Policy Deliberations in Wikipedia Talk Pages: How Editors Construct Knowledge About Mental Health

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While Wikipedia is a major repository for information on mental health, little is known about how editors construct knowledge about mental health and how that process is facilitated by policies and guidelines. To study this, we investigate policy deliberations amongst editors in mental health article talk pages. By further comparing policy deliberations to simultaneous edits in articles, in addition to other analyses, we hope to elucidate the role of rules in knowledge construction on Wikipedia. In this workshop paper, we provide an overview of the problem, describe our approach to studying it, and discuss future plans for analysis.

Keywords: Editors, Talk Pages, Knowledge Construction, Policy, Mental Health

Overview

Knowledge about mental health disorders and treatments is a key component of mental health literacy for people with mental health challenges (Kutcher et al., 2016). Therefore, it is imperative that online resources for mental health information are accessible, accurate, and up-to-date.

Wikipedia is a peer-produced knowledge system that hosts comprehensive information about mental health. However, little is known about the process of constructing mental health knowledge on Wikipedia. In particular, who is contributing mental health knowledge, how they do it, and how is this process influenced by Wikipedia guidelines and policies?

Wikipedia serves as an important resource for people with mental disorders and those researching and understanding conditions. It has over 100 mental disorder articles and many more about mental health-related topics (Wikipedia, 2023). Mental health literacy (MHL) is often described as person's knowledge, attitudes, and help-seeking efficacies surrounding mental health (Kutcher et al., 2016). MHL has been shown to increase help-seeking behaviors and the use of treatment services (Cormier et al., 2022). A main component of MHL is understanding mental disorders and treatments (Kutcher et al., 2016). For people seeking to develop their MHL, Wikipedia can be a pathway.

For mental health information and for encyclopedic knowledge in general, it is important that knowledge

is aggregated from multiple perspectives. Research has demonstrated the value of multiple perspectives in Wikipedia, such as Arazy et al. who found that editor diversity could positively impact article quality (Arazy et al., 2011). The importance of perspectives is not unrecognized by the Wikipedia community; policies, guidelines, and principles exist to in part uphold this standard. "Neutral Point of View" ensures the representation of major points of view regarding subjects. The five pillars include principles that invite diverse participation and welcome newcomers. However, the extent to which community standards—policies and guidelines in particular—are actually enacted in mental health articles is unknown, as well as their outcomes.

In this paper, we study how editors discuss and enact rules (a term we use to generally describe policies and guidelines) in mental health talk pages. An investigation of mental health talk pages will illuminate patterns of policy deliberation and its implications for article information and quality. By looking at other factors, such as diversity in contributing editors and variety of cited sources, we can provide an additional lens through which to look at how community standards like pluralism and information quality are upheld in mental health pages.

We consider the following research questions:

- RQ1: What deliberations about Wikipedia rules and article information occur in mental health talk pages?
- RQ2: How do talk page discussions about policy directly impact the quality of and type of information in the main article page?
- RQ3: Do these results align with Wikipedia values, such as pluralism or neutrality?

Mental Health Article Data Set

In this section, we describe our approach to gathering mental health articles. The actual definition of "mental health" lacks a clear consensus, and Wikipedia itself lacks a clear demarcation of what articles constitute "mental health articles."

Since mental health is broad and loosely-defined, we collaboratively formed a definition of mental health articles. For this study, we define mental health articles

(MHAs) as articles about: (1) mental disorders (e.g. bipolar disorder), (2) mental disorder symptomatology (e.g., anxiety), (3) mental disorder treatments (e.g., cognitive behavioral therapy), (4) and concepts closely related to mental health (e.g., self-care). It is important to note that our objective is to gather a dataset that is representative, not exhaustive, of MHAs on Wikipedia. While imperfect, our definition of MHAs enables us to correctly identify mental health-related articles while avoiding false-positives.

To operationalize this definition, we used snowball sampling and similarity measures to gather MHAs. We first sourced a core set of articles from the Wikipedia page, "List of Mental Health Disorders" (Wikipedia, 2023). The page lists wikilinks to mental disorder articles. All disorders listed are in the Diagnostic and Statistical Manual of Mental Disorders (DSM) or the International Classification of Diseases (ICD), two psychiatry and diagnostic references. This resulted in 217 core set articles. We then snowballed from each of the 217 articles using wikilinks from their main article text, yielding 9,499 candidate articles.

To filter candidate articles, we will use text similarity measures. In practice, we will establish a similarity threshold based on the cosine similarity scores between all MHAs in the core set. A candidate article will be included if its average similarity to all core set articles surpasses the threshold.

Future Methods and Analysis

Next, we will describe our tentative plans for the quantitative analysis of articles.

RQ 1: Patterns in Policy Discussions

To answer our first research question, we will analyze talk page discussions of policy. Policy deliberations will be identified through direct references to Wikipedia rules in talk page discussions, e.g. "W:NPOV." Analyzing the frequency of deliberation and enactments of policy can provide a descriptive understanding of how policy is enacted. A further analysis of dialogue act features can help elucidate editors' intentions behind policy enactment. Conversation act features could show mental health domain-specific topics that appear in policy discussions. To analyze both, we intend to use an unsupervised dialogue act identification method (Jo et al., 2017).

RQ 2: Impact on Article Information and Quality

We not only want to derive an understanding of the extent and nature of these discussions, but we also seek to know how discussions directly impact the information in and quality of articles. Towards this, we plan to compare talk page discussions about policy to simultaneous edits in the main article, a method used by Maki et al. to predict editor success (Maki et al., 2017). Instead of editor success, we aim to measure outcomes of policy deliberation on article content. We will ask: how does an article's revision history at the start time of a discussion compare to its revision history at the end time? What types of edits, if any, do editors make while participating in a policy discussion?

RQ 3: Alignment with Wikipedia values

We aim to connect our investigation of mental health articles to a broader discussion of how policy usage reinforces (or contradicts) Wikipedia values such as pluralism and neutrality. Policy usage is an important facet of peer-produced knowledge systems. Especially for higher-stakes information such as mental health, it's important to know how editors uphold platform values through policy use and editing. In addition to our other analyses, we will look at editor diversity and the variety of cited sources to examine how well the value of pluralism translates to mental health article spaces.

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