



Data Mining based profiles of emerging adults at elevated risk for negative alcohol use consequences

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Background

- Previous research has identified predictors of risky alcohol use in young adults, with early age of onset of alcohol use, positive expectations about alcohol, and other drug use or gender being important risk factors.
- Nevertheless, the role of **emotional dysregulation** (ED) and its relationships with other risk factors remains to be determined in the specific population of emerging adults.





- Deficits in emotion regulation have received attention in the addiction field (Garke et al., 2021; Weiss et al., 2021)

- ER is a psychological process comprising the ability to **understand emotions**, the ability to **control impulsive avoidance behaviors**, the use of adaptive strategies to **deal with unpleasant emotions**, and the conscious experience of negative emotions to pursue **emotional and personal growth** (Gratz and Roemer, 2004)
- ED is a **risk factor** for binge drinking (Amendola et al., 2019; Laghi et al., 2018) and alcohol abuse (Fairholme et al., 2013; Weiss et al., 2018)

Aim

- This study aimed to identify profiles of Spanish young adults at high risk of **developing negative alcohol use consequences** based on alcohol use (quantity) in the past month, ED, and mental health.
- We hypothesized that ED would predict alcohol use consequences, over and above mental health variables.

Participants

- A total of **2,828** emerging adults from the Balearic Islands, Principality of Asturias, and Aragon filled-out an online battery assessment.
- Recruited from university colleges and vocational schools using print and mass media advertising
- Mean age= **19.46 years old** (SD=1.63)
- **64 % women**



Instruments

Depression, Anxiety and
Stress Scale
(DASS-21)

Difficulties in Emotion
Regulation Scale
(DERS-28)

Daily Drinking
Questionnaire
(DDQ)

Brief Young Adult Alcohol
Consequences
Questionnaire
(BYAACQ)

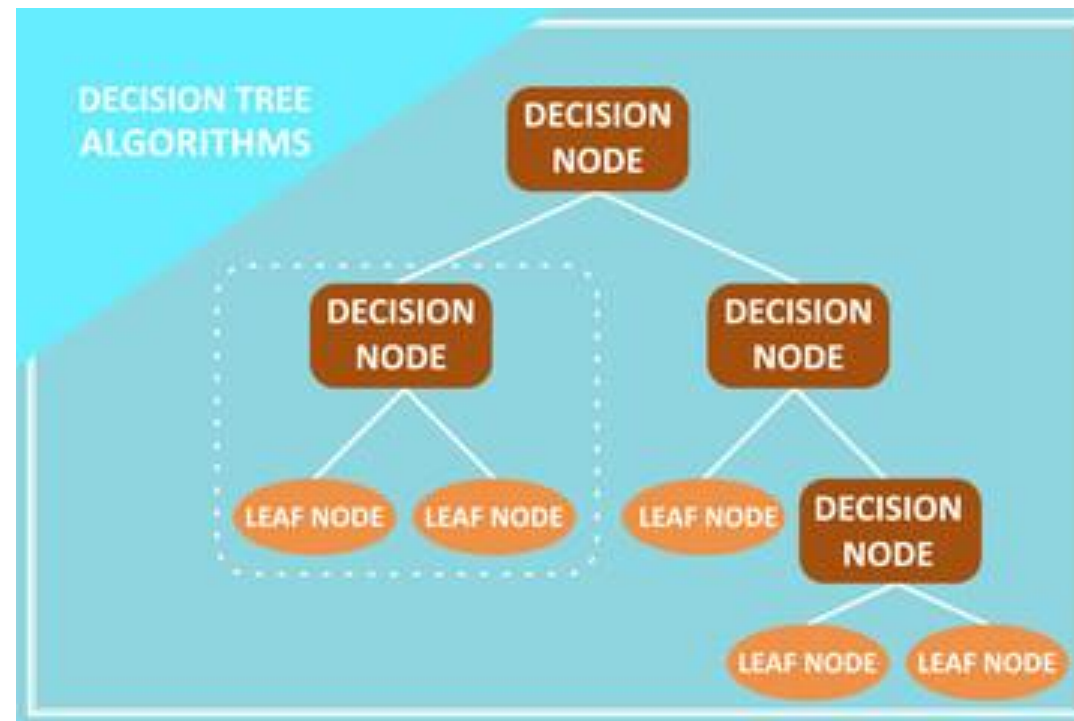


Procedure

- The protocol study (#191CER21) was reviewed and accepted by the Local Ethics Committee of the academic institution that received the funding. Prior to the study onset, participants provided written informed consent.
- This work was supported by the Spanish National Plan on Drugs (Project Grant #2020I003).

