

Peculiarities of the Impact of Psychotropic Substances on the Development of Emotional Intelligence of Drug Addicts

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Abstract The growing drug addiction rates in the world require an immediate solution to the issue of overcoming addiction and reducing the number of relapses. Identifying the impact of the type of psychotropic substances on the emotional intelligence of drug addicts will contribute to their more effective socialization. The aim is to reveal the influence of different types of psychotropic substances on the emotional intelligence of drug addicts. *Methods:* The study included standardized psychometric tests. Descriptive statistics and univariate analysis of variance (ANOVA) were used. *Results:* The research showed that the studied drug addicts have a medium level of emotionality ($M=6.72\pm 3.34$), medium emotional stability ($M=15.76\pm 5.32$), and a low level of emotional intelligence ($M=34.12\pm 15.84$). It was also established that the studied indicators are the lowest in persons using cocaine and opioids. No gender or age differences were found. *Conclusions:* The study showed that the heavier the psychotropic substance, the lower the emotional intelligence of drug addicts. Cocaine addicts have the lowest level of emotionality, emotional intelligence, and emotional stability. *Prospects:* The obtained data make it possible to differentiate drug addicts according to the level of required psychological assistance and support. This will enable building corrective programmes for the

development of emotional intelligence and reducing the possibility of relapse.

Keywords Emotional Intelligence, Emotional Stability, Psychotropic Substances, Drug Addiction, Emotional Awareness

1. Introduction

Modern society is characterized by rapid globalization progress, intensification of the development of socio-economic, cultural, political, and spiritual spheres of the individual. Such dynamism entails the creation of means that can change a person's consciousness to improve the indicators of his/her vital activity. Many people turn to narcotic substances to reduce the negative impact of the external environment, or to find new emotional experiences. In most cases, this leads to severe forms of addiction, which they are no longer able to cope with on their own.

According to the Centre for Medical Statistics of the Ministry of Health of Ukraine (Form No. 32 The 2019 Report on Persons with Mental Disorders Caused by the Use of psychoactive agents), it can be stated that there were

346 people addicted to cocaine, 40,324 people addicted to opioids, 4732 - to cannabinoids, 1,457 - to other stimulants in 2019. A sharp increase in the use of cocaine was detected in 2019. From 2018 to the end of 2019, the number of cocaine addicts increased 8.5 times [1].

The World Health Organization (WHO) warns that the use of psychotropic substances without special medical supervision entails significant risks for human health, and in some cases to narcotic disorders. The use of psychotropic drugs causes a significant burden on the socio-economic system. Disability, high premature mortality, increased health care costs, and criminal justice reduce the country's economic performance. According to the WHO, about 270 million people (5.5% of the world's population aged 15-64) used psychotropic substances in 2021, and almost 35 million people suffered from substance use disorder [2].

Such data indicate that the problem of dependence on psychotropic substances is relevant in modern society and requires an effective solution. Researchers proved that the abuse of psychotropic substances is the result of personal interests of pharmaceutical companies, prescribers, and pharmacists [3]. The production of such substances implies sales, which, in turn, is implemented by doctors who prescribe drugs, and pharmacists who sell them [4]. The consumption of large quantities of medications is determined by social policy, which often leads to mental disorders among a part of the population. The need for psychotropic medications to improve mental health is artificially created [5]. In some countries, there is a low level of referrals to specialists for various psychological problems, which increases the demand for psychotropic substances [6]. The problem of addiction to psychotropic substances is partly the lack of a clear classification of such substances, which leads to abuse [7].

Each country at its own discretion determines the severity of psychotropic substances, their effect on the body, as well as the legal framework regulating their production. Therefore, the degree of drug addiction in each country differs in intensity and severity [8]. However, one thing remains common: psychotropic substances have a destructive effect on a person, disrupt his/her life balance, and significantly reduce interpersonal interaction [9]. One of the most negative consequences of such an influence is a decreasing emotional intelligence of drug addicts. The ability to recognize emotions, express them, and control them allows a person to effectively interact with others. This ability is significantly reduced in drug addicts, which leads to impaired social functioning [10]. Moreover, different psychotropic substances affect emotional intelligence in different ways [11]. The ability to manage emotions is a predictor of successful personal adaptability, and this ability is very low in drug addicts [12]. Developing emotional intelligence helps people manage stressors and improve their mental performance. Developing emotional intelligence skills among users of psychotropic substances enable them to effectively manage their emotional state

because of drug withdrawal and encourages more effective interaction [13]. Emotional intelligence is also a predictor of physical health in drug addicts [14], which indicates its significant impact on a person's life.

