

Research Article

Silent Echoes: An In-Depth Qualitative Analysis of Benzodiazepine Misuse Patterns, Motivations, and Consequences Among Italian Young Adults

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Background

In recent years, the misuse of benzodiazepines (BZDs) has significantly increased, emerging as a critical global health and social issue. This trend is largely driven by the increased accessibility of BZDs through online platforms and the profound impact of the COVID-19 pandemic.

Objective

This study aims to provide a comprehensive overview of BZD misuse trends among Italian youths, exploring factors, such as internet influence, perceived safety, pandemic effects, and potential psychological interventions through a qualitative analysis.

Methods

The study employed a non-probabilistic sampling method, recruiting 28 participants aged 18–35 with a history of BZD misuse. Data were gathered through semi-structured interviews lasting 45–60 min, focusing on experiences and motivations related to BZD use, including self-medication, recreational use, and the impact of the COVID-19 pandemic.

Results

Thematic analysis revealed that 67.9% of participants used BZDs without a prescription, primarily for anxiety relief. The COVID-19 pandemic significantly influenced usage patterns, with 71.4% reporting increased consumption during lockdowns. Although most participants recognized the need for psychological support, few actively sought professional help. Online accessibility emerged as a key factor in misuse behavior, even though 85.7% of participants were aware of the associated risks (e.g., dependence, cognitive impairment, and overdose). The main motivations for BZD misuse were self-medication for untreated psychological distress and, to a lesser extent, recreational purposes, such as enhancing social interaction or emotional detachment.

Conclusion

This research highlights the complex phenomenon of BZD misuse among youths, emphasizing the interplay between internet accessibility, pandemic-related stressors, and psychological needs. Despite the limited number of participants, the findings suggest the need for accessible mental health support and targeted education on the risks associated with BZDs.

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1. INTRODUCTION

Benzodiazepines (BZDs) constitute a class of prescription medications that act on the gamma-aminobutyric acid-A receptor, producing anxiolytic, sedative, anticonvulsant, and muscle-relaxing effects. These drugs, which include commonly prescribed varieties, are among the most frequently prescribed psychiatric medications.¹ In addition, BZDs rank as the third most commonly misused prescription or illicit substances among both adults and adolescents.² BZD abuse is exacerbated by the ease of online access and the impact of the COVID-19 pandemic on substance use patterns.³

In Italy, the misuse of BZDs is also a significant concern. The Italian National Institute of Health has reported that BZD consumption is widespread, with notable regional variations. For example, the prevalence of BZD use is higher in Northern Italy compared to Southern regions, reflecting broader patterns of prescription practices and consumption disparities within the country.⁴ Furthermore, data from the European Monitoring Centre for Drugs and Drug Addiction indicate that BZDs are among the most commonly abused substances in Italy, particularly among young adults.⁵

BZD abuse poses a heightened risk of adverse effects, particularly with prolonged, high-dose usage, fostering dependency and addiction mechanisms. Discontinuation of BZDs can lead to withdrawal reactions, especially when cessation is abrupt. BZD dependence and withdrawal symptoms can manifest after only 4–6 weeks of use and affect 15–30% of individuals with regular intake.⁶ Rebound symptoms, such as insomnia and anxiety, may occur after discontinuation of BZDs even after using them for only 2 weeks.⁷ Studies indicate that BZD misuse often occurs alongside the abuse of other substances, particularly opioids and alcohol, which can amplify their harmful effects.⁸

The allure for young individual's lies in their relatively low cost compared to traditional illicit drugs and their widespread accessibility. This study employs qualitative analysis methods to examine the procedures and outcomes of BZD misuse, with a particular focus on the emerging trend of online sales. By understanding these dynamics, the present study aims to provide insights that could inform targeted interventions and policies to address this growing public health concern.⁹

1.1. BZD MISUSE AND PSYCHOSOCIAL IMPACT

The risk of BZD misuse is heightened by their legal status and easy availability, both online and in conventional drugstores. Online markets offer substances with similar pharmacological profiles; however, their toxicological and clinical ramifications remain largely unknown, thereby complicating the treatment of intoxications.¹⁰ Drug abuse can lead to altered cognitive function, impaired judgment, and changes in mood and emotions.¹¹ Despite the worsening public health indicators associated with BZD use, this problem remains largely overlooked by policymakers and the scientific community.¹² Therefore, interventions are needed to reduce BZD prescription rates and, consequently, the public health burden associated with their use.

