

# Prevalence of Sexual Coercion and Associated Social and Psychological Factors in Spanish University Students

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## INTRODUCTION

Although representative studies in the U.S. estimate that between **15% and 28% of university students have experienced non-consensual sexual contact or sexual coercion**, significant gaps remain in the international research literature. Psychological distress, perceived peer support, number of sexual partners, sexual identity, and substance use have all been shown to be important correlates of such experiences. In the Spanish context, empirical evidence is limited and fragmented, with few studies using behaviorally specific measures or examining variables beyond demographics or sex education. The lack of multi-campus surveys, multilevel designs, and intersectional analyses continues to hinder a comprehensive understanding of the phenomenon within Spanish universities.



**OBJECTIVE:** This study aimed to: i) Determine the prevalence of sexual coercion among **Spanish university students**, and ii) Assess its associations with **psychological, social, and sociodemographic variables**.



## METHODS

- **Design:** This study is part of the *Health Behavior in University (HBU)* research project and utilized a cross-sectional survey design with stratified random cluster sampling.
- **Participants:** **Inclusion criteria** required participants to be enrolled in an undergraduate or postgraduate degree program at the University of Huelva and to have provided explicit informed consent. **Exclusion criteria** included being an Erasmus (exchange) student, having previously participated in the survey, or falling outside the age range of 18 to 27 years.
- **Data:** The final sample included 752 students (75.20% female, 24.54% male, 0.27% non-binary), with a mean age of 20.72 years (SD = 2.15).

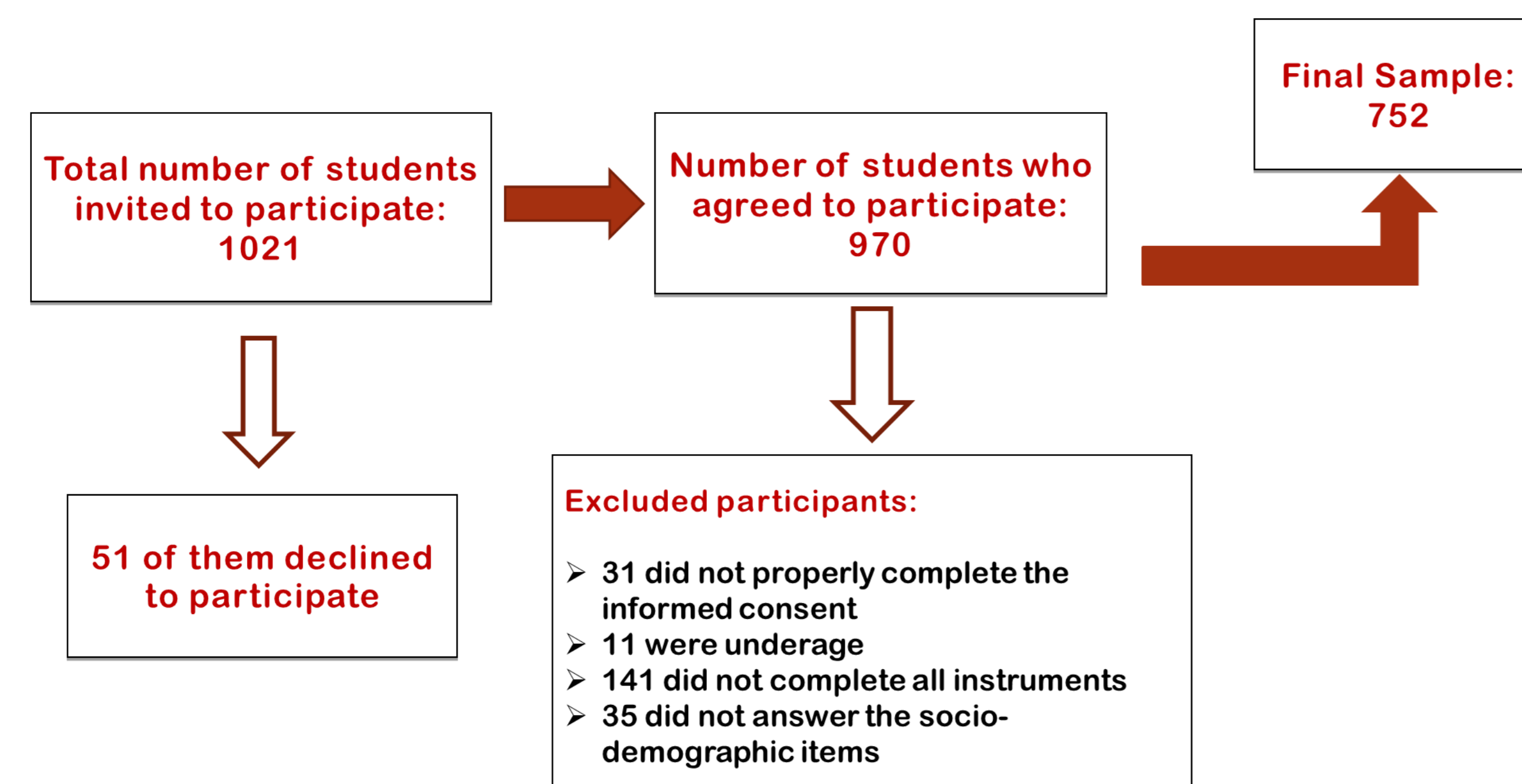
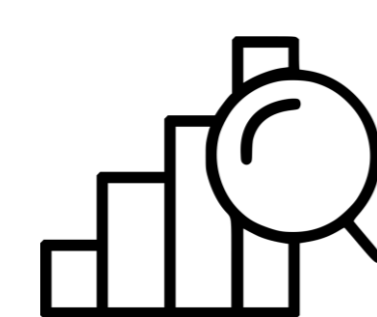


