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Identifying Factors Influencing the Tendency Toward Cannabis Use Among Adolescents and Young Adults Based on Grounded Theory

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ABSTRACT

This study aimed to identify the factors influencing the tendency toward cannabis use among adolescents and young adults based on grounded theory. The present study employed a qualitative research design using a grounded theory approach. The target population consisted of all adolescents and young adults who used cannabis in Hashtgerd during 2025–2026. The sampling process initially began using purposive sampling and subsequently continued through snowball sampling. The criterion for determining the sample size was theoretical saturation. Following the emergence of conceptual categories after 17 interviews, theoretical saturation was achieved. Data were collected using semi-structured interviews. Data analysis was based on the method proposed by Corbin and Strauss (2014). The findings indicated that the tendency toward cannabis use among adolescents and young adults, as the core phenomenon, is shaped by a complex network of causal factors, overlooked strategies, and intervening contexts. The causal conditions, including individual and interpersonal factors, function as the primary drivers that create the motivation and conditions conducive to cannabis use. The intervening context, comprising environmental-economic and cultural-normative factors, strengthens or moderates this tendency and, as a set of contextual conditions, regulates the magnitude of the effects of the causal conditions. Meanwhile, overlooked strategies, such as the lack of preventive educational programs or misinformation regarding the effects of cannabis, as well as weaknesses in policymaking and the enforcement of deterrent laws, restrict opportunities for effective intervention and contribute to the persistence or intensification of the tendency toward cannabis use. Based on the findings, the design and implementation of a comprehensive multilevel intervention program in schools and local communities through collaboration among the Ministry of Education, the Ministry of Health, and nongovernmental organizations are recommended.

Keywords: *tendency toward substance use, cannabis, adolescents, young adults, grounded theory.*

1. Introduction

Cannabis is among the most widely used psychoactive substances among adolescents and young adults, and its increasing accessibility, changing legal status, and shifting social perceptions have intensified concerns regarding patterns of initiation, continuation, and problematic use. Adolescence and emerging adulthood constitute particularly sensitive developmental periods because major neurobiological, psychological, interpersonal, and social transitions occur simultaneously, while experimentation, sensation seeking, identity formation, and greater autonomy from parents become increasingly salient. Although not every instance of cannabis use develops into a cannabis use disorder, early and repeated exposure may be associated with a range of adverse consequences, particularly when use becomes frequent, involves high-potency products, or occurs in the presence of psychological or social vulnerability. Evidence suggests that cannabis use disorder can be associated with deficits across several domains of cognitive functioning, emphasizing the potential consequences of persistent or problematic cannabis involvement (Pilon et al., 2025). Neurobiological research has also indicated that different forms of cannabis may produce acute alterations in resting-state brain networks among adolescents and young adults, reinforcing concerns about cannabis exposure during developmental periods characterized by ongoing neural maturation (Ertl et al., 2024). In addition, the use of high-potency cannabis has been associated with poorer mental health outcomes, substance-related problems, and greater cannabis dependence, suggesting that the characteristics of cannabis exposure itself may be important in understanding risk (Hines et al., 2020; Petrilli et al., 2023).

The relationship between cannabis use and psychological functioning is complex and multidirectional. Cannabis use has been examined in association with anxiety, depression, psychotic-like symptoms, and other psychological disorders, although the magnitude and direction of these relationships may vary according to frequency of use, potency, age, pre-existing vulnerability, and other contextual factors (Urits et al., 2020). Research comparing adolescent and adult cannabis users with age-matched controls has further demonstrated the importance of examining cannabis use disorder, anxiety, depression, and psychotic-like experiences together rather than viewing cannabis consumption as an isolated behavior (Lawn et al., 2022). More broadly, substance use disorders and co-occurring mental health outcomes are increasingly conceptualized through multilevel frameworks in which biological, psychological, and social determinants interact with one another rather than functioning independently (Belfiore et al., 2024). Psychological distress may therefore operate both as a vulnerability factor and as a perceived motive for consumption, with some young people using cannabis in an attempt to regulate unpleasant emotional states, reduce tension, escape from problems, or obtain temporary relief. At the same time, continued or heavy use may exacerbate psychological impairment in vulnerable individuals. Findings from primary care populations indicate that cannabis use is sufficiently common across healthcare settings to warrant systematic attention to patterns of consumption, reasons for use, and related risks (Gelberg et al., 2024).

Individual psychological characteristics constitute another important dimension in explaining why some adolescents and young adults are more likely than others to initiate or maintain cannabis use. Personality characteristics, particularly those associated with impulsivity, disinhibition, sensation seeking, low conscientiousness, emotional instability, or reduced behavioral control, have repeatedly been considered relevant to substance-use vulnerability. A meta-analysis examining the Five-Factor Model of personality found meaningful associations between personality dimensions and problematic cannabis use (Winters et al., 2022), while more recent findings have also linked Big Five personality characteristics with lifetime cannabis exposure (Jain et al., 2025). Cross-national evidence additionally suggests that personality traits may interact with the use of protective behavioral strategies, thereby influencing cannabis-related outcomes (Herchenroeder et al., 2022). Impulsivity may be especially important during adolescence, when reward sensitivity is relatively strong and executive control systems continue to mature. Individuals with cannabis use disorder have been shown to exhibit elevated levels of impulsivity (Wagner et al., 2022), and emerging neurodevelopmental evidence indicates that impulsive behaviors and white-matter characteristics may partially mediate the relationship between genetic vulnerability for cannabis use disorder and early cannabis use during adolescence (Cupertino et al., 2025). Longitudinal evidence further suggests that self-control is relevant not only to cannabis and tobacco involvement but also to broader externalizing outcomes extending from childhood into early adulthood (Loher et al., 2025). Similarly, future orientation and self-determination

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may shape adolescents' intentions to use marijuana, indicating that the capacity to consider long-term consequences and regulate goal-directed behavior may serve as important protective or risk-related mechanisms (Crabtree et al., 2020).

