

Review

The Factors Affecting Substance Use and the Most Effective Mental Health Interventions in Adolescents and Young Adults

Promethi Das Deep^{1,*}, Nitu Ghosh², Catherine Gaither³ and Md. Shiblur Rahaman^{4,5,*} 

¹ School of Teaching and Learning, College of Education, Sam Houston State University, Huntsville, TX 77341-2119, USA

² Departments of English, College of Humanities and Social Sciences, Sam Houston State University, Huntsville, TX 77341-2146, USA; nxg095@shsu.edu

³ Department of Humanities and Social Science, Upper Iowa University, Fayetteville, IA 52142, USA; gaitherc46@uiu.edu

⁴ Department of Public Health, College of Health Sciences, Sam Houston State University, Huntsville, TX 77341-2177, USA

⁵ Department of Environmental Science and Disaster Management, Noakhali Science and Technology University, Noakhali 3814, Bangladesh

* Correspondence: pxd033@shsu.edu (P.D.); mxr291@shsu.edu or shiblu@nstu.edu.bd (M.S.R.)

Abstract: Adolescents and young adults are particularly susceptible to substance abuse. They have yet to solidify their sense of self to the degree necessary to effectively resist temptations from negative peer pressure. It is vital for mental health counselors to understand the factors affecting substance abuse in adolescents/young adults and to comprehend the effectiveness of common intervention strategies fully. This paper produces a narrative literature review of 27 international journal publications from 2004 through June 2024 related to causal factors and interventions effective for treating substance abuse in adolescents and young adults. The results indicate that adolescents who idolize antisocial peers and lack a strong sense of self, family attachment, parental monitoring, and role models are more likely to suffer from substance abuse. Successful interventions include those that help strengthen the adolescent's sense of self, a mental-health-friendly school environment staffed with professional mental health counselors, and interactive programs that engage students in positive behaviors. Positive family and peer role models can also assist in helping adolescents/young adults build a strong self-image and resist substance use. Positive peer influence is another critical factor, but more work must be undertaken to fully assess its effectiveness as an intervention.

Keywords: substance use; adolescents; young adults; mental health interventions; relevant literature



Citation: Deep, P.D.; Ghosh, N.; Gaither, C.; Rahaman, M.S. The Factors Affecting Substance Use and the Most Effective Mental Health Interventions in Adolescents and Young Adults. *Psychoactives* **2024**, *3*, 461–475. <https://doi.org/10.3390/psychoactives3040028>

Academic Editor: Ricardo Dinis-Oliveira

Received: 28 August 2024

Revised: 28 September 2024

Accepted: 29 September 2024

Published: 2 October 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Substance abuse has become an increasingly severe problem throughout the world, and it can have serious neurocognitive, physiological, and psychological effects [1]. This is especially true among adolescents and young adults, who are more susceptible than adults to various influences [2]. Jaworska and MacQueen define adolescents as individuals aged 12–18 years, starting with the onset of puberty at approximately 12 years of age and ending with legal independence, which is 18 years old in most countries [3]. According to Arnett, young adulthood spans ages 18 to 25 [4]. The overall age span of 10–25 years old used in this study is consistent with the definition of the period of adolescence by the National Academies of Sciences in *The Promise of Adolescence: Realizing Opportunity for All Youth* [5], which states, “Adolescence is a period of significant development that begins with the onset of puberty and ends in the mid-20s”. They further note that the onset of puberty in the U.S. is now typically between the ages of 8 and 10 years. This is backed up by other studies on U.S. children [6,7] and some studies in other countries where puberty begins earlier [8]. Individuals in this age range are at an elevated risk for substance abuse during

these periods of significant biological and social development [2]. This forms a large part of the need for such a study as this one.

The risk of substance use in these age ranges is significant, and understanding the factors that influence use during this critical developmental time is vital for formulating effective interventions. Nearly 45% of college students (i.e., young adults) stated that they had been drinking heavily recently. Alcohol directly influences substance use and is one of the leading causes of injuries and death among college students [9]. There are numerous costs to alcohol consumption, not the least of which are disease, disability, and violent death. "In all U. S. states, binge drinking was responsible for more than 70% of these costs" [10]. Other illegal substances also have devastating effects. Barrós-Loscertales et al. found that cocaine addiction changes the frontoparietal lobe of the brain, which is responsible for impulse control and goal-oriented behaviors [11]. These changes have a significant impact on an individual's ability to resist peer pressure and other social temptations to engage in substance use. While it is true that policy changes and public health prevention programs can decrease the use of illegal substances, many adolescents and young adults disobey the law and continue using them [12]. This indicates a need for increased education on the dangers of substance use, as well as studies that explore the changing perceptions of substances, such as marijuana and hallucinogens, and the impact of these perceptions on the increased use of addictive substances [13]. Understanding the influence of the forces that encourage addictive behavior is necessary in order to create effective treatment plans [13,14].

The gravity of the situation makes it essential to thoroughly understand the factors that influence substance abuse and to explore how adolescents and young adults can be deterred from their use or assisted when needed. Although peer pressure is often critical, other factors are worth consideration. In our modern world, adolescents and young adults are frequently exposed to social media and advertising [15] that encourages substance use [16]. When adolescents see such substance use promotion on social media platforms, it is difficult for them to resist that pressure [16]. Additionally, individuals in this age range are about sociability and cultural perceptions of what is expected of them, and these can be significant contributors to substance use [17]. It is important, therefore, to gain a better understanding of the factors that contribute to addictive behavior, as well as the factors that help a person to resist engaging in this type of behavior. Doing so can assist mental health professionals in creating more effective intervention and prevention strategies before serious problems develop [15].

It is clear from the statistics that substance use and abuse among adolescents and young adults is a serious and costly problem around the world. The significance of the problem cannot be understated, given that patterns of consumption adopted in adolescence often follow individuals into young adulthood. As this paper is concerned with adolescents and young adults, the primary focus is on the factors that influence substance use and abuse, as well as those that allow some individuals in those age ranges to resist becoming addicted. These factors are explored within the context of creating effective intervention strategies for treating addictions. With that in mind, this study aims to figure out the following research questions and discuss (i) "The factors that influence people to become addicted to substances in adolescence and young adulthood"; (ii) "The mental health factors and/or personality traits that help an individual resist addictive behavior while others are unable to do so"; and (iii) "The mental health interventions that are most effective for treating addictions, and how they can be improved".

