
Studying Students Experiencing Mental Health Problems through Surrounding Peers' Points of View

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Abstract

College students are at a vulnerable age; among college students with serious mental health problems, this period is frequently when the first episodes appear. As a result, college students are increasingly disclosing their vulnerable, stigmatized experiences on social networking sites (SNSs). Understanding peers' perceptions of and attitudes toward their friends who are dealing with mental health problems is vital to efforts to eliminate peer exclusion and foster social support. In our ongoing study, we aim to understand students with mental health problems such as depression on SNSs through their peers' points of view. In this position paper, we will discuss the possibility and implication of studying the stigmatized population on SNSs through their surrounding people without directly approaching the stigmatized population along with the challenges and ethical consideration from our research.

Author Keywords

Depression; Social Network Sites; Stigma; Self-disclosure

References to Mental Health problem	Descriptions
Disclosed Mood and Diagnostic History	Negative mood, from depressive symptoms to suicidal feelings; Disclosure of mental illness diagnosis (e.g., alcohol problems, anxiety disorder) and experiences or desire for treatment
Personal Life Struggles and Stigmatized Experience	Description of severe difficulties/challenges that negatively impact a poster's life (i.e., family disruption, romantic breakups)
Encoded Contents Implying Mental Health Problems	Implicit signals, such as the use of literary references or visual images implying mental health problems
Gaps between Offline and Online Identity	Gaps between online identity appearing to be at odds with his or her offline identity
Social Interaction and Activity Log	Constant usage of social media; A drastic change in social media activities (a sudden burst of updates) and unusual communicative patterns

Table 1: Signals that raised participants' concern about others' mental health problems. Codes or categories are not mutually exclusive.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous;

Introduction

College students' mental health is at an all-time low because they are now exposed to a wide variety of stresses and pressures [2]. These students are also at a vulnerable life stage, which is frequently when the first episodes of serious mental health problems appear [7]. Increasingly, students are turning to social network sites (SNSs) to relieve their distress by simply venting negative emotions or by explicitly and implicitly disclosing mental health problems.

Earlier studies have addressed many aspects of mental health-related SNS use, including depression displayed on SNSs [8], the curation of self-harm images on Instagram [9], the sharing of pro-eating disorder content on Tumblr [5], and even suicidal ideation [6].

Researchers also have revealed that these disclosures garner supportive interactions between the discloser and the audience. For instance, due to their personal and intimate nature, sensitive disclosures (e.g., personal narratives or references to an illness) have been shown to elicit more positive comments from peers on an SNS, as compared to less sensitive disclosures [1].

Generally, as a methodology for studying the use of SNSs in a population with mental health issues, researchers have collected, observed, and studied the social media posts of people with mental health problems.

Although it has been shown that a relational basis is important in understanding the disclosure [11], relatively few studies have looked at people who are experiencing mental health problems from the perspective of surrounding people in the network.

Furthermore, existing research methods have limitations in understanding and overcoming the social exclusion, misconception, and discrimination suffered by the stigmatized population on social media because they do not focus on the surrounding people or peers.

Early Findings

In our ongoing study, we surveyed 227 university students in South Korea and then completed follow-up interviews with 20 of those students to understand their experiences and thoughts towards their friends on social media who have mental health problems.

Our results revealed a variety of explicit and implicit signals that raised these peers' concerns about their friends' mental health problems (see Table 1). Our participants synthesized multiple signals gained offline and online to describe an individual's SNS usage referring to a mental health problem. Therefore, the SNS activities of individuals may differ from what researchers understand and what friends in the network understand, because researchers have no background knowledge of the individuals nor the ability to contextualize them into SNS content.

For example, one of the participants referred to his friend uploading pictures of his luxury items whenever he suffers from a severely depressed feeling. According to the participant's comments, his friend uses this behavior as a way to vent and regulate his depressive

feeling. We were unable to confirm the intentions of the person posting luxury items, but such actions were used as a signal for our participant to help his friend. The participant also mentioned that this behavior could be seen as bragging by others who do not know the author of the posts very much.

Our findings emphasize the importance of a relational basis for understanding and interpreting SNS activities of people who have a mental health problem.

Ethical Considerations and Challenges

We acknowledge that this study addresses several ethical concerns, even though the researchers' institutional review board approved it.

In the Computer Supported Cooperative Work and Social Computing field, many discussions have been held on the ethical justification of using publicly available social media data for research. The British Psychological Society's guidebook states that even if the data are available to the public domain, one should consider carefully whether the use of the data is potentially harmful to the publisher [3].

In some cases, paraphrasing is suggested as an alternative way if participants were expected to be at risk but did not give consent [12]. Bruckman et al. proposed four different levels of a disguising method for studying Internet users [4]. The proposed guideline stated that when revealing information would be harmful to subjects, a "heavy disguise" is needed, which includes removing or changing the names of groups or individuals, pseudonyms, and verbatim quotes, and even including some false details. For example, even if a researcher deletes a publisher's

information from stigmatized content that is posted to a public domain and uses that content for the research, people can identify the publisher by searching the content via search engines. This can cause serious damage to the publisher.

Compared to collecting publicly published data such as Reddit or Twitter postings, the information that our participants share may also be public, but in some cases, the original poster intended to exclusively share the information with his or her closed social networks. Therefore, directly receiving a screenshot or original text of a post without the poster's consent is beyond the poster's intent and, of course, could not be considered.

The ideal method was to receive anonymized and paraphrased data from the participants at first. To this end, we asked participants to remove the personal information and singularities of the authors of posts when they answered interview or survey questions. For the experiment environment, we helped them to recall their previous experiences and memories by providing a screen that only the participants could see, and any web history was not stored by using private browsing mode. However, we found some limitations of anonymizing and paraphrasing by the participants in the first place. The content delivered by the participants included specific references to psychiatric diagnoses or sensitive issues. Therefore, we decided to minimize the risk to the authors of posts by paraphrasing the data while applying a "heavy disguise" process [4].

We acknowledge that mental health problems are very common among students. Thus, it is quite likely that

some of the participants have also struggled with undiagnosed disorders (e.g., depression), as the crisis regarding these disorders affects college campuses nationwide [10]. In particular, note that during the interviews three participants indicated that they had been diagnosed with major depressive disorder, which meant we had to be very careful when designing the survey sheet and interview protocol. For example, a description of a stigmatized posting as an example case presented in the interview and survey sessions may be a similar type of content that our participants have posted.

Due to the sensitive nature of the topic, we worked closely with a psychiatrist and two counselors at a university's health care center throughout the research period. At the beginning of the study, these experts thoroughly scrutinized the survey questions and the interview protocols.

We also acknowledge that it is possible that we misunderstood or misrepresented the actual experiences of authors of posts because we derived our findings from viewers' anecdotal observations. Authors of future studies should acquire ground-truth data to address the factors that affect whether a viewer correctly detects an issue or experiences a false alarm.

Conclusion

In this position paper, we propose our data collection method through friends of people who have mental health problems to better understand their SNS usage. Our initial findings have shown that the perspectives of surrounding people can reveal a new interpretation of SNS contents in terms of disclosing crisis signals, supportive interactions, and the process of

disconnecting and adopting an attitudinal social distance from the stigmatized issue. We have also identified ethical concerns and challenges in the research method of collecting data through surrounding people.

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