}

Test score: 0.835

Conclusion

Call-to-action

Promoting mental health: There is an opportunity offering a variety of services and programs, moderated online discussion forum.

* Support group for anxiety

* Suggestions for Medication alternatives

* Dealing with symptoms

Screening tools: Offer screening tools that can help you identify if you might have a mental illness, such as anxiety or PTSD.