2. Materials and Methods

This study employed a narrative literature review approach to examine substance abuse among adolescents and young adults. The primary aim was to investigate the factors contributing to substance abuse in these age groups and identify the most effective intervention strategies for treatment. The following methodology was utilized.

2.1. Databases Searched

Peer-reviewed articles from reliable journals were found using the databases JSTOR, PubMed, and Google Scholar.

2.2. Keywords

“Substance abuse” AND “adolescents” AND “factors”; “Substance abuse” AND “young adults” AND “factors” OR “risk factors”; “Substance abuse” OR “addiction” OR “young adults” OR “college students”; “Substance abuse” AND “adolescents” AND “mental health interventions”; “Substance abuse” AND “young adults” AND “mental health interventions OR effective mental health interventions”.

2.3. Inclusion Criteria

After the initial search, the abstracts and introductions of the resulting articles were scanned for relevancy using the following inclusion criteria. The articles selected for this research had to be published within the last 20 years (2004 to June 2024) to ensure their relevance to the current global context or be considered foundational literature on the topic. Additionally, the focus of the articles had to be on adolescents, young adults, or both, with an emphasis on the characteristics or factors contributing to substance use, substance abuse, and intervention strategies. Finally, the articles had to be available in full-text format and published in English.

2.4. Exclusion Criteria

Articles older than 20 years were specifically excluded from the review. Additionally, articles not directly relevant to the topics of addiction or substance abuse were excluded, as were those focused on other forms of addiction, such as gambling or sex addiction. Studies that addressed substance abuse in age groups older than 25 years were also not included in this review, nor were articles that were not published in English or available in full-text format.

The abstracts, introductions, and conclusions of each article were initially reviewed to ensure their alignment with the inclusion and exclusion criteria. A more detailed reading followed to confirm the article’s relevance to this study.

3. Results

The search yielded a total of 27 articles for this narrative review. The selected articles for this narrative review were published between January 2006 and June 2024. All articles addressed some aspect of substance use or abuse in adolescents, young adults, or both, focusing on the factors influencing substance use and the most effective intervention strategies for individuals in these age groups. The literature provided well-established factors affecting substance use and abuse, along with new insights into modern influences on adolescents and young adults. Table 1 presents the detailed results of the search.

Table 1. Key findings and important information from the 27 articles chosen for review.

SL.	Citation	Country of Study Population	Aim of the Study	Substance Used	Key Findings
1	Davis et al., 2019 [15]	USA	The study aimed to examine social media’s influence on both substance use and normative beliefs about substance use.	Alcohol	The key findings demonstrated that exposure to substance-related media was associated with an increase in alcohol use due to perceptions of alcohol norms in adolescents and young adults.

Table 1. Cont.

SL.	Citation	Country of Study Population	Aim of the Study	Substance Used	Key Findings
2	Laursen and Faur, 2022 [18]	Global Perspective	The study examined developmental changes that affect an individual's willingness to conform to peer influence.	Alcohol, smoking	The authors found that individual temperaments, social goals, resource acquisition strategies and vulnerabilities, and maturational status contributed to an increase in susceptibility to peer influence, particularly in the context of uncertainty, differences in personal attributes, unmet social needs, perceptions of benefits for impression management, and beliefs about behavior.
3	McCann et al., 2019 [19]	Australia	The study explored the experience of affected family members who supported a close relative with alcohol and/or other drug (AOD) use/abuse.	Combination of alcohol and drugs	The authors found that affected family members suffered numerous harms, including to their emotional, social, and financial well-being, as they supported their addicted family member.
4	Lange et al. 2018 [20]	Liberia	This study examined students' beliefs related to substance use, with particular emphasis on the role peers have in substance use behaviors in Monrovia, Liberia.	Drugs, alcohol	The study found that peers both directly and indirectly influence substance use. Direct influences included things like peer pressure and bullying, while indirect influences included things like witnessing the substance use of a peer.
5	Scull et al., 2009 [21]	USA	This study utilized two cross-sectional studies to examine the extent to which media influences substance use behaviors in adolescents and their intention to use substances when they are exposed to certain parental and peer risk factors, as well as protective factors.	Alcohol and tobacco	The study found that when adolescents believe they are in tune with media messages that are related to substance use, that is positively associated with their intention to use and actual use. Their critical thinking skills were also affected by media messages. The risk factors included peer substance use, peer pressure, and social norm advocating use, while the influence of their parents was a protective factor.
6	Winters and Arria, 2011 [22]	USA	This study examined how the developing adolescent brain could explain why they sometimes make risky decisions, such as drug use/abuse, that can lead to safety and health concerns. The research is focused on how that information may be useful for preventative interventions.	Alcohol, drugs	The researchers found that risk-taking behaviors are more likely during this period since the adolescent brain is still developing. However, the teenage brain is more susceptible to both the short- and long-term effects that stem from drug use, which can result in permanent cognitive impairment and an increase in the risk of a substance use disorder.
7	Cushion et al., 2019 [23]	USA	The study aimed to determine whether the admiration of antisocial peers in adolescents was associated with a higher risk of opioid misuse in a population of justice-involved children in Florida.	Opioids	This study found that over 75% of opioid users within the last 30 days at least somewhat admired their antisocial peers. That put them at 2–4 times more risk of misusing opioids. Therefore, cultivating positive peer influences and role models can help reduce opioid use in justice-involved children.
8	White, 2020 [24]	USA	This study examined changes in the gender gap concerning alcohol consumption in the context of the need for prevention strategies that target females.	Alcohol	The author found that gaps in alcohol use between the genders have narrowed. In adolescents, that narrowing is due to a decline in consumption by men, whereas in adults, the narrowing is due to increasing alcohol use by women but not men. This has increased the rates of emergency department visits and hospitalizations for alcohol-related reasons, particularly for women.

Table 1. Cont.

