

Comparative Analysis of Adolescent and Adult Drug Use Profiles: Sociopsychological and Behavioral Insights from a DUDIT-Based Evaluation

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ABSTRACT: Drug use harms physical and mental health and disrupts family, social, and work life. We compared substance-use patterns in adolescents versus adults across sociopsychological and behavioral domains. Sixty participants who acknowledged psychoactive-substance use were enrolled: 30 adolescents (16-17 years) and 30 adults (18-47 years). The Drug Use Disorders Identification Test (DUDIT) and a brief sociological questionnaire were administered. Adolescents reported more polydrug use ($p < 0.001$) and were more likely to take drugs the morning after a heavy session ($p = 0.029$). Adults showed higher craving ($p = 0.041$), greater guilt ($p = 0.033$), more confrontations about use ($p = 0.044$), and felt more heavily influenced by drugs ($p = 0.003$). Adults also reported more health problems attributable to use ($p = 0.005$) and a higher rate of specialist treatment ($p < 0.001$). Total DUDIT scores were higher in adults, although the difference was not significant ($p = 0.127$). Cannabis was the most commonly used substance in both cohorts, consistent with European trends; highly harmful drugs (e.g., cocaine, amphetamines, heroin) were rarely reported. Most adults lacked a stable romantic relationship, and all participants came from non-traditional family structures, suggesting early relational instability may shape later substance-use trajectories. These findings delineate distinct age-related profiles: adolescent use is characterized by experimentation and binge-linked patterns, whereas adult use is marked by dependence-related features and greater clinical consequences.

KEYWORDS: Drug use, DUDIT test, mental health.

Introduction

The abuse of addictive psychoactive substances results in harmful consequences for both the users and those around them, impacting public health and social well-being across the wider community [1].

One of the most widely used illicit substances in Europe remains cannabis, followed by stimulants such as cocaine, MDMA (3,4-Methylenedioxymethamphetamine, commonly known as ecstasy), and amphetamines, according to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) [2].

A study published in *Frontiers in Psychiatry* by German addiction medicine experts evaluated the overall harm associated with various psychoactive substances [1].

The analysis considered five key dimensions: physical, psychological, and social harm to the user, as well as physical and social harm to others.

Based on the average scores assigned across these dimensions, crack cocaine ranked as the most harmful substance, followed closely by methamphetamine, heroin, alcohol, and cocaine [1].

These substances scored highest in the Overall Harm index, which integrated the cumulative adverse effects on both the user and society.

Addictive substances act by affecting neurotransmitters.

Stimulants (e.g., amphetamines, cocaine) typically increase dopamine levels, leading to heightened alertness, energy, and euphoria.

Cocaine blocks the reuptake of dopamine, norepinephrine, and serotonin, which results in elevated levels of these neurotransmitters in the synapse.

Amphetamines trigger the release of dopamine and norepinephrine and also inhibit their reuptake [3].

A coping mechanism is evident in the brain following repeated drug use.

It boils down to the production of a smaller and smaller amount of dopamine or a decrease in the number of dopamine receptors in the reward circuit [4].

This leads to tolerance, meaning users require higher doses to achieve the same toxicological level.

Lower dopamine function can also make it difficult to feel pleasure from other sources, encouraging continued drug use.

Chronic use can cause dependence, where the brain relies on the drug to feel normal, and withdrawal symptoms appear when not using.

Over time, other brain areas like the prefrontal cortex (which handles decision-making and impulse control) can be affected too, resulting in poor judgment, impulsiveness, and compulsive drug-seeking behaviors—key signs of addiction [5].

Our study aims to describe the profile of individuals who use drugs, from adolescence to adulthood, by employing the well-established DUDIT (Drug Use Disorders Identification Test) alongside additional questionnaire-based items.

Ultimately, we seek to identify behavioral and psychological characteristics associated with substance use across different age groups, with the broader goal of better understanding and defining the user profile.

Materials and Methods

A total of 60 participants were selected for the study, the main selection criteria being the acknowledgement of using psychoactive substances. They were divided into 2 cohorts as follows:

- Group 1: Composed of 30 adolescents aged between 16 and 17 (mean age 16.27 ± 0.58).

The students were selected with the help of school counselors and were involved in counseling programs initiated by parents or requested by punitive institutions.

- Group 2: Composed of 30 adults aged between 18 and 47 (mean age 28.53 ± 9.53).

The subjects were selected by clinical psychologists based on criteria including psychoactive substance use and the presence of mental and behavioral disorders caused by such use (alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, hallucinogens, and other substances).

This division allowed for comparative analysis across age categories in relation to drug use behavior and associated psychological traits.

To uphold ethical research standards, confidentiality was maintained, with participants giving their informed consent prior to participation, and data being collected anonymously.

Instruments Used in the Investigation

Our investigation employed a series of instruments to explore as many aspects and nuances of the issue as possible, including the DUDIT (Drug Use Disorders Identification Test) and a Sociological Evaluation Questionnaire.

The Drug Use Disorders Identification Test (DUDIT) is a brief, self-administered screening instrument designed to identify problematic or dependent drug use (excluding alcohol consumption) [6].

Comprising 11 items, the test evaluates both the frequency and impact of drug use over the past 12 months.

The first nine items are scored on a 5-point Likert scale (0 to 4), while the last two items are scored on a 3-point scale (0, 2, or 4), yielding a total score ranging from 0 to 44.

