

Mestrado Integrado em **Medicina**

Assessment of the association between Mental Health and addictive behaviours and their trends among students of the School of Medicine and Biomedical Sciences

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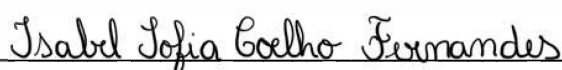
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Declaration of Scientific Integrity

I, Isabel Sofia Coelho Fernandes, no. 201807630, a sixth-year student of the Mestrado Integrado em Medicina at the School of Medicine and Biomedical Sciences - University of Porto, declare that this dissertation is my own work and has not been submitted for any other course or curricular units, at this or any other institution. References to other authors (statements, ideas, thoughts) strictly comply with citation rules and are properly acknowledged in the text and in the reference list, in accordance with referencing guidelines. I am aware that the practice of plagiarism and self-plagiarism constitutes an academic offence.

Porto, June 2025

A handwritten signature in black ink, reading "Isabel Sofia Coelho Fernandes", is positioned above a horizontal line.

(Isabel Sofia Coelho Fernandes)

Mental health problems don't define who you are. They are something you experience. You walk in the rain, and you feel the rain, but, importantly, you are not the rain.

Matt Haig

Agradecimentos

À Doutora Isabel Lourinho, o meu mais profundo agradecimento. Pela incansável força, pela presença constante e pelo apoio inabalável em cada etapa deste percurso. Agradeço-lhe a disponibilidade, a paciência e a prontidão com que sempre respondeu, mesmo nos momentos mais exigentes. Foi uma voz firme, de uma visão crítica, atenta e profundamente humana, que tanto enriqueceu este trabalho. Obrigada por acreditar neste projecto, pelo impulso dado à Educação Médica, à Saúde Mental dos estudantes e pela abertura a futuras colaborações que certamente florescerão.

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Resumo

Introdução: Na sequência da pandemia, a saúde mental ganhou uma visibilidade acrescida no ensino superior, com estudos a indicarem elevada prevalência de *distress* psicológico e aumento do consumo de álcool e drogas nesta faixa etária.

Objetivos: Avaliar a associação entre Saúde Mental e consumo de substâncias, assim como as suas tendências, em estudantes dos cursos nucleares do Instituto de Ciências Biomédicas Abel Salazar (ICBAS).

Métodos: Realizaram-se dois estudos transversais (2021 e 2025) com estudantes do ICBAS (Medicina: 1.º [n = 161], 3.º [n = 180], 6.º [n = 190]; Veterinária: 1.º [n = 74], 3.º [n = 67], 5.º [n = 64]; Ciências do Meio Aquático: 1.º [n = 31], 3.º [n = 41]), baseados em inquéritos com dados sociodemográficos (género, idade, coabitantes) e académicos (ano de curso, não transição de ano, primeiro curso, curso frequentado), procura de ajuda psicológica e psiquiátrica, bem como as escalas “Maslach Burnout Inventory - Student Survey” (MBI-SS) e “Hospital Anxiety and Depression Scale” (HADS), e padrões de consumo de substâncias.

Resultados: Em 2021, participaram 242 estudantes e, em 2025, 452 estudantes (81,4% mulheres; 92,2% entre os 17–24 anos). Ansiedade, depressão e *burnout* mantiveram prevalências semelhantes entre 2021 e 2025, sem diferenças estatisticamente significativas. O consumo de álcool aumentou significativamente (61,2% para 74,0%; $p=0,005$), enquanto o de canábis e outras substâncias permaneceu estável. A procura de apoio psicológico aumentou de 41,3% para 60,5% ($p<0,001$) e psiquiátrico de 18,6% para 32,8% ($p<0,001$). Em 2025, sintomas de ansiedade e depressão associaram-se inversamente ao consumo de substâncias após ajuste.

Conclusão: Houve um aumento da procura de ajuda psicológica e psiquiátrica por parte dos estudantes. No entanto, manteve-se quer o *distress* psicológico, quer o consumo de substâncias. Quanto ao consumo de álcool, existiu um aumento, particularmente em estudantes com menor sintomatologia de ansiedade e depressão, pelo que é crucial aprofundar as motivações subjacentes aos consumos e implementar intervenções eficazes para reduzir o *distress*, a experimentação e os consumos.

Palavras-Chave: Saúde mental, estudantes universitários, consumo de substâncias, ansiedade, depressão, *burnout*.

Abstract

Introduction: In the aftermath of the pandemic, mental health has gained increased visibility within higher education, with studies indicating a high prevalence of psychological distress and a rise in alcohol and drug consumption among this age group.

Objective: To assess the association between mental health and substance use, as well as their trends, among students enrolled in core degree programmes at the School of Medicine and Biomedical Sciences (ICBAS).

Methods: Two cross-sectional studies (2021 and 2025) were conducted with ICBAS students (Medicine: 1.^o [n = 161], 3.^o [n = 180], 6.^o [n = 190]; Veterinary Medicine: 1.^o [n = 74], 3.^o [n = 67], 5.^o [n = 64]; Aquatic Sciences: 1.^o [n = 31], 3.^o [n = 41]), based on surveys collecting sociodemographic data (gender, age, household composition) and academic information (year of study, academic failure, first degree, degree programme attended), as well as use of psychological and psychiatric support services. The surveys included the Maslach Burnout Inventory – Student Survey (MBI-SS) and the Hospital Anxiety and Depression Scale (HADS), alongside questions on substance use patterns.

Results: In 2021, 242 students participated, and in 2025, 452 students (81.4% women; 92.2% aged between 17–24 years). The prevalence of anxiety, depression, and burnout remained similar between 2021 and 2025, with no statistically significant differences. Alcohol consumption increased significantly (from 61.2% to 74.0%; $p=0.005$), while cannabis and other substance use remained stable. Psychological support-seeking rose from 41.3% to 60.5% ($p<0.001$), and psychiatric support from 18.6% to 32.8% ($p<0.001$). In 2025, symptoms of anxiety and depression were inversely associated with substance use after adjustment.

Conclusions: There was an increase in the demand for psychological and psychiatric support among students. Nevertheless, levels of psychological distress and substance use remained stable. Alcohol consumption, in particular, increased—especially among students presenting with lower levels of anxiety and depressive symptoms. These findings underscore the importance of further investigating the underlying motivations for substance use and of implementing effective interventions to reduce psychological distress, substance experimentation, and ongoing consumption.

Keywords: Mental health, university students, substance use, anxiety, depression, burnout.

