

Adolescent Substance Use, Misuse, and Abuse

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Abstract

Adolescent substance use, misuse, abuse and dependence is a family-oriented problem given that prevention, early detection, tracking adolescents at high risk (child maltreatment, delinquency, sexually-transmitted diseases, substance use, suicide), treating dependent individuals and their family, and follow up are important. Drug abuse is prevalent among adolescents who, in most cases, ignore the dangers inherent in drug abuse. Many of them engage in drug abuse out of frustration, lack of parental supervision, peer influence, pleasure, poverty, etc. This paper presents a classification of the substances used by adolescents, an inventory of children and adolescents at risk for substance use, an inventory of the domain risk factors for adolescent substance use. The authors also clarify a few terminological issues (abuse, misuse, and use), identify the associations of adolescent substance use, and make an attempt at identifying the parent - adolescent relationship in adolescent substance use with focus on the father – daughter relationship.

Keywords: *adolescents, substance abuse, substance misuse, substance use*

Introduction

The most common **problems during adolescence** are related to childhood illnesses that continue into adolescence, consequences of risky or illegal behaviours (infectious diseases, injury, legal consequences, pregnancy, **substance use**), growth

and development, mental health disorders, and school (Gavrilă-Ardelean & Gavrilă-Ardelean, 2016; Fond-Harmant & Gavrilă-Ardelean,).

According to Chernyshenko, Kankaraš & Drasgow (2018) **health-related life outcomes** can be classified as pertaining to *mental health* (depression, other psychopathologies), *physical health* (body fitness, diagnosed physical diseases, mortality), and *health-related behaviours* (exercise, **substance abuse**).

Adolescents use substances because substances can help them: alleviate boredom, deal with traumatic memories, escape emotional or physical pain, fit in socially, get up in the morning, go to sleep, lose weight, relax, or relieve anxiety (Child Mind Institute, 2019).

According to the *Controlled Substances Act* (<https://www.dea.gov/controlled-substances-act>), there are five types of controlled substances that tend to be addictive or harm the general public:

Class	Description	Examples
I	no currently accepted medical use in the US, lack of accepted safety for use under medical supervision, high potential for abuse	ecstasy, heroin, LSD, marijuana (cannabis), peyote (mescaline)
II	high potential for abuse which may lead to severe psychological or physical dependence	Adderall, fentanyl, hydrocodone (Vicodin), hydromorphone (Dilaudid), meperidine (Demerol), methadone, methamphetamine, morphine, oxycodone (OxyContin, Percocet), Ritalin
III	potential for abuse less than substances in Classes I or II and abuse may lead to moderate or low physical dependence or high psychological dependence	anabolic steroids, buprenorphine, codeine and hydrocodone products mixed with aspirin or acetaminophen, ketamine
IV	low potential for abuse relative to substances in Class III	alprazolam (Xanax), clonazepam (Klonopin), diazepam (Valium), lorazepam (Ativan)
V	low potential for abuse relative to substances listed in Class IV and consist primarily of preparations containing limited quantities of certain narcotics	cough medicines with codeine, ezogabine

Another classification takes into account their chemical makeup and the way they interact with the brain and body: **Anabolic-androgenic steroids** (sex hormone agonists) – “organic compounds [alkaloids, hormones, and vitamins]” (*Lexico*); **Depressants** (alcohol, barbiturates, opiates, opioids, sedatives, tranquillisers) – drugs “reducing functional or nervous activity” (*Lexico*); **Gateway drugs** (alcohol, tobacco) – drugs “which supposedly lead the user on to more addictive or dangerous drugs” (*Lexico*); **Hallucinogens** (brolamphetamine, *Conocybe*, *Copelandi*, ketamine, LSD, *Panaeoulus*, PCP, *Peyote cactus* (mescaline), *Psilocybe*, *Salvia divinorum*, *Strophia*, tryptamines) – drugs “that cause hallucinations” (*Lexico*); **Inhalants** (aerosols “sprays containing solvents and propellants” such as computer dusting spray, deodorant sprays, hair sprays, spray paints, vegetable oil sprays; gases “gases found in medical anaesthetics and in household or commercial products” such as butane lighters, chloroform, ether, laughing gas, propane tanks, refrigerant gases, whipped cream aerosols; *nitrates* “volatiles found in medical settings and as household chemicals” such as amyl nitrates, butyl, room deodorisers, video head cleaners; *volatile solvents* “liquids vaporising at room temperature” such as correction fluid, felt-tip markers, gasoline, glue, lighter fluid, paint remover/thinner, rubber cement (Wu, Pilowsky & Schlenger, 2004; Ahern & Falsafi, 2013; Sarbu et. al, 2014) – “solvents or other materials producing vapour that is inhaled by drug abusers” (*Lexico*); **Narcotics** (cocaine, heroin, marijuana) – “drugs or other substances that affect mood or behaviour and are consumed for non-medical purposes, especially ones sold illegally” (*Lexico*); **Stimulants** (Adderall, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, methamphetamine, morphine, oxycodone, Ritalin) – “substances that raise levels of physiological or nervous activity in the body” (*Lexico*).

