Protective factors of performance-enhancing substances use in a sample of Portuguese gym-goers

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Background

The use of PES, can occur at all levels of sports (Ntoumanis et al., 2014)

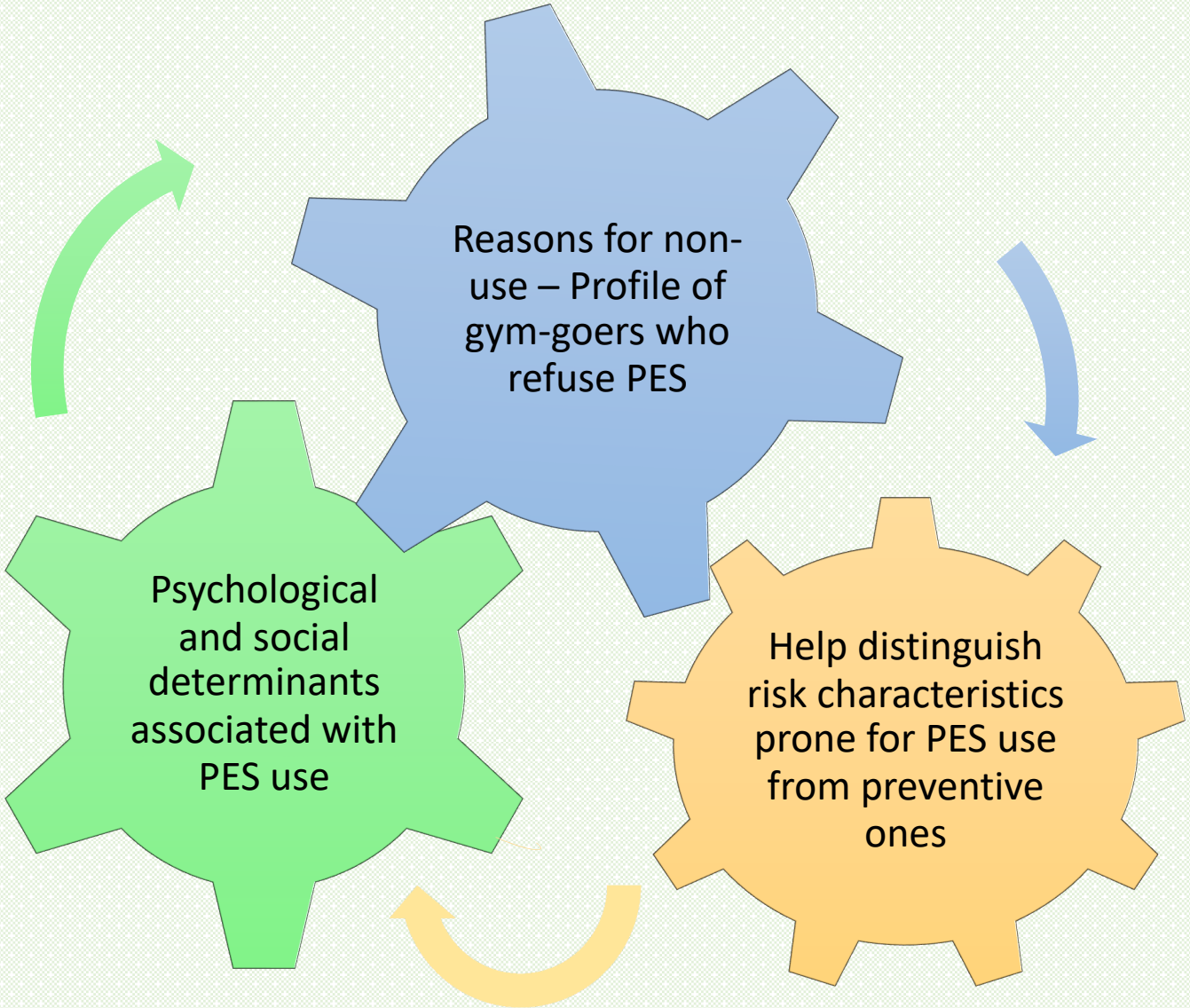
Spread throughout health clubs, gymnasia and other recreational activities