Higher scores indicate a higher likelihood of drug-related problems.

DUDIT has demonstrated high sensitivity (up to 90%) and acceptable specificity (78-88%) for detecting drug dependence based on DSM-IV (Diagnostic and Statistical Manual of Mental Disorders) and ICD-10 (International Classification of Diseases) criteria.

Furthermore, this questionnaire has been widely used to date, proving its usefulness across diverse populations, including general community samples, incarcerated individuals, and patients in outpatient or inpatient treatment.

Its psychometric characteristics and easy implementation are just two criteria that recommend it in both clinical practice and public health research.

To capture additional psychological and social aspects of the participants, beyond those assessed by the DUDIT scale, we designed a supplementary set of questions.

These additional questions are presented and analyzed in the Results section.

All statistical analyses were conducted using JASP software version 0.19.3.0.

The normality of numerical data distributions was assessed using the Shapiro-Wilk test. For group comparisons involving continuous variables, independent-samples *t*-tests were applied when normality assumptions were met.

For ordinal or non-normally distributed categorical data, the Mann-Whitney *U* test was employed.

A significance threshold of $p < 0.05$ was considered statistically significant throughout the analyses.

Results

a) Comparative Analysis of DUDIT Item Scores Between Adolescents and Adults

The DUDIT questionnaire has proven to be an important tool in the effective screening of drug abuse.

Its usefulness in the present study was given by the possibility of using it to identify differences between drug-induced problems experienced by adults on the one hand and adolescents on the other.

Adults reported significantly lower scores for polydrug use on the same occasion compared to adolescents (M=1.033 vs. M=2.367, p<.001), but significantly higher scores for being more frequently heavily influenced by drugs (M=2.867 vs. M=1.967, p=.003).

In terms of craving and control over drug use, adults exhibited stronger urges that they could not resist (M=3.000 vs. M=2.233, p=.041) and higher levels of guilt or bad conscience associated with drug use (M=3.200 vs. M=2.500, p=.033).

Additionally, from a social standpoint, adults were more likely to be confronted by others

(friends, family, or medical professionals) about their substance use (M=3.467 vs. M=2.600, p=.044).

However, adolescents were significantly more likely to report using drugs the morning after heavy use (M=1.167 vs. M=0.467, p=.029).

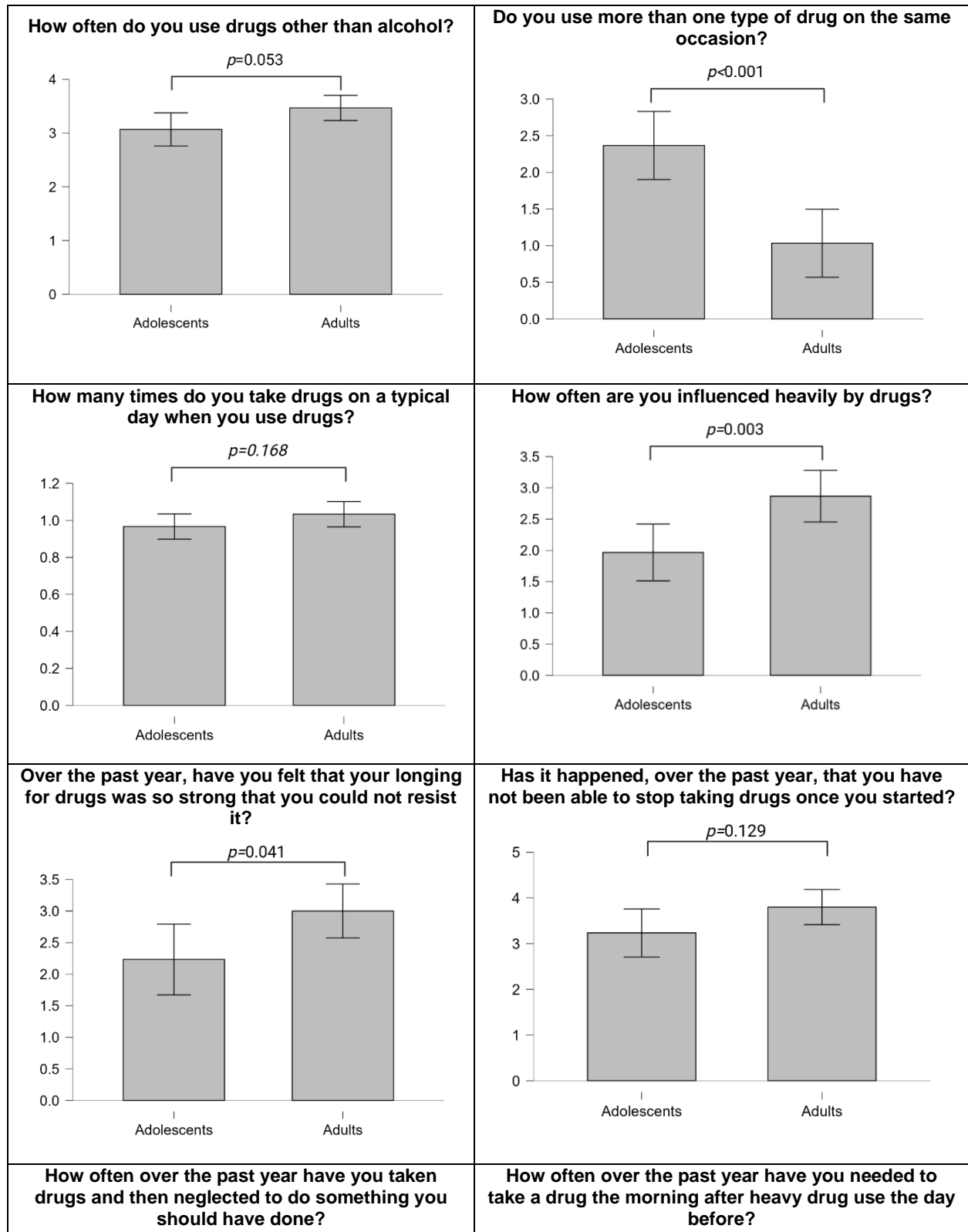
No statistically significant differences were found regarding the frequency of daily drug use (item 3), inability to stop using drugs once started (item 6), or neglect of responsibilities due to drug use (item 7), though mean values suggest slightly higher levels in the adult group.