Modern studies prove the relevance of the problem of emotional intelligence of drug addicts, but it is advisable to expand them by conducting an analysis of the impact of the type of psychotropic substances on emotional intelligence. Therefore, the aim of the study is to identify the level of development of emotional intelligence of persons addicted to various types of psychotropic substances. The aim involved the fulfilment of the following research objectives:

- 1) Carry out diagnostics of emotionality, emotional stability and emotional intelligence of drug addicts;
- 2) Determine the level of emotional intelligence of persons addicted to various types of psychotropic substances;
- 3) Establish whether age and gender influence the level of emotional intelligence of drug addicts.

The aim and objectives gave grounds to advance the research hypothesis: the type of psychotropic substances affects the emotional intelligence of drug addicts and the level of emotional intelligence is much lower in people who use cocaine and opioids than in those who use cannabinoids and stimulants.

2. Literature Review

2.1. Concept of Psychotropic Substances and their Influence on Personality

Psychotropic substances are a group of drugs that can influence and change a person's mental and emotional states. There are many different classifications of these substances, which differ from country to country. According to the WHO (2016), psychoactive drugs are "substances that, when taken in or administered into one's system, affect mental processes, e.g. perception, consciousness, cognition or mood and emotions" [2]. The sale and production of most psychotropic substances is strictly controlled at the legislative level or is prohibited altogether. There are also international drug conventions that control the production and distribution of psychotropic substances: Single Convention on Narcotic Drugs [15]; Convention on Psychotropic Substances [16]; Convention on Combating Illicit Traffic in Narcotic Drugs and Psychotropic Substances [17].

According to the Law "On Circulation of Drugs, Psychotropic Substances, Their Analogues and Precursors in Ukraine", psychotropic substances are substances of natural or synthetic origin that are capable of causing a state of dependence and having a depressing or stimulating effect on the central nervous system, causing disturbances in perception, emotions, thinking, behaviour, and constitute a health hazard [18].

Mamat et al. [10] note an increased need for awareness about the use of psychotropic substances among modern youth. The issue of awareness of the side effects of psychotropic substances, the process of addicting to them, as well as the interaction with other drugs is particularly acute. Some researchers focus on the problem of methamphetamine abuse, which is called one of the most global in the field of health care. The euphoric effect of this highly addictive substance can be compared to the effects of cocaine and other stimulants [8]. Wieghorst et al. [19] found a negative effect of medical cannabis on human cognitive functions. Crean et al. [20] proved that the use of cannabis disrupts cognitive functions at several levels - from basic motor coordination to more complex ones, such as the ability to plan, organize, solve problems, make decisions, memorize, control emotions and behaviour.

Science distinguishes two main directions when explaining the mechanism of action of psychotropic drugs. A "disease-oriented" approach reveals the biochemical imbalances caused by the disease. Another, "narcocentric" approach studies the psychoactive properties of psychotropic substances and their ability to cause mental and psychological changes in consciousness [21].

The second approach claims that psychotropic drugs have a negative effect on the functioning of all mental processes and properties. The effect on the emotional sphere is especially damaging, as it causes temporary euphoria and elevated activity. As a result, over time, a person becomes disoriented in the environment and cannot constructively perceive and express emotions, which disrupts interaction with others. One of the key consequences of the abuse of psychotropic substances is a violation of interpersonal interaction and psychoemotional balance [7]. This reduces the functional capabilities of the individual as an employee, as a citizen, as a member of society [22]. Psychotropic substances have a negative effect on mental development, and the heavier the drugs, the more severe the violations are observed. Cocaine, as one of the most addictive drugs, can harm the body even after a single use [23]. Initially, the drug stimulates the central nervous system, allows concentration, gives a feeling of comprehensiveness, energy. However, as soon as cocaine leaves the body, there is a feeling of lethargy, depression, irritability, weakness, and problems with concentration, which prompts repeated use. Drug addicts lose the sense of reality time, and the body gets used to the fact that only drug can bring emotional satisfaction, emotional ties with others are broken. The constant desire to restore the state of emotional satisfaction causes a decreased emotional intelligence, where the drug addict loses contact with society as a result. They interact with the world through emotional intelligence.

