Predicting Imminent Suicidal Thoughts and Nonfatal Attempts: The Role of Complexity

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SUMMARY

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Historically, it has been difficult to predict suicidal behavior with any greater accuracy than just chance. This study looks at how to identify better methods of prediction by looking at past research and identifying two methodological restraints on prediction: reliance of long follow-ups and the application of simple conceptualizations of risk. To date, meta-analysis research studies have not been successful at improving the chance of predicting the likelihood of suicidal attempts.

The participant group included 1021 adults who were recruited online. The ages ranged from 18-63 years old. The sample was 66.4% female, 28.5% male, and 1.4% identifying as other, and predominately white (78.9%). During the recruitment process, several steps were taken to prevent participants entering the study under false pretenses. The questionnaire included irrelevant items about self-harming and suicide as well as free response items to gain a better understanding of the person's individual situation. Data were collected anonymously, and payment was delivered through an unidentifiable email address. Assessments occurred at 3, 14, and 28 days after the baseline assessment. Compensation was delivered the next day in the form of gift cards, with increasing amounts to help increase patient retention.

The study utilized a modified affect-misattribution paradigm (AMP) where participants were flashed an emotionally evocative image, followed by a blank screen, then a Chinese symbol. The patient was asked to ignore the other images and focus on the symbols, describing each one as more or less pleasant than the average symbol. Images included death or suicide images with a range of intensity. Other measures included explicit affective image ratings where a range of positive and suicidal stimuli were assessed using self-report surveys. The sample participated in a modified self-injurious thoughts and behaviors interview with study personnel and also the Acquired Capability for Suicide Scale-Fearlessness About Death, a single-factor, seven-item self-report measure. Participants completed other self-report measures, the Affective States Questionnaire, the Beck Hopelessness Scale, the Beck Scale for Suicide Ideation, and additional scales including insomnia measurements, agitation measures, symptom index, and disgust with life scale.

The study determined that, at the baseline, "90% of the sample endorsed engaging in non-suicidal self-injury at least once in their lifetime." 80% reported using cutting as the preferred self-injurious method. 23% reported a cutting episode within the last week. Planning and preparing for suicide also was a common measure, with 96% endorsing a suicide plan and 51%

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reporting thinking about their plan within the last week at baseline. 76% reported they had prepared to attempt suicide in the past. 28.6% of the sample reported attempting suicide within the last year. Suicidal ideation was present in 79.3% of the sample, and the prevalence of nonfatal attempts over the 28 days after the baseline was 2.5%.

   Research in the past has shown that the ability to identify suicidal thoughts and behaviors is weak, and this research serves to better understand suicidal ideation and predictability. The results of the study support the conclusions that shorter follow up periods did not generally improve the prevalence of suicidal thoughts or ideations, nor prediction accuracy. While the study measures helped to identify risk factors (insomnia, agitation, etc.), these were not strong indicators of suicidal thoughts and behaviors. The researchers noted that their ability to predict suicidal ideation was slightly stronger than their ability to predict nonfatal suicide attempts. "We believe that the integration of complexity into the conceptualization of suicidal thoughts and behaviors will be critical to this shift" in focus from a circumscribed set of risk factors to complex combinations of a large number of biopsychosocial factors, they wrote. Research such as the present study is incredibly complex, and one of the limitations of measuring suicidal thoughts and behaviors is the difficulty of not excluding any potential variables within a participant's thought process.

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