The preference for one or another substance differs from country to country: adolescents from **Botswana** prefer alcohol, cocaine, inhalants, marijuana, methaqualone (Gotsang, Mashalla & Seloilwe, 2017); those from **Jamaica** – alcohol, inhalants, marijuana, tobacco (Atkinson, Abel & Whitehorne-Smith, 2015; Wynter & Hynes, 2019); those from **India** – alcohol, cannabis, inhalants, tobacco (Priyanka & Ankita, 2016); late children and early those from **Italy** – alcohol, energy drinks, marijuana, stimulant drugs, tobacco (Gallimberti *et al.*, 2015); those from **Nigeria** –

cocaine, marijuana, tobacco (Iorfa *et al.*, 2018); those from **Norway** – alcohol and drugs (Heradstveit *et al.*, 2018); those from **Slovakia** – alcohol, marijuana, tobacco (Kohútová & Almašiová, 2019); those from **Ukraine** – alcohol (Hryhorczuk *et al.*, 2019).

Research shows that adolescents at risk for substance use disorders are (Newcomb & Harlow, 1986; Lena, Hajela & Panarella, 1991; Wills, Vaccaro & McNamara, 1992; Vega *et al.*, 1993; Kuther, 1995; Chassin *et al.*, 1996; Wills *et al.*, 1996; Barry & Lochman, 2004; Wu, Pilowsky & Schlenger, 2004; Elek, Miller-Day & Hecht, 2006; Visser & Routledge, 2007; Farhadinasab *et al.*, 2008; Thatcher & Clark, 2008; Anderson *et al.*, 2009; Scull *et al.*, 2010; Farrugia *et al.*, 2011; Gunnarsson, 2012; Teunissen *et al.*, 2012; Ahern & Falsafi, 2013; De Haan *et al.*, 2013; Ferreira, Gaspar de Matos & Alves Diniz, 2013; Wen, Hockenberry & Cummings, 2014; Gavrilă-Ardelean, 2014; Gavrilă-Ardelean, 2015; Gavrilă-Ardelean, 2019; Malby *et al.*, 2015; Messler, Emery & Quevillon, 2015; Zaborskis & Sirvyte, 2015; Šumskas & Zaborskis, 2017; Heradstveit *et al.*, 2018; Iorfa *et al.*, 2018; Mattick *et al.*, 2018; Moñino-García *et al.*, 2018; Su *et al.*, 2018): **children** raised in a “parental conflict in child rearing practices” environment, rejected by their mothers, susceptible to peers who use drugs, who are victims of solicitation or who engage in or are victims of cyberbullying, whose parents and family members have alcohol and or drug abuse problems, with a history of emotional, physical, or sexual abuse, with behavioural, cognitive, and emotional difficulties (psychological dysregulation), with behavioural, interpersonal trust, and acceptance problems, with inconsistent discipline or with restrictive discipline, with childhood externalising (symptoms of conduct problems, deviancy, inattention/hyperactivity) and internalising (symptoms of anxiety, depression, peer problems, social withdrawal) problems; **children and adolescents** who have experienced childhood trauma, who have recurrent problems with the law, or with a long history of school and learning problems; **adolescents** exposed to media and commercial communications on alcohol, having experienced disruptive life change events, of African-American origin, living in states with laws permitting marijuana use for medical purposes; with a low level of religiosity, alcoholic fathers, deviance-prone attitudes, drug-using peers, high-status peer substance use, high levels of substance use, early onset of substance use, deviant personality traits, mental health problems,