Fig 1. Overview of recruitment and eligibility filtering.



## RESULTS

A total of **26.53% of participants reported having felt forced to have sex**, with a 95% confidence interval of [23.37%, 29.68%] (Fig 3). To examine psychosocial differences between individuals who reported experiencing sexual coercion ("Yes") and those who did not ("No"), independent samples t-tests were conducted across multiple variables. Several significant differences emerged. Participants in the "Yes" group reported significantly higher levels of **psychological distress**,  $t(319.43) = -5.40$ ,  $p < .001$ , with a medium effect size ( $d = -0.47$ ). They also reported significantly **lower self-esteem**,  $t(345.83) = 3.23$ ,  $p = .001$ , with a small-to-medium effect size ( $d = 0.27$ ), and **poorer body image**,  $t(317.46) = -3.09$ ,  $p = .002$ ,  $d = -0.27$  (Fig 4). Additionally, significant differences were observed in leisure activities, specifically in participation in sports and competitive activities,  $t(407.02) = 2.64$ ,  $p = .009$ ,  $d = 0.20$ . Finally, those who had experienced coercion also reported lower friendship quality,  $t(302.23) = 2.29$ ,  $p = .022$ ,  $d = 0.21$ , and reduced perceived peer support,  $t(296.53) = 2.91$ ,  $p = .004$ ,  $d = 0.26$ . In a subsequent logistic regression analysis, the final model retained the following predictors: age, gender, relationship status, sexual orientation, number of lifetime sexual partners, smoking status, perceived health, psychological distress, and peer support. Model fit was acceptable, with an Akaike Information Criterion (AIC) of 1661.14 and an **Area Under the Curve (AUC) of 0.72**, indicating good predictive performance. The model explained **25.15% of the variance in sexual coercion experience** and correctly classified 61.04% of cases. The classification metrics included **84% sensitivity**, **52.9% specificity**, and a **balanced accuracy of 68.45%**. Significant predictors of higher odds of having experienced sexual coercion included: Being female, having more lifetime sexual partners, identifying as bisexual, smoking, poor self-perceived health, elevated psychological distress. In contrast, older age, being in a relationship, and higher perceived peer support were associated with lower odds of reporting sexual coercion (see Table 1 for full details).

