
Abstract

A Sociotechnical Model for Managing Mental Health Distress Among College Students During and After a Pandemic: Development and Usability Study

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Abstract

Background: Mental distress affects people's health in many ways and at different levels. However, anxiety and depressive disorder have significantly increased since the outbreak of the COVID-19 pandemic. Controlling the spread of COVID-19 resulted in isolation protocols such as stay-at-home orders, social distancing, and quarantining. Though well intended, the protocols exacerbated the already increasing number of mental distress cases prior to the pandemic. During the rollout of these pandemic interventions to control the spread, there was a noticeable increase in technology use. For instance, to cope with their mental health concerns, several people, including students, turned to technology to sustain their connection to the society and to access mental health services. Although a plethora of technological tools exist for communication and socialization, it is unknown which types of technologies are effective in the management of anxiety and depression symptoms. Hence, there is a need for a sociotechnical model that can identify technologies effective in addressing an individual's mental health symptoms, specifically among college students.

Objective: The objective of this study is to identify the effectiveness of current technologies used in coping with a mental distress situation and to develop a model that college students can use to effectively handle their mental health distress during and after a pandemic.

Methods: The proposed model is built on the Stallman's Health Theory of Coping. The model expands the theory with 5 significant components, namely Mental Health Distress Situation, Level of Distress, Coping Strategy, Technology Used, and the Mental Health Distress Outcome. This paper describes the conceptualized functionality of each component. The model will be implemented as a prototype mobile app and evaluated using a case study with students from 2 colleges.

Results: The study is underway. However, the model will be evaluated using 2 categories of nonrandomized focus groups of college students to determine the usefulness and the effectiveness of the model. Each group will consist of 8 participants. Data collected from each group will be qualitatively evaluated to identify themes from the responses, which will be used to refine the model to meet the study objective.

Conclusions: Many people experienced an increase in mental distress due to the isolation requirements arising from the COVID-19 pandemic. With limited access to traditional coping strategies in public and large gatherings, people turned to technology to manage their stress, anxiety, and depression. However, there is no "one-size-fits-all" technology that can address every individual distress level and coping strategy. Thus, developing a model to identify effective technologies used as coping strategies will be helpful for an individual in alleviating their mental health distress symptoms during and after a pandemic.

Conflicts of Interest: None declared.

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technology; socialization; COVID-19; pandemic; mental health; college students

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