List of Abbreviations

HADS	Hospital Anxiety and Depression Scale
ICBAS	School of Medicine and Biomedical Sciences
MBI-SS	Maslach Burnout Inventory – Students Survey
WHO	World Health Organization

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Introduction

Globally, mental health issues among higher education students have become a significant concern, particularly following the COVID-19 pandemic.^[1, 2, 3] The same trend has been observed in Portugal, with studies indicating a high prevalence of anxiety and depression. For instance, a cross-sectional study involving 3,399 university students revealed that 75% experienced mild to severe anxiety symptoms, while 61.2% reported mild to severe depressive symptoms.^[4] These findings align with broader epidemiological evidence demonstrating a significant deterioration in student mental health indicators during the pandemic period relative to pre-pandemic baselines.^[5]

A 2019 pre-pandemic assessment of mental health among medical students at the School of Medicine and Biomedical Sciences (ICBAS) identified a burnout prevalence of 25.9%.^[6] In 2021, another study conducted at ICBAS found that 36.2% of Veterinary, 35.3% of Aquatic Sciences, and 33.1% of Medical students exhibited burnout. Furthermore, the study identified clinically significant anxiety symptoms, with moderate to severe manifestations present in 56.5% of Veterinary students, 47.1% of Medical students, and 41.2% of Aquatic Sciences students.^[7]

University years represent a critical developmental phase that coincides with emerging adulthood, conceptualised as “late adolescence”.^[8, 9] In this context, higher education students appear to be a vulnerable population group with respect to mental health disorders, as they are undergoing a key period of personal and physical development, during which they are expected to face increasing responsibilities - academically, financially, socially, and within their families.^[10]

This vulnerability and transitional period is also regarded as a risk factor for the use of legal and illegal substances, as well as the misuse of prescription medication. This phenomenon is facilitated by increased financial autonomy, reduced parental or guardian oversight, and a heightened propensity for novelty-seeking behaviours - factors that are associated with rising substance use trends among university students.^[11]

The consumption of alcohol, cannabis, and other substances among higher education students has been widely documented, often being associated with dysfunctional coping strategies, attempts at emotional regulation, and integration into social contexts characterised by permissive norms.^[12, 13] In many cases, such consumption is facilitated by the perception that these practices form part of the “normality” of university life, which can obscure early signs of problematic use or dependence.^[14]

At the intersection of mental health and substance use, a bidirectional relationship is often observed: students with more pronounced psychological symptoms tend to exhibit higher levels of consumption, while repeated substance use can exacerbate anxiety and depressive symptoms, or impair academic and interpersonal functioning.^[15]

Recent data from the World Health Organization (WHO) reveal a global burden of 292 million psychoactive substance users, reflecting a 20% increase in prevalence over the past decade.^[16] In 2024, approximately 400 million individuals met the diagnostic criteria for alcohol use disorders, with 209 million exhibiting alcohol dependence syndrome.^[17] Portuguese national data showed an increase in alcohol consumption prevalence between 2017 and 2022. Among 15-74-year-olds, past-year use rose from 58% to 62%, and past-month use from 49% to 55%. The 15-34 age group showed similar trends (past-year: 52% to 58%; past-month: 41% to 49%).^[18]

Regarding the ages of initiation of substance use, and focusing on the 15-24 age group - where recent initiations are more likely - cannabis continues to have the earliest age of onset, with an average initiation age of 17 years. Prevalence rates of consumption remain higher among males, both in the 15-74 population and in the 15-34 age group, although the male-to-female ratio is lower among those aged 15-34.^[18]

Consistent with the high prevalence of psychological distress among students in higher education, universities and college campuses around the world have witnessed a significant increase in demand for mental health services in recent years.^[19, 20, 21] A similar pattern has been observed at ICBAS. Since the psychological consultation service became available in May 2020, the number of consultations has increased from 152 that year to 1,492 in 2024. Meanwhile, psychiatry consultations rose from 39 in 2021 to 106 in 2024.^[22] Within the scope of these consultations, we have identified cases of psychopathology, as well as alcohol and drug use behaviours, which are often associated with other risk behaviours. However, while research has already been conducted on mental health issues, no studies to date have addressed substance use specifically at ICBAS.^[6, 7]

With this study, we aim to assess the association between mental health and substance consumption, as well as their trends, among students enrolled in the core undergraduate programmes at ICBAS. This information is essential for informing the design of targeted and potentially more effective intervention strategies for our student population.

Material and Methods

To examine the association between mental health disorders and substance use behaviours among students enrolled in core degree programmes (Aquatic Sciences, Medicine, and Veterinary Medicine) at ICBAS, we conducted a longitudinal comparative study. We employed repeated cross-sectional designs, with baseline data collected between September and December 2021 (previous study), and follow-up data collected between March and April 2025 using identical methodologies. The study evaluated temporal trends in anxiety and depressive disorders, burnout syndrome, and substance use patterns.

To measure anxiety, depressive, and burnout disorders, we used the Hospital Anxiety and Depression Scale (HADS) and the Maslach Burnout Inventory - Student Survey (MBI-SS), specifically the validated Portuguese versions. Sociodemographic and academic characteristics were collected as covariates.

The target population were ICBAS's students from the 1st, 3rd and 6th years of Medicine, the 1st, 3rd and 5th years of Veterinary Medicine, and the 1st and 3rd years of Aquatic Sciences.

The students were invited to complete an online survey via the University of Porto platform. Participation was voluntary and anonymous; informed consent was requested prior to initiating the survey, and participants were free to withdraw at any time. Both studies were approved by the Ethics Committee and the Data Protection Office of the University of Porto, and permission to reuse data from the previous study was obtained from the original author.

Study measures

We collected sociodemographic data (gender, age, and household composition), academic data (year of study, academic probation status, first or subsequent university degree), data on help-seeking for mental health issues (psychological and psychiatric support), as well as responses to the MBI-SS, HADS, and information on substance use patterns.

The MBI-SS assesses burnout through three subscales (15 items in total): emotional exhaustion (5 items), depersonalisation (4 items), and personal accomplishment (6 items), rated on a 0–6 Likert scale. Cut-off scores classify each dimension as low, moderate, or high: emotional exhaustion (≤ 9 [low]/10–14 [moderate]/ ≥ 15 [high]), depersonalisation (≤ 1 [low]/2–6 [moderate]/ ≥ 7 [high]), and personal accomplishment (≤ 22 [low]/23–27 [moderate]/ ≥ 28 [high]). According to the

three-dimensional definition (TDD-MBI-SS), burnout is defined by the simultaneous presence of high emotional exhaustion (≥ 15), high depersonalisation (≥ 7), and low personal accomplishment (≤ 22).

The HADS assesses anxiety and depressive symptoms experienced over the preceding week via two 7-item subscales (scored 0-3 per item), yielding separate scores ranging from 0 to 21 for each domain. Symptom severity is classified as normal (0-7), mild (8-10), moderate (11-14), or severe (15-21).^[24]

Substance use was assessed through a comprehensive questionnaire documenting all potentially used substances (alcohol, cannabis, smartshop substances, cocaine, ecstasy, poppers, Viagra, Cialis and similar drugs, amphetamines, LSD, GHB, ketamine, mephedrone, and methamphetamines) alongside their temporal patterns of consumption.

Statistical analysis

For comparison of means between groups, we used the Student's t-test or its non-parametric equivalent. For comparison of proportions, we employed the chi-square test or Fisher's exact test when expected cell counts were below five.

To assess the association between different outcomes and exposures - quantifying the magnitude of exposure effects - we calculated odds ratios (ORs) with corresponding 95% confidence intervals (95% CIs), using logistic regression analysis to adjust for potential confounders and further evaluate these associations.