The transition from adolescence to adulthood has evolved in recent years, influenced by economic, social, and psychological factors. This developmental phase is marked by vulnerability to addiction and risky behaviors. Notably, the modern transition to adulthood is prolonged, as reflected in delayed milestones, such as stable employment, marriage,

and parenthood.¹³ Contributing factors include extended education, youth unemployment, and economic hardship. Adolescents, susceptible to the effects of substance use, face heightened risks of enduring mental health repercussions. BZDs are generally consumed in combination with other substances, a pattern commonly observed among opioid users, to enhance their euphoric effects, alleviate withdrawal symptoms, or counteract psychostimulant-induced anger surges, and to synergistically enhance the effect of alcohol.⁸ Mental health conditions, such as anxiety and depression, also play a significant role, as these disorders are often treated with BZDs, leading to potential misuse.¹⁴

1.2. CULTURAL AND MEDIA INFLUENCES ON BZD MISUSE

The internet plays a pivotal role in reshaping substance abuse landscapes—facilitating the marketing, sales, and distribution of psychoactive substances, including prescription drugs.¹⁵ Music is a central element in the daily lives of young people, serving as a medium through which they seek identity and expression. Contemporary trends reveal that prominent artists in the trap genre often emphasize themes of pain, transgression, and street life, and notably, frequently promote a “hymn to drugs.” Psychotropic substances, particularly BZDs and purple drank—a cocktail made by mixing codeine-based cough syrup with sugary beverages—are often referenced in their lyrics.¹⁶ There has been a decline in heroin and cocaine use, which are derived from raw materials that became difficult to transport during periods of restricted movement of people and goods. Similarly, hashish consumption also decreased for the same reason. In contrast, there has been a significant surge in the use of new synthetic opioids and BZDs.⁵

2. MATERIALS AND METHODS

2.1. ETHICAL CONSIDERATIONS

The qualitative study was approved by the ethics committee of the Department of Educational Sciences, Section of Psychology at the University of Catania. All participants provided written informed consent before their participation in the study. To ensure data protection and participant confidentiality, all data were collected and stored in compliance with the European Union's General Data Protection Regulation. Personally identifiable information was either pseudonymized or encrypted, and access to the data was restricted to authorized researchers involved in the study.

2.2. PURPOSE OF THE STUDY

This study aims to investigate the phenomenon of BZD misuse among Italian young adults by exploring the motivations, perceptions, and personal experiences of individuals directly involved in this behavior. The primary objective is to analyze participants' narratives to gain an in-depth understanding of the psychosocial dynamics underlying BZD misuse, as described from the unique perspectives of those who engage in it. By adopting a qualitative, interpretative approach, this research seeks to capture the subjective and reflexive dimensions of participants' experiences, exploring how BZD misuse influences their emotional well-being, coping strategies, social relationships, and daily routines.

Particular attention is given to contextual factors, such as the impact of the COVID-19 pandemic, the role of online accessibility, cultural influences, and the perceived safety of these substances due to their legal status. Positioned within the broader framework of substance misuse and mental health research, this study aims to expand existing knowledge about emerging patterns of prescription drug misuse, offering insights that may inform targeted prevention strategies, educational interventions, and mental health support services for young adults.

2.3. METHODOLOGY

This qualitative study was conducted between April and November 2023 to explore participants' emotions, opinions, and lived experiences related to BZD misuse. The research paradigm is interpretive and is not intended to produce generalizable results; rather, each statement by the participant reflects their own perception and interpretation of reality. Each experience is regarded as unique, with its own meaning. Based on the research objectives, we developed a set of questions that were asked during semi-structured interviews, each lasting approximately 45–60 min (Table 1).