SL.	Citation	Country of Study Population	Aim of the Study	Substance Used	Key Findings
9	Ghozayel et al., 2020 [25]	Lebanon	This study examined the consumption patterns of energy drinks and the perceptions and experiences of Lebanese university students toward these beverages.	Energy drinks, alcohol mixed with energy drinks (AmEDs)	The results of this study showed that 45% of college students had tried energy drinks at least once in their lives, and of those, 30% had tried energy drinks mixed with alcohol. Individual, interpersonal/social, and environmental factors affected the use of energy drinks, including peer pressure, social image, and ease of access.
10	Reid and Carey, 2018 [9]	USA	This study focused on theoretical concepts—outcome expectancies, sociability, attitudes about heavy drinking, self-efficacy in protective strategies, and descriptive norms—as possible mediators of the association between personal consumption and social network use.	Alcohol	The researchers found that attitudes were the only significant mediator of social network associations with drinks per week and the subsequent consequences. Their results support decreasing attitudes about heavy drinking as a possible way to mitigate network effects.
11	Makela and Maunu, 2016 [17]	Finland	This study focused on direct and indirect pressures to drink among adults who drink heavily.	Alcohol	The study’s results indicate that indirect pressure to drink is more significant. They also found that certain social situations create a strong expectation to drink, even though drinking was determined to be an individual, autonomous activity.
12	Hellman et al., 2015 [26]	Finland, Italy, The Netherlands, Poland	This study focused on the origins of addiction problems with an emphasis on the causes and reasons for why they occurred.	Alcohol, illicit drugs, and tobacco	The authors found that a general worry over societal change is one of the most significant factors in the explanation of accumulating addiction problems, as reported by the press in all countries.
13	Andreescu, 2017 [10]	USA	This study sought to determine the significant predictors of alcohol use in racially integrated populations.	Alcohol	The study found that pro-alcohol definitions and associations with peers who drink, as well as their reinforcement of using alcohol, were predictors for alcohol use. However, other factors, notably parental monitoring, attachment to family, and attachment to school, exert significant indirect effects on alcohol use.
14	Room et al., 2015 [27]	Australia	This study aimed to examine how risky/heavy drinkers experience the expectations of others about drinking to understand cultural norms as a contributor to drinking problems.	Alcohol	The authors concluded that social and risky drinkers have experienced more peer pressure to drink from their friends, work colleagues, and family members. Therefore, intervention methods must consider the cultural influence on drinking behaviors.
15	Cherrier and Gurrieri, 2013 [28]	Australia	This study examined normative barriers to abstinence in consumption patterns to understand the role of nonprofit organizations as change agents.	Alcohol	The authors found three cultural barriers to abstaining from alcohol use. These were (1) the collectively felt obligation to share, the expectation that gifts of alcohol would be reciprocated, and the belief that abstinence was a form of deviance. The authors also discussed how nonprofit organizations can use disenfranchised groups to garner support for unpopular causes.
16	Martinotti et al., 2015 [29]	Italy	This study explored the knowledge and use of novel psychoactive substances (NPSs) by Italian youth in both urban and rural areas.	Novel psychoactive substances (NPSs)	The authors found that over 50% of respondents had some knowledge of NPSs, and there was more knowledge in urban areas. Moreover, there was a strong association between binge drinking and NPS use. Urban areas may be a focal point for preventative strategies.

Table 1. Cont.

SL.	Citation	Country of Study Population	Aim of the Study	Substance Used	Key Findings
17	Moore et al., 2018 [30]	USA	In light of research that shows interactive prevention programs to be more effective, this study examined the efficacy of an interactive program that utilized near-peer facilitators and hands-on activities to prevent substance abuse in adolescents.	Alcohol, marijuana, inhalants, heroin, methamphetamines, cocaine, prescription drugs	The study found that the interactive program statistically significantly increased knowledge of substance abuse risks on both mental and physical health. They discuss how the findings demonstrate effective methods to raise awareness of the harmful side effects of substance use.
18	Whitesell et al., 2013 [31]	USA	This study examined various causes of adolescent substance use and how that knowledge is vital for implementing effective prevention and intervention programs.	Alcohol, cigarettes, marijuana, prescription drugs	The authors found that risk factors fall into three categories: familial, social, and individual. They highlighted the most serious risk factors in each category, including child abuse, gang affiliation, peer pressure, and comorbidities like depression and ADHD.
19	Addy et al., 2021 [32]	Ghana	This study explored the mental health difficulties in adolescent students in high schools in Ghana with an emphasis on their coping strategies and support systems.	Alcohol and illicit drugs	The authors identified several themes attributed to mental health difficulties, including financial challenges, bullying, and domestic violence. They found that the main coping strategies were isolation, substance use, and spiritual help. The most extensive support system was school-based, but that was inadequate due to problems with staffing and confidentiality. They concluded that many mental health difficulties emanate from schools, and, therefore, mental-health-friendly school environments with trained counselors are necessary.
20	Meldrum et al., 2012 [33]	USA	This study explored the role of self-control and its influence on susceptibility to peer pressure. It also examined the independent and interactive effects of self-control and peer pressure on delinquency.	Alcohol, marijuana, drugs,	The results of this study indicated that individuals with a higher sense of self-control are less susceptible to peer influence, and those who are susceptible to peer influence are more likely to become delinquent. They also concluded that peer pressure was a stronger predictor than self-control for delinquent behaviors. However, they noted that individual self-control is a moderator of the influence of susceptibility.
21	Bahji, 2024 [34]	USA, Canada	This narrative literature review attempted to synthesize the literature on the management of individuals with comorbid substance use disorders and psychiatric disorders.	Alcohol, cannabis, opioids, methamphetamine, cocaine, benzodiazepines	The authors found that comorbidities for substance use disorders and psychiatric conditions are common and have profound implications for intervention prevention and policymaking. The study emphasizes the need for a holistic understanding of coexisting conditions for successful outcomes.
22	Naslund et al., 2020 [35]	USA, Australia, UK	This research examined the use of social media by individuals with mental illness, emphasizing the impact of social media on their mental well-being and the potential use of social media for interventions addressing mental health problems.	Interventions	The authors found that while social media use can have potentially harmful effects on mental health and fitness, it can also be a positive force by giving individuals more access to support groups and potential treatment options.

Table 1. Cont.

