iSee counseling

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A \$1 million NSF grant to develop a mobile technology will help MSU enhance college counseling services

Michigan State University will use a National Science Foundation grant of \$1 million to develop a smart human-centered system, known as iSee, for enhancing college counseling services.



It is estimated that about 10 percent of college students turn to counseling services to help navigate the turbulent waters of college life and deal with serious mental health issues, such as depression.

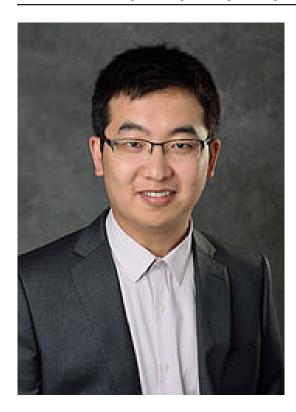
With the help of the NSF grant, researchers at MSU's colleges of Engineering and Communication Arts and Sciences, as well as the MSU Counseling Center, are developing mobile technology that will supplement in-person counseling services.

The technology will objectively measure a student's depressive indicators, helping him or her to better manage their symptoms. The technology also will help clinicians identify students with the most urgent needs.

Specifically, the mobile technology leverages sensors inside smartphones and wristbands to monitor many of the student's behaviors – such as physical activity, diet, sleeping habits, travel and social behavior – all of which can be indicators of the student's mental wellbeing.

The behavior information will be translated into meaningful analytics results for identifying the student's depression severity. A dashboard running on the clinician side visualizes behavior information, as well as the analytics results, to help clinicians make clinical decisions and provide treatment.

"Our technology will allow college counseling centers to be more accurately informed with the severity of each student," said Mi Zhang, an assistant professor of electrical and computer engineering who is heading up the project. "As such, unnecessary visits can be reduced and clinician time can be better utilized."



Jingbo Meng, an assistant professor of communication at MSU, is a co-investigator of the project.

"With the assistance of the behavioral data, clinicians can better understand students' narratives about their life incidents, and the quality of clinician-student communication will be improved during the counseling process," she said.

"The iSee project is an extremely innovative approach to using technology in the context of mental health treatment, and it promises to significantly augment the ways in which university counseling centers engage with our students," said Scott Becker, director of the MSU Counseling Center, who collaborated on the project.

The innovative solutions expected through iSee will lead to considerable advancements in counseling services delivered from college counseling centers. In the bigger picture, iSee could serve as a model for college counseling centers across the nation and thus has the significant potential to enhance mental health services in thousands of colleges and universities, benefiting millions of students.

Other collaborators in the project include Anil Jain, MSU University Distinguished Professor of computer science and engineering; Alex Liu, MSU professor of computer science and engineering; David Mohr from Northwestern University; and a team from Microsoft Research.

Related Website: Story courtesy of MSUToday.

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