Emerging public health and societal concern

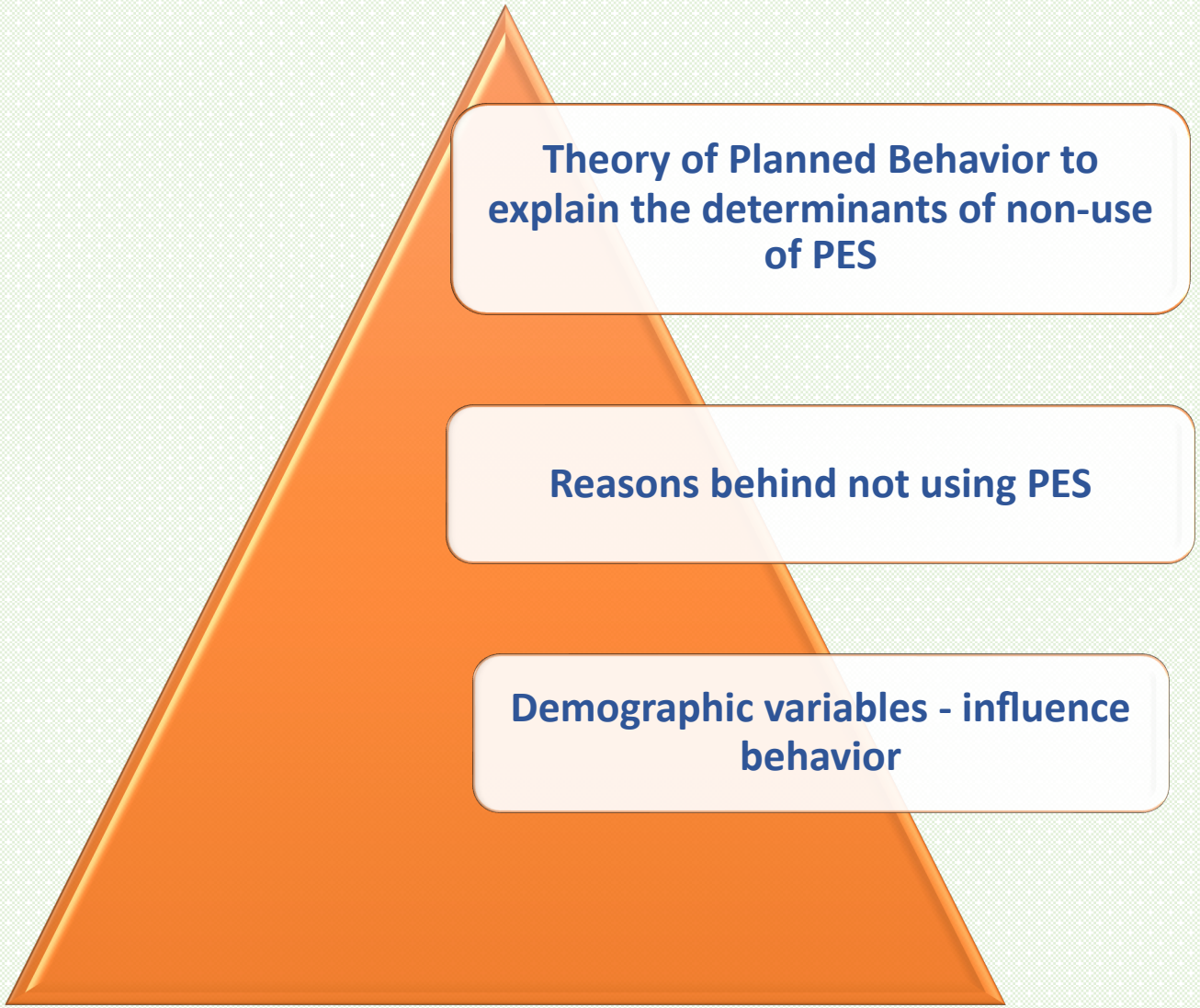
Research base on PES use among gym-goers is limited

Long term use of PES can be associated with psychological symptoms and physical disorders

Relevance of the Study



Background


Theory of Planned Behavior to explain the determinants of non-use of PES
Reasons behind not using PES
Demographic variables - influence behavior

Main objective / hypothesis

To identify the profile of the non-use of PES of gym-goers

Unfavorable attitude towards substance consumption + absence of a subjective norm that emphasizes consumption +

Unfavorable beliefs about the outcomes of PES consumption = associated with reports of non-use of PES

Intentions towards PES use - negatively associated with self-reports of PES non-use

Females and those who practice non-strength-based activities - more likely to report non-use of PES.

Method

Study design

Quantitative, cross-sectional and descriptive (Ribeiro, 2010)