SL.	Citation	Country of Study Population	Aim of the Study	Substance Used	Key Findings
23	Nairn et al., 2006 [36]	New Zealand	This study aimed to understand how New Zealand adolescents used alternative subject positions (i.e., the way they refer to themselves) to go against the prevailing norm of alcohol consumption.	Alcohol	The authors found that participants used four methods to constitute themselves as non-drinkers: (1) by using alternative self-descriptions (e.g., sporty or healthy), (2) by constructing alternative leisure identities, (3) by reconstituting the norm of drinking as abject to legitimize their abstinence, and (4) by passing as a drinker in social situations.
24	Romo, 2012 [37]	USA	This study explored how college students communicated that they are nondrinkers and established that meaning in a culture where drinking is the norm.	Alcohol	The author found that participants in the study used privacy rules to determine whether and how to disclose their drinking status. If they felt it would cost them more than it would benefit them, they did not disclose. They used specific strategies to manage their disclosure or nondisclosure, and their examples provided a practical way for healthy deviants to avoid or manage the stigma attached to their nondrinking status.
25	Zakariah et al., 2023 [38]	Malaysia	This study explored a specific genetic polymorphism and its influence on methamphetamine addiction in Malaysian populations.	Methamphetamine (meth)	The authors found a genetic difference in a specific gene that is linked to methamphetamine dependence in Malay and Chinese populations. Those who had a different allele may be protected from developing dependence. This highlights the genetic links involved in some addictions.
26	Huang et al., 2022 [39]	Taiwan	This research examined the relationship between cigarette smoking and meth addiction, and it also investigated the role of impulsivity in methamphetamine use disorder.	Cigarette smoking, methamphetamine use disorder (MUD), polysubstance use	The authors found that individuals who began smoking earlier in adolescence had a higher risk of methamphetamine addiction, and that that might be related to the effect of impulsivity in their actions. Therefore, early cigarette smoking may indicate the need for prevention efforts with a focus on the trait of impulsivity.
27	Törrönen and Härkönen, 2016 [40]	Finland	This article studies the motives for drinking among Finnish people, as well as the prevalence of these motives in different population groups, social backgrounds, and their association with becoming intoxicated.	Alcohol	The authors concluded that Finns use motives of sociability, relaxation, meals, and situational factors to explain their drinking habits. More educated individuals listed motives that expressed mastery of cultural capital and individuality, while less educated Finns listed motives related to intoxication and external expectations. The authors concluded that these motives express the ritual perspective, while the individual perspectives included orientations with drunkenness. Therefore, a situational perspective may be necessary to serve as a bridge between the two with implications for interventions.

4. Discussion

The results of the narrative review revealed many well-established concepts, as well as a few new insights.

4.1. The Factors That Influence People to Become Addicted to Substances in Adolescence and Young Adulthood

Regarding the research question that relates to the factors that cause addiction in these age ranges, the publications revealed that substance use is a global problem and is one of

the most significant public health burdens for every country it affects. Perhaps the most prominent new modern influence that can cause adolescents and young adults to engage in substance use and abuse is that of social media [15]. It is an influential factor since today's adolescents and many young adults have been using social media most or even all their lives. It is, in fact, a form of peer pressure. In the modern world, peer pressure can be accomplished virtually. A study conducted by Reid and Carey concluded that, among 274 college students, the level of drinking was strongly associated with the student's social network consumption patterns [9]. The authors examined the links between students' time-consuming social media and mediating factors, including student attitudes about heavy drinking, descriptive norms, self-efficacy as a protective factor, and sociability outcome expectancies. They found that student attitudes were the most significant mediating factor, which suggests that this might be a promising avenue for intervention strategies. Davis et al. also found substance-use-related media and advertising to be a significant influence on young adults and adolescents for their consumption of alcohol and other substances [15]. This is a notable finding, given that individuals in this age range are increasing their screen time and exposure to this type of social media concept. That, in turn, influences their understanding of what is generally considered normal consumption.

There are indeed many other factors that can influence adolescents to engage in illegal substance use, but peer pressure is still among the most influential, whether virtual or not. Lange et al. found that peer pressure is what motivated the students in their study to use substances [20]. The authors also found that bullying was a common reason given by males for substance abuse. Peer pressure to engage in substance use can be direct, indirect, or both, but adolescents frequently report that watching their peers motivated them to take drugs [21]. Frequently, they report that curiosity is what first led them to try drugs and alcohol [22]. Peers influence them to pick up other bad habits as well, such as smoking. Unfortunate role models are also a problem since antisocial adolescents who fall into addictive behaviors and frequently encounter the justice system, as a result, have enormous admiration for their antisocial peers. In a cross-sectional study of over 79,000 justice-involved children (JIC), Cushion et al. found that some 2.75% of the sample had misused opioids in the past 30 days. Over 75% of current users admired or somewhat admired their antisocial peers. The authors concluded that those who had some admirations of antisocial peers were over two times more likely to misuse opioids, and those who more fervently admired their antisocial peers were over four times more likely to be current opioid users [23].

Another study examined the differences between genders with regard to substance use and abuse. The study reported that the differences in use between males and females have diminished considerably [24]. While males generally consume more alcohol and experience more injuries and deaths related to such consumption than females, the gaps are narrowing. Among adolescents, alcohol use in males has declined more than it has in females and adults; such use is increasing in females but not in males. Emergency room visits and deaths related to alcohol use have also increased significantly over the past two decades, and the increase has been notable in females. Studies suggest females are more prone to specific alcohol-induced ailments, including liver inflammation, memory blackouts, cardiovascular disease, hangovers, and certain cancers [24]. That suggests that prevention strategies should seek to address the unique risks for female at-risk adolescents and young adults. The author also found some interesting patterns emerging in adolescent alcohol consumers. Notably, the highest percentages of alcohol consumption in the past month were among White students, American Indian or Alaska Native students, and Latino or Hispanic students. Additionally, while more boys than girls start drinking before age 14, the girls who do begin drinking at this early age have a shorter interval between their first drink and their first experience with binge drinking compared to boys. Of those adolescents 15 years old or older, boys progressed to binge drinking more quickly [24].

Additionally, sometimes alcohol consumption manifests in a less obvious form than one might think. Ghozayel et al. examined university students' consumption of energy

drinks [25]. They found that some 30% of the university students who stated they had tried energy drinks specifically consumed those energy drinks that also contained alcohol. Peer pressure and social image were the factors that students reported influenced them to consume these drinks [17]. This brings to light other important influencing factors, those of social image, societal upheaval, and cultural norms. Makela and Maunu surveyed 2725 Finnish adults, and they found that both social pressures encouraging drinking and the perceptions of cultural norms around alcohol use were significant factors that influenced the drinking habits of specifically young adults [17]. In Europe, worries about societal changes were discussed by Hellman et al. as one explanation for the rise in addiction problems in recent years [26]. In a survey of 226 university students in Beirut, Lebanon, Ghozayel et al. surveyed 226 universities in Beirut, Lebanon [25]. They discovered that peer pressure, in combination with concerns about their social image, were the most significant factors driving the consumption of energy drinks containing alcohol. Cultural pressure is, therefore, a significant factor that contributes to substance. When individuals are exposed to cultural norms that encourage drinking socially or using certain substances, it can be very challenging for them to stick to their abstinence.