While not statistically significant, adults also reported more frequent physical or mental harm caused by drug use (item 10), with a trend toward significance (p=0.070).

These results are presented in Table 1 and Figure 1.

Table 1. Comparative Analysis of DUDIT Item Scores Between Adolescents and Adults (Mann-Whitney U test and Student T test for total score of DUDIT). The scoring system for the DUDIT questionnaire is structured as follows: items 1 through 9 are rated on a scale from 0 to 4, where 0 indicates "Never", 1 means "Once a month or less", 2 represents "2-4 times per month", 3 corresponds to "2-3 times per week", and 4 signifies "4 times per week or more". An exception is item 3, which assesses daily frequency of use and is scored as follows: 0 for "0 times", 1 for "1-2 times", 2 for "3-4 times", 3 for "5-6 times", and 4 for "7 times or more". Items 10 and 11 follow a distinct scoring pattern: 0 denotes "No", 2 stands for "Yes, but not in the past year", and 4 indicates "Yes, during the past year".

| No | Group | Mean | SD | p | |
|-------------|--|-------------|--------|--------|--------|
| 1 | How often do you use drugs other than alcohol? | Adolescents | 3.067 | 0.828 | 0.054 |
| | Adults | 3.467 | 0.629 | | |
| 2 | Do you use more than one type of drug on the same occasion? | Adolescents | 2.367 | 1.245 | < .001 |
| | Adults | 1.033 | 1.245 | | |
| 3 | How many times do you take drugs on a typical day when you use drugs? | Adolescents | 0.967 | 0.183 | 0.168 |
| | Adults | 1.033 | 0.183 | | |
| 4 | How often are you influenced heavily by drugs? | Adolescents | 1.967 | 1.217 | 0.003 |
| | Adults | 2.867 | 1.106 | | |
| 5 | Over the past year, have you felt that your longing for drugs was so strong that you could not resist it? | Adolescents | 2.233 | 1.501 | 0.041 |
| | Adults | 3.000 | 1.145 | | |
| 6 | Has it happened, over the past year, that you have not been able to stop taking drugs once you started? | Adolescents | 3.233 | 1.406 | 0.129 |
| | Adults | 3.800 | 1.031 | | |
| 7 | How often over the past year have you taken drugs and then neglected to do something you should have done? | Adolescents | 2.333 | 1.398 | 0.241 |
| | Adults | 2.800 | 0.997 | | |
| 8 | How often over the past year have you needed to take a drug the morning after heavy drug use the day before? | Adolescents | 1.167 | 1.289 | 0.029 |
| | Adults | 0.467 | 0.937 | | |
| 9 | How often over the past year have you had guilt feelings or a bad conscience because you used drugs? | Adolescents | 2.500 | 1.358 | 0.033 |
| | Adults | 3.200 | 0.997 | | |
| 10 | Have you or anyone else been hurt (mentally or physically) because you used drugs? | Adolescents | 2.067 | 1.929 | 0.070 |
| | Adults | 2.933 | 1.721 | | |
| 11 | Has a relative or a friend, a doctor or a nurse, or anyone else, been worried about your drug use or said to you that you should stop using drugs? | Adolescents | 2.600 | 1.905 | 0.044 |
| | Adults | 3.467 | 1.383 | | |
| Total score | | Adolescents | 24.500 | 10.670 | 0.127 |
| | | Adults | 28.067 | 6.731 | |