Results

Sample description: Sociodemographic and academic characterization (2025)

A total of 452 undergraduate students participated in the study, representing the fields of Aquatic Sciences, Medicine, and Veterinary Medicine in 2025. Of these, 81.4% ($n = 364$) identified as female and 18.6% ($n = 83$) as male. One participant preferred not to disclose their gender and was excluded from gender-specific analyses. The majority of participants (92.2%) were aged between 17 and 24 years, with 7.8% aged between 25 and 49 years.

In terms of household composition, 66.8% reported living with their parents or family, 24.1% in shared housing or university residences, 7.1% lived alone, and 2.0% reported other living arrangements. Academic distribution revealed that 33.1% were in their first year of study, followed by 28.4% in their sixth year, and 26.9% in their third year. The remaining students were distributed across the second (2.4%), fourth (4.7%), and fifth years (4.4%).

Most students (84.5%) were undertaking their first academic degree, while 15.5% reported holding a previous degree. A history of academic failure (having repeated a year) was reported by only 7.8% of participants. The results above are presented in Table I.

Mental Health Outcomes

Analysis of mental health disorders revealed a slight, non-significant decrease in the prevalence of anxiety and depression between 2021 and 2025. Reported anxiety symptoms declined from 37.5% to 32.2% ($p = 0.24$) (Table II), with an adjusted odds ratio (OR) of 0.75 (95% CI: 0.50-1.13; $p = 0.167$) (Table III). Similarly, depression prevalence decreased modestly from 10.5% to 7.5% ($p = 0.28$), with an adjusted OR of 0.76 (95% CI: 0.38-1.48; $p = 0.421$).

For burnout syndrome, a reduction was observed from 36.5% in 2021 to 31.3% in 2025 ($p = 0.25$) (Table II). The adjusted OR for burnout in 2025 was 0.81 (95% CI: 0.54-1.22; $p = 0.311$), indicating no statistically significant change over the study period (Table III).

Notably, all adjusted ORs showed non-significant associations after controlling for gender, living arrangements, and university course. These findings suggest that, while there were numerical declines in mental health disorder prevalence between 2021 and 2025, none reached statistical significance. The complete results are presented in Tables II and III.

Substance Abuse Outcomes

The prevalence of substance use among students in 2025 varied by substance type. Alcohol was the most frequently consumed substance, with 67.0% reporting use. Cannabis use was reported by 21.0% of students, followed by significantly lower usage rates for substances such as ecstasy (2.1%), smartshop products (1.9%), poppers (1.4%), and amphetamines (0.7%). Other substances, including LSD, ketamine, and methamphetamines, were used by fewer than 1% of students. No students reported using heroin or methadone (Table IV).

A statistically significant increase in alcohol consumption was observed between 2021 and 2025, rising from 61.2% to 74.0% ($p = 0.005$). In contrast, cannabis use remained stable (20.4% in 2021 vs. 21.4% in 2025; $p = 0.80$). Use of all other substances remained rare and did not show statistically significant trends over time (Table V).

Adjusted analysis confirmed these patterns: the odds of reporting alcohol or drug use in the previous 24 months were significantly higher in 2025 (OR = 2.03; 95% CI: 1.33-3.14; $p = 0.001$). When analysed separately, alcohol use remained significantly higher (adjusted OR = 2.03; 95% CI: 1.33-3.14; $p = 0.001$), while drug use alone did not show a statistically significant change (adjusted OR = 1.28; 95% CI: 0.77-2.12; $p = 0.348$) (Table VI).

The aforementioned results are presented in Tables IV, V and VI.

Association between Mental Health Disorders and substance consumption outcomes

Cross-sectional data collected in 2025 indicate an inverse association between symptoms of anxiety and depression and self-reported alcohol or drug use within the preceding 24 months.

Among students without symptoms of anxiety, 68.5% reported substance use, compared to 57.0% of those with anxiety symptoms. This difference was statistically significant ($p = 0.02$) (Table VII). After adjusting for gender, living arrangements, academic course, and prior engagement with psychological services, anxiety symptoms remained significantly associated with lower odds of substance use (adjusted OR = 0.61; 95% CI: 0.40-0.88; $p = 0.021$) (Table VIII).

A similar pattern was observed with depressive symptoms. Substance use was more prevalent among students without depressive symptoms (92.4%) than among those reporting such symptoms (87.2%), although this difference was not statistically significant in the unadjusted model ($p = 0.08$) (Table VII). However, following adjustment for relevant covariates, the association

reached statistical significance: students with depressive symptoms had significantly lower odds of reporting alcohol or drug use (adjusted OR = 0.48; 95% CI: 0.24-0.96; $p = 0.038$) (Table VIII).

In contrast, no significant association was found between burnout and substance use. The prevalence of alcohol or drug use was similar among students with (33.0%) and without (34.5%) burnout symptoms ($p = 0.75$) (Table VII). This lack of association persisted after adjustment for potential confounders (adjusted OR = 1.02; 95% CI: 0.63-1.66; $p = 0.940$) (Table VIII).

These findings reveal a counterintuitive trend, whereby students without symptoms of anxiety or depression reported higher rates of alcohol and/or drug use. This pattern remained consistent even after controlling for demographic and contextual variables. Full results are presented in Tables VII and VIII.

Psychological and Psychiatric Help-Seeking

Approximately half of the students surveyed reported having sought psychological support at some point, with a statistically significant increase in demand from 2021 (41.3%) to 2025 (60.5%) ($p < 0.001$). Among those who sought help, 30.1% had done so within the past 3 months, 14.4% within 6 months, 19.4% within 12 months, and 36.1% within the last 24 months ($p = 0.04$).

Similarly, the proportion of students who sought psychiatric help rose significantly from 18.6% in 2021 to 32.8% in 2025 ($p < 0.001$). Of these, 31.8% had done so within the past 3 months, 14.5% within 6 months, 18.2% within 12 months, and 35.5% within the past 24 months ($p = 0.93$). The results mentioned above are presented in Table IX.

Discussion

The findings indicated that most participants were female, aged between 17 and 24 years, and living with their parents or family - demographic patterns consistent with previous research on university students in health-related programmes.^[25] In Portugal, this living arrangement is common and influenced by cultural norms as well as economic factors, with financial constraints and job market instability contributing to the prolonged stay of young adults in the parental home.^[26, 27]

Although the slight decline in the prevalence of anxiety and depression among students between 2021 and 2025 did not reach statistical significance, it may indicate a partial recovery from the psychological impacts of the COVID-19 pandemic, aligning with findings from other studies reporting a post-pandemic stabilisation in student mental health.^[28] Nonetheless, the persistently elevated levels observed underscore the continued presence of substantial psychological distress among higher education students. These findings are consistent with both national and international data, as well as the study conducted in 2021 which identified anxiety, depression, and burnout as some of the most prevalent mental health issues among higher education students.^[4, 5, 6, 7, 29] Moreover, we found no differences irrespective of the students' field of study, which aligns with our previous findings from 2021.^[7]

Burnout remained prevalent (approximately 33%) but stable over time, consistent with global literature reporting persistently high levels among students in demanding academic fields, particularly medicine and veterinary sciences.^[30, 31] Higher education students often face intense academic pressures, leading to emotional exhaustion, depersonalisation, and reduced personal fulfilment, which are associated with poorer academic performance and, in severe cases, suicidal ideation or intentions to withdraw from their studies.^[32, 33, 34]