Self-esteem, perceived acceptance, rejection, and social identity are also relevant to cannabis-related behavior. Young people with low self-worth may be more vulnerable to external validation, peer conformity, or the use of substances as a means of coping with negative self-perceptions. Research examining young adults who use marijuana has linked parental acceptance-rejection with self-esteem, highlighting the potential importance of early interpersonal experiences in shaping psychological vulnerability (Akter et al., 2021). Cannabis use has also been considered in relation to self-esteem and self-worth, suggesting that perceptions of the self may form part of the psychological context in which substance-use decisions occur (Garnere, 2023). Social rejection may further increase willingness to use substances, particularly when rejection is combined with social anxiety and substance-related cues (Cloutier et al., 2021). Experiences of discrimination and exclusion may create additional vulnerability. Among Black youth and young adults, perceived racial and social class discrimination has been associated with cannabis involvement (Ahuja et al., 2022), while perceived social rejection among sexual minorities has been examined in relation to substance use and other health-risk behaviors (Drydakis, 2022). Financial strain represents another form of chronic psychosocial stress that may shape cannabis-use patterns, particularly among socially disadvantaged groups (Zvolensky et al., 2024). Adverse life experiences and socioeconomic hardship may therefore contribute to cannabis involvement through mechanisms including distress, diminished future expectations, reduced access to supportive resources, and the use of substances as a coping strategy (Fusco, 2021).

Interpersonal relationships constitute a central developmental context for adolescent and young adult substance use. During adolescence, peers become increasingly influential, and perceived expectations, modeling, approval, and pressure from friends may substantially affect decisions about cannabis experimentation. Prospective evidence indicates that changes in peer pressure are associated with changes in cannabis and alcohol use during emerging adulthood, demonstrating that peer influence is not merely a static background variable but a dynamic process that may change alongside substance-use behavior (Gmel et al., 2025). Research on school, family, and peer predictors similarly suggests that adolescent marijuana use is embedded in multiple social systems rather than being determined by individual preference alone (Novak et al., 2023). Although qualitative evidence concerning peer influence has often been developed in the context of tobacco use, systematic synthesis of adolescent accounts shows how friendship dynamics, perceived group norms, and the desire for social belonging can shape substance-related behavior across different regulatory environments (Littlecott et al., 2023). Parental and peer disapproval may also influence marijuana use indirectly through young people's perceptions of risk, indicating that interpersonal norms affect behavior partly by shaping beliefs about the acceptability and dangerousness of cannabis (Yang et al., 2022). Within the family, poor communication, conflict, insufficient emotional support, and parental substance use may increase vulnerability, whereas supportive relationships and clear parental norms may operate protectively. Intergenerational transmission studies have demonstrated that parental cannabis-related problems can increase offspring risk for cannabis use disorders (Kosty et al., 2015), while family climate and intention to use cannabis have been identified as predictors of cannabis use and cannabis-related problems among young university students (Hernández-Serrano et al., 2021).

The broader cultural and informational environment has also changed considerably. Young people are increasingly exposed to cannabis-related messages through social media, entertainment media, peer networks, online communities, and commercial or quasi-commercial content. Social networking site use has been identified as a potential risk factor for alcohol, marijuana, and synthetic cannabinoid use (Gutierrez & Cooper, 2016), while social media has also been implicated in facilitating exposure to illicit drug sales and substance-use information among university students (Adejoh et al., 2020). More recent research has specifically linked social media use with initiation of cannabis vaping among youth, suggesting that novel forms of cannabis consumption may diffuse through digital social environments (Lee et al., 2023). These environments may simultaneously transmit information, misinformation, images of pleasurable use, and perceptions that cannabis is normative or low risk. Perceptions of health risks are especially important because individuals who view cannabis as relatively harmless may be more willing to experiment or use frequently. National survey evidence from Canada and the United States has documented substantial variation in

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perceptions of cannabis-related health risks (Goodman & Hammond, 2022). Among college students, marijuana knowledge, confidence in that knowledge, and perceived efficacy in obtaining accurate information have been identified as both protective and risk-related factors (Park et al., 2022). Qualitative research further indicates that young adults may hold ambivalent attitudes toward cannabis and may respond differently to public prevention messages depending on whether information is perceived as credible, balanced, relevant, and consistent with their lived experiences (Kvillemo et al., 2022). Such findings underscore that prevention should not merely provide information but should also address misinformation, perceived benefits, normalization, and the credibility of educational communication.

Cultural norms and changing policy environments may further influence how cannabis is perceived and used. Cannabis has increasingly moved from being viewed exclusively as an illicit drug toward occupying a more complex cultural position involving medical use, recreational use, commercialization, legalization, and public-health regulation. Social acceptability itself may affect willingness to use substances, as research examining cannabis, alcohol, and tobacco demonstrates that perceived acceptance can differ considerably across products and populations (Coughenour et al., 2021). Cultural, social, and psychological perspectives on legal cannabis use also indicate that attitudes are shaped by value systems, perceived legitimacy, social norms, and broader cultural beliefs (Siddiqui et al., 2022). Among university students, cannabis use has been associated with gender differences, legalization support, use intentions, risk perceptions, and indicators of cannabis use disorder, demonstrating that legal and normative attitudes are intertwined with individual behavior (Andreas et al., 2021). Policy changes may also alter availability and perceptions of access. Canadian evidence has shown changes in perceived accessibility and ease of purchasing cannabis around legalization (Wadsworth et al., 2022). At the local level, legalization may generate both opportunities and challenges related to regulation, taxation, retail availability, enforcement, prevention, and protection of vulnerable groups (Kavousi et al., 2022). Systematic review evidence indicates that legal cannabis availability may influence use patterns and health outcomes, although effects vary across populations, policy models, and outcome measures (Manthey et al., 2023).

A major concern in policy development is therefore how to balance regulation, prevention, risk reduction, enforcement, and the avoidance of unintended consequences. Youth prevention has been a central issue in evidence-based cannabis policy, particularly because adolescents may respond differently to legal changes than older adults (Hathaway, 2019). One unintended consequence of evolving cannabis policy environments may be changes in treatment-seeking patterns. Evidence from the United States has suggested that cannabis legalization has coincided with declining utilization of treatment for cannabis use disorder, raising questions about whether normalization, reduced perceived risk, changing treatment availability, or other factors may influence help-seeking (Mennis et al., 2023). At the same time, legal regulation alone cannot explain young people's cannabis behavior. Cannabis-related risk also involves specific behavioral outcomes, including impaired driving, and studies of Canadian young adults have identified a range of factors associated with driving after cannabis use (Huỳnh et al., 2022). These findings illustrate that effective prevention requires an integrated framework addressing individual characteristics, social relationships, perceived risk, availability, cultural norms, and policy implementation rather than relying on prohibition or health education in isolation.