2.2. Peculiarities of Manifestation of Emotional Intelligence in Drug Addicts

Emotional intelligence is the basis of a person's empathy,

his/her ability to empathize, which improves interpersonal interaction [24]. Developed emotional intelligence ensures success and plays an important role in regulating negative emotional states [25]. It enables expressing one's needs and interests through emotional manifestations and builds constructive relationships with them based on the perception of the emotions of others.

Interest in emotional intelligence appeared in the 20th century. Salovey and Mayer were the first to describe it as an analogue of general intelligence, denoting the ability to interact with the external environment. They argued that high emotional intelligence allows regulating one's own and other people's emotions, which contributes to their adaptation [26]. According to Mayer and Salovey's ability model, emotional intelligence is viewed as a form of innate intelligence that contains certain components of emotion management. They included: perception, assessment and expression of emotions, emotional expression, understanding and analysis of emotions, reflective regulation of emotions [27].

Bar-On [28] interpreted emotional intelligence as a certain set of non-cognitive abilities and competencies that determine an individual's ability to successfully cope with the influence of the environment. He included five aspects in the structure of emotional intelligence: intrapersonal, interpersonal, adaptive, stress management, and general mood.

Goleman [29] considered emotional intelligence a general phenomenon that reflects the possibility of a person's success in life. The author claimed that emotional intelligence is the determining factor in achieving success despite the indicators of general intelligence. The author included recognition of one's own emotions, management of emotions, self-motivation, and understanding of other people's emotions in its structure.

Modern studies prove the existence of disorders of emotional intelligence in drug addicts. Researchers proved that adolescents with drug addiction have disorders of emotional intelligence. At the same time, the development of EI components can positively reduce the abuse of psychoactive substances [30].

Kun et al. [31] found that an individual's ability to recognize, express, and control emotions is associated with dependence on psychotropic substances. At the same time, low emotional intelligence is a precursor to drug addiction [31].

There are many definitions and approaches among modern researchers of emotional intelligence. However, all of them expressly demonstrate the importance of developed emotional intelligence for the general functioning of an individual in society. The use of psychotropic substances leads to a violation of emotional intelligence, which causes a decrease in the individual's potential. The inability to adequately understand emotions, manifest and regulate them leads to numerous behavioral disorders. On the other hand, low emotional intelligence

increases addiction, causes the risk of relapse, and reduces the effectiveness of treatment.

Depressed resistance to conflicts, frustration tolerance, and social competence make a person emotionally unstable. Addiction occurs faster because of dissatisfaction with relationships in the family, at work, in intimate relationships, etc [24]. Looking for a way out for negative emotions and trying to get positive ones, a person can change his/her state of consciousness in a certain usual way, switch from one substance to another or combine different forms of addiction. Such behaviour indicates the need for emotional experiences artificially created by various psychoactive substances.

3. Methods

3.1. Research Design

The study lasted from December 2022 to April 2023 and involved four stages. The first stage involved the methodological analysis of the issue under research, the study of diagnostic tools, and the substantiation of the research programme. The second stage provided for the selection of an empirical background, sampling, the preparation of the necessary materials, and conducting diagnostics. The third stage involved the processing and interpretation of the obtained results. The fourth stage provided for a qualitative analysis of the obtained data, drawing conclusions and outlining prospects.

The research design included the preparation of the necessary diagnostic tools, the selection of groups of subjects in accordance with the aim and objectives.

3.2. Sampling

The research sample included 226 drug addicts aged 18 to 45 years: 98 males and 127 females. In particular, 38 people were addicted to cocaine (of them 18 women and 20 men), 81 - to opioids (25 women and 56 men), 51 - to cannabinoids (27 women and 24 men), and 56 - to other stimulants (22 women and 34 men).