2.4. PARTICIPANTS

Table 2 presents the distinguishing characteristics of the participants included in the study, whose names are pseudonymized to guarantee anonymity and protect their privacy. A total of 28 participants were interviewed. Table 2 shows the gender distribution of the sample, with a slight predominance of male participants. In addition, the table presents the average age of participants and their geographical distribution by region of residence, with most residing in Sicily. This information provides an overview of the key characteristics of the sample, facilitating a better understanding of the context in which the data were collected.

Table 1. Semi-structured interview questions

Research objective	Interview questions
First objective	Why do you take BZDs out of medical supervision?
Second objective	Where do you buy BZDs? Are you familiar with the illegal online market for the sale of BZDs? What is your opinion of the online purchasing method? Have you found information on the web that convinced or encouraged your misuse behavior? Do you “follow” celebrities on social media who display BZD consumption? How does music influence your decision to misuse BZDs?
Third objective	Does the perceived safety of BZD, due to their legal status, encourage the development of misuse behavior?
Fourth objective	How has the pandemic affected your BZD consumption?
Fifth objective	What type of psychological support might have had a positive impact on your substance misuse?

Abbreviation: BZD: Benzodiazepine

2.5. PROCEDURES

To analyze the data collected from the interviews, thematic analysis was employed, following the method developed by Braun and Clarke¹⁷ (Table 3). Thematic analysis is a widely used approach in qualitative research that enables the identification, analysis, and reporting of patterns or themes within the data. This method offers a flexible and accessible framework for systematically examining qualitative data.

2.6. DATA ANALYSIS

We sought to maximize participant inclusion in this study, but encountered significant challenges in developing an effective recruitment strategy. Initial attempts to engage various facilities for sample identification were unsuccessful, as these institutions claimed the phenomenon under investigation was not prevalent. However, this assertion was later contradicted by the successful recruitment and engagement of the target sample. The findings suggest that young individuals are generally reluctant to seek assistance through formal channels. Consequently, we adopted a more youth-oriented approach by utilizing social media platforms to communicate in a manner aligned with the target demographic. This strategy proved effective, as social network postings successfully attracted participants. A notable finding was the higher participation rate among individuals from Rome, suggesting a potentially greater prevalence of the phenomenon in this urban center. This geographic variation in participation rates presents a valuable avenue for future research into potential regional differences in the prevalence and characteristics of BZD misuse among young adults.

3. RESULTS

3.1. SELF-MEDICATION AND RECREATIONAL USE OF BZD

The thematic analysis revealed several key motivations for BZD misuse among young adults, primarily related to the perceived effects of these substances. Participant responses, presented below using pseudonymized names, indicated a prevalent trend of using BZDs for self-medication or recreational purposes, often with an inadequate understanding of the associated risks. A significant majority of participants ($n = 19$, 67.9%) reported using BZDs to alleviate anxiety and cope with stressful or challenging situations. Many respondents consistently expressed a desire for escapism, viewing BZDs as a primary means of achieving this state.

In contrast, younger participants more frequently reported using BZDs for recreational purposes, particularly in combination with alcohol. This pattern of polydrug use was associated with cognitive impairment and dissociative effects. The legal status of BZDs appeared to be a

Table 2. Participants' characteristics

Characteristics ($n=28$)	n (%)	Standard deviation
Female	47	
Male	53	
Age (average)	22.25	3.94
Resident of Northern Italy	10.71	
Resident of Central Italy	53.57	
Resident of Southern Italy	35.72	

