PREDICTING SUICIDE FROM FACIAL EXPRESSIONS

Can the Facial Action Coding System (FACS) be used to help medical professionals determine whether or not a patient is suicidal? A study conducted by Heller and Haynal suggested that therapists who have predicted suicidal risk have done so based on a hunch of sorts, and that hunch is derived from the nonverbal behavior of suicidal patients. Therefore, researchers Heller and Haynal wondered if capturing emotion with FACS could determine if there were specific nonverbal cues in the face that could signal a patient’s possible suicide attempt.

The participants in Heller’s and Haynal’s study were patients who were diagnosed with depression, patients who attempted suicide, and patients who reattempted suicide a year later. The participants were categorized into suicidal depressives, nonsuicidal depressives, non reattempter suicidal depressives, and reattempter suicidal depressives. The participants filled out questionnaires and had their faces filmed while they were asked questions about contemplating suicide. FACS coders coded for both the lower and upper face and took note of the duration of the action unit as well as any form of asymmetry.

The findings were as follows:

Although this study could not come up with concrete evidence for a specific facial expression that could signify suicide, expressions of contempt (AU 14) were found in five of the seventeen suicidal depressive patients, three of whom reattempted suicide. Meanwhile, depressive non-suicidal patients did not exhibit any signs of contempt. Heller and Haynal figured that the suicidal patients showed contempt either because they were contemptuous at the interviewing process or because they felt contempt toward themselves or their lives.

Another finding of the study was that suicidal depressive patients did not use their upper face as much as nonsuicidal depressed patients. The lack of upper face movement does not mean, however, that the suicidal patients are experiencing more severe depression than nonsuicidal depressive patients. The study suggests that the decrease in upper face movement for patients who attempted suicide may be because they wished to refrain from communication with others. An eyebrow raise (AU 1+2) can be used as a conversational marker to accent words or catch attention, and suicidal patients who were asked to speak about considering suicide showed no upper face movement or desire to communicate with their doctors. Nonsuicidal depressive patients did not show as much upper face inhibition when answering questions about suicide.

The results of the study suggest that non suicidal depressive patients show different expressions of emotion on the face from suicidal depressive patients and that observing nonverbal behavior of these patients can provide valuable information about a patient’s risk of suicide.