The accumulation of evidence therefore points toward a multifactorial understanding of cannabis use among adolescents and young adults. Biological vulnerability, personality, impulsivity, self-esteem, mental health, family functioning, peer relationships, social rejection, economic hardship, digital media exposure, cultural normalization, risk perceptions, accessibility, and public policy may intersect to shape the likelihood of initiation and continued use. However, much of the existing literature has examined these determinants separately or through predetermined quantitative variables. Such approaches are valuable for estimating associations and identifying population-level predictors, but they may provide only a partial account of how young cannabis users themselves interpret the pathways leading to consumption. The meaning attributed to cannabis, the sequence through which social and psychological pressures accumulate, the ways young people perceive family and peer influence, and the mechanisms through which environmental access and misinformation interact may be highly context dependent. For this reason, qualitative inquiry is particularly appropriate when the purpose is to develop an explanatory framework grounded in participants' lived experiences rather than impose a pre-existing theoretical structure. Grounded theory provides a systematic

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methodology for deriving concepts, categories, relationships, and an integrative theoretical explanation directly from empirical data through iterative comparison, coding, theoretical sampling, and progressive conceptualization (Corbin et al., 2014).

Within the Iranian context, understanding these processes is especially important because adolescents and young adults may encounter a distinctive combination of social expectations, family structures, economic pressures, legal restrictions, cultural attitudes, informal drug markets, and rapidly expanding digital influences. International evidence provides important insights, yet patterns identified in other countries cannot automatically be assumed to operate in precisely the same manner within Iranian communities. Moreover, prevention programs may be ineffective if they fail to address the meanings, motivations, interpersonal pressures, and contextual conditions experienced by young people themselves. A grounded, context-sensitive explanation can therefore help identify not only direct risk factors but also overlooked preventive strategies, environmental conditions that amplify risk, and the mechanisms through which multiple determinants converge. Such knowledge may provide a more useful basis for school-based prevention, family interventions, community programs, health education, and policy responses tailored to adolescents and young adults at elevated risk of cannabis use.

Accordingly, the present study aimed to identify and explain the factors influencing the tendency toward cannabis use among adolescents and young adults using a grounded theory approach.

2. Methods and Materials

This study employed a qualitative research design using a grounded theory approach. The target population consisted of all adolescents and young adults who used cannabis in Hashtgerd during 2025–2026. The sampling process initially began using purposive sampling and subsequently continued through snowball sampling. The criterion for determining the sample size was theoretical saturation. Following the emergence of conceptual categories after 17 interviews, theoretical saturation was achieved. In fact, after conducting 15 in-depth interviews with the participants, the researchers concluded that the data obtained were repetitions of those derived from previous interviews. To further ensure data saturation, two additional interviews were conducted, which again yielded data that repeated the findings of the previous interviews. At this stage, the sampling process was terminated.

The interviews were conducted in public places such as parks and public green spaces. To encourage the participation of eligible individuals, the objectives of the study were explained in a manner that maintained transparency while minimizing the possibility of inducing bias. If individuals agreed with the study objectives and were prepared to participate in the interview, the interview process was initiated; otherwise, given time constraints, a specific date was scheduled for the interview. Interview scheduling was fully coordinated with the participants' schedules and leisure time. For some employed participants, interviews were scheduled outside working hours. Participants were completely free to express their views and experiences, and the interviewer served only as a facilitator to ensure that the discussion remained aligned with the study objectives, namely, collecting information relevant to the research topic.

Before the interviews began, permission was obtained from participants to audio-record the conversations, and, upon their agreement, the interviews were recorded. In cases where participants objected to audio recording, simultaneous note-taking was used to document the content of the conversation. The interview process was conducted over a one-month period, and each session generally lasted between 30 and 60 minutes. All interviews and note-taking procedures were conducted by one member of the research team. Two methods, semi-structured interviews and note-taking, were used to collect data in this study. In the first stage, participants' basic and demographic information was recorded through note-taking. For this purpose, a checklist containing essential information required for the initial identification of participants was designed and completed after obtaining their consent and agreement.

One of the primary data collection instruments was a semi-structured interview designed to examine cannabis users' perceptions of the factors influencing the tendency toward cannabis use.

The data obtained from the interview questions primarily focused on identifying the factors influencing the tendency toward cannabis use and the participants' educational needs. Data analysis was based on concepts extracted during the coding process. In this process, the data were initially divided into smaller units, from which key concepts were subsequently extracted. To ensure the credibility and trustworthiness of the findings, the following procedures were implemented: (1) participants' experiences were

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documented fully and independently of their theoretical knowledge regarding the research topic; (2) the lived experiences of cannabis users were described comprehensively and accurately; (3) a portion of the interviews was submitted to a secondary researcher for critical review; and (4) throughout the study, the opinions and feedback of two specialists in psychology and educational sciences and one specialist in health promotion were utilized.

The Corbin and Strauss (2014) method of analysis was employed in the present study. Data analysis was conducted concurrently with data collection, such that each interview was transcribed and examined immediately after completion. During this analytical process, the data were first decomposed into smaller components, initial concepts were subsequently extracted, and these concepts were ultimately elaborated in terms of their properties and dimensions to clarify the relationship between individual components and the phenomenon as a whole. The stages of analysis within this approach included: (1) open coding to identify initial concepts; (2) elaboration of concepts according to their properties and dimensions; (3) data analysis to understand the context; (4) integration of process into the analysis; and (5) integration of categories (Corbin & Strauss, 2014).

From an ethical perspective, informed and voluntary consent was obtained from all participants, and comprehensive information regarding the objectives of the study, implementation procedures, and duration of the study was provided without inducing bias. Clear and satisfactory responses were also provided to participants' questions. Note-taking and interviews were conducted only after obtaining participants' permission, and they were assured that their identities would remain anonymous in research reports, including theses or articles, and that no personally identifying information would be disclosed.

3. Findings and Results

A total of 17 cannabis users participated in the study, of whom 14 were male (82.4%) and 3 were female (17.6%). The mean (standard deviation) age of the participants was 23.11 (4.59) years, with an age range of 16 to 30 years. Participants' educational attainment ranged from lower secondary education to a bachelor's degree; however, the largest educational group consisted of participants with a high school diploma (5 participants, 29.4%). The mean (standard deviation) age at first cannabis use was 20.70 (4.13) years, with ages at first use ranging from 15 to 28 years. Regarding marital status, the majority of participants, comprising 15 individuals (88.2%), were married, while the remaining 2 individuals (11.8%) were also married.