Table 3. Themes and codes

Research questions	Themes	Codes
What are the motivations that drive young adults to misuse BZDs?	(i) Self-medication and emotional regulation. (ii) Recreational use and effect enhancement.	(i) Anxiety and stress management. (ii) Low emotional tolerance. (iii) Difficulty expressing emotional distress. (iv) Enhancement of alcohol's effects. (v) Seeking emotional dissociation. (vi) Boosting self-esteem. (vii) Recreational purposes.
How does the internet influence the misuse of BZDs?	(i) Online accessibility and availability. (ii) Information exposure and cultural influences.	(i) Ease of access through online platforms. (ii) Anonymity in online transactions. (iii) Substance-related information dissemination through social media. (iv) Influence of music culture. (v) Increased knowledge about substances. (vi) Distrust in online purchases.
Does the legal status of BZDs affect perceptions of safety and misuse behavior?	(i) Risk perception and normalization of use. (ii) Awareness and denial of addiction.	(i) Perceived safety/unsafety of BZD use. (ii) Awareness of addiction. (iii) Drug use denial.
How has the COVID-19 pandemic impacted BZD consumption?	(i) Influence/no influence of pandemic.	(i) Normalization of BZD use due to its legal status. (ii) Underestimation of long-term addiction risks. (iii) Acceptance or denial of drug addiction. (iv) Awareness of the dangers associated with misuse.
What forms of psychological support could positively influence the reduction of substance abuse?	(i) Psychological support.	(i) Effectiveness of psychotherapy. (ii) Importance of family and social support. (iii) Addiction risk education. (iv) Strategies for recognizing psychological distress.

Abbreviation: BZD: Benzodiazepine

contributing factor in their selection over illicit substances, as users perceived a reduced risk of legal repercussions. These findings highlight the complex interplay between self-medication, recreational use, and risk perception in BZD misuse among young adults. They underscore the need for targeted interventions that address both the underlying psychological drivers of misuse and the misconceptions surrounding the safety and legality of non-prescribed BZD use.

Participant responses are presented below using pseudonymized names:

- (i) Self-medication: "Because they help me deal with moments of high anxiety and panic." (Giulia, 25 years old, oral communication, May 2023).
- (ii) Recreational use: "I took BZDs recreationally to amplify the effects of alcohol." (Paolo, 20 years old, oral communication, July 2023).

3.2. PERCEIVED INFLUENCE OF THE INTERNET ON BZD USE

The analysis of the responses revealed that the influence of the internet is predominantly negative, with online accessibility promoting misuse and the spread of misinformation. However, some individuals reported that the internet also helped raise awareness of the risks associated with BZD misuse. One of the most significant influences of the internet is the facilitation of online drug sales—11 out of 28 participants reported purchasing BZDs illegally online, which provided them with anonymity and increased availability. The remaining participants (17/28) reported continuing to obtain anxiolytics from pharmacies using outdated prescriptions or from drugstores. Many participants reported encountering a large amount of online content that encourages BZD use, which negatively influences the development of substance dependence. Nevertheless, some admitted that

they are cautious about information found on the internet and the illegal market for anti-anxiety medications. Conversely, several participants noted that the internet has also helped them recognize the risks of continued misuse, alerting them to the potential for severe addiction. In addition, it was noted that music, particularly within the trap genre, contributes to the normalization of BZD consumption, especially in combination with alcohol, as a perceived means of escaping reality.

Participant responses are presented below using pseudonymized names:

- (i) Positive influence of the web: "I found information on the web about the negative effects of the substance and stopped taking them." (Cristina, 27 years old, oral communication, June 2023).
- (ii) Negative influence of the web: "Very nice, convenient, functional, and safer (anonymous) online purchase." (Grazia, 19 years old, oral communication, May 2023); "Getting high on benzo makes you feel very trap, so cool." (Ugo, 18 years old, oral communication, September 2023).

3.3. PERCEPTIONS OF SAFE AND UNSAFE USE OF BZD

The perception of BZDs as safe due to their legal status appears to encourage misuse among some individuals, even though many acknowledge the risk of dependence. Nine out of 28 participants considered the improper use of BZDs to be unsafe. Conversely, 10 participants believed it was safe to misuse these substances, while the remaining nine did not respond to the question. Participant responses are presented below using pseudonymized names:

- (i) Perception of BZDs as safe: "In my opinion, they are safe. In the end, they are even prescribed by the doctor." (Pamela, 26 years old, oral communication, June 2023).

- (ii) Perception of BZDs as unsafe: “I strongly advise against the use of anxiolytics, even for medical use, because I think it is a harmful substance that also harms the individual in terms of socialization.” (Giovanni, 28 years old, oral communication, June 2023).

The analysis also revealed that 25 participants reported being aware of their addiction, although only six admitted to feeling “addicted.”