Men often experience more pressure to drink, particularly in urban areas, than women do. It seems that many women can find what are considered socially acceptable alternative behaviors to drinking collectively [17,27]. Research [17,36,37] has also shown that when an individual refuses to drink with someone, that can be interpreted as a rejection of forming a social bond, and this finding is factual cross-culturally. Individuals who do not want to engage in drinking usually recognize they are in danger of committing a social faux pas, and they feel the need to compensate by showing that they are amenable to forming a social bond even though it does not involve drinking. College students who opted to disclose their nondrinking status often used specific strategies. For example, they might reframe their healthy deviance using words like “sporty” or “athletic” [36]. Even so, Room et al. found that respondents in their study felt increasing pressure each time they drank, which emphasizes how strong social pressure can be [37]. As people grow older, however, they do not feel the social pressure to drink as heavily [40]. The authors found this was due to both personal motives and the heavier impact of the negative aspects of drinking [40]. Laursen and Faur, however, indicate that those individuals with a strong sense of self may be more capable of resisting peer pressure at any age [18].

Many of these same influencing factors are also present in drug abuse, as well as a combination of genetic, psychological, and environmental factors. Zakariah et al. found that specific individuals have a hereditary predisposition to methamphetamine addiction [38]. Chinese and Malaysian individuals with a specific genetic expression may be predisposed to methamphetamine dependence. The authors found this genetic variation in these ethnic groups but not in others. This highlights the heritability of some substance dependencies. Although it does not guarantee that an individual with a specific genetic variation will become addicted, it predisposes them to addiction in certain environmental circumstances. Likewise, certain personality traits might play a role. Huang et al. found that young individuals with high levels of impulsivity are more likely to engage in behaviors that lead to addiction [39]. The availability of drugs and peer pressure also play a significant role.

This brings to light the relatively new problem of novel psychotropic substances (NPSs). These are designed specifically to replace banned or controlled drugs and to avoid needing to meet quality control measures. Producers constantly change their chemical structure, making it difficult for forensic investigators to identify them and challenging for law enforcement to track and ban them. For this reason, they are often designated as “legal highs” since they replicate the effects of illicit drugs while remaining legal. Their ease of production and low cost make them readily available to adolescents and young adults. The social perception of them as legal encourages use and abuse [29]. The recent spate of legalization of marijuana and some psychotropic drugs adds to that perception. All of these influencing factors can combine to create a cycle that is difficult to break without intervention. In Italy, for example, the use of synthetic cathinones and synthetic

cannabinoids is rapidly increasing. Mephedrone, a synthetic cathinone, was used by 3.3% of more than 3000 participants in a study of adolescents and young adults, while synthetic cannabinoids, commonly known as “Spice”, were used by 1.2% of the participants. The study also found that these substances are gaining popularity among US and European young adults and are associated with risky behaviors such as binge drinking. This finding underscores the potential impact of research on our understanding of the problem and for addressing the rapid growth of these substances in the scientific community today. Moreover, the researchers noted that NPS use was predictive of binge-drinking behaviors, something that also has a known association with addiction to other substances [29].

4.2. The Mental Health Factors and/or Personality Traits That Help an Individual Resist Addictive Behavior While Others Are Unable to Do So

In order to resist the strong motivating factors to use or abuse various substances, an important concept that emerged was the need for a strong sense of self [18]. Moreover, mental-health-friendly K-12 schools could help to improve an adolescent’s sense of self and thereby help prevent addiction, but this involves community commitment and family support [19]. Other factors that can assist an individual in resisting addictive behaviors include familial attachment and parental involvement in addition to social bonds. Andreescu’s study revealed that in both the White and American Indian group of adolescents who used substances, there was a lack of social bonds and a solid attachment to family, along with low levels of parental monitoring, encouragement from peers, and definitions that favor alcohol use all predicted for alcohol consumption [10]. The only way in which the two groups differed was that while attachment to school was a deterrent for White teenage girls, it was not for American Indian teenagers [10]. School performance, family non-attachment, attachment to school (or the lack thereof), family disengagement, negative family reinforcement, association with heavy drinking peers, definitions favorable to alcohol use, positive peer reinforcement, and low self-control/high impulsivity were the independent variables that all acted as predictors for alcohol use. Therefore, the opposite of these traits would likely be predictors for non-alcohol and non-substance use [10]. This reinforces the view that fitting in is a strong motivator in either promoting or preventing substance use and abuse. Still, it also brings to light other factors, such as family attachment, that also play a strong role and can be used to prevent and treat substance use. Other researchers [19] have also found that affected family members who support addicts are critical mediators of substance abuse. Additionally, Cushion et al. concluded that positive role models played a significant role in helping adolescents and young adults resist substance use [23]. Therefore, the researchers in both studies concluded that positive role models and affected family members might also be able to help prevent substance use.

Moreover, an individual must have suitable coping mechanisms to stand up to cultural pressure. Strategies for preventing such behaviors have to include an understanding of the cultural and symbolic expectations that can exert an enormous amount of pressure on an individual’s drinking and substance use decisions [17]. Treatment plans should, therefore, focus on helping to strengthen an individual’s self-identity to help them withstand peer and cultural pressure to use various substances [18]. Additionally, many students who are concerned about the adverse health effects of using drugs or other substances can resist peer pressure. One of the things they are most fearful of is damage to their heart and brain [20].

4.3. The Mental Health Interventions That Are Most Effective for Treating Addictions and How They Can Be Improved

It is clear that successful intervention strategies need to address a multitude of factors that influence substance misuse. Underlying many of these factors, however, is often a mental health disorder. Individuals diagnosed with substance use disorders (SUDs) are also often diagnosed with a comorbid mental health condition. Bahji notes that the intricate interplay between the psychological, biological, and social underpinnings of these dual conditions characterizes the co-occurrence of SUDs and psychiatric conditions [34]. “From

a diagnostic standpoint, the co-occurrence of SUDs and psychiatric conditions introduces distinct challenges, mainly when arriving at a diagnosis involving two or more comorbid disorders" [34]. Bahji states that there is a reciprocal connection between psychological disorders and substance use disorders (SUDs) [34]. In other words, each condition exacerbates or can trigger the other. Many people use substances to alleviate the symptoms of different psychiatric disorders like anxiety, depression, and psychosis. For example, an individual may use cannabis or benzodiazepines to reduce the symptoms of anxiety, while someone with depression might consume alcohol to alleviate symptoms like sadness or hopelessness. However, this is not a good practice for coping with psychiatric/psychological problems, as it could make the situation worse in the long term since it only masks the symptoms the patient is experiencing. It is also essential to understand that substance use disorders can trigger a psychiatric disorder or psychological state. For example, drugs and alcohol can trigger psychosis in people who are diagnosed with schizophrenia, or they can exaggerate the mood instability of people with bipolar disorder.