In contrast to the trends observed for anxiety and depression, alcohol consumption among students increased significantly from 61.2% to 74.0% between 2021 and 2025. This rise aligns with international data showing a resurgence in alcohol use among young adults following the easing of pandemic-related restrictions. Although consumption declined during lockdowns, many students have since resumed or exceeded pre-pandemic levels, likely driven by stress-related coping behaviours and the re-establishment of social drinking contexts.^[35, 36, 37] Most participants in our study lived with their parents or other relatives, a context that aligns with a recent Portuguese study among higher education students which reported higher alcohol consumption among those residing at home.^[36] It is also important to note that in Portugal, alcohol consumption is both legal

and culturally embedded within social and recreational contexts. Conversely, cannabis and other illicit drug use remained relatively stable, with low overall prevalence - likely influenced by Portugal's legal framework, cultural factors, and accessibility. This post-decriminalisation trend aligns with studies reporting relatively low cannabis use among adolescents and limited associations with adverse academic or mental health outcomes, reflecting a more normalised perception of its use.^[38, 39]

In examining the association between mental health and substance use, our adjusted models indicated higher substance use among individuals reporting lower levels of anxiety and depression. While most studies suggest a direct positive association, emerging evidence points to a non-linear relationship, particularly with regard to alcohol use.^[4, 40, 41] A cross-sectional study conducted across 14 countries (n = 5,438) found that excessive alcohol consumption was associated with higher rates of depression, whereas light to moderate use was linked to lower levels of both depression and anxiety.^[42, 43] Similarly, data from the National Epidemiological Survey on Alcohol and Related Conditions revealed that regular nicotine and cannabis use correlated with elevated rates of psychiatric disorders, whereas regular alcohol use was associated with lower rates. Furthermore, regular substance use predicted the future onset of anxiety, depression, and bipolar disorder. Interestingly, regular alcohol users reported better physical and mental health-related quality of life compared to those using nicotine or cannabis.^[44] Longitudinal data suggest a potential "protective" effect of moderate alcohol consumption against common mental disorders, possibly reflecting either a direct benefit or the consequence of greater underlying psychological well-being among moderate drinkers.^[45, 46]

Heavy substance abuse, including alcohol and drug use, has significant short- and long-term effects on both physical and mental health, varying according to the substance and duration of use. Acute impacts may include cardiovascular and respiratory disturbances, impaired motor and cognitive functioning, and psychological symptoms such as anxiety, hallucinations, and impulsivity.^[47] Alcohol, for example, can impair memory and executive function, undermining decision-making and increasing risk-taking behaviours.^[48] These impairments are associated with heightened risks of unprotected sex, academic underachievement, interpersonal conflicts, and, in some instances, involvement in criminal activity.^[36, 49] Such outcomes underscore the broader social and functional risks associated with substance use. Future research should prioritise identifying the most prevalent risk behaviours among university students. Preventive strategies must emphasise awareness, early intervention, and the promotion of sustained, age-appropriate responses that extend beyond legal regulation to foster meaningful shifts in attitudes and behaviours among young people. For example, several Scottish universities have begun replacing

the traditional integration period, commonly known as “Freshers’ Week”, with more inclusive “Welcome Week” initiatives that prioritise student wellbeing and promote alcohol-free activities such as yoga, craft workshops, film screenings, and therapy animal sessions.^[50]

However, for interventions to be truly effective in reducing premature and excessive alcohol consumption among adolescents, it is essential to understand the underlying determinants, particularly drinking motives, which represent the behavioural and psychological drivers of alcohol use. This framework posits that individuals consume alcohol to achieve specific desired outcomes, each motivated by distinct needs or functions and associated with different antecedents and consequences.^[51, 52] Evidence indicates that most young people drink for social motives, while fewer report enhancement or coping motives. Social motives are generally associated with moderate consumption, enhancement motives with heavier drinking, and coping motives with alcohol-related problems.^[13]

It has been a key recommendation of some authors the integration of counsellors into diverse university environments to improve access to mental health support.^[20] This can reduce reliance on centralised services by providing timely, context-specific care through professionals based in settings such as cultural centres or health units.^[20, 56] The increasing demand for psychological support at ICBAS reflects a broader international trend across higher education institutions.^[19, 20, 21] Findings from this study suggest a growing number of students are seeking psychological or psychiatric care, including through external services, indicating a potential reduction in mental health stigma. However, this rising demand places considerable pressure on existing resources, rendering individualised care progressively unsustainable. Consequently, there is a need for more scalable and effective strategies, such as group interventions, alongside holistic, preventive approaches that extend beyond clinical care and promote mental health through integrated, community-based measures.^[20, 53, 54, 55] This embedded approach reduces reliance on centralised services by providing timely, context-specific care through professionals based in settings such as cultural centres or health units.^[20, 56] It also promotes collaboration among faculty, staff, and students in identifying priorities and resources, supporting a coordinated, needs-led system.^[20]

In summary, while promising interventions such as Botvin’s Life Skills Training, peer support, and virtual reality-based training offer innovative avenues for prevention, their success depends on contextual adaptation, student engagement, and sensitivity to individual experiences.^[57, 58, 59, 60] Embedding mental health professionals within diverse university settings can alleviate pressure on centralised services and promote early, tailored support. A coordinated, community-based

strategy that integrates prevention, intervention, and policy reform is essential to address the complex interplay between mental health and addictive behaviours in higher education.^[61]

Limitations

This study presents several limitations that should be acknowledged. Firstly, although data were collected at two time points (2021 and 2025), the study design was based on repeated cross-sectional samples rather than a longitudinal cohort.^[42] Therefore, it was not possible to assess individual-level changes over time or establish causal relationships between mental health outcomes and substance use.

Secondly, the sample consisted solely of students from a single biomedical institution, with a predominance of female and white participants. This limits the generalisability of the findings to broader, more diverse academic or general populations.

Thirdly, both mental health symptoms and substance use behaviours were assessed through self-reported questionnaires.^[2, 62] Although standardised and validated tools were used (e.g., HADS, MBI-SS), self-reporting is inherently subject to recall bias and social desirability bias, particularly concerning sensitive topics such as alcohol or drug use.^[2, 63]

Furthermore, symptoms of anxiety and depression were not confirmed through clinical diagnosis but were screened using validated instruments. While these tools are widely used in research, they cannot replace clinical assessment and may lead to random misclassification.^[64]

Additionally, relevant confounding factors - such as personality traits, academic performance, or peer influence - were not measured and may have affected the associations observed.

Finally, cultural and regional specificities, including social norms around alcohol consumption in Portugal, may limit the applicability of these findings to other national contexts.^[65, 66]

Conclusion

This study represents the first comprehensive investigation at ICBAS to explore the associations between mental health and substance use among its undergraduate students across core biomedical programmes. While the overall prevalence of anxiety and depression declined slightly between 2021 and 2025, these changes were not statistically significant, and psychological distress remains a salient concern among this population. Burnout levels remained stable, further emphasising the persistent burden of academic and emotional demands faced by students.