positive effect of drug use, intention of future use, heritable vulnerability, high levels of substance misuse, life stress, negative affect, nonadaptive coping, parental substance use, no family support, no internal locus of control (perception about the underlying main causes of events in their lives), no proper social norms (descriptive, friend/parent injunctive, and personal), poor psychological well-being; who are depressed or suicidal or victimised online/offline, with a childhood onset of aggression, psychotic adolescents (aggressive, hostile, impulsive, lively, seeking sensation, taking risk), and socially alienated adolescents (feeling detached, feeling isolated, meaningless, powerlessness). However, “The direction of the causal relationship is less certain. Conduct disorders, depression and anxiety disorders that develop in early adolescence may predispose young adults to become dependent on illicit drugs. These disorders may also arise as a result of the adverse effects that illicit drug dependence has on the lives of those affected by it, or the rigours of regular illicit drug use may prolong pre-existing depressive and anxiety disorders that may have resolved in its absence.” (Degenhardt *et al.*, 2004, 1126; Sarbu, 2014; Sarbu, 2016; Panescu & Sarbu, 2019)

Arthur *et al.* (2003) grouped domain risk factors for **substance use**, **delinquency**, and other **adolescent problem behaviours** into four categories: **community domain risk factors**: *community disorganization* – “neighbourhoods with high population density, physical deterioration, and high rates of adult crime also have higher rates of juvenile crime and drug use”; *extreme economic deprivation* – “neighbourhoods with high rates of residential mobility have been shown to have higher rates of juvenile crime and drug use. also, children who experience frequent residential moves and stressful life transitions have been shown to have higher risk for school failure, delinquency, and drug use”; *laws and norms favourable to drug use* – “normative attitudes about drug use and local laws and policies, such as the legal drinking age and taxes on alcohol and tobacco products, have been related to consumption”; *low neighbourhood attachment* – “neighbourhoods where youths report low levels of bonding to the neighbourhood have higher rates of juvenile crime and drug use”; *perceived availability of drugs* – “perceptions of the availability of cigarettes, alcohol, marijuana, and other illegal drugs have been shown to predict use of these substances”; *transitions and mobility* – “neighbourhoods with high rates of residential mobility have

been shown to have higher rates of juvenile crime and drug use. also, children who experience frequent residential moves and stressful life transitions have been shown to have higher risk for school failure, delinquency, and drug use”; **family domain risk factors:** *family history of antisocial behaviour* – “children born or raised in a family with a history of alcoholism are at higher risk of having alcohol or other drug problems themselves”; *high family conflict* – “children raised in families high in conflict, whether or not the child is directly involved in the conflict, are at greater risk for both delinquency and drug use”; *parental attitudes favourable to antisocial behaviour* – “in families in which parents engage in criminal behaviour or are tolerant of their children’s involvement in criminal or violent behaviour, children are more likely to engage in delinquent and violent behaviour”; *parental attitudes favourable to drug use* – “in families in which parents use illegal drugs, are heavy users of alcohol, or are tolerant of children’s use, children are more likely to use drugs themselves”; *poor family management* – “family management practices characterised by unclear expectations for behaviour, poor monitoring of behaviour, few and inconsistent rewards for positive behaviour, and severe or inconsistent punishment for unwanted behaviour increase the risk for drug use, violence, and delinquency”; **individual/peer domain risk factors:** *attitudes favourable to antisocial behaviour* – “youth who express positive attitudes toward delinquency and violence are at higher risk for later involvement in such behaviours”; *attitudes favourable to drug use* – “initiation of use of any substance is preceded by values favourable to its use. youths who express positive attitudes toward drug use, including lower perceived risks from using substances, are more likely to use drugs”; *early initiation of antisocial behaviour* – “the earlier onset of any drug use, the greater the involvement in other drug use and the greater the frequency of use; onset of drug use prior to the age of 15 is a consistent predictor of later drug abuse”; *impulsiveness* – “youths who show a tendency to act impulsively are at higher risk for drug abuse, violence, and delinquency; *peer antisocial behaviour* – “young people who associate with peers who engage in delinquent or violent behaviour are much more likely to engage in the same behaviour”; *peer drug use* – “young people who associate with peers who engage in alcohol or substance abuse are much more likely to engage in the same behaviour”; *peer rejection* – “youths who feel rejected and are disliked by