Participants

Target population - fitness practitioners in Portuguese gyms

Convenience sample

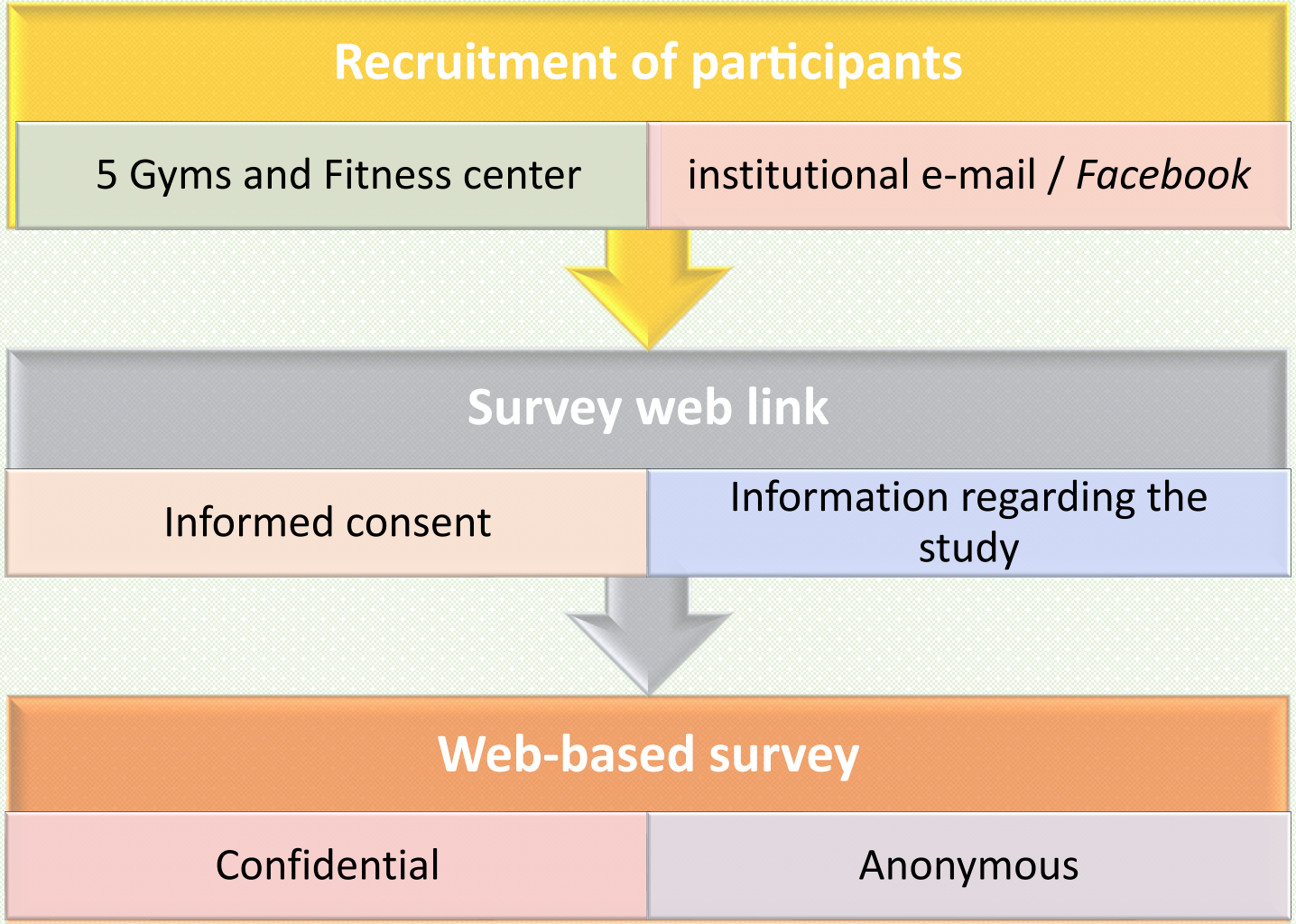
453 participants

(277 females and 175 males), aged between 16-79 years old (*M*) = 35.64; *SD*) = 13.08)