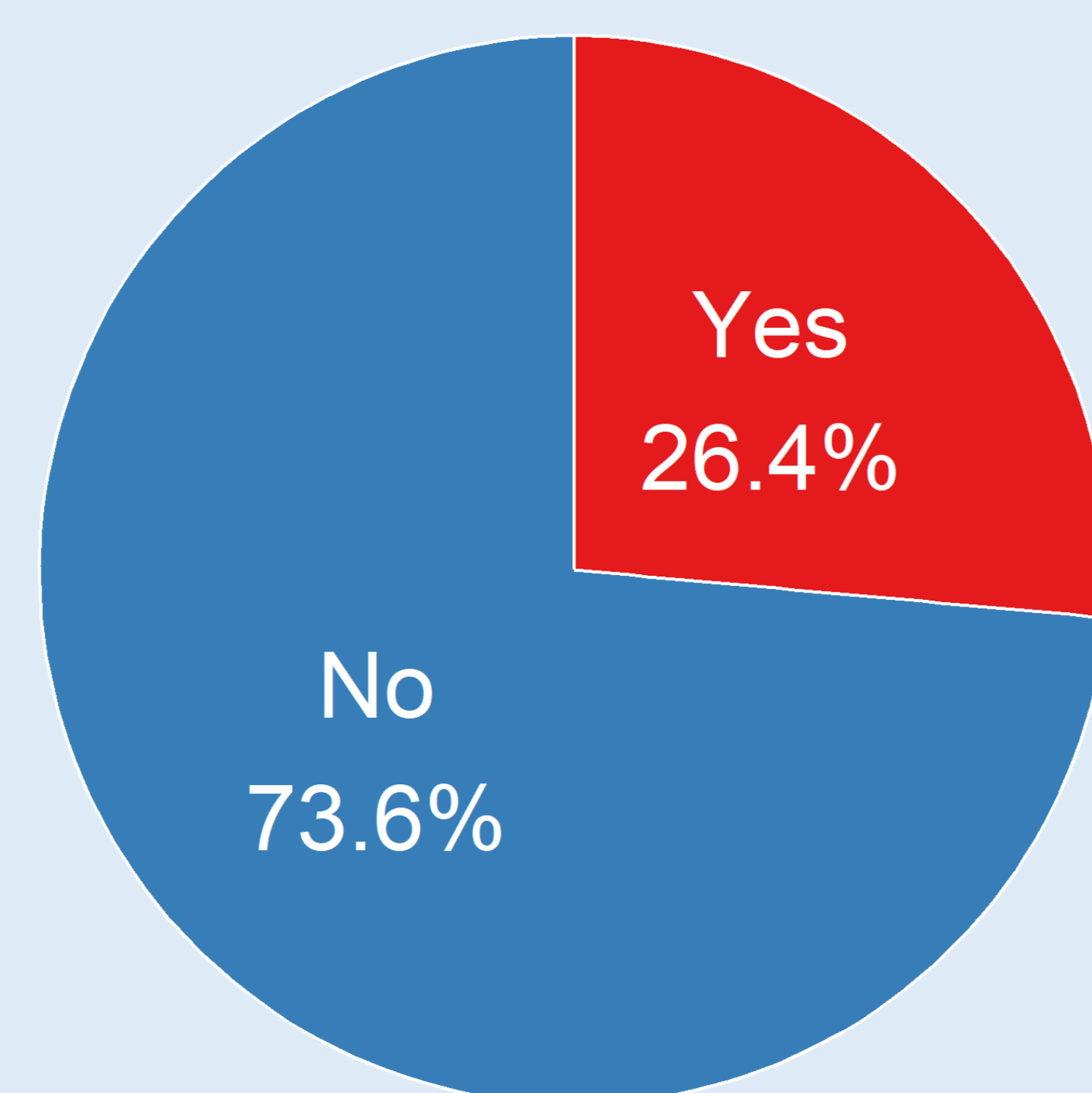


Fig 3. Prevalence of Sexual Coercion

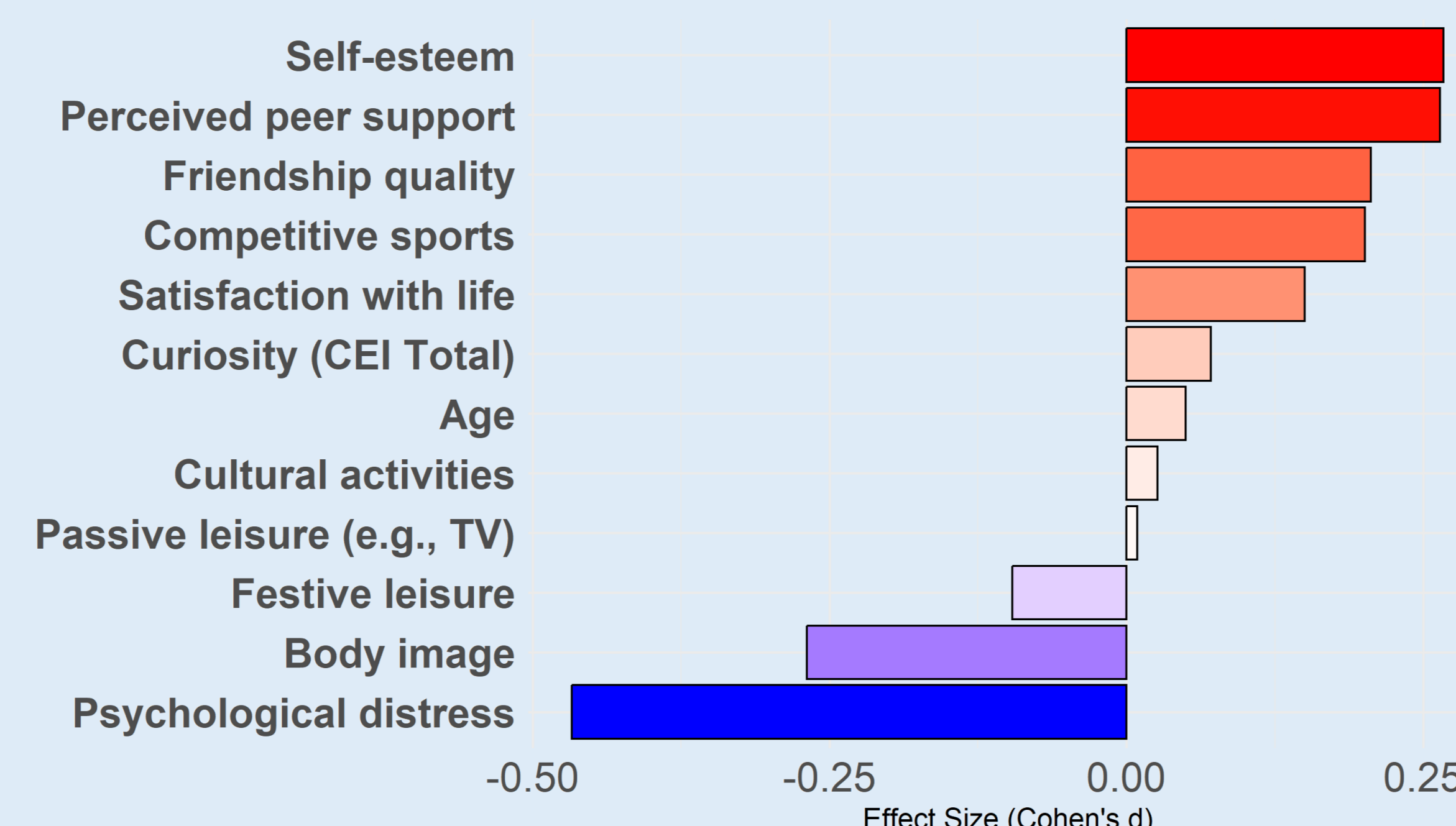


Fig 4. Cohen's d Effect Sizes by Variable

Variable	Adjusted OR (95% CI)
Age	0.92** (0.86, 0.98)
<b>Sex</b>	
Female	2.35*** (1.74, 3.19)
Male	1
<b>Relationship status</b>	
No Single	0.75* (0.59, 0.96)
Single	1
<b>Sexual orientation</b>	
Bisexual	2.25** (1.38, 3.79)
Homosexual	0.6 (0.3, 1.21)
Don't Know	0.32 (0.07, 1.41)
Heterosexual	1
N° Boy/girlfriends	1.19*** (1.12, 1.27)
<b>Smoking</b>	
Yes	1.55*** (1.2, 2.01)
No	1
<b>Health Perception</b>	
Poor/Fair	1.59** (1.13, 2.26)
Excellent/Good	1
Psychological Distress	1.1*** (1.06, 1.14)
Peer Support	0.79*** (0.71, 0.87)

Table 1. Logistic regression models on Sexual Coercion by set variables. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$



## METHODS

- **Procedure:** For the data collection, each of the selected classrooms was visited after an agreement with the corresponding lecturers. The data were collected in two different periods during the **2018/19 academic year**. Both collection periods were performed under the same protocol for sampling, reaching the necessary sample size for a maximum error of estimation of 3% and a 95% confidence level according to the size of the population selected. The participating students were informed of the objectives of the study, as well as the voluntary nature of their participation and the anonymity of the data. After completing the questionnaires, the researchers, under the same protocol, proceeded to the digitalization phase.
- **Variables:** The variables included in the analysis were: age, gender, relationship status, sexual orientation, and number of lifetime sexual partners, along with smoking status, perceived health, psychological distress, and peer support. Additionally, **psychosocial measures** such as satisfaction with life scores, self-esteem, and body image were considered. **Social behavior** indicators included the frequency of social activities, specifically going out with friends, attending parties, and drinking alcohol, as well as practical life circumstances like having paid employment and living with a partner.
- **Data analysis:** Prevalence was estimated using descriptive statistics. Independent samples t-tests were conducted to compare mental health indicators, lifestyle factors, social relationships, and demographic variables. Feature selection was carried out using a **backward stepwise** procedure applied to a **weighted multivariate logistic regression model** to identify key associated factors. The weight of the minority group was iteratively adjusted, and the best model fit was determined by the highest value of **Youden's Index** (Fig 2).