It is essential to understand this relationship to manage and treat complex comorbidities. As the diseases are co-occurring, it is challenging for clinicians to diagnose them. Often, the symptoms are the same or overlap; for example, the symptoms of substance use (e.g., methamphetamine use) can be the same as a mental health disorder like psychosis. That makes it difficult to understand if the mental health disorder is the result of a substance use disorder or if it is an independent disorder. If people with mental health disorders do not receive treatment, it could lead them to use more drugs or alcohol to manage their symptoms. Since these issues are linked to each other, it is crucial to diagnose and give the necessary treatment for both problems for better long-term outcomes. Treatment may include medication interventions, as well as psychotherapy.

Several studies note that interventions that address mental health issues can also help with addiction [18,39]. The conclusions of many of these studies indicate that the most successful mental health interventions utilize family support, as well as positive role models to treat addicted adolescents and young adults [10,19]. Despite suffering different types of emotional trauma and social problems, affected family members can help addicted relatives struggling with their substance use disorders. Andreescu and McCann et al. also advocate for the idea that attachment to family and affected family members are important elements of a treatment plan for helping addicts stay sober [10,19]. Andreescu also highlights how vital positive peer influence is in an effective intervention [10]. By shaping intervention strategies to focus on assisting patients in establishing strong, positive connections and influences in their lives, professionals can be more effective in treating their addicted clients. This is why it is so vital to understand the individual factors that contribute to substance abuse. Another way that effective mental health programs can be improved is to include strategies to reduce a client's social media consumption or to help them find positive social media influences instead of negative ones. Naslund et al. found that people with mental health disorders often use social media as a forum for sharing their experiences as well as seeking help from others [35]. They can also search for information regarding treatment options. In that way, social media can be a positive influence instead of a negative one. Thus, intervention programs need to take that into account when working with people who have comorbidities of substance abuse disorders and mental health issues.

Moore et al. assessed an interactive substance abuse program that shows promise in helping to increase student understanding of the harmful effects substances can have on physical and mental health [30]. This study evaluated a high school prevention program, including 175 participants, 92 (52.5%) of whom were fully engaged in the program. The program specifically utilized hands-on activities in combination with near-peer facilitators, and the results showed a significant increase in knowledge that can effectively raise awareness of substance use risks. The program divided participants into small groups and made use of impactful activities, such as examining human organs damaged by substance abuse. The participants had a favorable view of the facilitators and their presentations, and the overall conclusion found the program effective at increasing awareness of the risks of substance

use. However, the study needed to be more comprehensive in determining which specific factors were the most effective (i.e., novel experiences and interactive facilitators). Additionally, it might be difficult to replicate this program in contexts without access to certain educational materials, such as the damaged human organs used in these demonstrations. While this type of intervention program can be successful in preventing substance use, it cannot be used in isolation. It must also include activities that help students develop more resilience so that they can resist peer pressure influence, mainly if they are in an abusive home environment. Whitesell et al. discuss several abusive home environments, such as those involving physical abuse, neglect, and familial substance abuse, which are risk factors for substance misuse [31]. Helping an individual develop resilience can help them resist the temptation to abuse substances even in these kinds of situations.

It is important to realize that the majority of the research clearly shows that peer influence is one of the strongest factors among adolescents and young adults who use drugs and alcohol. Therefore, it comes as no surprise that Addy et al. concluded that a school environment that is mental-health-friendly can be a big help to students suffering from a substance abuse disorder [32]. Having a trained psychotherapist readily available to adolescents and young adults can certainly help them resist peer pressure in school, and it can also help them develop the resilience they need to resist other factors that may be tempting them into addiction. Meldrum et al. found that peer influence is one of the main factors for several different types of delinquent behavior during adolescence, and this includes substance abuse [33]. That demonstrates the importance of helping a teen strengthen their identity during this vulnerable developmental stage. At-risk youth headed down the wrong path can benefit from professional support to build their sense of self and exercise control over their choices. Moore et al. demonstrated that this can be accomplished using near-peer facilitators and hands-on activities that help to engage adolescents in their health and welfare, but having a trained mental health counselor readily available to guide students through this challenging time of life can also make an enormous impact [30]. Moreover, these data suggest that clinical mental health counselors present in all K-12 schools could be of assistance in spotting problematic behaviors and helping to prevent those that may lead to addiction later in life.

4.4. Recommendations for Future Research

Though much has been accomplished in the last twenty years, much remains to be achieved. It is necessary to learn more about the effects of positive peer pressure and how that can be utilized to help adolescents reject substance use when other forces are tempting them. There also needs to be more research into strategies that are effective for assisting adolescents who live in an abusive home. These individuals lack the positive familial support that is critical for helping them resist the pressure to abuse substances. Instead, they will need to turn to other types of positive reinforcement to help them make the best choices for their life situation. There is also a lack of information about how certain physical factors affect adolescent behaviors. This is something that needs more attention in the literature. Case studies can also be used more to illustrate relevant findings and effective intervention strategies. Most research necessarily focuses on more extensive group studies, but case studies help provide essential specifics.

Numerous articles indicate that mental health issues play a role in substance use; more comprehensive research is necessary on the role of mental health issues, how they affect drug use, and what could be the treatment plan. If we need to create an intervention strategy for substance use issues, it is crucial to understand mental health and its impact on substance use. More longitudinal and experimental studies are critical to find out the long-term effectiveness of mental health issues affecting substance use problems. Another issue is that many studies are cross-sectional or observational; more longitudinal studies are essential.

4.5. Limitations of the Current Review

Most of the articles reviewed for this paper are from the United States and other English-speaking countries. However, the perception and legal precepts of substance use and alcoholism differ from culture to culture, which limits the generalizability of the findings. Furthermore, the studies used different tools or measures of substance use and peer pressure. Because of this, comparing results and reaching conclusions was one of the biggest challenges. As the articles consulted for this study were limited to those that addressed the issues of peer pressure and family circumstances in substance use, there could also be a bias in the conclusions, since any published results that found no correlation between these factors were not considered in this study.