Data analysis

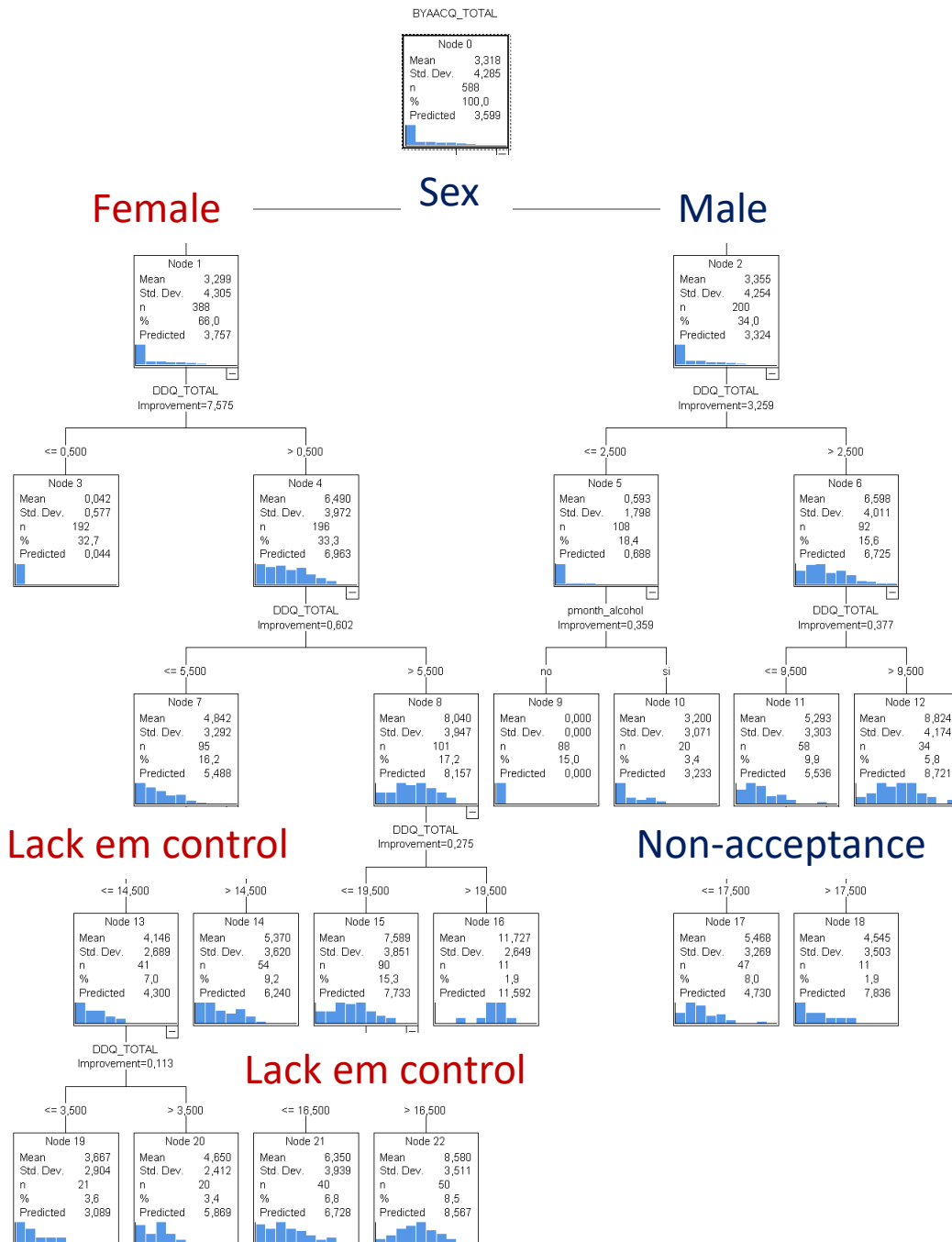
- We implemented a decision tree model with Classification and Regression Tree (CART) algorithm



Results

The background of the slide features three wine glasses of different shapes (a large bowl, a martini glass, and a tall flute) arranged horizontally. The glasses are rendered in a light, sketchy style against a solid blue background. A white, torn-edge banner is positioned at the bottom of the slide, containing the results text.