- (i) Acknowledgment of drug addiction: “Who is not in 2023? We are all junkies of something.” (Pietro, 22 years old, oral communication, May 2023).
- (ii) Rejection of addiction label: “Absolutely, I am not a junkie.” (Giovanni, 28 years old, oral communication, June 2023).

3.4. INFLUENCE OF THE COVID-19 PANDEMIC ON THE USE OF BZDS

Analysis of participant responses revealed a substantial increase in BZD consumption during the COVID-19 pandemic. A significant majority of participants ($n = 20$, 71.4%) reported elevated use, while the remaining 28.6% ($n = 8$) indicated no BZD use during this period. Pandemic-induced stress and anxiety, exacerbated by social isolation, appeared to be the primary drivers of increased BZD consumption. Participants frequently noted the use of these substances as a coping mechanism to manage heightened psychological distress and feelings of loneliness. Many reported using BZDs to achieve prolonged periods of rest and to disconnect from a challenging external environment. Some respondents also noted an increase in BZD use due to the reduced availability of illicit substances, highlighting the relative accessibility of BZDs during the lockdown.

These findings underscore the potential for substance substitution in times of restricted access to preferred drugs. Notably, while participants initially reported positive effects from BZD use, many acknowledged a subsequent deterioration of their symptoms, including worsening anxiety and panic attacks. This led to a pattern of dose escalation and polydrug use involving multiple anxiolytic medications, as individuals attempted to recapture the initial relief experienced. These findings highlight the complex relationship between external stressors, such as those induced by the pandemic, and patterns of BZD misuse. They emphasize the need for enhanced mental health support during crisis periods and underscore the importance of monitoring prescription drug use, particularly in vulnerable populations, during times of heightened stress.

Participant responses are presented below using pseudonymized names:

- (i) Use influenced by lockdown: “Yes, I think I would have died without it. In difficult moments, I would take En and fall asleep. It only worked at the beginning, then I would take healthy bottles.” (Sara, 26 years old, oral communication, October 2023).
- (ii) Use not influenced by lockdown: “I did not take BZDs during the lockdown.” (Simone, 22 years old, oral communication, May 2023).

3.5. PSYCHOLOGICAL SUPPORT

While some participants recognized the need for psychological support to address BZD abuse, others showed resistance or lacked awareness of the severity of the issue. Five out of 28 participants indicated that they did not want any

form of psychological support, whereas the majority (20/28) reported needing both psychological and environmental support. The remaining three participants believed such support was unnecessary. Participants who advocated for psychological support viewed it as essential for identifying the root causes of their distress and managing their medication under medical supervision, if necessary. In addition, many expressed a need for environmental support, particularly from family and social networks, emphasizing the importance of being heard, an aspect often neglected both within families and by institutions. Despite the majority of participants acknowledging the need for psychological support, only a small proportion (4/20) was currently undergoing psychological therapy.

- (i) Psychological/environmental support: “A person to help you focus on the basis of the problem rather than sedate it, because I think anxiety is a symptom, not a thing to be switched off.” (Francesca, 22 years old, oral communication, November 2023).
- (ii) No support: “The help I was given made no significant difference to me.” (Paolo, 22 years old, oral communication, July 2023).

4. DISCUSSION

This study was motivated by the multifaceted challenges surrounding BZD misuse. There is an urgent need to examine this phenomenon from multiple perspectives and address the accessibility of these substances. BZDs, while clinically important and effective, require careful monitoring to prevent tolerance, dependence, and abuse.¹⁸ In clinical practice, it is crucial to balance the benefits of BZDs against their risks, integrating them into comprehensive treatment plans that include non-pharmacological interventions whenever feasible.¹⁹

Our qualitative analysis aimed to elucidate young adults’ perceptions and motivations regarding BZD misuse. We sought to understand their awareness of side effects, particularly those arising from co-use with alcohol or other substances. Given the pervasive role of technology in contemporary society, we also explored its influence on BZD abuse behaviors.²⁰ While the physical symptoms of BZD misuse are well documented, this study highlights the importance of investigating behavioral consequences, such as increased risk-taking and cognitive impairment.