Table 1

Demographic Characteristics of Participants in the Qualitative Study

Participant	Age	Gender	Education	Marital Status	Age at First Cannabis Use
1	19	Male	High school diploma	Single	19
2	23	Male	Lower secondary education	Single	20
3	27	Male	Bachelor's degree	Married	24
4	16	Male	Grade 10	Single	15
5	27	Female	Associate degree	Single	26
6	21	Male	High school diploma	Single	21
7	28	Female	Bachelor's degree	Single	28
8	19	Male	Lower secondary education	Single	16
9	23	Male	Lower secondary education	Single	21
10	20	Male	University student	Single	18
11	25	Female	High school diploma	Single	23
12	18	Male	High school diploma	Single	15
13	29	Male	Bachelor's degree	Single	27
14	30	Male	High school diploma	Single	24
15	17	Male	Grade 11	Single	17
16	29	Male	Associate degree	Married	21
17	22	Male	Lower secondary education	Single	17

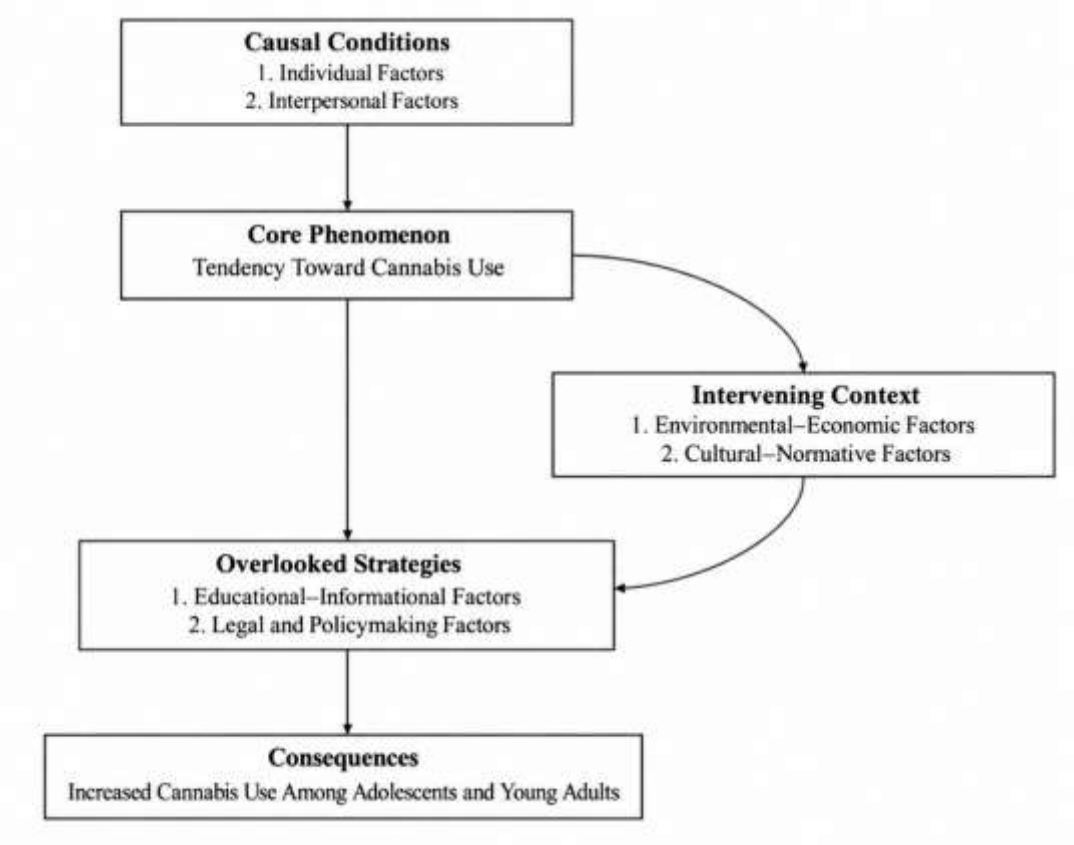
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The tendency toward cannabis use among young people was examined as a behavioral phenomenon shaped by multiple factors. In this study, the grounded theory method was used to identify and analyze these factors, with an effort to identify and explain the behavioral and social patterns associated with cannabis use among adolescents and young adults.

A total of 88 statements were extracted from the interview transcripts and categorized into 22 subthemes and 6 main themes. The six main themes were: (1) individual factors (5 subthemes and 26 statements); (2) interpersonal factors (5 subthemes and 24 statements); (3) economic-environmental factors (3 subthemes and 15 statements); (4) cultural-normative factors (4 subthemes and 11 statements); (5) educational factors (2 subthemes and 7 statements); and (6) legal and policymaking factors (3 subthemes and 5 statements). Based on the Corbin and Strauss (2014) model, the themes were categorized as follows. This mapping focuses on the relationships among the themes.

Figure 1

Mapping of Themes onto the Components of the Paradigm Model



Causal conditions directly or indirectly influence the tendency toward cannabis use among adolescents and young adults. These conditions include individual factors such as personality characteristics, psychological problems, low self-esteem, poor impulse control, and previous experience with substance use, as well as interpersonal factors such as peer-group influence, substance use within the family, poor family relationships, social rejection, and maladaptive behavioral models. As primary drivers, these factors create conditions conducive to cannabis use within this age group.

Individual Factors: The subthemes associated with the main theme of individual factors are presented in Table 2. From the interviews with adolescents and young adults who used cannabis, 26 statements and 5 subthemes relating to individual factors were extracted. Analysis of the interviews indicated that personality characteristics, psychological problems, low self-esteem, poor impulse control, and previous experience with substance use were individual factors influencing the tendency toward cannabis use.