their peers are more likely to engage in drug use, delinquency, and violence”; *peer rewards for antisocial behaviour* – “youths who believe that their friends and peers would approve and admire them for engaging in drug use, delinquency, and violence are more likely to become involved in such behaviours”; *rebelliousness* – “young people who feel they are not part of society, are not bound by rules, do not believe in trying to be successful or responsible, or who take an active rebellious stance toward society are more likely to use drugs”; *sensation seeking* – “young people who like to engage in risky and thrilling behaviours are more likely to use drugs”; ***school domain risk factors***: *academic failure* – “beginning in the late elementary grades (grades 4-6), academic failure increases the risk of both drug use and delinquency”; *little commitment to school* – “drug use is less prevalent among students who expect to attend college than among those who do not. factors such as liking school, time spent on homework, and perceiving schoolwork as relevant are also negatively related to drug use”.

There are enormous changes from adolescence well in to adulthood regarding trying and using substances. Thus, while, in their teens, the general trend is towards greater experimentation and, in their twenties, the general trend is away from drug use, it is notable that beyond this, there is considerable change, including initiation and experimentation well into mid adulthood (Aldridge, Measham & Williams, 1998).

Among adolescents, there are four **groups of substance-users**: *non-users*, *minimal experimenters*, *late starters*, and *escalators* (Wills *et al.*, 1996).

Terminological Issues

World Health Organisation (WHO) (1994) defined the meaning of the terms ***abuse***, ***misuse***, and ***use*** in relation to different substances.

Thus, if English-language dictionaries define ***use*** as “the habitual consumption of a drug” (*Lexico*), WHO defined it as “self-administration of a psychoactive substance [such as alcohol, cannabis, or stimulant]” (WHO, 1994). The term also occurs in phrases such as ***(controlled) alcohol/drug use*** (“controlled use of alcohol/drug” – WHO, 1994), ***dysfunctional use*** (“substance use that is leading to impaired psychological or social functioning [loss of employment, marital problems]” – WHO,

1994), **experimental use** (“the first few instances of using a particular drug (sometimes including tobacco or alcohol); extremely infrequent or non-persistent use” – WHO, 1994), **harmful use** (“a pattern of psychoactive substance use that is causing [physical or mental] damage to health” – WHO, 1994), **hazardous use** (“a pattern of substance use that increases the risk of harmful [physical, mental, or social] consequences for the user” – WHO, 1994), **multiple drug use** or **polydrug use** (“the use of more than one drug or type of drug by an individual, often at the same time or sequentially, and usually with the intention of enhancing, potentiating, or counteracting the effects of another drug” – WHO, 1994), **non-medical use** (“use of a prescription drug, whether obtained by prescription or otherwise, other than in the manner or for the time period prescribed, or by a person for whom the drug was not prescribed” – WHO, 1994), **one-off use**, **recreational/social use** (“use of a [usually illicit] drug in sociable or relaxing circumstances, by implication without dependence or other problems” – WHO, 1994), **unsanctioned use** (“use of a substance that is not approved by a society or by a group within that society [disapproval is accepted as a fact in its own right, without the need to determine or justify the basis of the approval]” – WHO, 1994).

Abuse is defined by English-language dictionaries as “the improper use of something [e.g. alcohol]” (*Lexico*) and by WHO as “a term sometimes used disapprovingly to refer to any use at all, particularly of illicit drugs; persistent or sporadic excessive drug use inconsistent with or unrelated to acceptable medical practice” (WHO, 1994). The term also occurs in a few phrases such as **abuse liability** (“the propensity of a particular psychoactive substance to be susceptible to abuse, defined in terms of the relative probability that use of the substance will result in social, psychological, or physical problems for an individual or for society” – WHO, 1994), **abuse of non-dependence-producing substances** “repeated and inappropriate use of a substance [herbal and folk remedies, prescription drugs, proprietary drugs such as *analgesics* – aspirin, paracetamol; *antacids*; *laxatives*; *psychotropic drugs* – antidepressants, neuroleptics; *steroids* and other hormones; *vitamins*] which, though the substance has no dependence potential, is accompanied by harmful physical or psychological effects, or involves unnecessary contact with health professionals (or

both)” (WHO, 1994), **alcohol abuse**, **chemical abuse**, **drug abuse**, **psychoactive substance abuse**, and **substance abuse**.