The sample was formed at the following institutions: GROST Addiction Clinic (Odesa), PRIVAT CLINIC Addiction Institute (Odesa), Adomed Addiction Institute (Kyiv), NewLife Addiction Clinic (Kyiv), Genesis Life Addiction Clinic (Kyiv).

3.3. Instruments

Empirical diagnostics was carried out using standardized methods. The level of emotional intelligence was determined using Hall Emotional Intelligence Test (EQ-test) (test authors - N. Hall). The main purpose of the test is to determine the ability to recognize one's emotions, to show them in accordance with the situation, the ability to recognize other people's emotions, to show empathy and

compassion. The methodology consists of 30 statements. The interpretation is based on 5 test scales: emotional awareness; control of one's own emotions; self-motivation; empathy; recognizing other people's emotions.

To determine the degree of emotionality of the subjects, the Suvorov Emotionality Test was used (Diagnosis of Emotionality, test author: V. Suvorov). This technique was proposed by Suvorov in 1976 to determine the general emotionality of a person. In this context, emotionality reflects the ability to show certain emotional reactions. The technique includes 15 questions, weighting 1 point each. The higher the total score according to the method, the higher the emotionality of the subject.

Eysenck's scale of emotional stability (Test for Emotional Resilience (Neuroticism), test author: Hans Jürgen Eysenck). The scale is part of the of H. Eysenck's technique, which measures extraversion-introversion and neuroticism (Form A). Only questions related to neuroticism (emotional stability) are selected. Emotional stability indicates the level of an individual's ability to remain stable in different life situations.

The research results were processed in Microsoft Excel 2016, using statistical data analysis programs SPSS 29.0 and Jamovi 2.3.21. Jamovi 2.3.21 program consists of tools that allow statistical analysis of results in a simplified form.

3.4. Ethical Criteria of Research

The study was conducted by the norms of the Declaration of Helsinki (2013). Respondents participated in the study voluntarily. All respondents who received informed consent before conducting the study, were introduced into the purpose and objectives of the study. They were informed about data privacy and anonymity of the study. Individual and group testing of subjects who previously approved consent to their examination were conducted.

4. Results

Table 1. Indicators of the development of emotional intelligence of drug addicts (N=226)

Scales		M	SD	σ
Emotionality		6.72	3.34	11.13
Emotional stability		15.76	5.32	28.34
Emotional intelligence	emotional awareness	9.32	3.29	10.84
	control of one's own emotions	9.50	3.85	14.82
	self-motivation	9.60	3.91	15.25
	empathy	8.99	4.06	16.46
	recognizing other people's emotions	8.70	4.21	17.75
	Integral indicator of EI	34.12	15.84	250.91

Table 2. Analysis of indicators of emotional intelligence depending on the type of psychotropic drugs

		N	M	SD	F
Emotionality	cocain	74	3.97	2.42	55.94 p≤0.001
	opioids	50	6.44	2.41	
	cannabinoids	33	7.82	2.05	
	stimulants	69	9.35	2.92	
	Total	226	6.72	3.34	
Emotional stability	cocain	74	19.77	3.17	44.01 p≤0.001
	opioids	50	15.73	4.79	
	cannabinoids	33	14.94	3.55	
	stimulants	69	11.55	5.02	
	Total	226	15.76	5.32	
emotional awareness	cocain	74	7.09	3.22	32.07 p≤0.001
	opioids	50	9.40	2.54	
	cannabinoids	33	9.33	1.85	
	stimulants	69	11.64	2.77	
	Total	226	9.32	3.29	
control of one's own emotions	cocain	74	6.85	3.31	36.68 p≤0.001
	opioids	50	9.00	2.89	
	cannabinoids	33	10.27	2.32	
	stimulants	69	12.33	3.53	
	Total	226	9.50	3.85	
self-motivation	cocain	74	6.96	3.00	29.85 p≤0.001
	opioids	50	6.80	3.40	
	cannabinoids	33	8.79	2.70	
	stimulants	69	12.20	3.81	
	Total	226	9.60	3.91	
empathy	cocain	74	5.86	3.19	43.95 p≤0.001
	opioids	50	6.08	3.49	
	cannabinoids	33	9.48	2.31	
	stimulants	69	12.06	3.46	
	Total	226	9.00	4.06	
recognition of emotions	cocain	74	6.34	3.60	18.01 p≤0.001
	opioids	50	7.20	4.22	
	cannabinoids	33	8.55	3.61	
	stimulants	69	10.97	3.78	
	Total	226	8.71	4.21	
EI	cocain	74	33.11	13.20	56.33 p≤0.001
	opioids	50	36.48	11.72	
	cannabinoids	33	47.42	6.40	
	stimulants	69	59.20	12.89	
	Total	226	46.12	15.84	

