Mental Distress, Label Avoidance, and Use of a Mental Health Chatbot: Results from a U

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November 16, 2022

Abstract

Objectives

To pilot test a mental health chatbot designed to screen users for psychological distress and refer to resources, addressing the strain on the U.S. behavioral healthcare workforce and exacerbated behavioral health challenges among U.S. adults due to COVID-19.

Methods

Data were collected via a national, cross-sectional, internet-based survey of U.S. adults. Measures included demographics, symptoms, stigma, technology acceptance, willingness to use the chatbot, and chatbot acceptability. Relationships between these variables were explored using chi-square tests, correlations, and logistic regression.

Results

Of 222 participants, 75.7% completed mental health screening within the chatbot. Participants found the chatbot to be acceptable. Demographic predictors of chatbot use included being White or Black/African American, identifying as Hispanic/Latino, having dependents, having insurance coverage, having used mental health services in the past, having a diagnosed mental health condition, and reporting current distress. Logistic regression produced a significant model with perceived usefulness and symptoms as significant positive predictors of chatbot use for the overall sample, and label avoidance as the only significant predictor of chatbot use for those currently experiencing distress.

Discussion

Chatbot technology may be a feasible and acceptable way to screen large numbers of people for psychological distress and disseminate mental health resources. Since label avoidance was identified as the single significant predictor of chatbot use among currently distressed individuals, chatbot technology may be one way to circumnavigate stigma as a barrier to engagement in behavioral health care.

Limitations

Recruitment through Amazon's mTurk limits generalizability of our findings, and chi-square test effect sizes were small.

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Keywords: chatbot, mental health, mental health screening, resource referral, stigma, label avoidance

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