In contrast, alcohol consumption increased significantly, suggesting a potential shift in post-pandemic coping behaviours and social reintegration patterns, whereas cannabis and other illicit drug use remained relatively unchanged. Interestingly, adjusted analyses revealed an inverse association between self-reported anxiety and depression symptoms and recent substance use, pointing to a more complex and potentially non-linear relationship that warrants further longitudinal investigation.

The rising demand for psychological and psychiatric support services observed in this study reflects a broader international trend and underscores the urgency of developing sustainable, integrated mental health strategies that should include both individual-level interventions and systemic approaches embedded within the academic environment.

Given its scope and methodology, this study offers valuable insights for guiding institutional policy and targeted preventive efforts. Nonetheless, further research is needed to assess individual trajectories over time, clarify causal mechanisms, and explore contextual factors influencing the interplay between psychological well-being and substance use in higher education.

Appendix

Tables

Table I. Sociodemographic and academic characterization of the participants in 2025.

	Aquatic Sciences	Medicine	Veterinary Medicine	Overall	<i>p</i>
Gender*	35	322	90	447	0.65
Female	30 (85.7%)	259 (80.4%)	75 (83.3%)	364 (81.4%)	
Male	5 (14.3%)	63 (19.6%)	15 (16.7%)	83 (18.6%)	
Age	34	323	91	448	0.07
[17,24]	33 (97.1%)	301 (93.2%)	79 (86.8%)	413 (92.2%)	
]24,49]	1 (2.9%)	22 (6.8%)	12 (13.2%)	35 (7.8%)	
Household composition	36	324	92	452	0.007
Parents/Family	28 (77.8%)	201 (62.0%)	73 (79.3%)	302 (66.8%)	
Shared house/ University Residence	7 (19.4%)	88 (27.2%)	73 (79.3%)	109 (24.15%)	
Alone	0 (0.0%)	30 (9.3%)	14 (15.2%)	32 (7.1%)	
Other	1 (2.8%)	5 (1.5%)	3 (3.3%)	9 (2.0%)	
Year of study	36	323	91	450	< 0.001
1	22 (61.1%)	103 (31.9%)	24 (26.4%)	149 (33.1%)	
2	0 (0.0%)	6 (1.9%)	5 (5.5%)	11 (2.4%)	
3	12 (33.3%)	67 (20.7%)	42 (46.2%)	121 (26.9%)	
4	2 (5.6%)	16 (5,0%)	3 (3.3%)	21 (4.7%)	
5	0 (0.0%)	7 (2.2%)	13 (14.3%)	20 (4.4%)	
6	0 (0.0%)	124 (38.4%)	4 (4.4%)	128 (28.4%)	
(continued on next page)					

Table I. (continuation)

	Aquatic Sciences	Medicina	Veterinary Medicine	Overall	<i>p</i>
Is this your first degree?	36	323	92	451	0.002
No	1 (2.8%)	45 (13.9%)	24 (26.1%)	70 (15.5%)	
Yes	35 (87.2%)	278 (86.1%)	68 (73.9%)	381 (84.5%)	
Have you ever failed a year?	36	324	91	451	0.05
No	32 (88.9%)	305 (94.1%)	79 (86.8%)	416 (92.2%)	
Yes	4 (11.1%)	19 (5.9%)	12 (13.2%)	35 (7.8%)	

**Only one person answered "other" for gender, namely, that they preferred not to answer, so they were excluded when studying gender as a variable.*

Table II. Comparative Prevalence of Mental Health Disorders in 2021 and 2025: Anxiety, Depression, and Burnout Syndrome.

	2021	2025	<i>p</i>
Anxiety*	240	199	0.24
No	150 (62.5%)	135 (67.8%)	
Yes	90 (37.5%)	64 (32.2%)	
Depression*	237	199	0.28
No	212 (89.5%)	184 (92.5%)	
Yes	25 (10.5%)	15 (7.5%)	
Burnout†	241	198	0.25
No	153 (63.5%)	136 (68.7%)	
Yes	88 (36.5%)	62 (31.3%)	

*According to HADS, scores >7 were used as the cutoff to define clinically significant anxiety and depression.

†According to MBI-SS, the following clinical thresholds were used to define burnout: emotional exhaustion >14, depersonalization >6, and personal accomplishment <23.

Table III. Comparative Analysis of Anxiety, Depression, and Burnout between 2021 and 2025: Crude and Adjusted Odds Ratios.

Anxiety			
Year	Odds Ratio	95% CI	<i>p</i>
2021	Ref		
2025 (Crude)	0.79	0.53-1.17	0.244
2025 (Adjusted)*	0.75	0.50-1.13	0.167
Depression			
Year	Odds Ratio	95% CI	<i>p</i>
2021	Ref		
2025 (Crude)	0.69	0.35-1.34	0.280
2025 (Adjusted)*	0.76	0.38-1.48	0.421
Burnout			
Year	Odds Ratio	95% CI	<i>p</i>
2021	Ref		
2025 (Crude)	0.79	0.53-1.18	0.253
2025 (Adjusted)*	0.81	0.54-1.22	0.311

*The crude amount was adjusted according to gender, who you live with, and what university course you are taking.

Table IV. Prevalence of Psychoactive Substance Use* Among University Students Across Academic Programs in 2025

	Aquatic Sciences	Medicina	Veterinary Medicine	Overall	<i>p</i>
Alcohol	33	313	90	436	0.30
No	7 (21.2%)	105 (33.5%)	32 (35.2%)	144 (33.0%)	
Yes	26 (78.8%)	208 (66.5%)	58 (64.4%)	292 (67.0%)	
Cannabis	33	308	88	429	0.25
No	23 (69.7%)	249 (80.8%)	67 (76.1%)	339 (79.0%)	
Yes	10 (30.3%)	59 (19.2%)	21 (23.9%)	90 (21.0%)	
Smartshop Substances	31	308	89	428	0.10
No	29 (93.5%)	304 (98.7%)	87 (97.8%)	420 (98.1%)	
Yes	2 (6.5%)	4 (1.3%)	2 (2.2%)	8 (1.9%)	
Cocaine	33	311	89	433	0.48
No	33 (100.0%)	310 (99.7%)	88 (98.9%)	431 (99.5%)	
Yes	0 (0.0%)	1 (0.3%)	1 (1.1%)	2 (0.5%)	
Ecstasy	33	309	88	430	0.39
No	32 (97.0%)	304 (98.4%)	85 (96.6%)	421 (97.9%)	
Yes	1 (3.0%)	5 (1.6%)	3 (3.4%)	9 (2.1%)	
Poppers	33	311	89	433	1.00
No	33 (100.0%)	306 (98.4%)	88 (98.9%)	427 (98.6%)	
Yes	0 (0.0%)	5 (1.6%)	1 (1.1%)	6 (1.4%)	
Viagra/Cialis/Similar	33	311	89	433	1.00
No	33 (100.0%)	310 (99.7%)	89 (100.0%)	432 (99.8%)	
Yes	0 (0.0%)	1 (0.3%)	0 (0.0%)	1 (0.2%)	
Amphetamines	33	309	90	434	1.00
No	33 (100.0%)	308 (99.0%)	90 (100.0%)	431 (99.3%)	
Yes	0 (0.0%)	3 (1.0%)	0 (0.0%)	3 (0.7%)	
(continued on next page)					