Table 2

Statements and Subthemes Related to Individual Factors

Main Theme	Subthemes (Number of Statements)	Statement
Individual factors	Personality characteristics (5)	"I think a lot of young people start using because they are highly sensation-seeking and willing to take risks. In a way, they want to prove themselves or avoid falling behind others. Some of them also do not have much self-control; they give in quickly and say, 'Let me try it once and see what happens.'"
Individual factors	Psychological problems (6)	"In my opinion, many young people turn to cannabis because of psychological pressures and problems such as depression and anxiety. They feel that by using it, they can escape from thinking about their problems for a while and calm down. Some of them think this is the only way that can make them feel better."
Individual factors	Low self-esteem (6)	"A lot of young people use marijuana because they have low self-esteem. They think that by doing this, they can be more accepted among their friends or appear stronger. Some of them also feel that without marijuana, they cannot express themselves comfortably in a group."
Individual factors	Poor impulse control (3)	"A lot of young people make decisions very quickly and, without thinking about the consequences, just want to experience the excitement. Some of them are so impulsive that as soon as it is offered to them, they accept and do not resist."
Individual factors	Previous experience with substance use (6)	"A lot of young people who have previously used alcohol or other substances move toward marijuana and other drugs more easily because, in a way, they have become familiar with substance-use environments and are less afraid. Some of them also think that if they have tried alcohol, marijuana and similar substances are nothing serious and that they can control their use."

Interpersonal Factors: The subthemes related to the main theme of interpersonal factors influencing the tendency toward cannabis use are presented in Table 3. From the interviews with adolescents and young adults who used cannabis, 24 statements and 5 subthemes concerning interpersonal factors were extracted. Analysis of the interviews indicated that peer-group influence, substance use within the family, poor family relationships, social rejection, and maladaptive behavioral models were interpersonal factors influencing the tendency toward cannabis use.

Table 3

Statements and Subthemes Related to Interpersonal Factors

Main Theme	Subthemes (Number of Statements)	Statement
Interpersonal factors	Peer-group influence (8)	"Some people feel that if they do not use, they will no longer be accepted in the group or will be labeled by others. Some of them also start using simply because they want to be like everyone else."
Interpersonal factors	Substance use within the family (5)	"There are people who have someone in their family who uses drugs, and that makes it easier for them to move toward using drugs themselves. They see it closely and think it is not something unusual or dangerous. Sometimes, the family member who uses substances even encourages the behavior or makes it seem normal."
Interpersonal factors	Poor family relationships (4)	"I think one of the reasons young people turn to substance use is the problems that exist among family members. For example, parents and their children often cannot get along with each other, and this causes the young person to look for relief or a way to escape from reality. When interactions are poor, these things happen more often."
Interpersonal factors	Social rejection (3)	"When people feel that they do not have a place in social groups or even at school, they look for ways to prove themselves or attract attention. This can lead them toward these things so that they can feel a greater sense of belonging."
Interpersonal factors	Maladaptive behavioral models (4)	"Many people start doing this because they model themselves after celebrities or famous people who use substances. They think that if those people use them, then it cannot be something bad and may even be attractive. Some of them want to be like those people and think doing this makes them more distinctive."

Overlooked strategies refer to actions and policies that have received insufficient attention in preventing or reducing the tendency toward cannabis use among adolescents and young adults. Educational-informational factors include insufficient preventive education and misinformation regarding cannabis use, which may lead to misunderstanding or minimization of the risks associated with its use. Legal and policymaking factors refer to lenient laws, weaknesses in law enforcement, and ineffective preventive policies that restrict opportunities for intervention.

Educational and Informational Factors: The subthemes related to the main theme of educational and informational factors influencing the tendency toward cannabis use are

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presented in Table 4. From interviews with adolescents and young adults who used cannabis, 7 statements and 2 subthemes concerning educational and informational factors were extracted. Analysis of the interviews indicated that insufficient preventive education and misinformation were educational and informational factors influencing the tendency toward cannabis use.

Table 4

Statements and Subthemes Related to Educational and Informational Factors

Main Theme	Subthemes (Number of Statements)	Statement
Educational and informational factors	Lack of preventive education (2)	"A lot of young people do not really know about the risks of cannabis because there are no effective educational programs about it at school or in the community. When no one explains it properly to them, they think using it is harmless or even attractive. Some of them make decisions only based on what their friends say or what they see on social media, and they start using without being properly informed."
Educational and informational factors	Misinformation (5)	"A lot of young people believe marijuana is harmless or may even have benefits. For example, they think it helps them relax or increases creativity. These misconceptions spread on social media or among friends and encourage them to use it. Some of them do not think about the consequences at all and simply believe these claims."

Legal and Policymaking Factors: The subthemes related to the main theme of legal and policymaking factors influencing the tendency toward cannabis use are presented in Table 5. From the interviews with adolescents and young adults who used cannabis, 5 statements and 3 subthemes concerning legal and policymaking factors were extracted. Analysis of the interviews indicated that lenient laws, weaknesses in law enforcement, and ineffective preventive policies were legal and policymaking factors influencing the tendency toward cannabis use.

Table 5

Statements and Subthemes Related to Legal and Policymaking Factors

Main Theme	Subthemes (Number of Statements)	Statement
Educational and informational factors	Lenient laws (2)	"In our country, the laws are not strict enough. When people see that someone is not fined or punished for using drugs, they think it is not dangerous. Some of them also think that because the law does not treat it very seriously, they can use without worrying."
Educational and informational factors	Weaknesses in law enforcement (1)	"Sometimes there are laws prohibiting substance use, but in practice they are not enforced or nobody takes them seriously. For example, I have seen many dealers who were arrested but were released within one or two months. It is as if this is not a major issue for society."
Educational and informational factors	Ineffective preventive policies (2)	"In many places, there are no proper programs for the prevention or treatment of addiction. Some people, once they become involved, do not know how to get out of it because they receive no support from society or the government."

The intervening context refers to contextual conditions that influence the tendency toward cannabis use among adolescents and young adults and may moderate the strength or direction of this tendency. Environmental-economic factors include easy access to substances, high-risk environments, and poverty and economic deprivation, which create conditions conducive to increased cannabis use. Cultural-normative factors refer to social norms, media influence, a culture of substance use, and minimization of consequences, all of which may strengthen or weaken this behavior.

Environmental-Economic Factors: The subthemes associated with the main theme of environmental-economic factors influencing the tendency toward cannabis use are presented in Table 6. From the interviews with adolescents and young adults who used cannabis, 15 statements and 3 subthemes concerning environmental-economic factors were extracted. Analysis of the interviews indicated that easy access to substances, high-risk environments, and poverty and economic deprivation were environmental-economic factors influencing the tendency toward cannabis use.