Data collection

October to November 2017

Method

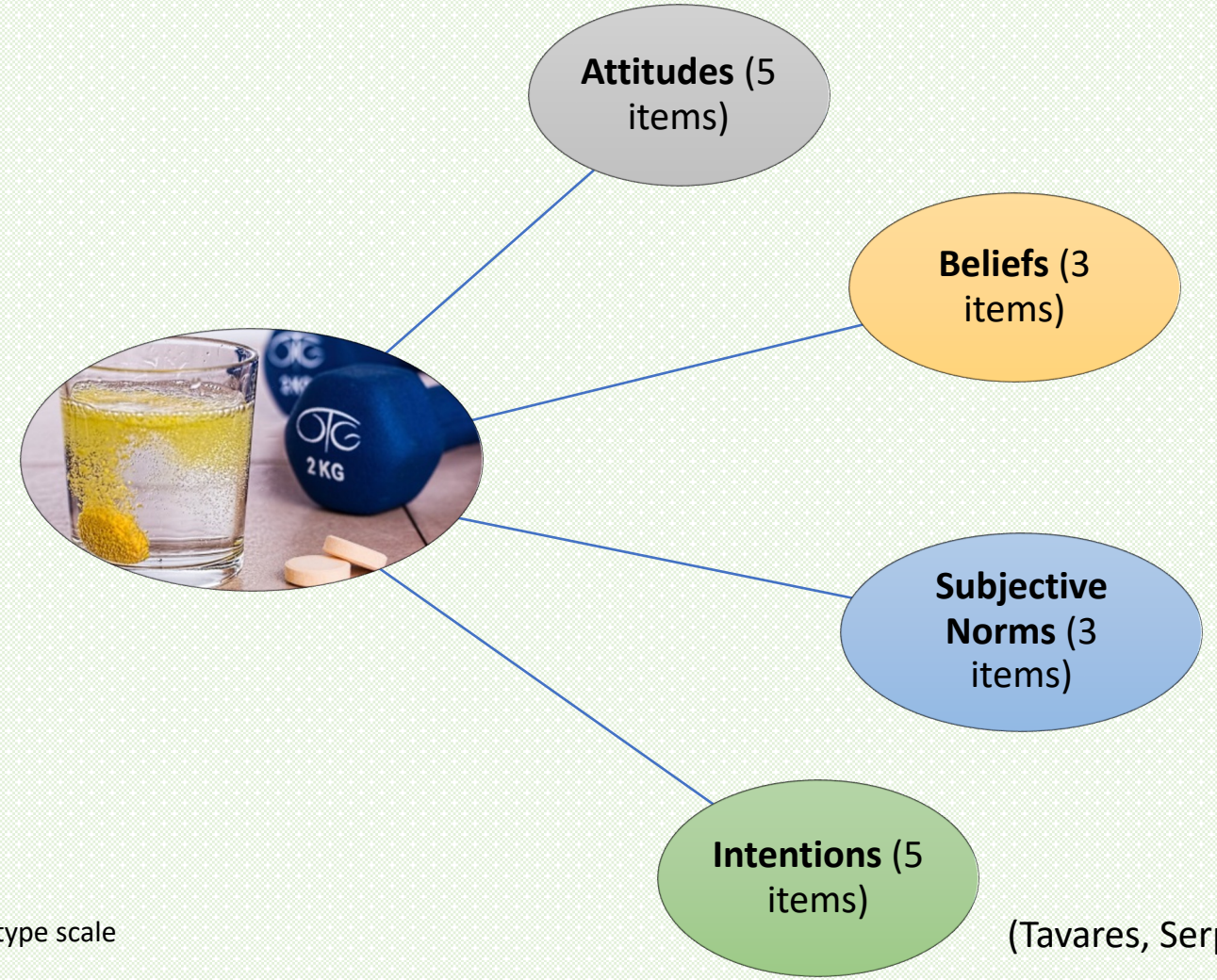

Recruitment of participants
5 Gyms and Fitness center
institutional e-mail / *Facebook*
Survey web link
Informed consent
Information regarding the study
Web-based survey
Confidential
Anonymous

Tools for data collection

Self- reported use of PES

Questionnaire of Attitudes towards Doping in Fitness (QAD-*Fit*) – Tavares, Serpa & Rosado, 2019

Questionnaire of Attitudes towards Doping in Fitness (QAD-Fit)



Note. 16 items scored on a seven-point Likert-type scale

(Tavares, Serpa & Rosado, 2019)

Data Analysis

- Decision Trees
  - CHAID
  - Split-sample validation
- Multiple linear regression analysis

Note. Data Analysis was performed using SPSS V27.0 (SPSS Inc. Chicago IL).
The models obtained obey the Gauss-Markov Conditions (residuals with zero mean, constant variance, and Normal distribution) and do not present multicollinearity between the independent variables, evaluated through the tolerance value (whereby values <0.1 indicate the existence of multicollinearity) and/or the VIF (values >10 suggest multicollinearity) (Marôco, 2021; Pestana and Gageiro, 2014).