Table IV. (continuation)

	Aquatic Sciences	Medicina	Veterinary Medicine	Overall	<i>p</i>
LSD	33	311	90	434	0.04
No	32 (97.0%)	311 (100.0%)	89 (98.9%)	432 (99.5%)	
Yes	1 (3.0%)	0 (0.0%)	1 (1.1%)	2 (0.5%)	
GHB	33	309	90	432	1.00
No	33 (100.0%)	309 (100.0%)	90 (100.0%)	432 (100.0%)	
Yes	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Ketamine	33	310	90	433	0.49
No	33 (100.0%)	309 (99.7%)	89 (98.9%)	431 (99.5%)	
Yes	0 (0.0%)	1 (0.3%)	1 (1.1%)	2 (0.5%)	
Mephedrone	33	310	90	433	1.00
No	33 (100.0%)	309 (99.7%)	90 (100.0%)	432 (99.8%)	
Yes	0 (0.0%)	1 (0.3%)	0 (0.0%)	1 (0.2%)	
Methamphetamines	33	310	90	433	1.00
No	33 (100.0%)	309 (99.7%)	90 (100.0%)	432 (99.8%)	
Yes	0 (0.0%)	1 (0.3%)	0 (0.0%)	1 (0.2%)	
Others	31	308	89	428	0.18
No	30 (96.8%)	307 (99.7%)	89 (100.0%)	426 (99.5%)	
Yes	1 (3.2%)	1 (0.3%)	0 (0.0%)	2 (0.5%)	

**Heroin and methadone were not included in the results, as no participant indicated their use.*

Table V. Comparative Prevalence of Psychoactive Substance Use* in 2021 and 2025: Alcohol, Cannabis, and Other Illicit Drugs.

	2021	2025	Overall	<i>p</i>
Alcohol	237	196	433	0.005
No	92 (38.8%)	51 (26.0%)	143 (33.0%)	
Yes	145 (61.2%)	145 (74.0%)	290 (67.0%)	
Cannabis	230	196	426	0.80
No	183 (79.6%)	154 (78.6%)	337 (79.1%)	
Yes	47 (20.4%)	42 (21.4%)	89 (20.9%)	
Smartshop Substances	229	196	425	1.00
No	225 (98.3%)	192 (98.0%)	417 (98.1%)	
Yes	4 (1.7%)	4 (2.0%)	8 (1.9%)	
Cocaine	234	196	430	1.00
No	233 (99.6%)	195 (99.5%)	428 (99.5%)	
Yes	1 (0.4%)	1 (0.5%)	2 (0.5%)	
Ecstasy	233	194	420	0.52
No	227 (97.4%)	191 (98.5%)	418 (97.9%)	
Yes	6 (2.6%)	3 (1.5%)	9 (2.1%)	
Poppers	234	196	430	0.42
No	232 (99.1%)	192 (98.0%)	424 (98.6%)	
Yes	2 (0.9%)	4 (2.0%)	6 (1.4%)	
Viagra/Cialis/Similar	234	196	430	0.46
No	234 (100.0%)	195 (99.5%)	429 (99.8%)	
Yes	0 (0.0%)	1 (0.5%)	1 (0.2%)	
Amphetamines	234	195	430	0.59
No	233 (99.6%)	194 (0.0%)	427 (99.3%)	
Yes	1 (0.4%)	1 (0.4%)	3 (0.7%)	
(continued on next page)				

Tabela V. (continuation)

	2021	2025	Overall	<i>p</i>
LSD	234	196	430	0.21
No	234 (100.0%)	194 (99.0%)	428 (99.5%)	
Yes	0 (0.0%)	2 (1.0%)	2 (0.5%)	
GHB	233	195	428	1.00
No	233 (100.0%)	195 (100.0%)	428 (100.0%)	
Yes	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Ketamine	234	195	429	1.00
No	233 (99.6%)	194 (99.5%)	427 (99.5%)	
Yes	1 (0.4%)	1 (0.5%)	2 (0.5%)	
Mephedrone	233	196	429	0.46
No	233 (100.0%)	195 (99.5%)	428 (99.8%)	
Yes	0 (0.0%)	1 (0.5%)	1 (0.2%)	
Methamphetamines	234	195	429	0.45
No	234 (100.0%)	194 (99.5%)	428 (99.8%)	
Yes	0 (0.0%)	1 (0.5%)	1 (0.2%)	
Others	230	194	424	0.21
No	230 (100.0%)	192 (99.0%)	422 (99.5%)	
Yes	0 (0.0%)	2 (1.0%)	2 (0.5%)	

**Heroin and methadone were not included in the results, as no participant indicated their use.*

Table VI. Comparative Analysis of Alcohol and Drug Use Among University Students from 2021 to 2025: Crude and Adjusted Odds Ratios.

In the past 24 months, you have consumed alcohol or drugs			
Year	Odds Ratio	95% CI	<i>p</i>
2021	Ref		
2025 (Crude)	1.80	1.20-2.05	0.005
2025 (Adjusted)*	2.03	1.33-3.14	0.001
In the past 24 months, you have consumed alcohol			
Year	Odds Ratio	95% CI	<i>p</i>
2021	Ref		
2025 (Crude)	1.80	1.20-2.74	0.001
2025 (Adjusted)*	2.03	1.33-3.14	0.001
In the past 24 months, you have consumed drugs			
Year	Odds Ratio	95% CI	<i>p</i>
2021	Ref		
2025 (Crude)	1.14	0.70-1.85	0.602
2025 (Adjusted)*	1.28	0.77-2.12	0.348

*The crude amount was adjusted according to gender, who you live with, and what university course you are taking.

Table VII. Association Between Mental Health Disorders and Substance Use in the Past 24 Months in 2025.

	Have you consumed alcohol or drugs in the last 24 months?		
	No	Yes	<i>p</i>
Anxiety*	122	292	0.02
No	81 (57.0%)	200 (68.5%)	
Yes	61 (43.0%)	92 (31.5%)	
Depression*	141	291	0.08
No	123 (87.2%)	269 (92.4%)	
Yes	18 (12.8%)	22 (7.6%)	
Burnout†	142	294	0.75
No	93 (65.5%)	197 (67.0%)	
Yes	49 (34.5%)	97 (33.0%)	

*According to HADS, scores >7 were used as the cutoff to define clinically significant anxiety and depression.

†According to MBI-SS, the following clinical thresholds were used to define burnout: emotional exhaustion >14, depersonalization >6, and personal accomplishment <23.

Table VIII. Association Between Mental Health Disorders and Alcohol or Drug Use Among University Students in 2025: Crude and Adjusted Odds Ratios.

