## Characterization of legal and illegal drugs users: segmentation using TAID-LCA analysis

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Summary

The consumption of adictive substances is a serious health problem. This is why the Universidad Veracruzana is being concerned about establishing actions and strategies to be more deeply aware of this problem. The Red Veracruzana de Investigación de Adicciones (REVIVA), assigned to the Instituto de Ciencias de la Salud, made the "Diagnostic of perception, risk and drugs consumption in university students". Research like this one, addresses this issue in such exhaustive way in an educational institution. We take it from the assumption that knowledge generated about the characteristics of drugs consumption will give definition and contrast to the information about the drug consumption problem and it will help to define the accurate answers. The diagnosis was established as a quantitative research made from march 2012 to june 2013, the aim was to know the prevalence of the legal and illegal drugs consumption, the issues and the risk perception of the students. The instrument that was used for the diagnosis of the student's drugs consumption was called "Questionnaire about the drugs consumption in college students" It is an autorized adaptation of the questionnaire "UNAM students 2007", of Villatoro etc. al. 20,644 students participated. The 73 questions instrument inquires about socio-demographic aspects of the students, legal and illegal drugs consumption, handicap directly related with drugs consumption, among others. The huge number of generated data, raises the need to use powerful multivariate data analysis techniques, which will allow to get important information. Here is where TAID\_LCA application is given (Tau Automatic Interaction Detection- Latent Class Analysis) (CASTRO y GALINDO 2012, analysis of a statistic segmentation with the possibility of multivariable answers, under the latent class model, which main idea is to part the simple using the predictivity coefficient, originally developed by (GOODMAN AND KRUSKAL 1954,) The numerator of the index may be decomposed through the main axes, using the Non Symmetrical Correspondences Analysis , (ACNS), (LAURO y DÁMBRA 1984. This allows the segmentation in ternary trees through the representation on the factorial plane of the coordinates of the categories of the predictor variables. We present the results of the TAID-LCA analysis application to the gotten data, which allow us to identify segments of interest, which characterization is very important to establish strategies of attention to the student's health.

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