It is crucial to understand cultural differences, as culture can significantly influence substance use. Few studies have taken this into account. This is true for both different countries and different cultures within one country. If we consider diverse populations such as low-income families, minorities, or LGBTQ community it could be possible they have unique factors that may contribute to substance use.

5. Conclusions

This narrative literature review revealed many factors involved in causing addiction problems at different stages of life. It is clear from most of the research that peer influence is a major factor affecting adolescents' substance use. Modern factors affecting addiction behaviors include social media, the consumption of which is a heavy influencer of addictive patterns of behavior. In line with that, cultural beliefs and norms also affect adolescents and young adults. The factors that help individuals resist addiction include the development of a strong sense of self in adolescence, positive peer influence, a strong family attachment, and a mental-health-friendly school environment. These also yield insight into the effective mental health interventions that help prevent and mitigate addiction. Staffing schools with clinical mental health counselors who can work with at-risk youth to help them build a stronger sense of self, interventions that utilize near-peer facilitators, and hands-on activities can educate adolescents and young adults on the risks of addiction and minimizing social media use along with optimizing positive social media influences are all effective parts of successful interventions.

Author Contributions: Literature search P.D.D.; Writing—original draft preparation, P.D.D.; Writing—review and editing, P.D.D., C.G., N.G. and M.S.R. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Acknowledgments: We would like to thank Chen for her assistance and encouragement in publishing this article.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Rose, E.J.; Picci, G.; Fishbein, D.H. Neurocognitive Precursors of Substance Misuse Corresponding to Risk, Resistance, and Resilience Pathways: Implications for Prevention Science. *Front. Psychiatry* **2019**, *10*, 339. [[CrossRef](#)]
2. Knoll, L.J.; Leung, J.T.; Foulkes, L.; Blakemore, S. Age-related differences in social influence on risk perception depend on the direction of influence. *J. Adolesc.* **2017**, *60*, 53–63. [[CrossRef](#)]
3. Jaworska, N.; MacQueen, G. Adolescence as a unique developmental period. *J. Psychiatry Neurosci.* **2015**, *40*, 291–293. [[CrossRef](#)] [[PubMed](#)]
4. Arnett, J.J. The Developmental Context of Substance use in Emerging Adulthood. *J. Drug Issues* **2005**, *35*, 235–254. [[CrossRef](#)]
5. Bonnie, R.J.; Backes, E.P. (Eds.) *The Promise of Adolescence*; National Academies Press: Washington, DC, USA, 2019.