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Table 6

Statements and Subthemes Related to Environmental-Economic Factors

Main Theme	Subthemes (Number of Statements)	Statement
Environmental-economic factors	Easy access to substances (6)	"In some neighborhoods, drugs are very easy to obtain, and this makes it easier for many young people to start using them. When something is right in front of you and you can find it easily, it becomes tempting. Some people also think that because it is everywhere and everyone is using it, it cannot be particularly dangerous."
Environmental-economic factors	High-risk environments (5)	"Some young people grow up in neighborhoods that are unsafe and where drugs are easily available. That environment causes them to become involved earlier. When you are surrounded by these things, it is much more difficult to stay away from them."
Environmental-economic factors	Poverty and economic deprivation (4)	"When someone is living under severe financial hardship and has no hope for the future, they look for a way to escape from reality. This is how many people turn to these substances, hoping that, even for a moment, they can feel some relief."

Cultural-Normative Factors: The subthemes associated with the main theme of cultural-social factors are presented in Table 7. From the interviews with adolescents and young adults who used cannabis, 11 statements and 4 subthemes concerning cultural-normative factors were extracted. Analysis of the interviews indicated that social norms, media influence, a culture of substance use, and minimization of consequences were cultural-normative factors influencing the tendency toward cannabis use.

Table 7

Statements and Subthemes Related to Cultural-Normative Factors

Main Theme	Subthemes (Number of Statements)	Statement
Cultural-normative factors	Social norms (2)	"When you see everyone around you doing it, you think there is nothing wrong with it or that it is somehow socially accepted. Some people also feel that if they do not use, they will fall behind others or will not be accepted by the group."
Cultural-normative factors	Media influence (4)	"In my opinion, one of the things that attracts people to marijuana and similar substances is the influence of the media and the content they see on social media. When they are exposed every day to images portraying the pleasure and enjoyment associated with these substances, they become tempted to try them. For example, seeing celebrities use these substances, even in movies, can also be provocative."
Cultural-normative factors	Culture of substance use (2)	"Some young people grow up in groups or environments where substance use is part of the culture and everyone regards it as something normal. When you see other people doing it and even encouraging it, you accept it more easily yourself."
Cultural-normative factors	Minimization of consequences (3)	"In some places, marijuana and similar substances are portrayed as so harmless and safe that young people think cannabis use is not dangerous. When you see that nobody talks about its harmful effects or people even make jokes about them, you gradually start believing that nothing bad is going to happen."

The consequence of the factors identified as contributing to the tendency toward cannabis use among adolescents and young adults is an increased likelihood of initiating and continuing cannabis use, which may result in physical, psychological, and social problems. Causal conditions such as personality characteristics, psychological problems, and peer influence strengthen the tendency toward cannabis use by generating internal motivations and external pressures. Overlooked strategies, including insufficient preventive education and weaknesses in laws, restrict opportunities to reduce this tendency and contribute to the persistence of high-risk behaviors. The intervening context, including easy access to substances and cultural norms that encourage substance use, intensifies this tendency and increases barriers to prevention. Consequently, these factors may operate synergistically to increase rates of cannabis use and dependence and contribute to negative consequences such as academic decline, social isolation, and legal problems within this age group.

The tendency toward cannabis use among adolescents and young adults, as the core phenomenon, is shaped by a complex network of causal factors, overlooked strategies, and intervening contexts. The causal conditions include individual factors such as personality characteristics (e.g., a tendency toward sensation seeking or poor impulse control) and psychological problems (e.g., anxiety or depression), as well as interpersonal factors such as peer pressure, dysfunctional family relationships, or experiences of social rejection. These function as the primary drivers that create the motivation and conditions conducive to cannabis use. By

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generating internal or external forces, these factors may propel individuals toward high-risk behaviors. The intervening context, including environmental-economic factors (e.g., easy access to substances or poverty) and cultural-normative factors (e.g., the social acceptance of substance use or media influence), may strengthen or moderate this tendency and, as contextual conditions, regulate the magnitude of the effects of the causal conditions. Meanwhile, overlooked strategies, such as insufficient preventive educational programs or misinformation regarding the effects of cannabis, as well as weaknesses in policymaking and the enforcement of deterrent laws, restrict opportunities for effective intervention and contribute to the continuation or intensification of the tendency toward cannabis use. Consequently, the model indicates that the tendency toward cannabis use results from the dynamic interaction among driving factors (causal conditions), contextual conditions (intervening context), and the absence of effective preventive interventions (overlooked strategies), ultimately leading to outcomes such as increased rates of use, dependence, and physical, psychological, and social problems among adolescents and young adults. This theoretical narrative provides a comprehensive framework for understanding the phenomenon and designing targeted interventions to reduce the tendency toward cannabis use.

4. Discussion

The present study aimed to identify the factors influencing the tendency toward cannabis use among adolescents and young adults using a grounded theory approach. The findings indicated that cannabis use tendency is shaped through the dynamic interaction of causal conditions, intervening contextual factors, overlooked preventive strategies, and resultant consequences. Individual and interpersonal factors constituted the principal causal conditions, while environmental-economic and cultural-normative factors operated as intervening conditions that could intensify or moderate the tendency toward cannabis use. Educational-informational deficiencies and legal-policy weaknesses emerged as overlooked strategies that limited the effectiveness of prevention. The consequences of this interaction included an increased likelihood of initiation and continuation of cannabis use, dependence, and a range of psychological, social, academic, and legal problems. These findings support a multidimensional conceptualization of cannabis use and are consistent with contemporary perspectives emphasizing that substance-use behavior results from the interaction of biological, psychological, interpersonal, environmental, and sociocultural determinants rather than from a single isolated risk factor (Belfiore et al., 2024).

