

What Can We Discover About Panic and Anxiety from Bloggers in Quora and Reddit?

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Abstract

The recent surge in research interest underscores the undeniable significance of mental health, particularly in the realm of social media analysis. While existing studies have predominantly focused on depression and suicide, there is a growing recognition of the equally critical role of anxiety and panic disorders. Panic, characterized by sudden and overwhelming fear, and anxiety, marked by persistent unease and worry, are distinct yet interconnected phenomena. Despite their shared traits, literature confirms the validity of distinguishing between generalized anxiety and panic.

Anxiety is frequently linked with depression, while panic remains relatively understudied. However, understanding panic is crucial due to its association with heightened risks of severe psychological issues such as acute suicidality and agoraphobia, as well as its potential relevance in identifying individuals with post-traumatic stress disorder (PTSD). Yet, current literature lacks computational approaches to differentiate between panic and anxiety in social media data.

To address this gap, a dataset comprising 1,930 user posts from platforms like Quora and Reddit was collected, and a comprehensive analysis was conducted. The research aimed to answer key questions regarding the (dis)similarity between panic and anxiety-annotated posts, the efficacy of classifiers in discerning panic from anxiety, and the insights gained from a qualitative natural language processing (NLP)-assisted analysis.

By leveraging various analytical approaches, including lexical analysis, emotion assessment, and machine learning techniques, the study not only contributes new insights but also provides the dataset, analysis, and code for future research endeavors. Practical applications of the findings include potential clinical utility in distinguishing between anxiety and panic triggers, guiding emergency medical responses, and encouraging individuals to seek support.

Ultimately, this research aims to enhance mental health understanding and practice by enabling the screening of social media posts displaying indications of anxiety or panic. Through these efforts, it is hoped that a more comprehensive understanding of mental health issues in online discourse will be achieved, ultimately contributing to improved mental health outcomes in society.