English-language dictionaries define **misuse** as “the wrong or improper use of something” (*Lexico*), while WHO defined **misuse** or **non-medical use** as “use of a substance for a purpose not consistent with legal or medical guidelines” (WHO, 1994).

Associations of Adolescent Substance Use

According to Lena, Hajela & Panarella (1991, 1207), **adolescent substance use** is connected to all their life areas: **activities**: changes in usual patterns, daily routine, interests, peer group activities, relationships with same/opposite sex; **drugs**; **education**: adjustment, boredom, changes in schools, enjoyment, failure at school, grade, performance, plans, preferences, problems with authority, school (Akanbi *et al.*, 2015); **emotions**: depression, loneliness, moods, sadness, self-harm, suicidal thoughts; **home**: family composition, family functioning, family losses, health, relationships with the family; and **sexuality**: history of sexual abuse, sleep pattern, social life.

Almost 35 years ago, Newcomb & Harlow (1986) analysed the association between **disruptive life change events** such as *uncontrollable stressful events* (accident and illness events, family and parent events, relocation events), which creates a *perceived loss of control* (not in control, others control life, powerless), which, in its turn, engenders increased *meaningless* (no direction, no plans, no solutions), and **adolescent substance use** (alcohol, marijuana, and hard drugs) frequency.

Are associated with **substance use** certain **behaviours**, **conditions**, **mental health disorders**, **minor crimes**, and **subclinical phenomena**.

Addictive behaviour, **risky sexual behaviour**, **self-harm**, and **suicidal behaviour/ideation** are **behaviours associated with substance use**. The risk for **Internet addiction** may be predicted by **alcohol**, **drug**, and **tobacco use** (Lee *et al.*, 2013). **Behavioural addictions** (exercise, gambling, Internet use, love and sex, repetitive non-suicidal self-injury, shopping, suicidal behaviour, sun-tanning, work) share many characteristics and common neurobiological and genetic underpinnings with **substance addiction** (i.e., relapse, tolerance, withdrawal, etc.) (Blasco-Fontecilla *et al.*,

2016; Kuss & Griffiths, 2017; Hussain & Pontes, 2019). **Gambling disorders** (Rash, Weinstock & Van Patten, 2016) and **excessive use of ICTs** (computers, Internet, smartphones, etc.) (WHO, 2015), on one hand, and **substance use disorders**, on the other hand, share the same **key features**: *conflict/negative repercussions* (arguing, fatigue, lying, poor academic and occupational achievement, self-imposed social isolation and disintegration), *craving* (urge and obsessions related to online activity/substance use), *excessive use/salience* (impaired time management, loss of or diminished control over the activity, neglect of basic needs etc.), *mood modification* (use of online activity/substance to cope with negative emotional states or boredom), *relapse* (deterioration in someone's state of health after a temporary improvement), *tolerance* (need for more hours of use), *withdrawal* (feelings of anger, tension, anxiety and/or depression, when the devices/substances are inaccessible). Adolescent **alcohol, drug, and tobacco use** increases the risk of **risky sexual behaviour** (Ritchwood *et al.*, 2015) and **unplanned pregnancies** and, consequently, of **foetal exposure to addictive, teratogenic substances** (Connery, Albright & Rodolico, 2014). **Self-harm** covers **self-poisoning** (overdosing with medicines, swallowing poisonous substances) (Wood, 2009; Greydanus & Apple, 2011), but **other risk-taking behaviours** (food restriction, over-eating, promiscuity, recreational drug/substance misuse, smoking) could also be considered self-harmful. Greydanus & Apple (2011) list, among the causes of **self-harm**, antidepressant medication, drug and alcohol use, and substance abuse. *Self-poisoning (with alcohol; overdosing with drugs / medicines such as antidepressants, non-opiate analgesics, paracetamol, sedatives, tranquillisers; non-ingestible substances such as household bleach, recreational drugs)* are **forms of self-harm**. Almost two decades ago, Harrington (2001, 47) stated that “the cause [of **suicide**] is usually a combination of predisposing constitutional factors arising from genetic endowment or earlier experience and precipitating stressful events”. The researcher also provided a model of teenage suicide in which *individual disposition* (mental disorder, personality, or **substance abuse**) acts on *triggers* (altered state of mind, opportunity, or stressful event), which, together with *social milieu* (media coverage, role models in community, or taboos), inhibit or facilitate suicide (Harrington, 2001, 54). By 2004, there was accumulating evidence from clinical and epidemiological studies on the link between