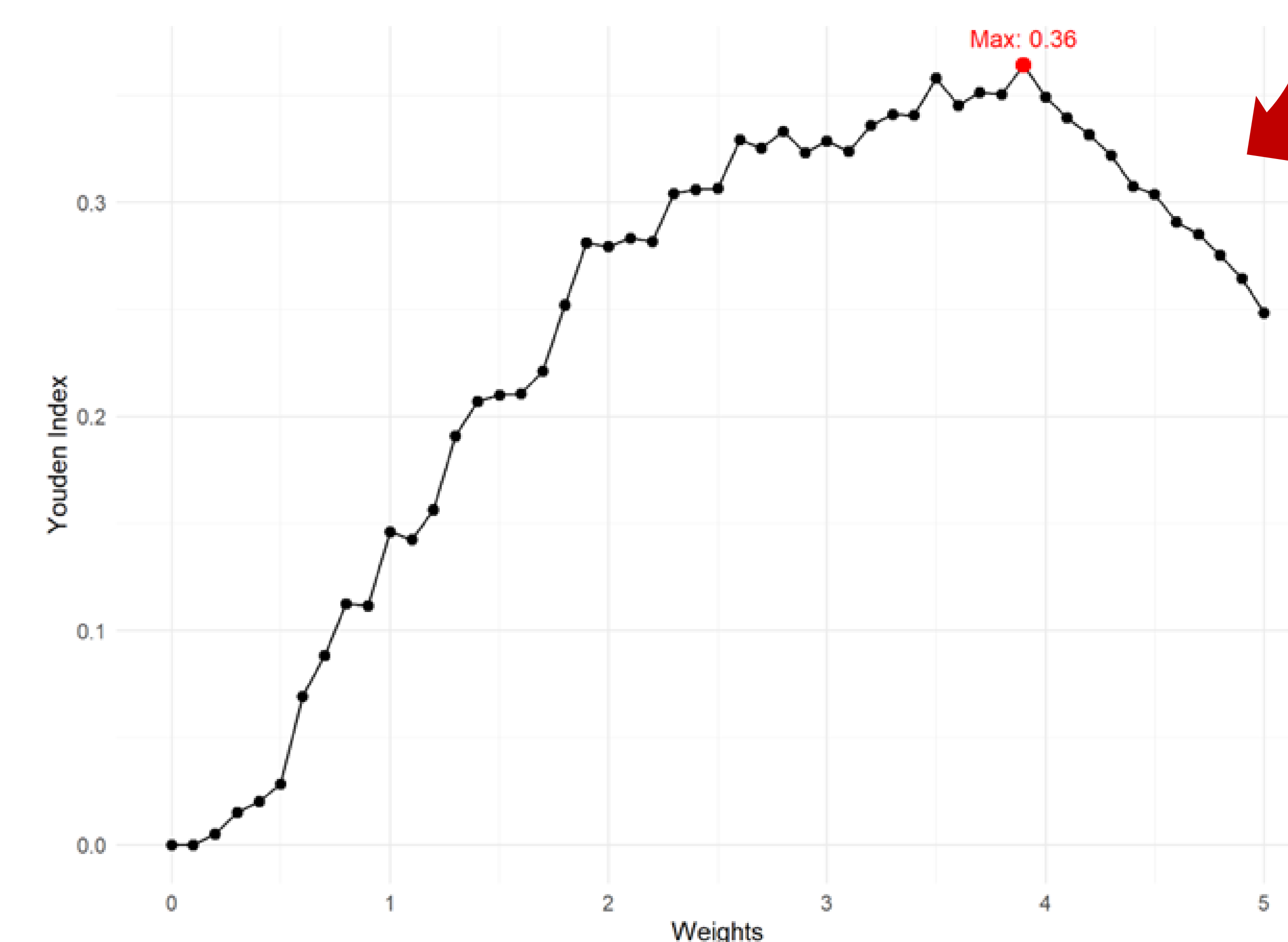


Fig 2. Youden Index regarding the assigned weight

**DISCUSSION:** The multivariate models indicated that sexual coercion is associated with poorer mental health, lower peer support, and negative self-perceived health but not with participation in social activities. These findings emphasize the need for targeted interventions focusing on mental health support, social well-being, and creating safer university environments

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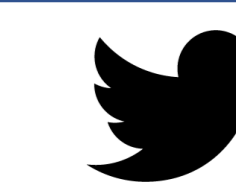
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