Results

Sociodemographic characteristics

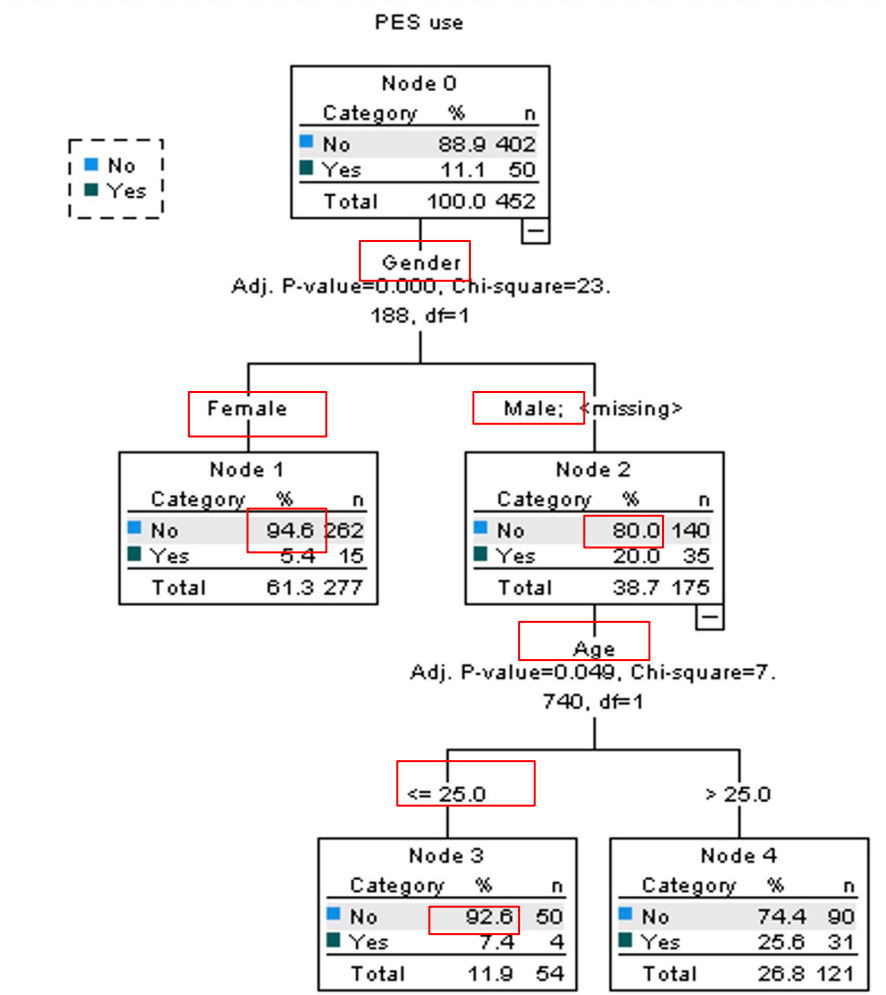


Figure 1: Decision tree for sociodemographic characteristics

Results

Modalities practiced, training frequency and training time

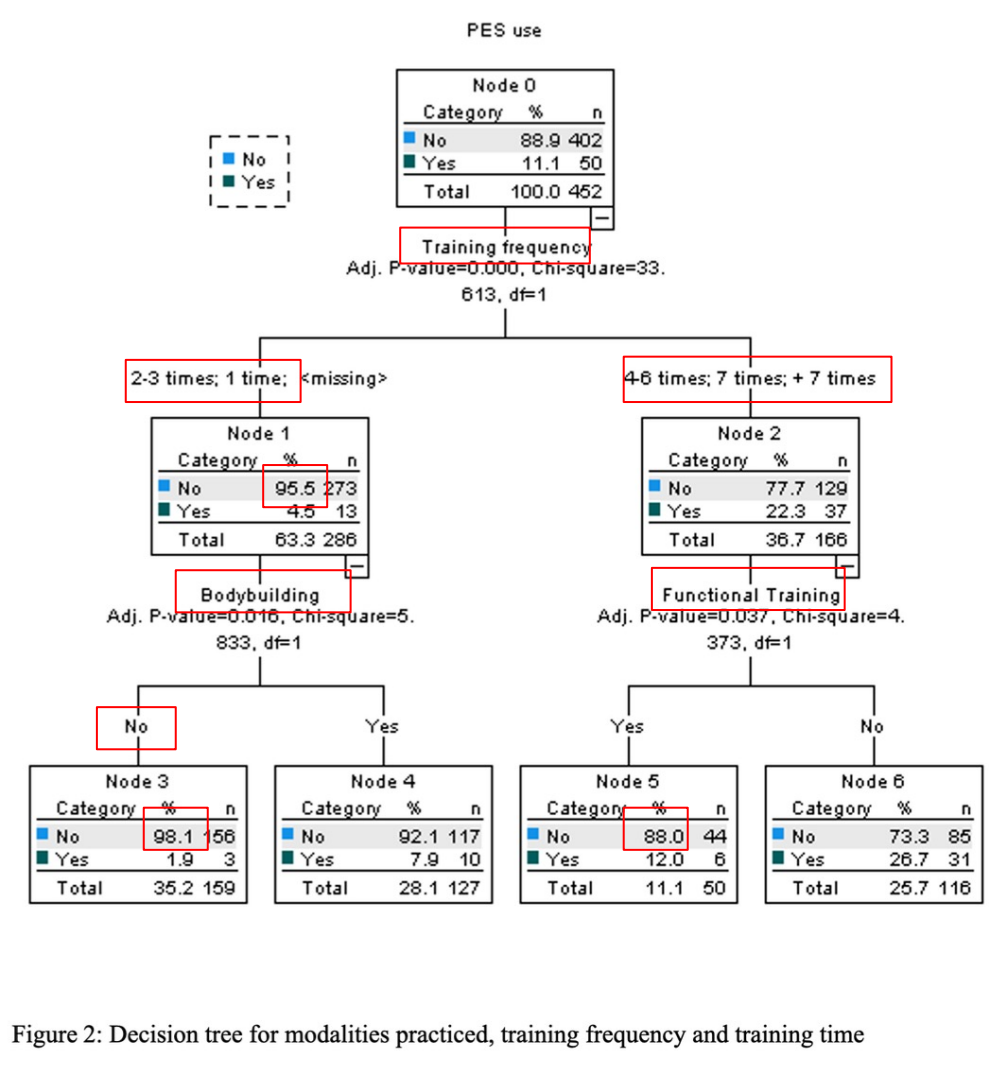


Figure 2: Decision tree for modalities practiced, training frequency and training time