The study revealed that low indicators of emotionality, emotional intelligence, and emotional stability are dominated among the studied drug addicts (Table 1).

It was established that drug addicts have a medium level of emotionality ($M=6.72$; $SD=3.34$) and medium emotional stability ($M=15.76$; $SD=5.32$). They also showed a medium level of the components of emotional intelligence: emotional awareness ($M=9.32$; $SD=3.29$), control of one's own emotions ($M=9.50$; $SD=3.85$), self-motivation ($M=9.60$; $SD=3.91$), empathy ($M=8.99$; $SD=4.06$), recognition of other people's emotions ($M=8.70$; $SD=4.21$). The integrated indicator of emotional intelligence in the studied drug addicts is low ($M=34.12$; $SD=15.84$).

However, analysing the level of emotional intelligence depending on the type of psychotropic substances, it should be noted that the lowest level is found in cocaine addicts (Table 2).

The obtained data give grounds to state that the level of emotionality is low in cocaine addicts ($M=3.97$; $SD=2.42$), the medium level is found in opioids ($M=6.44$; $SD=2.41$), cannabinoids ($M=7.82$; $SD=2.05$) and stimulants ($M=9.35$; $SD=2.92$) users. So, it is statistically confirmed that the level of emotionality is the lowest in cocaine users ($F=55.94$, $p\leq 0.001$).

Emotional stability is low in cocaine users ($M=19.77$; $SD=3.17$), the medium level is found in opioids ($M=15.73$; $SD=4.79$), cannabinoids ($M=14.94$; $SD=3.55$) and stimulants ($M=11.55$; $SD=5.02$) users. Therefore, it is statistically confirmed that the level of emotional stability is the lowest in cocaine users ($F=44.01$, $p\leq 0.001$).

Emotional awareness is low in cocaine users ($M=7.09$; $SD=3.22$), medium opioids ($M=9.40\pm 2.54$), cannabinoids ($M=9.33$; $SD=1, 85$) and stimulants ($M=11.64$; $SD=2.77$) users. Based on such indicators, the level of emotional

awareness is the lowest in cocaine users ($F=32.07$, $p\leq 0.001$).

Control of one's own emotions is low in cocaine users ($M=6.85$; $SD=3.31$), medium in opioids ($M=9.00$; $SD=2.89$), cannabinoids ($M=10.27$; $SD=2.32$) and stimulants ($M=12.33$; $SD=3.53$) users. Therefore, it is statistically confirmed that the control of one's own emotions is the lowest in cocaine users ($F=36.68$, $p\leq 0.001$).

Self-motivation in cocaine users is low ($M=6.96$; $SD=3.00$), it is also low in opioid users ($M=6.80$; $SD=3.40$), medium in cannabinoids ($M=9.79$; $SD=2.70$) and stimulants ($M=12.20$; $SD=3.81$) users. So, the level of self-motivation is the lowest in cocaine and opioids users ($F=29.85$, $p\leq 0.001$).

Empathy is low in cocaine ($M=5.86$; $SD=3.19$), opioids ($M=6.80$; $SD=3.40$), cannabinoids ($M=8.79$; $SD=2.70$) users, and medium in stimulants users ($M=12.20$; $SD=3.81$). Therefore, it is statistically confirmed that the type of psychotropic substances affects the empathy of drug addicts, and the level of empathy is the lowest in cocaine, opioids and cannabinoids users ($F=43.95$, $p\leq 0.001$).