Anxiety			
Have you consumed alcohol or drugs in the last 24 months?	Odds Ratio	95% CI	<i>p</i>
No	Ref		
Yes (Crude)	0.61	0.40-0.92	0.020
Yes (Adjusted)*	0.61	0.40-0.88	0.021
Depression			
Have you consumed alcohol or drugs in the last 24 months?	Odds Ratio	95% CI	<i>p</i>
No	Ref		
Yes (Crude)	0.56	0.29-1.09	0.083
Yes (Adjusted)*	0.48	0.24-0.96	0.038
Burnout			
Have you consumed alcohol or drugs in the last 24 months?	Odds Ratio	95% CI	<i>p</i>
No	Ref		
Yes (Crude)	0.74	0.61-1.43	0.155
Yes (Adjusted)*	1.02	0.63-1.66	0.940

**The gross amount was adjusted according to gender, who you live with, what university course you are taking and whether you have ever sought psychological help.*

Table IX. Demand for Mental Health Professional Support Among Students: A Comparative Analysis Between 2021 and 2025.

	2021	2025	Overall	<i>p</i>
Psychological help	242	200	442	<0.001
No	142 (58.7%)	79 (39.5%)	221 (50.0%)	
Yes	100 (41.3%)	121 (60.5%)	221 (50.0%)	
When*	98	118	216	0.04
Last 3 months	31 (31.6%)	34 (28.6%)	65 (30.1%)	
Last 6 months	14 (14.3%)	17 (14.4%)	31 (14.4%)	
Last 12 months	26 (26.5%)	16 (13.6%)	42 (19.4%)	
Last 24 months	27 (27.6%)	51 (43.2%)	78 (36.1%)	
Psychiatric help	242	201	443	<0.001
No	197 (81.4%)	135 (67.2%)	332 (74.9%)	
Yes	45 (18.6%)	66 (32.8%)	111 (25.1%)	
When*	44	66	110	0.93
Last 3 months	13 (29.5%)	22 (33.3%)	35 (31.8%)	
Last 6 months	7 (15.9%)	9 (13.6%)	16 (14.5%)	
Last 12 months	9 (20.5%)	11 (16.7%)	20 (18.2%)	
Last 24 months	15 (34.1%)	24 (36.4%)	39 (35.5%)	

**Of those who said yes.*

Survey

CONSENTIMENTO INFORMADO, LIVRE E ESCLARECIDO PARA PARTICIPAÇÃO EM PROJETOS DE DOCÊNCIA E/OU INVESTIGAÇÃO

de acordo com a Declaração de [Helsínquia](#) e a Convenção de [Oviedo](#)

Por favor, leia com atenção a seguinte informação. Se achar que algo está incorreto ou que não está claro, não hesite em solicitar mais informações. Se concordar com a proposta que lhe foi feita, prossiga com o inquérito.

Título do estudo: Avaliação da associação entre Saúde Mental e comportamentos de adição e suas tendências em estudantes do Instituto de Ciências Biomédicas Abel Salazar.

Enquadramento: Projeto a realizar no âmbito da Unidade Curricular "Dissertação/ Projeto/ Estágio" do 6º ano do Mestrado Integrado em Medicina do Instituto de Ciências Biomédicas Abel Salazar da Universidade do Porto.

Público-alvo do estudo: Alunos do Mestrado Integrado em Medicina (1.º, 3.º e 6.º anos), do Mestrado Integrado em Medicina Veterinária (1.º, 3.º e 5.º anos) e de Ciências do Meio Aquático (1.º e 3.º anos).

Explicação do estudo: Este projeto pretende analisar a associação entre ansiedade, depressão, burnout e comportamentos de adição em estudantes dos cursos nucleares do ICBAS relativo ao ano de 2021 e efetuar uma nova avaliação em 2025 para verificar quais as tendências destes indicadores. A recolha de dados para 2025, será feita por questionário online, de forma anónima. A resposta ao questionário é voluntária, feita em suporte eletrónico e sem a presença do investigador.

Condições e financiamento: A participação dos estudantes neste estudo é voluntária, sendo que poderão desistir a qualquer momento durante o seu preenchimento, não havendo lugar a qualquer tipo de pagamento ou outras contrapartidas.

Confidencialidade e anonimato: O questionário foi implementado numa plataforma interna disponibilizada pela U.Porto, o LimeSurvey, sendo esta a entidade responsável pela recolha e pelo armazenamento seguro dos dados. Durante o inquérito, não será solicitada qualquer informação que permita a sua identificação, garantindo-se que as suas respostas serão tratadas de forma anonimizada. Os dados recolhidos destinam-se exclusivamente a tratamento estatístico e serão utilizados apenas no âmbito deste estudo.

*

Escolha uma das seguintes respostas

- ☐ Declaro que li e compreendi as informações prestadas, as quais considero adequadas e suficientes. Declaro ainda estar ciente de que posso desistir da participação neste estudo a qualquer momento, sem qualquer consequência, bastando, para tal, encerrar o inquérito. Desta forma, aceito participar neste estudo e autorizo a utilização dos dados que forneço de forma voluntária, confiando que serão utilizados exclusivamente para esta investigação e que serão asseguradas todas as garantias de anonimização dos meus dados, por parte dos investigadores.

Dados sociodemográficos

Género

Escolha uma das seguintes respostas

- ☐ Feminino
☐ Masculino
☐ Outro
☐ Prefiro não responder

Idade

Neste campo só é possível introduzir números.

Com quem reside

Escolha uma das seguintes respostas

- ☐ Pais/Família
☐ Sozinho
☐ Partilha de casa/Residência universitária
☐ Outro:

Dados académicos

Ano de Curso

☒ Escolha uma das seguintes respostas

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

Alguma vez não transitou de ano na faculdade?

☒ Escolha uma das seguintes respostas

☐ Sim

☐ Não

Este é o seu primeiro curso?

☒ Escolha uma das seguintes respostas

☐ Sim

☐ Não

Qual o Curso que frequenta?

☒ Escolha uma das seguintes respostas

☐ Ciências do Meio Aquático

☐ Medicina

☐ Medicina Veterinária

Teve algum teste positivo para COVID-19?

☒ Escolha uma das seguintes respostas

☐ Sim

☐ Não

Alguma vez procurou ajuda psicológica?

☒ Escolha uma das seguintes respostas

☐ Sim

☐ Não

Alguma vez procurou ajuda psiquiátrica?

☒ Escolha uma das seguintes respostas

☐ Sim

☐ Não

Malash Burnout Inventory - Students Survey

As afirmações seguintes são referentes aos sentimentos/emoções de estudantes em contexto escolar. Leia cuidadosamente cada afirmação e decida sobre a frequência com que se sente da forma descrita.