Results

Psychosocial Determinants

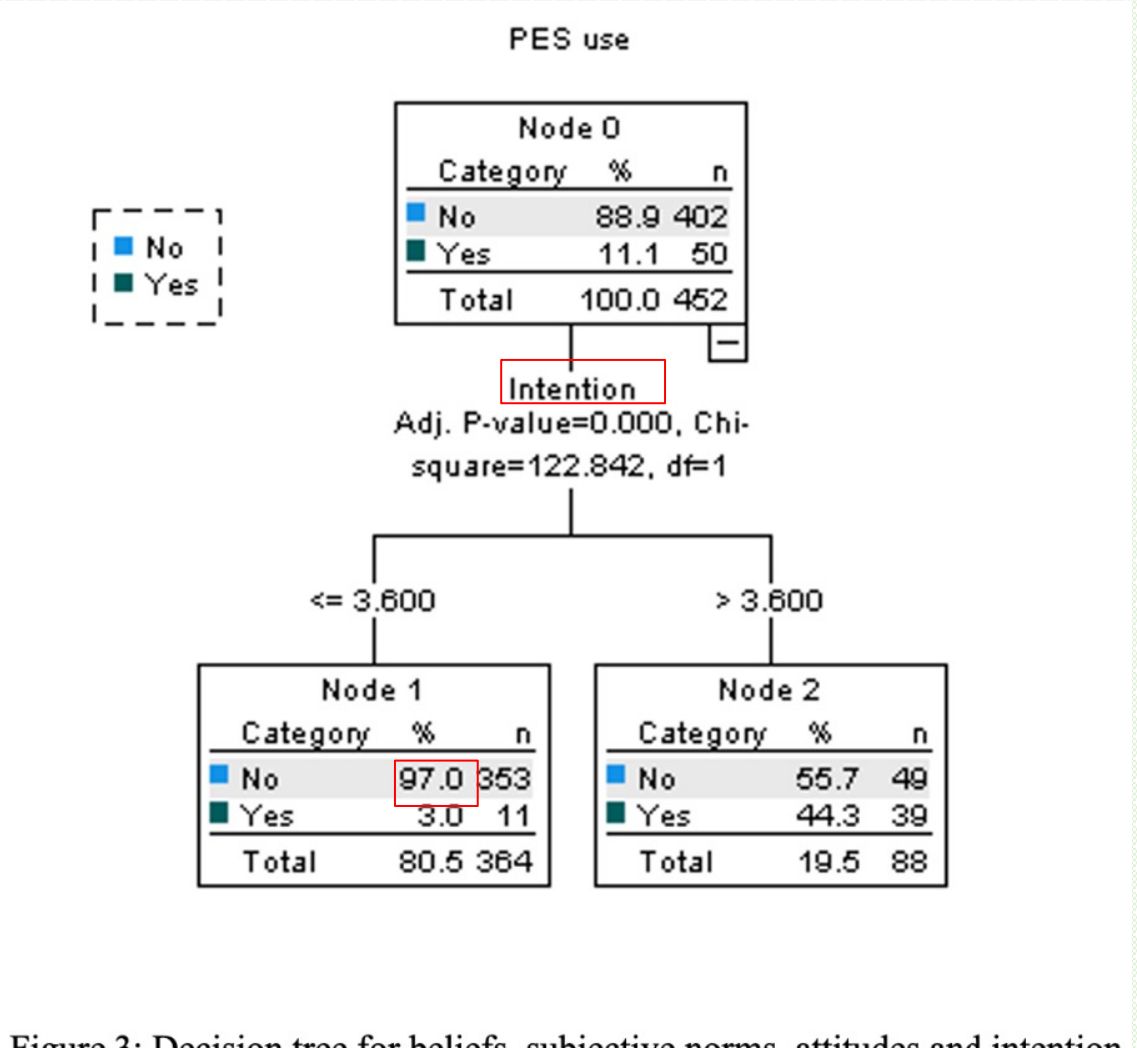


Figure 3: Decision tree for beliefs, subjective norms, attitudes and intention

Results

Psychosocial Determinants

Table 1: Multiple linear regression model to identify predictors of intention

Model	Unstandardized Coefficients		t	p	95,0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	-1,000	0,139	-7,196	0,000	-1,273	-0,727		
Attitudes	0,259	0,035	7,438	0,000	0,191	0,328	0,839	1,192
Subjective norms	0,821	0,049	16,610	0,000	0,724	0,918	0,780	1,282
Beliefs	0,302	0,038	7,962	0,000	0,227	0,376	0,784	1,276
a. Dependent Variable: Intention								