The prevalence of American studies on this topic contrasts with the limited research conducted in Italy, underscoring the relevance of our qualitative findings.²¹ The present study, involving 28 participants aged 18–35, revealed similarities in motivations for BZD misuse across different cultural backgrounds and age groups. Most participants reported using BZDs without a prescription to alleviate anxiety and panic attacks. Notably, while the majority expressed a need for psychological support, few actively sought help, indicating significant barriers to accessing mental health services.²² These findings highlight the need for further research to develop effective strategies for detecting and addressing BZD misuse among young adults.

In addition, this study reflects on broader societal challenges, such as constant stimulation and increasing anxiety levels, that may contribute to substance abuse.²² Previous research on BZD misuse has focused on prevalence, addiction, comorbidity with other substances, and withdrawal symptoms. A 2020 study by Andersson²³ described cases of acute poisoning related to BZD misuse

in Oslo, highlighting the tendency to combine BZDs with other substances to amplify effects or alleviate withdrawal symptoms. A 2015 qualitative study by Liebrezn²⁴ identified four motivational categories for BZD misuse: Coping with psychological distress or mental disorders; managing symptoms of somatic illnesses; alleviating substance-related disorders; and recreational use. These findings align with the results of the present study, suggesting that motivations for BZD misuse may transcend cultural and demographic boundaries.

4.1. LIMITATION

While this study aimed to provide a comprehensive description of BZD misuse, it is important to acknowledge its limitations. The qualitative nature of the study inherently involves subjectivity in responses, which, while appropriate to our research objectives, may impact validity. The small sample size limits both the generalizability and replicability of the findings. The lack of similar studies in the Italian context, especially when compared to the United States, underscores the need for additional research with a larger sample size. Despite these limitations, this research provides valuable insights and a foundation for future investigations into BZD misuse among young adults. This study underscores concerns about the prolonged use of BZDs and the psychosocial pressures that drive individuals to seek relief through potentially harmful means. Future research should build upon these findings to develop targeted interventions and policies to address BZD misuse while preserving their efficacy in appropriate clinical contexts.

5. CONCLUSION

BZD misuse represents a complex interplay of psychological, social, and cultural factors, thereby necessitating a comprehensive, multidimensional approach for effective mitigation. Previous research indicates a prevalent trend of BZD misuse—often in combination with other substances—to enhance effects or mitigate withdrawal symptoms. Motivations for misuse include managing anxiety, panic, or psychological distress, as well as recreational purposes.²⁴ The findings of the present study revealed that 67.85% (19/28) of participants use BZDs without prescription to alleviate anxiety and panic attacks, particularly among older respondents. Despite 71.42% (20/28) acknowledging the need for psychological and environmental support, few actively seek help, suggesting persistent barriers to accessing support services. This phenomenon reflects broader societal challenges, including heightened anxiety, reduced social stimulation, and the normalization of substance use in popular culture. The accessibility and prolonged use of BZDs, despite their intended short-term application, exacerbate these issues. Further research is warranted to develop effective strategies for early detection and intervention in

BZD misuse among young adults. This includes targeted therapeutic approaches and prevention measures that address contemporary social and cultural factors. Online data, particularly from social media, may support the identification of emerging substance use patterns and inform toxicological testing and assay development for newly identified substances of concern.²⁵

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CONFLICT OF INTEREST

The authors declare that they have no any conflicts of interest.

AUTHOR CONTRIBUTIONS

Conceptualization: Graziella Chiara Prezzavento, Pasquale Caponnetto

Data curation: All authors

Investigation: All authors

Methodology: All authors

Writing – original draft: All authors

Writing – review & editing: All authors

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The qualitative study was approved by the ethics committee of the Department of Educational Sciences, Section of Psychology at the University of Catania (759 Approval ID). All participants provided written informed consent before their participation in the study. To ensure data protection and participant confidentiality, all data were collected and stored in compliance with the European Union's General Data Protection Regulation.

CONSENT FOR PUBLICATION

All participants provided informed consent for their anonymized data to be used in publications derived from this research.

DATA AVAILABILITY STATEMENT

All data supporting the findings of this study are available from the corresponding author upon reasonable request.

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