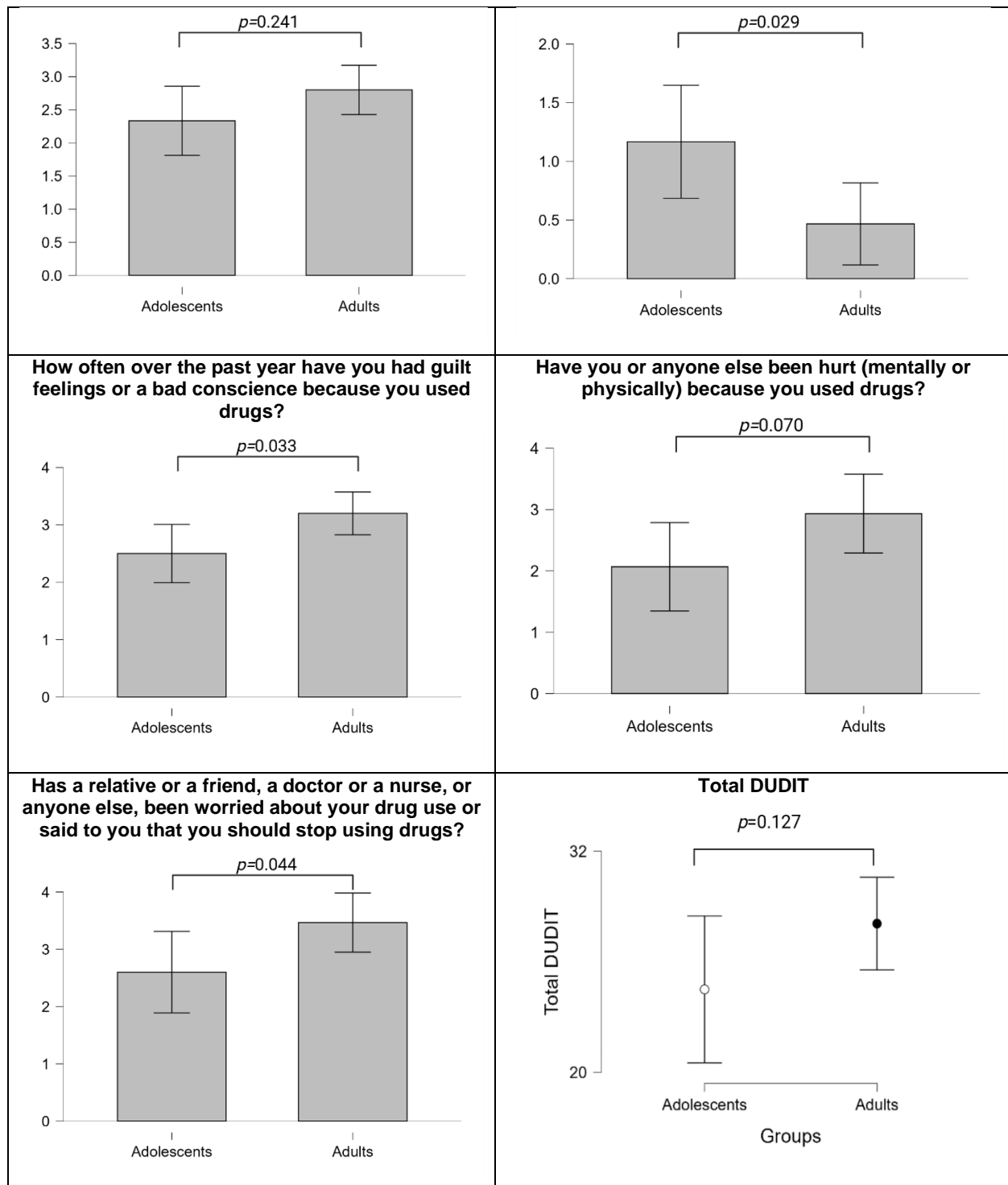


Figure 1. Comparative Analysis of DUDIT Item Scores Between Adolescents and Adults (Mann-Whitney U test and Student T test for total score of DUDIT).

The analysis of the total score obtained from the 11 items of the DUDIT scale reveals a quantitative difference between the two groups, although this difference is not statistically significant ($p=0.127$).

Adolescents recorded a mean score of 24.50 (SD=10.67), while adults scored higher, with a mean of 28.07 (SD=6.73) (Table 1, Figure 1).

According to the interpretation grid, both scores fall within the range indicating problematic use, possibly abuse.

However, the higher average in the adult group may reflect a greater severity of substance use behavior, as supported by elevated individual item scores, particularly those related to compulsive use, guilt, and concern expressed by others.

These findings suggest that although problematic use is present in both groups, adults show a higher level of substance-related impairment.

b) Sociodemographic and Psychosocial Factors Associated with Drug Use

The second category of questionnaire parameters (questions 12-21) (Table 2, Figure 2) characterizes problems associated with drug use in the psychological and social context, with significant differences between the groups.

Regarding question number 12, adults reported significantly higher rates of having received specialist treatment for substance use (mean=0.700) compared to adolescents (mean=0.133, $p < .001$).

Similarly, adults reported significantly more health-related consequences of drug use ($p=.005$), while relationship problems, financial strain, legal issues, or negative

academic/professional impact did not significantly differ between groups.

Regarding the motivation for initiating drug use (question 18), both groups showed relatively similar trends, with no statistically significant difference ($p=0.244$) and with interpersonal influences among the common reasons.

