Purpose: At a worldwide level, suicide is a public health problem that, despite displaying downward trends in several areas of the world, in many countries these rates have increased. One of the elements that contributes to its prevention is an early and dynamic evaluation. Due to this, the objective is to determine the association between acoustic parameters of voice and speech (F0, F1, F2, F3, dB, and Jitter) and suicidal ideation arousal amongst some university students from the city of Temuco, Chile. Methods: Attending to this issue, a cross-sectional design study was conducted through a non-probabilistic sampling of sixty 18- and 19-year-old adolescents from the city of Temuco, that went through an acoustic evaluation of their voice and speech after taking a test to determine suicidal ideation. Afterwards, data were analyzed through IBM SPSS version 23.0 software (IBM SPSS Statistics, Armonk, NY), by means of exploratory, descriptive, and inferential statistics taking the variable’s levels of measurements and the types of distributions into account. Results: The results point out that 30% of the adolescents, from both genders, displayed suicidal ideation. Taking into account the acoustic results of their voice, it is possible to recognize that the fundamental frequency (F0), the formants (F1, F2), and Jitter, are the ones that majorly link to the presence of suicidal ideation, both in women and men (p <.05). The characteristics that describe F3 were only linked to the presence of suicidal ideation in men (p <.05). Conclusions: It is concluded that the acoustic parameters of voice and speech differ in adolescents with suicidal behavior, opening the possibility of representing a useful tool in the diagnosis of suicide. © 2020, © 2020
adolescents
Chile
speech acoustics
Suicidal ideation
voice
voice quality