

# Bilingual Computer-Assisted Psychological Assessment: An Innovative Approach for Screening Depression in Chicanos/Latinos

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## ABSTRACT

Literature suggests that clinical depression is a major public health problem. Latinos are significantly at high risk for depression and in need of culturally-responsive mental health services. Conventional self-report depression assessment methods display limited predictive power. Fortunately, computer-assisted assessment methods offer alternatives to overcome the psychometric and cultural limitations of self-report measures. Most importantly, computerized speech recognition promises to enhance the early and accurate detection of depressed mood and symptoms. The author developed, tested, and evaluated several bilingual computerized speech recognition (voice-interactive) depression screening programs that verbally interviewed English and Spanish speakers using the Center for Epidemiological Studies - Depression scale (CES-D). The bilingual computer programs were evaluated for psychometric properties and the relationship of depression levels to demographics, acculturation, and speech behavior. The studies provided evidence that the bilingual voice-interactive speech recognition applications were generally feasible to administer, reliable, valid, and equivalent (means and variabilities) to standard interview (face-to-face and paper-and-pencil) methods. The English- and Spanish-speaking samples positively rated the automated interviews. The findings suggested that the applications were culturally and linguistically viable tools for screening depression. The potential of the analysis of speech behavior and voice characteristics for accurately detecting depression among Chicanos/Latinos is discussed.

## ABOUT THE AUTHOR

Gerardo M. González is an Associate Professor and Program Director of Psychology at California State University, San Marcos. Dr. González received his Ph.D. in clinical psychology at the California School of Professional Psychology in Fresno. He received post-doctoral clinical and research training at the University of California, Berkeley and the University of California, San Francisco. Among his research and multicultural mental health issues, Dr. González has published extensively on bilingual computerized screening of depression and the prevention of depression in English and Spanish-speaking populations.