

Classifications of clinical depression detection using acoustic measures in Malay speakers

ABSTRACT

Objective screening mechanism using paralinguistic cues to enhance current diagnostic on detecting depression is desirable, which resulted in the rise of research on this area. However, to date, there has been no research done using dataset of Malay speakers. This paper presented an acoustic depression detection classification using Linear and Quadratic Discriminant analysis with transition parameters and power spectral density as the acoustic features. Among the two features, power spectral density performed better, especially with the combination of band 1, 2 and 3 for both male and female data. As for the Transition parameters, we found that unvoiced feature performed best overall for both male and female.

Keyword: Clinical depression; Discriminant analysis; Power spectral density; Transition parameter