Recognition of other people's emotions is low in cocaine ($M=6.34$; $SD=3.60$), opioids ($M=7.20$; $SD=4.22$) users, medium in cannabinoids ($M=8.55$; $SD=3.61$) and stimulants ($M=10.97$; $SD=3.78$) users. Consequently, emotion recognition is lowest among cocaine and opioid users ($F=18.01$, $p\leq 0.001$).

The general level of emotional intelligence is low in cocaine ($M=33.11$; $SD=13.20$), opioids ($M=36.48$; $SD=11.72$) users, medium in people who are cannabinoids ($M=47.42$; $SD=6.40$) and stimulants ($M=59.20$; $SD=12.89$) users. The data indicate that emotional intelligence is the lowest among cocaine and opioid users ($F=56.33$, $p\leq 0.001$) (Figure 1).

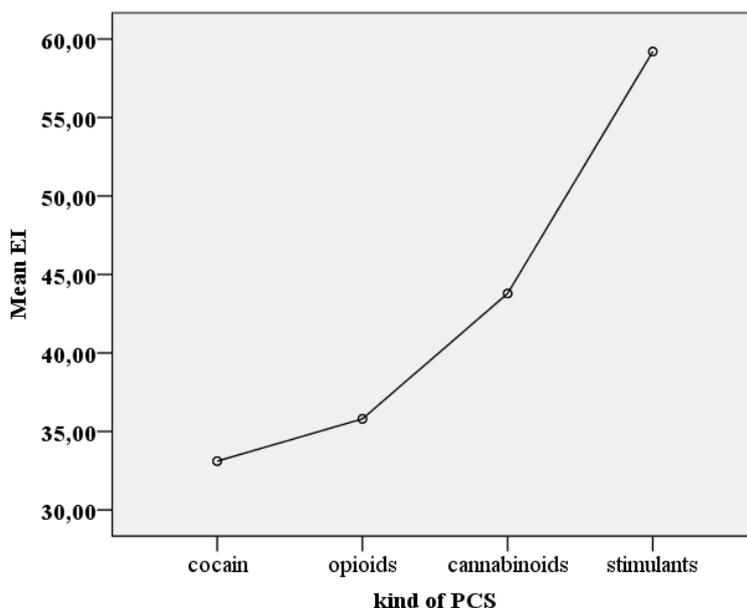


Figure 1. The influence of the type of psychotropic substances on the level of emotional intelligence of drug addicts

Table 3. The influence of age and gender on the level of emotional intelligence of drug addicts

Dependent variable Emotional intelligence				F	P-value
age	M	SD	N		
<25	45.58	15.25	81	0.584	0.559
26-35	49.00	15.66	74		
>36	43.74	16.42	71		
Total	46.12	15.84	226		
gender	M	SD	N	F	P-value
male	45.27	15.17	128	1.79	0.183
female	47.23	16.675	98		
Total	46.12	15.84	226		

However, the study showed that the influence of such characteristics as age and gender did not show significant differences at the level of emotional intelligence (Table 3).

According to the obtained data, there are no statistically significant differences in the indicators of emotional intelligence of drug addicts by age ($F=0.584$, $p \geq 0.05$) and gender ($F=1.79$, $p \geq 0.183$). This suggests that emotional intelligence is equally low in all age groups of drug addicts, and equally in women and men.

The obtained results indicate that different types of psychotropic substances have different effects on emotional intelligence in drug addicts. The heavier the psychotropic substance, the lower the emotional intelligence.

5. Discussion

It was established that drug addicts have a low level of emotionality, emotional intelligence, and emotional stability. Such results indicate that it is difficult for them to control their emotions, react accordingly, and recognize the emotional states of other people. The hardest psychotropic substances are used when a drug addict cannot cope with unpleasant emotional experiences and becomes dependent on the need to get pleasure.

A low level of emotional intelligence found in drug addicts coincides with previous studies. Bukhari et al. [14] also found that emotional intelligence is low in drug addicts. Moreover, he proved the impact of emotional intelligence on the physical health of drug addicts. Sánchez Alonso [11] proved that lower frequency of consumption of psychotropic drugs contributes to greater self-control, reduced stress and better emotional intelligence. There is also an inverse relationship between a low level of emotional intelligence and drug addiction. It is noted that emotional instability is a factor in the faster emergence of addiction to psychotropic substances. This is because individuals with low emotional intelligence are more susceptible to negative influences [12].