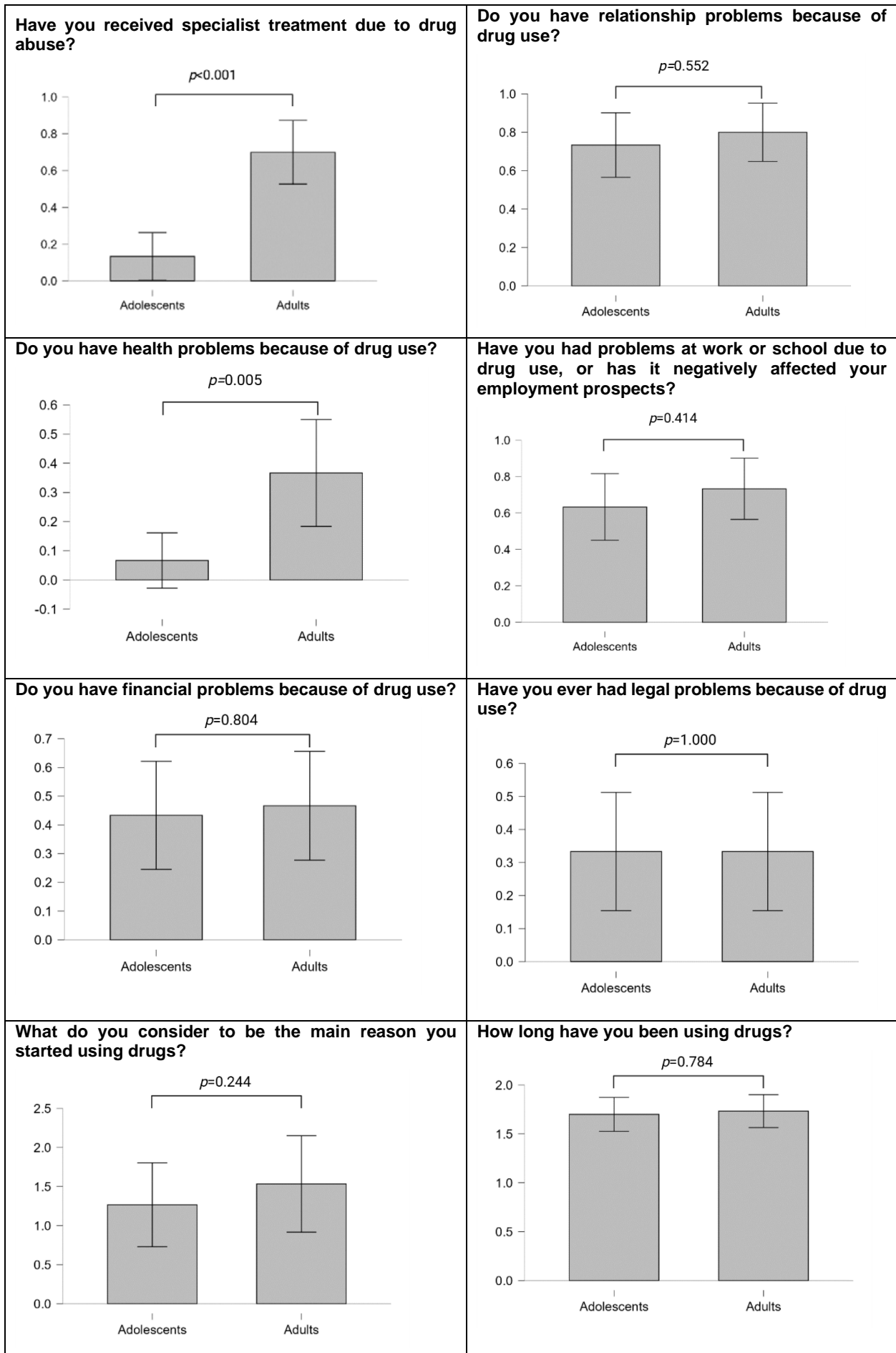
The answers to the next question, which takes into consideration the duration of drug use, were also comparable between the two groups, with both indicating extended periods of substance involvement.

Interestingly, while the question on depression treatment (question 20) did not yield a statistically significant difference, the higher mean in the adult group suggests more individuals had received or were receiving treatment for affective disorders.

Finally, both groups, adults even more so, reported an upbringing in non-traditional family structures, such as single-parent households or foster care (Figure 3) (question 21, $p=0.018$).

Table 2. Sociodemographic and Psychosocial Factors Associated with Drug Use Comparative Analysis Between Adolescents and Adults (Mann-Whitney U test). The scoring for questions 12-21 followed a simplified ordinal coding system for analysis. Questions 12 to 17 had binary response options (“No” and “Yes”), which were coded as 0 and 1, respectively. For question 18, which addressed the main reason for initiating drug use, the options were coded on a scale from 0 to 8, corresponding to: boyfriend/girlfriend (0), group of friends (1), family (2), media (3), curiosity (4), physical health condition (5), mental health condition (6), mental exhaustion/overload (7), and psychological stress (8). Question 19, concerning the duration of drug use, was also ordinally coded: at least 6 months (0), more than 6 months but less than a year (1), and more than 1 year (2). For question 20, related to depression treatment, responses were coded as: no (0), yes (1), and previously treated, but not currently (2). Finally, question 21-regarding family structure-was categorized as: two-parent family (0), single-parent family due to divorce/separation (1), single-parent family due to death of a parent (2), adoptive family (3), foster care (4), in the care of grandparents or other relatives (5), reconstructed family with stepparent (6), and other situation (7).