Legenda da escala:
 0- Nenhuma vez
 1- Poucas vezes por ano
 2- Uma vez por mês
 3- Poucas vezes por mês
 4- Uma vez por semana
 5- Poucas vezes por semana
 6- Sempre

	0 Nenhuma vez	1 Poucas vezes por ano	2 Uma vez por mês	3 Poucas vezes por mês	4 Uma vez por semana	5 Poucas vezes por semana	6 Sempre
Os meus estudos deixam-se emocionalmente exausto.	☐	☐	☐	☐	☐	☐	☐
Sinto-me de 'rastos' no final de um dia na universidade.	☐	☐	☐	☐	☐	☐	☐
Sinto-me cansado quando me levanto de manhã e penso que tenho de enfrentar mais um dia na universidade.	☐	☐	☐	☐	☐	☐	☐
Estudar ou assistir a uma aula deixam-me tenso.	☐	☐	☐	☐	☐	☐	☐
Os meus estudos deixam-me completamente esgotado.	☐	☐	☐	☐	☐	☐	☐
Tenho vindo a desinteressar-me pelos meus estudos desde que entrei na universidade.	☐	☐	☐	☐	☐	☐	☐
Sinto-me pouco entusiasmado com os meus estudos.	☐	☐	☐	☐	☐	☐	☐
Sinto-me cada vez mais cínico relativamente à utilidade potencial dos meus estudos.	☐	☐	☐	☐	☐	☐	☐
Sinto-me estimulado quando alcanço os meus objectivos escolares.	☐	☐	☐	☐	☐	☐	☐
Tenho aprendido muitas matérias interessantes durante o meu curso.	☐	☐	☐	☐	☐	☐	☐
Durante as aulas, sinto que consigo acompanhar as matérias de forma eficaz.	☐	☐	☐	☐	☐	☐	☐
Tenho dúvidas sobre o significado dos meus estudos.	☐	☐	☐	☐	☐	☐	☐
Consigo resolver, de forma eficaz, os problemas que resultam dos meus estudos.	☐	☐	☐	☐	☐	☐	☐
Acredito que participo, de forma positiva, nas aulas a que assisto.	☐	☐	☐	☐	☐	☐	☐
Sinto que sou um bom aluno.	☐	☐	☐	☐	☐	☐	☐

Escala Hospitalar de Ansiedade e Depressão

Esta escala pretende saber como se encontra a sua saúde mental no momento presente. Responda de forma espontânea e sincera.

Sinto-me tenso/a ou ansioso/a:

🔍 Escolha uma das seguintes respostas

- ☐ Quase sempre
- ☐ Muitas vezes
- ☐ Por vezes
- ☐ Nunca

Ainda sinto prazer nas coisas de que costumava gostar:

🗳 Escolha uma das seguintes respostas

- ☐ Tanto como antes
- ☐ Não tanto agora
- ☐ Só um pouco
- ☐ Quase nada

Tenho uma espécie de sensação de medo, como se algo terrível estivesse prestes a acontecer:

🗳 Escolha uma das seguintes respostas

- ☐ Sim e muito forte
- ☐ Sim, mas não muito forte
- ☐ Um pouco, mas não me preocupa
- ☐ Não (de modo algum)

Consigo rir e ver o lado divertido das coisas:

🗳 Escolha uma das seguintes respostas

- ☐ Tanto como antes
- ☐ Não tanto como antes
- ☐ Muito menos agora
- ☐ Nunca

Tenho a cabeça cheia de preocupações:

🗳 Escolha uma das seguintes respostas

- ☐ A maior parte do tempo
- ☐ Muitas vezes
- ☐ Por vezes
- ☐ Quase nunca

Sinto-me animado/a:

🗳 Escolha uma das seguintes respostas

- ☐ Nunca
- ☐ Poucas vezes
- ☐ De vez em quando
- ☐ Quase sempre

Sou capaz de estar descontraidamente sentado/a e sentir-me relaxado/a:

🗳 Escolha uma das seguintes respostas

- ☐ Quase sempre
- ☐ Muitas vezes
- ☐ Por vezes
- ☐ Nunca

Sinto-me como se estivesse mais lento/a:

🔗 Escolha uma das seguintes respostas

- ☐ Quase sempre
- ☐ Muitas vezes
- ☐ Por vezes
- ☐ Nunca

Sinto-me de tal forma apreensivo/a (com medo), que até sinto um aperto no estômago:

🔗 Escolha uma das seguintes respostas

- ☐ Nunca
- ☐ Por vezes
- ☐ Muitas vezes
- ☐ Quase sempre

Perdi o interesse em cuidar do meu aspecto físico:

🔗 Escolha uma das seguintes respostas

- ☐ Completamente
- ☐ Não dou a atenção que devia
- ☐ Talvez cuide menos que antes
- ☐ Tenho o mesmo cuidado de sempre

Sinto-me de tal forma inquieto/a que não consigo estar parado/a:

🔗 Escolha uma das seguintes respostas

- ☐ Muito
- ☐ Bastante
- ☐ Não muito
- ☐ Nada

Penso com prazer nas coisas que podem acontecer no futuro:

🔗 Escolha uma das seguintes respostas

- ☐ Tanto como antes
- ☐ Não tanto como antes
- ☐ Bastante menos agora
- ☐ Quase nunca

Tenho sensações de pânico repentinas:

🔗 Escolha uma das seguintes respostas

- ☐ Muitas vezes
- ☐ Bastantes vezes
- ☐ Por vezes
- ☐ Nunca

Sou capaz de apreciar um bom livro ou um programa de rádio ou televisão:

🗖 Escolha uma das seguintes respostas

- ☐ Muitas vezes
- ☐ De vez em quando
- ☐ Poucas vezes
- ☐ Quase nunca

Álcool e drogas

Nos últimos 24 meses, consumiste álcool ou drogas?

🗖 Escolha uma das seguintes respostas

- ☐ Sim
- ☐ Não
- ☐ Não responde

Toma regularmente:

	Nunca	<1x/mês	1x-3x/mês	1x/sem	2x-3x/sem	4x-6x/sem	todos os dias
Sedativos	☐	☐	☐	☐	☐	☐	☐
Anti-depressivos	☐	☐	☐	☐	☐	☐	☐
Outros fármacos de ação no SNC	☐	☐	☐	☐	☐	☐	☐

Nos últimos 24 meses, consumiste álcool ou drogas?

📌 Escolha uma das seguintes respostas

- ☒ Sim
- ☐ Não
- ☐ Não responde

Nos últimos 24 meses, quando foi a última vez que consumiste álcool ou drogas?

	Nas últimas 24 horas	Nos últimos 7 dias	Nas últimas 4 semanas	Nos últimos 6 meses	Nos últimos 12 meses	Nos últimos 24 meses	Nunca	Não responde
Álcool	☐	☐	☐	☐	☐	☐	☐	☐
Cannabis (marijuana, charros, etc)	☐	☐	☐	☐	☐	☐	☐	☐
Substâncias Smart shop (incluindo online)	☐	☐	☐	☐	☐	☐	☐	☐
Cocaína	☐	☐	☐	☐	☐	☐	☐	☐
Ecstasy (MDMA)	☐	☐	☐	☐	☐	☐	☐	☐
Poppers	☐	☐	☐	☐	☐	☐	☐	☐
Viagra/ Cialis/ similar	☐	☐	☐	☐	☐	☐	☐	☐
Anfetaminas (Speed)	☐	☐	☐	☐	☐	☐	☐	☐
LSD	☐	☐	☐	☐	☐	☐	☐	☐
GHB	☐	☐	☐	☐	☐	☐	☐	☐
Ketamina	☐	☐	☐	☐	☐	☐	☐	☐
Heroína	☐	☐	☐	☐	☐	☐	☐	☐
Metadona	☐	☐	☐	☐	☐	☐	☐	☐
Mefedrona (miau miau, bloom)	☐	☐	☐	☐	☐	☐	☐	☐
Metanfetaminas (crystal)	☐	☐	☐	☐	☐	☐	☐	☐
Outros	☐	☐	☐	☐	☐	☐	☐	☐

Observações

Observações

Anterior

Submeter

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