This study revealed a different level of emotional intelligence in drug addicts who use different types of psychotropic substances. It was found that cocaine and opioids users have the lowest emotional intelligence. The medium level was found in addicts using cannabinoids and stimulants. This was confirmed by other studies. MacKenzie and Cservenka established that using cannabinoids leads to emotional difficulties, problems perceiving and expressing emotions, and an inability to differentiate them [32]. Zamir et al. [13] found that adults who use methadone (opioid) have low emotional intelligence. At the same time, their inclusion in a special programme for the development of emotional intelligence skills contributed to its improvement. Fox et al. [33] also found low indicators of emotional intelligence in cocaine-addicted people. According to their findings, certain aspects of emotional intelligence influence factors associated with relapse, such as stress dysregulation and impulse control. Sánchez Alonso [11] also found low levels of emotional intelligence in opioid addicts. Rasheed et al. [34] reached the same conclusion. Wu et al. [35] claim that treating patients with opioids reduces emotional expressiveness, disrupts the ability to understand and perceive the emotional manifestations of other people. Opioid addiction negatively affects patients' emotional awareness [35].

Studies on the identification of gender differences in the emotional intelligence of drug addicts are ambiguous. This study found no statistical differences at the level of emotional intelligence between drug-addicted men and women. Stolberg [36] obtained the same results in his study. But there are also contradictory results. Mamat et al. [10] established that men use marijuana more often than women. Alatawi et al. [8] indicate that women are more prone to abuse psychoactive substances against the background of emotional disorders. At the same time, this contradicts the study of Aslanidou [37], in which such differences were not statistically confirmed. Therefore, gender differences at the level of emotional intelligence of drug addicts should be more thoroughly studied and include larger samples to

prove statistical significance.

Age differences in emotional intelligence were not established in this study. Tsavou and Petkari [6] obtained the same results and found a connection between drug addiction and low emotional intelligence but did not find an age difference at the level of emotional intelligence. However, Saraiva et al. [38] found that there is an age difference and that older drug addicts have higher emotional intelligence than younger ones.

The obtained results indicate that the emotional intelligence of drug addicts is not sufficiently developed, and the type of psychotropic substances affects the level of emotional intelligence.

6. Conclusions

The study found that people who are addicted to cocaine, opioids, cannabinoids, and stimulants have low levels of emotionality, emotional stability, and emotional intelligence. The heavier the psychotropic substances, the lower the emotional intelligence. It was proved that the level of emotional intelligence, emotionality and emotional stability is affected by the type of psychotropic substances regardless of age or gender. The more severe the drug addiction, the lower the emotional intelligence. Drug addicts with low emotional intelligence are not capable of constructive interpersonal interaction, do not understand others well, and are not able to express their emotional states according to the situation.

Among the limitations of the study, the changing course of drug addiction is worth noting. The probability of relapse is much higher than the probability of remission. Therefore, the study of the emotional sphere of drug addicts, especially those undergoing treatment, requires a longer and deeper study. The difficulties related to the registration of such persons should be attributed to the limitations. Even those persons who are undergoing treatment do not always make contact and do not willingly participate in research. Limitations should also include the impossibility of monitoring the use of specific psychotropic substances by drug addicts. They can use not only one type, but also combine them, so determining the effect of a specific type of substance on emotional intelligence can be indirect.

The limitations include the age characteristics of the sample since all respondents are under the age of 45, which in a certain way, mediate the general picture of the research results.

The advantage of this study is the data collection methodology, which includes the confidentiality of the questionnaire and the received answers, ensuring the maximum informativeness of the collected data.

As prospects for further research, it is appropriate to expand the list of psychotropic substances that can reduce the emotional intelligence of drug addicts. It is also appropriate to make a comparative analysis of the emotional intelligence of drug addicts at the stage of

treatment and in the process of remission. An effective means of reducing dependence on psychotropic drugs is timely prevention, which includes informing about the consequences of drug abuse, especially among adolescents and young people. Therefore, in the future, it is advisable to develop a program to prevent addiction to psychotropic substances.

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