| No | | Group | Mean | SD | |
|----|---|-------------|-------|-------|--------|
| 12 | Have you received specialist treatment due to drug abuse? | Adolescents | 0.133 | 0.346 | < .001 |
| | | Adults | 0.700 | 0.466 | |
| 13 | Do you have relationship problems because of drug use? | Adolescents | 0.733 | 0.450 | 0.552 |
| | | Adults | 0.800 | 0.407 | |
| 14 | Do you have health problems because of drug use? | Adolescents | 0.067 | 0.254 | 0.005 |
| | | Adults | 0.367 | 0.490 | |
| 15 | Have you had problems at work or school due to drug use, or has it negatively affected your employment prospects? | Adolescents | 0.633 | 0.490 | 0.414 |
| | | Adults | 0.733 | 0.450 | |
| 16 | Do you have financial problems because of drug use? | Adolescents | 0.433 | 0.504 | 0.804 |
| | | Adults | 0.467 | 0.507 | |
| 17 | Have you ever had legal problems because of drug use? | Adolescents | 0.333 | 0.479 | 1.000 |
| | | Adults | 0.333 | 0.479 | |
| 18 | What do you consider to be the main reason you started using drugs? | Adolescents | 1.267 | 1.437 | 0.244 |
| | | Adults | 1.533 | 1.655 | |
| 19 | How long have you been using drugs? | Adolescents | 1.700 | 0.466 | 0.784 |
| | | Adults | 1.733 | 0.450 | |
| 20 | Are you currently taking medication for depression? | Adolescents | 1.233 | 1.382 | 0.313 |
| | | Adults | 2.200 | 1.919 | |
| 21 | What type of family do you belong to? | Adolescents | 1.233 | 1.382 | 0.018 |
| | | Adults | 2.200 | 1.919 | |



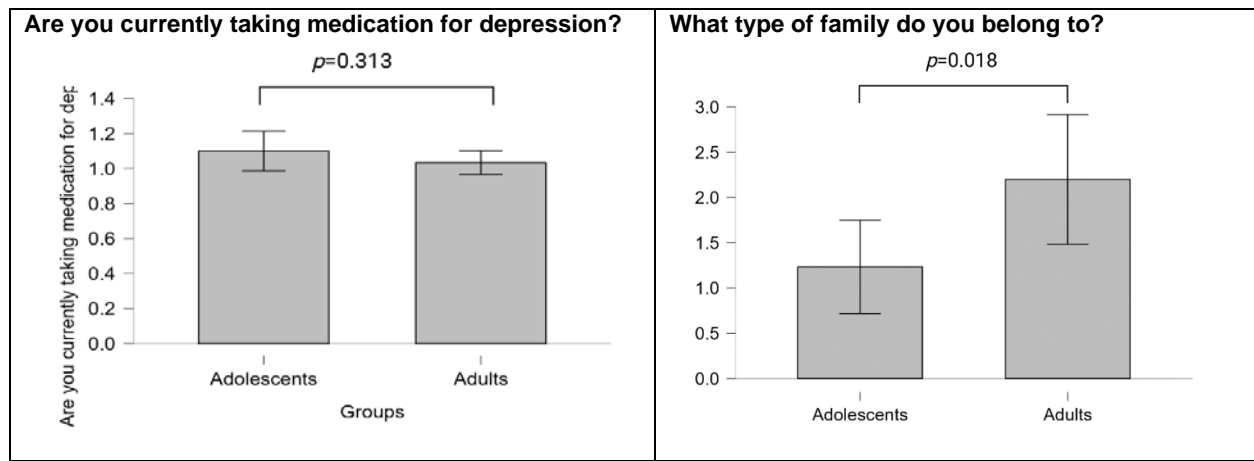


Figure 2. Sociodemographic and Psychosocial Factors Associated with Drug Use Comparative Analysis Between Adolescents and Adults (Mann-Whitney U test).

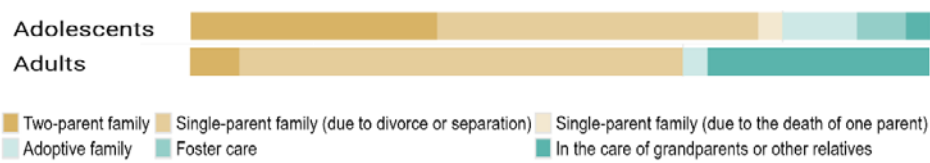


Figure 3. Type of family between the two groups.

Significant statistical differences were also observed when performing a comparative analysis of the main types of substances used between the two groups.

Among adolescents, cannabis stands out as the most frequently used substance (53%), followed by new psychoactive substances (43%) and, to a much lesser extent, amphetamines (3%) and cocaine (3%).

In contrast, adults tend to predominantly use prescription medications and new psychoactive substances (67%), along with cannabis (33%), but no reports of cocaine use were recorded (Figure 4).

These results suggest that adolescents are more inclined toward accessible recreational substances, while adults appear to develop a pattern of use related to self-medication or prolonged treatments, with potential for abuse.

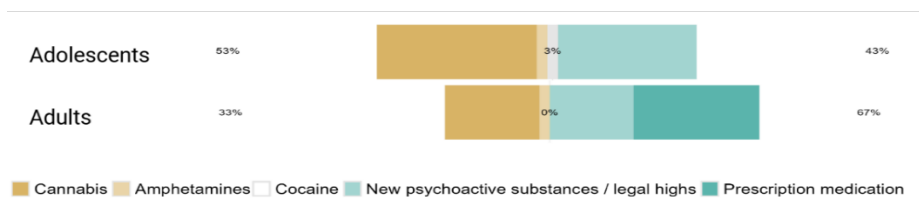


Figure 4. The main drug used between the two groups.

Another parameter taken into consideration was the relationship status of adult participants.

Not surprisingly, there is a predominance of short-term or absent romantic relationships.

More specifically, the data indicate that 13 individuals reported being single and not involved in a romantic relationship, while

9 individuals were in a relationship lasting less than six months.

Additionally, 5 participants were divorced, only 2 individuals were in a relationship longer than six months, and just one person (3%) was married (Figure 5).