One of the main findings was the prominent role of individual factors, including personality characteristics, psychological problems, low self-esteem, poor impulse control, and prior substance-use experience. Participants frequently described cannabis initiation in relation to sensation seeking, risk-taking, impulsive decision-making, psychological distress, and the desire to experience temporary emotional relief. These findings are consistent with research demonstrating associations between personality dimensions and cannabis involvement. Meta-analytic evidence has shown that certain Five-Factor Model personality traits are related to problematic cannabis use (Winters et al., 2022), while more recent studies have also reported significant associations between Big Five personality dimensions and lifetime cannabis use (Jain et al., 2025). The finding concerning poor impulse control is particularly consistent with evidence indicating elevated impulsivity among individuals with cannabis use disorder (Wagner et al., 2022). Neurodevelopmental findings further suggest that impulsive behavior may constitute a mechanism linking genetic vulnerability with early cannabis use among adolescents (Cupertino et al., 2025). Therefore, the tendency toward cannabis use in adolescence and young adulthood may partly reflect a combination of heightened reward sensitivity, limited behavioral inhibition, and a reduced tendency to evaluate long-term consequences.

The role of psychological problems identified in the present study is also supported by previous research. Participants commonly described cannabis use as a means of escaping psychological pressures, anxiety, depression, or distress. This pattern is consistent with evidence linking cannabis use with a broad range of psychological disorders and emotional difficulties (Urits et al., 2020). Comparative research among adolescent and adult cannabis users has similarly identified significant relationships between cannabis use disorder and symptoms of depression, anxiety, and psychotic-like experiences (Lawn et al., 2022). Furthermore, high-potency cannabis use has been associated with poorer mental health outcomes and greater substance-related problems (Hines et al., 2020; Petrilli et al., 2023). These findings may be interpreted within a self-medication framework, whereby adolescents and young adults use cannabis as an accessible strategy for temporary emotion

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regulation or relief from unpleasant internal experiences. However, repeated reliance on cannabis for psychological relief may increase the risk of continued use and ultimately contribute to a reciprocal cycle in which psychological distress increases cannabis use and problematic cannabis use further aggravates psychological functioning.

Low self-esteem also emerged as an important individual-level factor. Participants indicated that some young people used cannabis to appear stronger, become more accepted among peers, or feel more comfortable in social situations. This result is consistent with findings linking parental acceptance and rejection with self-esteem among marijuana-using young adults (Akter et al., 2021). Research has also directly examined relationships between cannabis use, self-esteem, and self-worth (Garnere, 2023). Low self-esteem may heighten vulnerability to peer influence because individuals with negative self-perceptions may depend more strongly on external validation and may perceive conformity as necessary for social acceptance. This mechanism may be especially important during adolescence, when identity formation and perceived social belonging become developmentally salient.

Interpersonal factors constituted the second major group of causal conditions. Peer influence, substance use within the family, weak family relationships, social rejection, and maladaptive behavioral models were all identified as contributing to cannabis use tendency. Peer influence was especially prominent, with participants describing fear of exclusion, labeling, and pressure to conform. This finding is strongly consistent with prospective evidence showing that changes in peer pressure are associated with corresponding changes in alcohol and cannabis use during emerging adulthood (Gmel et al., 2025). Similarly, school, family, and peer factors have been identified as important predictors of adolescent marijuana use (Novak et al., 2023). Although qualitative syntheses of peer influence have frequently focused on tobacco, they similarly demonstrate that friendship networks, perceived norms, and the desire for group acceptance can substantially shape adolescent substance-related behavior (Littlecott et al., 2023). The present findings therefore reinforce the view that cannabis use among young people should not be interpreted solely as an individual choice but as behavior embedded within social networks in which belonging and conformity exert substantial influence.

The finding regarding family relationships is also consistent with previous studies. Participants reported that poor communication, conflict, and emotional disconnection within the family could contribute to cannabis use as a means of seeking relief or emotional escape. Previous research has shown that family climate and intentions to use cannabis predict both cannabis consumption and cannabis-related problems among young adults (Hernández-Serrano et al., 2021). The observed role of family substance use is similarly supported by evidence regarding intergenerational transmission of cannabis-related risk, with parental cannabis use disorders increasing the likelihood of similar problems among offspring (Kosty et al., 2015). Family members may influence cannabis use through modeling, normalization, reduced perceived danger, and increased access to substances. Conversely, clear family norms and emotionally supportive relationships may function as protective factors. This interpretation is also consistent with findings indicating that parental and peer disapproval can reduce marijuana use partly by increasing perceived risk (Yang et al., 2022).

Social rejection was another important interpersonal theme. Participants indicated that young people who felt excluded from social groups or school settings could use cannabis as a way of achieving belonging, visibility, or acceptance. Experimental evidence has demonstrated that peer rejection, particularly when combined with social anxiety and substance-related cues, may increase willingness to use alcohol and cannabis (Cloutier et al., 2021). Broader research has also linked perceived discrimination and social exclusion with cannabis involvement among young populations (Ahuja et al., 2022). Similarly, perceived social rejection among marginalized populations has been associated with increased substance use (Drydakis, 2022). These converging findings suggest that cannabis use may sometimes function as a socially mediated coping behavior through which individuals attempt to manage exclusion, gain entry into desired peer groups, or reduce distress associated with interpersonal rejection.

The present study further identified educational and informational deficiencies as overlooked preventive strategies. Participants described limited preventive education and widespread misinformation, including beliefs that cannabis is harmless, relaxing, or creativity-enhancing. This finding corresponds closely with studies demonstrating that perceived risk and knowledge strongly influence cannabis-related decisions. National survey findings from Canada and the United States indicate substantial variation in perceptions of cannabis-related health risks (Goodman & Hammond, 2022). Among university students, cannabis knowledge, confidence in knowledge, and information

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efficacy have been identified as protective and risk-related factors for cannabis use (Park et al., 2022). Qualitative research also indicates that young adults may distrust preventive messages when they are perceived as exaggerated, irrelevant, or inconsistent with their own experiences (Kvillemo et al., 2022). Therefore, simply providing warnings may be insufficient. Prevention programs should provide scientifically accurate, developmentally appropriate, credible, and balanced information while directly addressing common misconceptions.

The influence of media and digital environments also emerged within the cultural-normative context. Participants referred to social media, celebrities, and entertainment media as contributing to the normalization and attractiveness of cannabis use. This finding is compatible with research identifying social networking site use as a potential risk factor for marijuana and other substance use (Gutierrez & Cooper, 2016). Social media has also been linked with exposure to illicit drug sale and use among university students (Adejoh et al., 2020). More recent evidence suggests that social media exposure may facilitate initiation of cannabis vaping among young people (Lee et al., 2023). These platforms may influence cannabis use not only through direct exposure to substance-related content but also through social comparison, normalization, dissemination of misinformation, and repeated presentation of cannabis as part of desirable lifestyles. This mechanism may help explain why participants described cannabis as becoming increasingly socially acceptable or ordinary.