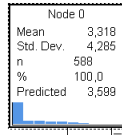
Alcohol use in the sample was **60.8%** (1716/2828)
Past-month alcohol use in alcohol users was **89.8%** (1541/1716).



TRAINING: 70%
TEST: 30%
Algorithm: CART

Sex, higher frequency and quantity of alcohol use in the last month, and ED strategies significantly predict alcohol use consequences.

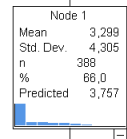
BYAACQ_TOTAL



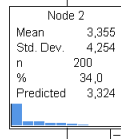
Female

Sex

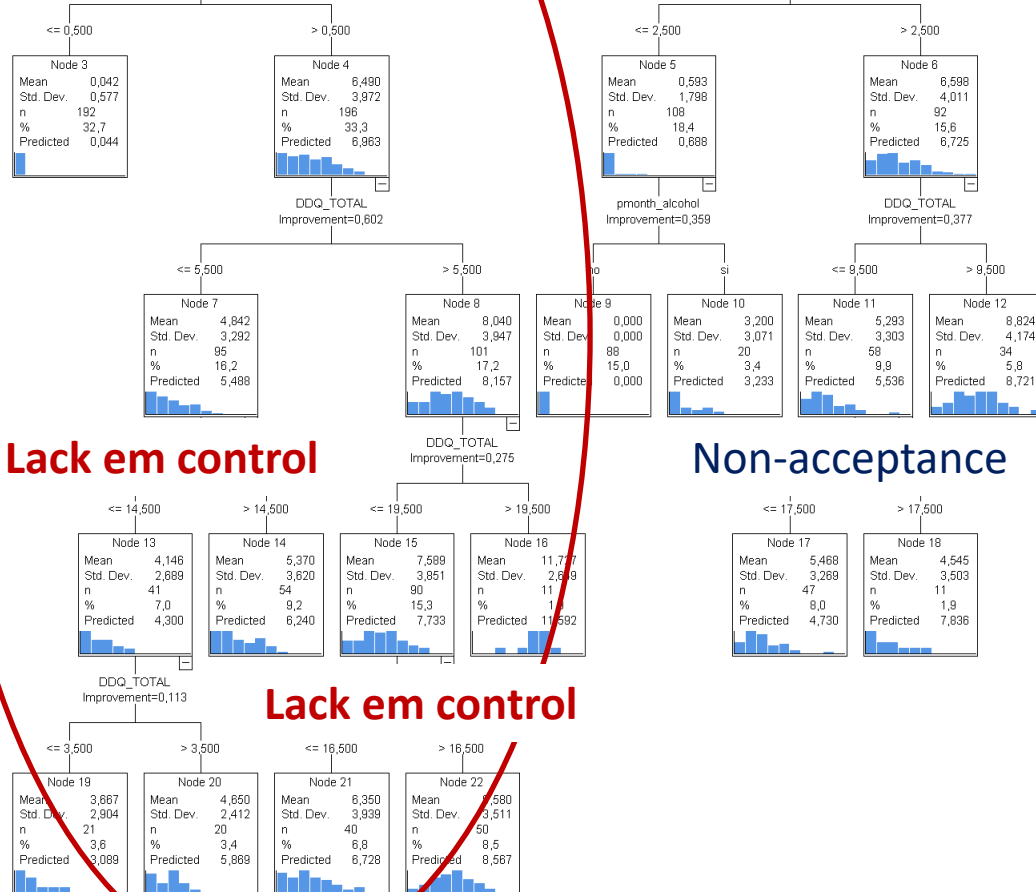
Male



DDQ_TOTAL
Improvement=7,575



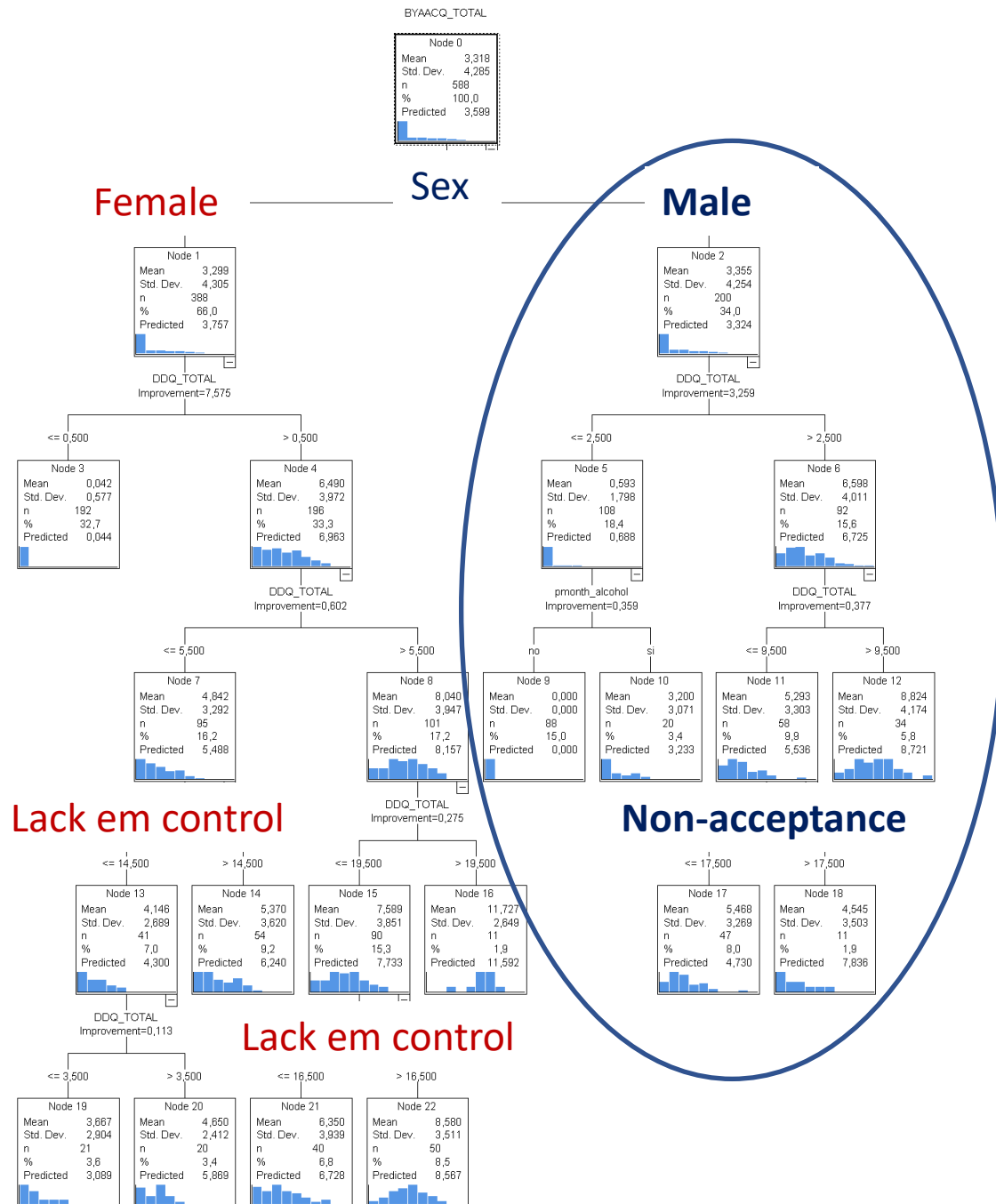
DDQ_TOTAL
Improvement=3,259



Females scoring between .50 and 19.50 in the DDQ and >16.50 in the **lack of emotional control** DERS dimension are at particularly risk for more severe alcohol use consequences.



In males, more vulnerable individuals were characterized by DDQ scores ≥ 9.50 and >17.50 in **non-acceptance of emotional responses**.



Discussion

- ED permits to identify college students at particularly high risk of developing alcohol use consequences.
- There exist sex differences in ED difficulties.
- Promoting adaptive emotional regulation may turn potentially effective for preventing negative alcohol use consequences in young adults.



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Thanks!

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