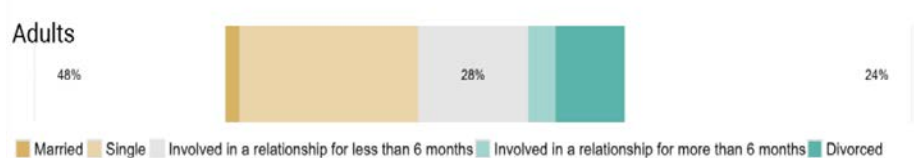


Figure 5. The relationship status of adult participants.

Discussions

The study of psychoactive substances such as cocaine, amphetamines, nicotine, alcohol, and cannabis showed that, although often used for their mood-altering effects, they carry a strong risk of developing into addiction in vulnerable individuals [7].

Moreover, the literature distinguishes between substance use and dependence as not all users become dependent, and furthermore, the earlier the exposure occurs-particularly during adolescence-the higher the likelihood of establishing problematic use patterns later in life [8].

This observation is central to our findings, which compare two distinct age groups with active drug use: adolescents (<18 years) and adults (>18 years).

Our data gathered from the DUDIT total scores aligns with the findings reported in the existing literature.

A higher mean score was found in the adult group ($M=28.07$, $SD=6.73$) than in adolescents ($M=24.50$, $SD=10.67$), which indicates a more entrenched and possibly chronic pattern of drug use, raising several interpretative questions:

Are these adults former adolescent users whose drug use escalated over time?

Alternatively, did they initiate consumption later, under different social and psychological pressures?

Does the earlier onset among adolescents predict a similar trajectory toward chronic use as they age?

These questions raise the need for more in-depth research into drug abuse through longitudinal studies, to establish the trajectory of substance use and thus to precisely identify key intervention strategies and key points.

Interestingly, adolescents reported more frequent poly-drug use on the same occasion ($M=2.37$ vs. $M=1.03$, $p<.001$), while adults showed significantly higher scores on items related to craving (Item 5), inability to stop (Item 6), and guilt (Item 9), reflecting more internalized consequences and compulsive patterns.

This suggests that although adolescents are already engaging in risky behaviors-particularly experimentation with multiple substances-adults are more likely to experience the deeper psychosocial burdens of long-term consumption.

The literature reviewed [7] questions whether early drug initiation directly alters brain development in a way that predisposes individuals to addiction, or whether it simply

reflects pre-existing vulnerabilities, genetic or environmental.

In our case, both mechanisms might be at play. Adolescents in our study may currently be in a “high-risk experimentation” phase, while adults may reflect on the long-term consequences of unresolved adolescent use.

From a neurodevelopmental perspective, adolescence represents a critical window of vulnerability for the initiation and progression of substance use.

Compared to both children and adults, adolescents are particularly sensitive to the reinforcing effects of psychoactive substances due to ongoing reorganization of the brain’s dopaminergic systems [9].

Specifically, during this period, dopamine levels decrease in striatal regions such as the nucleus accumbens-areas involved in reward processing-while inhibitory control mechanisms, mainly regulated by the prefrontal cortex, are not yet fully matured [10].

Therefore, the experimentation with drugs in adolescence may subconsciously attempt to compensate for this dopaminergic deficiency by engaging in risk-taking behaviors, such as external stimulation [11].

The underdevelopment of top-down cognitive control systems, such as those in the prefrontal cortex, leaves adolescents less equipped to evaluate long-term consequences, favoring instead immediate rewards-a hallmark of impulsive decision-making [12].

This theoretical model has been substantiated by a variety of experimental studies that demonstrate the delayed maturation of regulatory brain networks relative to those governing reward and emotion [13].

These findings help explain why adolescents are more likely to engage in early substance use and why early initiation often correlates with more severe patterns of use in adulthood.

In light of these mechanisms, the results of our study gain additional context.

Adult participants displayed higher DUDIT scores, indicating more chronic and compulsive patterns or even a potentially greater level of intoxication or intensity of use.

Adolescents, on the other hand, tend to engage more frequently in polydrug consumption. (Item 2) and early risky behavior, confirming the biological predisposition to impulsivity and experimentation during this stage of development.

A multitude of factors are considered to increase adolescents' susceptibility to substance

use. A variety of environmental, familial, and individual risk factors are added to the neurobiological vulnerabilities outlined above.

A high impact level is attributed to the positive family history of substance use, which significantly elevates the likelihood of developing similar behaviors [14].

Specific genes remain difficult to isolate due to the complex etiology of addiction [15], but there is hope with the new techniques [16].

Additional psychosocial and contextual risk factors include early exposure to traumatic life events, prenatal exposure to alcohol or drugs, lack of parental supervision or emotional monitoring, as well as sleep problems, peer pressure, and involvement in romantic relationships during adolescence [9].

Notably, comorbid psychiatric conditions, such as ADHD, depression, and conduct disorder symptoms, are strongly associated with an increased risk of early and persistent substance use [17].

Our findings provide important insights within the vast field of drug abuse, successfully differentiating between the drug use patterns of adolescents and adults.

We were able to highlight that adults often present more chronic use patterns with social and health consequences.

Often cited in the literature are the disorders that emphasize factors such as unemployment, unstable housing, bereavement, psychiatric comorbidity, and financial stress, which are seen as key drivers of sustained drug misuse [18-20].