Environmental-economic factors also played a major role. Easy access to cannabis, residence in high-risk environments, and poverty or economic deprivation were identified as conditions that intensified the tendency toward use. The importance of availability is supported by evidence showing that perceived access and ease of cannabis purchasing may increase following changes in cannabis regulation and market structure (Wadsworth et al., 2022). Policy-level research also emphasizes that cannabis legalization and regulation create complex local challenges involving access, availability, enforcement, and prevention (Kavousi et al., 2022). Systematic review evidence suggests that legal cannabis availability may influence consumption and health-related outcomes, although the direction and magnitude of effects vary according to policy context (Manthey et al., 2023). Even in settings where cannabis remains illegal, informal market accessibility may produce similar behavioral consequences by reducing practical barriers to obtaining cannabis.

Poverty and economic deprivation may influence cannabis use through multiple mechanisms, including chronic stress, limited recreational opportunities, reduced access to supportive resources, and diminished optimism regarding the future. The present participants described cannabis as a temporary means of escaping financial hardship and hopelessness. This is consistent with evidence linking adverse life experiences and socioeconomic disadvantage to frequent marijuana or alcohol use among emerging adults (Fusco, 2021). Financial strain has also been associated with cannabis-related behavior in vulnerable populations (Zvolensky et al., 2024). Such findings suggest that substance-use prevention should extend beyond individual education and consider the structural conditions that shape stress exposure and coping resources.

Cultural and normative factors, including social acceptance, normalization, media influence, and minimization of cannabis-related consequences, were also important. Previous research has demonstrated that social acceptability differs across substances and may affect patterns of use (Coughenour et al., 2021). Cultural, social, and psychological attitudes toward legal cannabis also influence whether consumption is interpreted as dangerous, acceptable, normal, or personally relevant (Siddiqui et al., 2022). Among university students, cannabis use has been associated with legalization support, risk perception, use intentions, and cannabis use disorder (Andreas et al., 2021). The present results therefore suggest that normative climate may influence behavior indirectly by shaping how young people interpret risk, morality, and social acceptability. When cannabis use becomes perceived as common and relatively harmless, psychological barriers to initiation may decline.

Legal and policymaking factors were also identified as overlooked strategies. Participants emphasized perceived leniency, weak law enforcement, and inadequate prevention or treatment programs. This finding aligns with broader debates concerning the complexity of cannabis policy. Evidence-based policy development must balance prevention, regulation, enforcement, and the protection of young populations (Hathaway, 2019). At the same time, changes in legal frameworks may alter perceived risk and help-seeking behavior. Declines in cannabis use disorder treatment utilization following legalization in some settings have raised concerns that normalization may reduce perceived need for treatment (Mennis et al., 2023). Policy

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must therefore move beyond punitive responses and include credible prevention, early identification, treatment access, harm reduction, and community-based support. The present results also indicate that weak implementation may undermine otherwise appropriate regulations, particularly when young people perceive enforcement as inconsistent or inconsequential.

5. Conclusion

Finally, the theoretical model derived from the present study demonstrates that cannabis use tendency among adolescents and young adults results from the interaction of personal vulnerability, interpersonal pressures, contextual exposure, normative acceptance, and insufficient preventive responses. These factors appear to operate synergistically rather than independently. For example, an impulsive adolescent experiencing family conflict may be particularly vulnerable when surrounded by substance-using peers, exposed to misinformation online, and living in an environment where cannabis is easily accessible. Such interaction is consistent with multilevel models of substance-use disorder that emphasize interdependence between biological, psychological, and social determinants (Belfiore et al., 2024). The grounded theory approach allowed these relationships to emerge from participants' accounts and provided an integrated explanation of why cannabis use may begin, continue, and become increasingly difficult to prevent.

This study had several limitations. First, the sample consisted of 17 cannabis-using adolescents and young adults from Hashtgerd, which limits the transferability of the findings to other geographical, cultural, and socioeconomic contexts. Second, the findings were based on self-reported experiences and perceptions and may therefore have been influenced by recall bias, social desirability, or reluctance to disclose sensitive information. Third, the qualitative design did not permit estimation of the prevalence or relative strength of the identified factors. Fourth, although theoretical saturation was achieved, the relatively limited diversity of the sample may have restricted the emergence of additional categories relevant to other subgroups. Finally, some interviews were conducted in public settings, which may have influenced participants' sense of privacy and willingness to discuss highly personal experiences.

Future studies are recommended to examine the proposed model in larger and more diverse samples across different cities, provinces, and socioeconomic groups. Quantitative studies could develop and validate measures based on the identified categories and test the relative contribution of individual, interpersonal, environmental, cultural, and policy-related factors to cannabis use tendency. Longitudinal research would be particularly valuable for clarifying the temporal sequence between psychological distress, peer influence, family functioning, exposure to cannabis, and initiation or escalation of use. Future qualitative studies could also separately investigate adolescents, emerging adults, women, individuals with cannabis use disorder, and non-users at elevated risk. Mixed-methods studies may further strengthen the model by integrating lived experiences with measurable behavioral and psychological variables.

The findings suggest the need for comprehensive, multilevel prevention programs rather than interventions focused solely on individual knowledge or behavior. Schools and community organizations should provide accurate and credible education about cannabis, correct misinformation, strengthen self-control and refusal skills, and address emotional coping and psychological distress. Family-based programs should improve communication, monitoring, and parental awareness of substance-use risk. Peer-led interventions may be useful for changing perceived norms and reducing social pressure. Public-health agencies should also monitor cannabis-related content on social media and develop age-appropriate digital prevention campaigns. At the community and policy levels, efforts should focus on reducing easy access to cannabis, strengthening consistent enforcement, improving early identification and treatment pathways, and increasing supportive services for young people living under socioeconomic stress. Coordination among schools, healthcare services, families, local authorities, and nongovernmental organizations may provide the strongest basis for reducing cannabis initiation and preventing progression to problematic use.

Authors' Contributions

Authors equally contributed to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

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Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. The implementation of this study was approved by the Ethics Committee of the Arak Branch of Islamic Azad University under ethics code IR.IAU.ARAK.REC.1403.329.

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