6. Aris, I.M.; Perng, W.; Dabelea, D.; Ganiban, J.M.; Liu, C.; Marceau, K.; Robertson, O.C.; Hockett, C.W.; Mihalopoulos, N.L.; Kong, X.; et al. Analysis of Early-Life Growth and Age at Pubertal Onset in US Children. *JAMA Netw. Open.* **2022**, *5*, e2146873. [[CrossRef](#)] [[PubMed](#)]
7. Herman-Giddens, M.E. Recent data on pubertal milestones in United States children: The secular trend toward earlier development. *Int. J. Androl.* **2006**, *29*, 241–246. [[CrossRef](#)]
8. Esfarjani, S.; Jamalzade, N.; Hakim, A.; Hesam, S. Puberty signs and its relationship with lifestyle in 8-to-10-year-old girls: A descriptive-analytical study. *J. Fam. Med. Prim. Care* **2022**, *11*, 4736. [[CrossRef](#)]
9. Reid, A.E.; Carey, K.B. Why is social network drinking associated with college students' alcohol use? Focus on psychological mediators. *Psychol. Addict. Behav.* **2018**, *32*, 456–465. [[CrossRef](#)]
10. Andreescu, V. Family, School, and Peer Influences on Alcohol Abstinence and Use among American Indian and White Female Adolescents. *Deviant Behav.* **2019**, *40*, 56–73. [[CrossRef](#)]
11. Barrós-Loscortales, A.; Costumero, V.; Rosell-Negre, P.; Fuentes-Claramonte, P.; Llopis-Llacer, J.; Bustamante, J.C. Motivational factors modulate left frontoparietal network during cognitive control in cocaine addiction. *Addict. Biol.* **2020**, *25*, e12820. [[CrossRef](#)]
12. Griffin, K.W.; Botvin, G.J. Evidence-Based Interventions for Preventing Substance Use Disorders in Adolescents. *Child Adolesc. Psychiatr. Clin. N. Am.* **2010**, *19*, 505–526. [[CrossRef](#)] [[PubMed](#)]
13. Grant, J.E.; Potenza, M.N.; Weinstein, A.; Gorelick, D.A. Introduction to Behavioral Addictions. *Am. J. Drug Alcohol Abuse.* **2010**, *36*, 233–241. [[CrossRef](#)] [[PubMed](#)]
14. Volkow, N.D.; Blanco, C. Substance use disorders: A comprehensive update of classification, epidemiology, neurobiology, clinical aspects, treatment and prevention. *World Psychiatry* **2023**, *22*, 203–229. [[CrossRef](#)]
15. Davis, J.P.; Pedersen, E.R.; Tucker, J.S.; Dunbar, M.S.; Seelam, R.; Shih, R.; D'Amico, E.J. Long-term Associations Between Substance Use-Related Media Exposure, Descriptive Norms, and Alcohol Use from Adolescence to Young Adulthood. *J. Youth Adolesc.* **2019**, *48*, 1311–1326. [[CrossRef](#)] [[PubMed](#)]
16. Xu, X.; Han, W.; Liu, Q. Peer pressure and adolescent mobile social media addiction: Moderation analysis of self-esteem and self-concept clarity. *Front. Public Health* **2023**, *11*, 1115661. [[CrossRef](#)]
17. Mäkelä, P.; Maunu, A. Come on, have a drink: The prevalence and cultural logic of social pressure to drink more. *Drugs Educ. Prev. Policy* **2016**, *23*, 312–321. [[CrossRef](#)]
18. Laursen, B.; Faur, S. What does it mean to be susceptible to influence? A brief primer on peer conformity and developmental changes that affect it. *Int. J. Behav. Dev.* **2022**, *46*, 222–237. [[CrossRef](#)]
19. McCann, T.V.; Polacsek, M.; Lubman, D.I. Experiences of family members supporting a relative with substance use problems: A qualitative study. *Scand J. Caring Sci.* **2019**, *33*, 902–911. [[CrossRef](#)]
20. Lange, B.C.L.; Pullen, S.J.; Petrucci, L.J.; Parnarouskis, L.; Dominguez, S.; Harris, B.; Quiterio, N.; Fernandez, P.J.; Lekpeh, G.; Slopadoe, S.P.; et al. A qualitative investigation of the perceived role of peers in influencing substance use among youth in Monrovia, Liberia. *Vulnerable Child Youth Stud.* **2018**, *13*, 357–367. [[CrossRef](#)]
21. Scull, T.M.; Kupersmidt, J.B.; Parker, A.E.; Elmore, K.C.; Benson, J.W. Adolescents' Media-related Cognitions and Substance Use in the Context of Parental and Peer Influences. *J. Youth Adolesc.* **2010**, *39*, 981–998. [[CrossRef](#)]
22. Winters, K.C.; Arria, A. Adolescent Brain Development and Drugs. *Prev. Res.* **2011**, *18*, 21–24. [[PubMed](#)]
23. Cushion, M.L.; Johnson, M.E.; Smith, N.D. The Association between Admiration of Antisocial Peers and Past 30-Day Opioid Misuse among Justice-Involved Children. *J. Child Adolesc. Subst. Abuse.* **2019**, *28*, 259–265. [[CrossRef](#)] [[PubMed](#)]
24. White, A. Gender Differences in the Epidemiology of Alcohol Use and Related Harms in the United States. *Alcohol Res.* **2020**, *40*, 1. [[CrossRef](#)] [[PubMed](#)]
25. Ghozayel, M.; Ghaddar, A.; Farhat, G.; Nasreddine, L.; Kara, J.; Jomaa, L. Energy drinks consumption and perceptions among University Students in Beirut, Lebanon: A mixed methods approach. *PLoS ONE* **2020**, *15*, e0232199. [[CrossRef](#)]
26. Hellman, M.; Majamäki, M.; Rolando, S.; Bujalski, M.; Lemmens, P. What Causes Addiction Problems? Environmental, Biological and Constitutional Explanations in Press Portrayals from Four European Welfare Societies. *Subst. Use Misuse* **2015**, *50*, 419–438. [[CrossRef](#)]
27. Room, R.; Callinan, S.; Dietze, P. Influences on the drinking of heavier drinkers: Interactional realities in seeking to 'change drinking cultures'. *Drug Alcohol Rev.* **2016**, *35*, 13–21. [[CrossRef](#)]
28. Cherrier, H.; Gurrieri, L. Anti-consumption Choices Performed in a Drinking Culture. *J. Macromarket.* **2013**, *33*, 232–244. [[CrossRef](#)]
29. Martinotti, G.; Lupi, M.; Carlucci, L.; Cinosi, E.; Santacroce, R.; Acciavatti, T.; Chillemi, E.; Bonifaci, L.; Janiri, L.; Di Giannantonio, M. Novel psychoactive substances: Use and knowledge among adolescents and young adults in urban and rural areas. *Hum. Psychopharmacol. Clin. Exp.* **2015**, *30*, 295–301. [[CrossRef](#)] [[PubMed](#)]
30. Moore, M.B.; Karpinski, A.C.; Tsien, F. An examination of an interactive substance abuse prevention program for high school students. *J. Child Adolesc. Subst. Abuse* **2018**, *27*, 283–287. [[CrossRef](#)]
31. Whitesell, M.; Bachand, A.; Peel, J.; Brown, M. Familial, Social, and Individual Factors Contributing to Risk for Adolescent Substance Use. *J. Addict.* **2013**, *2013*, 579310. [[CrossRef](#)]
32. Addy, N.D.; Agbozo, F.; Runge-Ranzinger, S.; Gryns, P. Mental health difficulties, coping mechanisms and support systems among school-going adolescents in Ghana: A mixed-methods study. *PLoS ONE* **2021**, *16*, e0250424. [[CrossRef](#)] [[PubMed](#)]

33. Meldrum, R.C.; Miller, H.V.; Flexon, J.L. Susceptibility to Peer Influence, Self-Control, and Delinquency. *Sociol. Inq.* **2013**, *83*, 106–129. [[CrossRef](#)]
34. Bahji, A. Navigating the Complex Intersection of Substance Use and Psychiatric Disorders: A Comprehensive Review. *J. Clin. Med.* **2024**, *13*, 999. [[CrossRef](#)] [[PubMed](#)]
35. Naslund, J.A.; Bondre, A.; Torous, J.; Aschbrenner, K.A. Social Media and Mental Health: Benefits, Risks, and Opportunities for Research and Practice. *J. Technol. Behav. Sci.* **2020**, *5*, 245–257. [[CrossRef](#)] [[PubMed](#)]
36. Nairn, K.; Higgins, J.; Thompson, B.; Anderson, M.; Fu, N. 'It's Just Like the Teenage Stereotype, You Go Out and Drink and Stuff': Hearing from Young People who *Don't* Drink. *J. Youth Stud.* **2006**, *9*, 287–304. [[CrossRef](#)]
37. Romo, L.K. "Above the Influence": How College Students Communicate about the Healthy Deviance of Alcohol Abstinence. *Health Commun.* **2012**, *27*, 672–681. [[CrossRef](#)]
38. Zakariah, H.A.; Nik Abdul Rahman, N.N.S.; Wu, Y.S.; Wahab, S.; Abdul Rashid, R.; Sim, M.S. Association Analysis of a GSTP1 Functional Polymorphism with Methamphetamine Dependence and Associated Symptoms in a Multiethnic Malaysian Population. *Sains Malays.* **2023**, *52*, 3211–3222. [[CrossRef](#)]
39. Huang, C.-Y.; Hung, C.-C.; Ho, Y.-J.; Fang, S.-C. Trait Impulsivity as a Mediator Between Early Cigarette Smoking Initiation and Addiction Severity in Patients with Methamphetamine Use Disorder. *Int. J. Ment. Health Addict.* **2024**, *22*, 279–298. [[CrossRef](#)]
40. Törrönen, J.; Härkönen, J. Studying ritual and individual orientations to alcohol use: Drinking motives and their connection to intoxication in Finland in the 2000s. *Int. J. Drug Policy* **2016**, *29*, 33–40. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.