drug use and **suicide** among adolescents (Wilcox, 2004). According to Cash & Bridge (2009), **substance (alcohol/drug) abuse disorders** contribute substantially to risk of suicide, especially in older adolescent males when co-occurring with mood disorder or disruptive disorders. **Substance use/abuse** is considered a **psychological factor associated with suicidal behaviour among adolescents**: female adolescents under the influence of alcohol are three times more likely to commit suicide; male adolescents under the influence of alcohol are 17 times more prone to make a suicide attempt than when they are sober; the association of mental health problems (conduct disorder, depression) and *substance use/abuse* is worse; this is the case of suicidal adolescents from Benin (Randall *et al.*, 2014; Sarbu, 2017a; Sarbu, 2017b).

Post-traumatic stress disorder is a **condition associated with substance use** in children and adolescents who have experienced childhood trauma (Farrugia *et al.*, 2011; Gavrilă-Ardelean, 2018).

Are considered **mental health disorders** (“problematic, recurrent uses of drugs or alcohol that cause significant distress or impairment in a person’s life” – American Psychiatric Association, 2018) **anxiety disorder** – *generalized anxiety* (worrying excessively about everyday things), *panic disorder* (feeling of acute and disabling anxiety), *separation anxiety* (fearing losing parents and of being alone), *social anxiety* (being excessively self-conscious in social situations), *specific phobia* (fearing a particular thing – blood, dogs, heights, or needles); **attention-deficit hyperactivity disorder (ADHD)** (being easily distracted and appearing to not listen when spoken to directly, fidgeting, having trouble with organization and frequently losing things, making careless mistakes, talking or interrupting, blurting out answers excessively); **bipolar affective disorder** (“alternating periods of elation and depression” – *Lexico*); **borderline personality disorder** (“severe mood swings, impulsive behaviour, and difficulty forming stable personal relationships” – *Lexico*); **depression** – *major depressive disorder* (episodes lasting at least two weeks) and *persistent depressive disorder* (episodes lasting for years); **schizophrenia** (“a breakdown in the relation between thought, emotion, and behaviour, leading to faulty perception, inappropriate actions and feelings, withdrawal from reality and personal relationships into fantasy and delusion, and a sense of mental fragmentation” – *Lexico*) (Child Mind Institute, 2019).

The severity of the problem can be determined based on four **categories of behaviour**: *impaired control* – using more of a substance and for a longer period of time than intended, being unsuccessful at cutting back on use despite wanting to, spending significant amounts of time getting, using and recovering from substance use, and experiencing intense cravings; *social impairment* – using substances despite problems with family, school or work obligations, reducing or giving up hobbies, interests, social and recreational activities because of substance use, and continuing substance use despite problems with interpersonal relationships; *risky use* – using substances in physically dangerous situations and using substances even though it is causing or worsening physical and psychological problems; *tolerance and withdrawal* – needing to increase the amount of a substance to achieve the same desired effect (i.e. to feel intoxicated, to avoid withdrawal symptoms) and the body's response to the abrupt cessation of a substance, once the body has developed a tolerance to it. It is important to know that **behavioural symptoms** (avoiding friends and social situations, erratic behaviour, moodiness, paranoia, and sleeping more or less than usual) can result from both **mental health disorders** and **substance use**.

Delinquency as a minor crime is associated, among others, with **alcohol and substance use** and **smoking** (Kuther, 1995), with **alcohol, cocaine, heroin, inhalants, LSD, marijuana, and tobacco use** (Arthur *et al.*, 2003), **online and offline forms of interpersonal victimisation** (e.g. online sexual solicitation), **depressive symptomatology** and **substance use** (Mitchell, Ybarra & Finkelhor, 2007; Panescu & Sarbu, 2019).