Social determinants, such as a lack of religious affiliation, marital separation, and age over 25, also compound the risk [18,19].

The data show that most adults in our sample were not engaged in a stable romantic relationship, which may reflect underlying relational instability and limited emotional support networks.

Hence, although adolescents show early warning signs-such as frequent and varied substance use-the full manifestation of addiction, with associated severity, emerges more prominently in adulthood.

In our study, the adult group reported significantly higher rates of having received specialized treatment for drug use compared to the adolescent group ($M=0.700$, $SD=0.466$ vs. $M=0.133$, $SD=0.346$; $p < .001$).

Additionally, health problems caused by drug use were more frequently noted among adults ($M=0.367$, $SD=0.490$) than adolescents ($M=0.067$, $SD=0.254$), a difference that was also statistically significant ($p=0.005$).

That is to say that substance use in adulthood may be not only prolonged but also severe,

potentially leading to greater physical health consequences and an increased need for intervention.

Clinically, prolonged or heavy drug use is linked to serious medical conditions, particularly within the cardiovascular domain.

For instance, chronic cocaine use has been consistently associated with myocardial infarction [21], cardiac arrhythmias (including sudden cardiac death), and both ischemic and hemorrhagic strokes, primarily due to vasospasm, thrombus formation, hypertension, and endothelial toxicity [22].

Additionally, synthetic cannabinoids have been implicated in acute coronary syndrome, life-threatening arrhythmias, and Takotsubo-like cardiomyopathy, even in otherwise healthy individuals [23].

Cannabis use has also been linked to increased risks of myocardial infarction and stroke, with chronic or heavy use doubling cardiovascular mortality risk [24].

A growing body of literature distinguishes between two parental control dimensions-behavioral control and psychological control-and their respective influences on adolescent substance use [25].

Behavioral control, which involves consistent discipline, monitoring, and setting limits, is generally considered a protective factor against risky behaviors [26].

In contrast, psychological control-manifested through guilt induction, emotional manipulation, or shaming-can undermine adolescent autonomy and is associated with increased substance use.

A small proportion of the adolescents in our study come from a two-parent family structure, with an even smaller percentage in the case of adults.

However, the presence of a biparental family does not necessarily indicate the existence of functional or supportive family dynamics; what plays a more important role is the quality of intra-family relationships.

Moreover, as time progresses, the risk of family breakdown increases, potentially exposing individuals to additional psychosocial stressors that may contribute to the initiation or perpetuation of substance use.

Empirical evidence shows that the degree of behavioral control influences the likelihood of a child using substances like alcohol, tobacco, or illicit drugs [27].

When psychological control dominates the parent-child dynamic, adolescents tend to report higher levels of emotional distress, maladaptive coping, and subsequent engagement in substance use [28].

The existing longitudinal studies show that impaired parent-child relationships predict greater substance use over time [25,29].

Our findings show cannabis as being the most commonly used substance among adolescents, reported by 53% of the group, followed by new psychoactive substances (43%), while cocaine and amphetamines were rarely mentioned (3% each).

Alternatively, adults preferred prescription medications and new psychoactive substances (67%), with no reported use of cocaine or amphetamines.

These findings are in line with data from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), which indicates that cannabis remains the most widely used illicit drug across Europe [2].

Importantly, although highly harmful substances such as crack cocaine, methamphetamine, and heroin were not frequently reported in our study, this should not imply a lower risk profile.

As highlighted in the literature, including a comprehensive review published in *Frontiers in Psychiatry*, the overall harm of a drug depends not only on its classification but also on dose, frequency, and social context of use [1].

Even substances perceived as "mild," such as cannabis or prescription medications, can have significant consequences when used in high doses or chronically, particularly paired with other psychosocial vulnerabilities.

While the study clearly differentiates between the two patterns of consumption, several limitations should be taken into consideration.

A follow-up study should be conducted with a larger number of individuals, including a control group from the general population, in order to improve the statistical power.

Conclusions

In conclusion, our findings suggest that while adolescents show risky patterns of consumption (e.g., poly-substance use), adults bear the burden of chronic use, loss of control, and social consequences.

Also, the family represents the fundamental social unit that shapes early behavioral patterns, emotional regulation, and risk-taking tendencies, including susceptibility to substance use.

Determining whether today's adolescent risk-takers will evolve into tomorrow's chronic users or whether targeted interventions can disrupt this potential trajectory requires further longitudinal research.

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Author Contributions

Conceptualization, R.D. and C.E.N.; Methodology, R.D., M.D., and I.R.T.; Investigation, R.D, M.D, I.R.T., and C.E.N.; Data analysis, R.D. and C.E.N.; Manuscript writing and initial draft preparation, R.D. and C.E.N.; Manuscript review and editing, R.D., A.M.B., and I.R.T; Supervision, R.D., A.M.B., and C.E.N.

All authors read and approved the final manuscript.

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Conflicts of interest

The authors declare no competing interests

Institutional Review Board

The study was conducted according to the guidelines of the Declaration of Helsinki;

This study was non-interventional and based exclusively on self-reported questionnaire data.

Participation was voluntary, informed consent was obtained, and all data were collected anonymously.

No clinical interventions were involved.

Consent Statement

All human subjects involved in this study provided a written informed consent prior to participation, including consent to publish their anonymized data.

Data availability

All data presented in the manuscript are available from the authors upon request.

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