Results

Global Profile

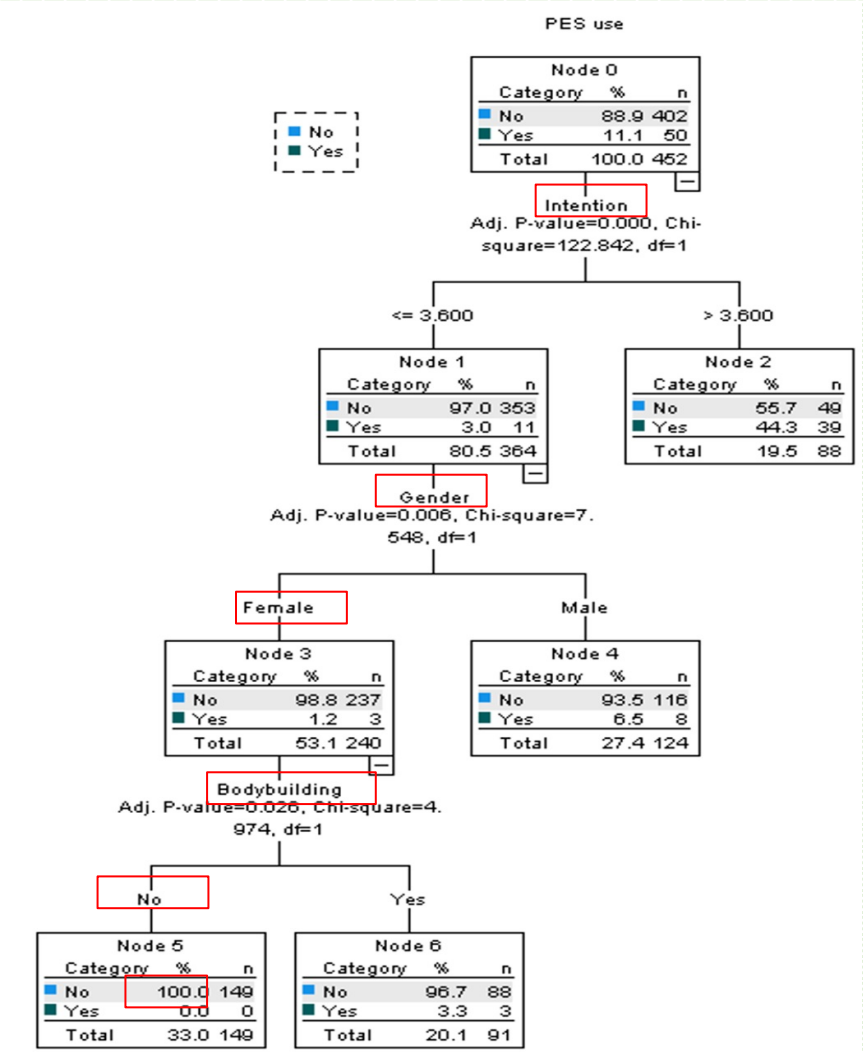
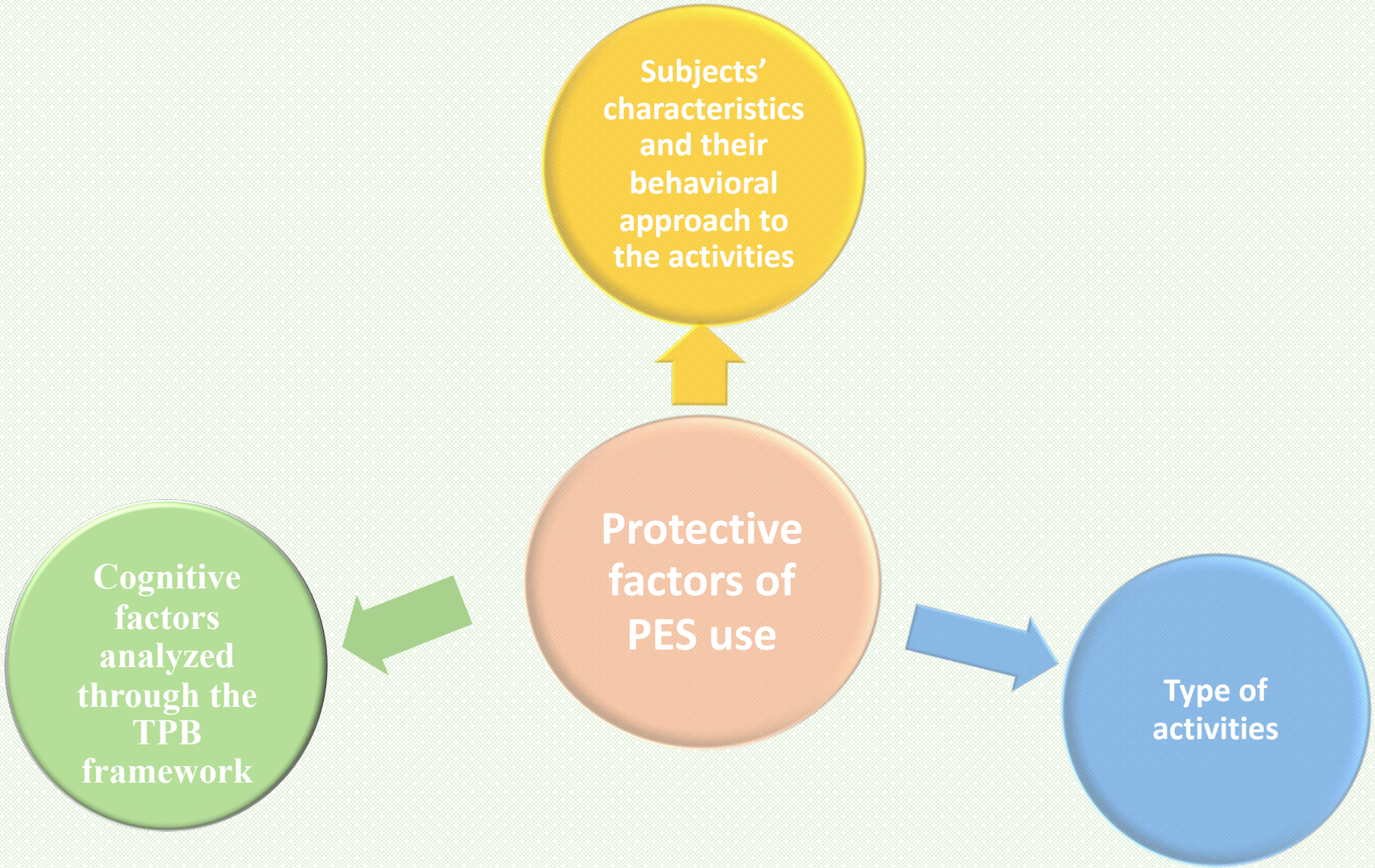
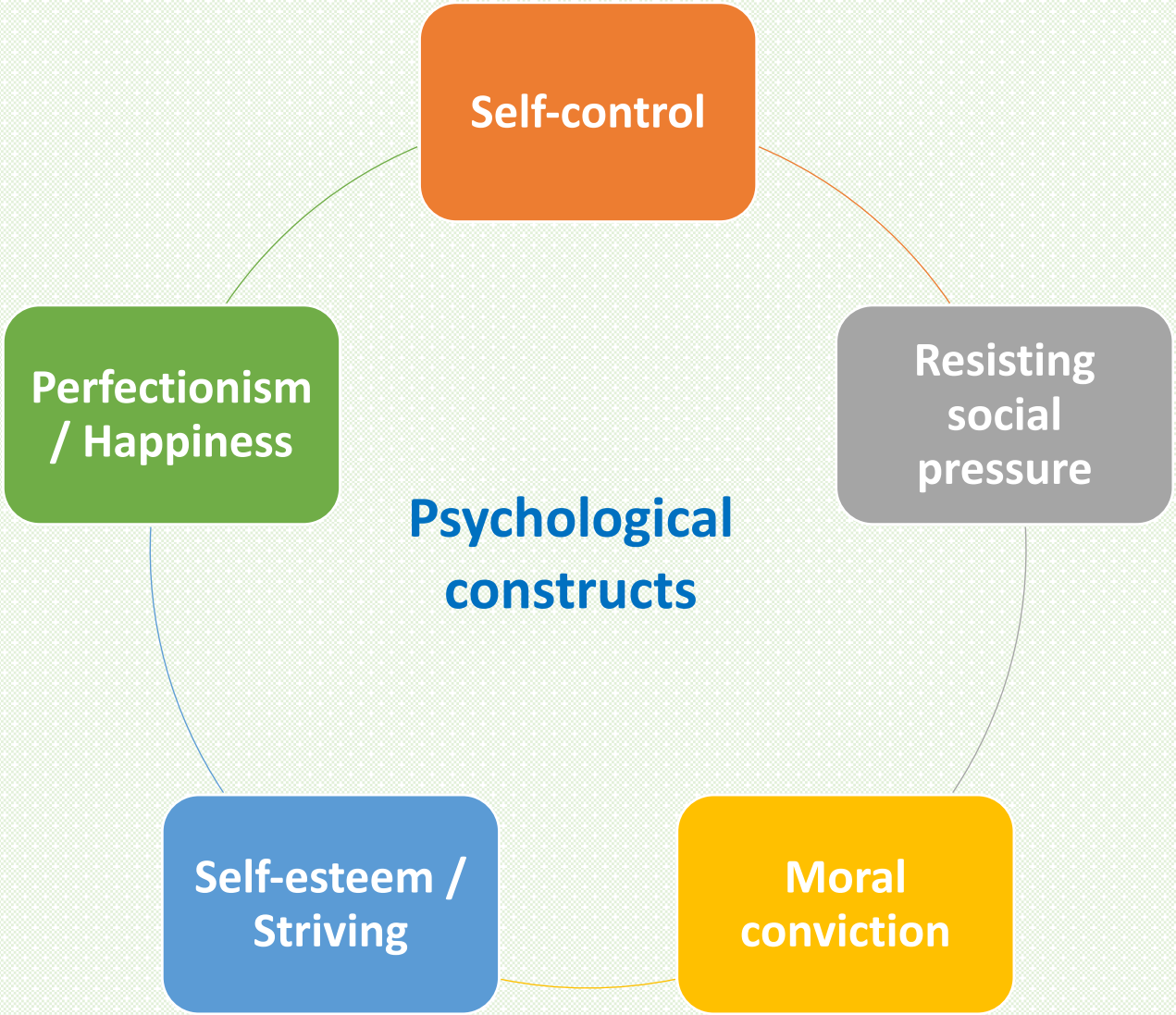


Figure 4: Decision tree for global profile

Discussion and Conclusion



Future Studies



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Thank you very much for your attention !

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