Alexithymia (“a subclinical phenomenon involving a lack of emotional awareness or, more specifically, difficulty in identifying and describing feelings and in distinguishing feelings from the bodily sensations of emotional arousal” – Nemiah *et al.*, 1976, in Singer & Tusche, 2014) may be associated with **mental disorders** (“any clinically significant behavioural or psychological syndrome characterized by distressing symptoms, significant impairment of functioning, or significantly increased risk of death, pain, or other disability” – *Medical Dictionary*) such as **alcohol and substance misuse** (Thorberg *et al.*, 2009; Karukivi, 2011). De Haan *et al.* (2013) investigated whether a familial vulnerability to alcoholism relates to the presence and severity of alexithymia in

substance use disorder-patients and found that the relation between a paternal family history of alcohol and a higher degree of alexithymia in substance use disorder-patients suggests that alexithymia could mediate the familiarity of alcoholism or substance use disorders in the paternal line. According to Morie *et al.* (2016), the children of individuals with alcohol-use problems demonstrate increased **alexithymia** that may raise the risk for future substance use.

Father – Daughter Relationship in Adolescent Substance Use

Levine & Singer (1988, in Kuther, 1995, 19) assessed whom do adolescents turn to for help for problems with alcohol or drugs. 84% said they would turn to friend for help, 66% would turn to a sibling, 41% reported their **fathers**, and 55% reported their mothers. Females were more likely to seek help from others. Male adolescents with alcoholic fathers showed steeper substance use growth over time than did female adolescents with non-alcoholic **fathers** (Chassin *et al.*, 1996, 74). Swadi (2000, 204) noted that families of children who misuse drugs were characterised as being those whose **fathers** were distant and disengaged and whose mothers were too involved. Pagliaro & Pagliaro (1996, in Mokoena, 2002, 44) pointed out that absence of a **father** figure is also related to adolescent psychopathology including substance abuse. De Rick & Vanheule (2006, 2007, in Thorberg *et al.*, 2009, 241) examined alexithymia, attachment and parental bonding and reported that avoidant attachment and lack of warmth from the **father** predicted 'cognitive' alexithymia (conceptualised as a cluster of the 'identifying', 'verbalising' and 'analysing' dimensions), and alcohol dependent individuals with insecure attachment reported higher levels of 'difficulties communicating their feelings' compared to a more securely attached group. Scull, Kupersmidt & Parker (2010, 981) found that parental influence variables (e.g., parental pressure to not use, perceived parental reaction) acted as protective factors against substance use. De Haan *et al.* (2013, 911) found that high alexithymic (50%) patients were more likely to have **fathers** with alcohol problems. Zaborskis & Sirvyte (2015, 1) found five independent familial factors significantly related to increased risk for adolescent smoking: low maternal monitoring, low satisfaction with family relationships, low school-

related parental support, easy communication with the **father**, and often use of electronic media for communication with parents. Similar risks may appear also when adolescents are using e-cigarettes (Kristjansson et al., 2017). Šumskas & Zaborskis (2017, 1) found three parenting factors associated with weekly use of alcohol: **father's** and mother's low monitoring, **father's** authoritarian-repressive and mother's permissive-neglectful parenting style. Mattick *et al.* (2018, 66) found that adolescents in their survey received alcohol (sips or standard drinks) from their parents (**fathers** and mothers alike). Moñino-García *et al.*'s (2018, 3) findings show that boys and girls with a bad relationship with their **father** had a higher risk of alcohol consumption. Su *et al.* (2018, 2) found that **fathers'** alcohol dependence symptom count was associated with higher adolescent risky drinking and conduct problems indirectly via disruption to **fathers'** and mothers' positive parenting behaviours. Kohútová & Almašiová (2019, 184) found that the **fathers** of 51.4% of occasional addictive substance adolescent users and 53.9% of occasional alcohol adolescent drinkers in their survey has secondary education with a school-leaving exam.

Conclusions

After analysing adolescent substance use, misuse, and abuse, the authors conclude that, in order to prevent it, it is vital:

- To know the effects substance use, misuse, and abuse can have on children and adolescents' health state;
- To know the substances children and adolescents could use;
- To know the categories of adolescents at risk for substance use;
- To know the domain risk factors for substance use in children and adolescents;
- To properly understand such terms as substance use, substance misuse, and substance abuse;
- To know the associations of adolescent substance use;

- To know the type of parent – adolescent relationship in adolescent substance use.

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