

Study on Relationship between Personality Traits and Relapse Tendency in Drug Addicts

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ABSTRACT

Objective: To explore the relationship between personality traits and relapse tendency of drug addicts. **Methods:** 187 drug addicts were tested on the relapse tendency scale, and the results were analyzed by SPSS24.0. **Results:** (1) there is no difference in demographic variables in personality traits of drug users, and there is significant difference in the number of relapse tendencies entering drug rehabilitation centers; (2) there is a high correlation between personality traits and relapse tendency, in which there is significant negative correlation between inclination and relapse tendency, and stability and mental quality and relapse tendency. **Conclusion:** The close association between personality traits and the relapse tendency provides a new perspective for us to better understand the relapse tendency of drug users and their influencing factors.

KEYWORDS

Drug addicts; Personality trait; Relapse tendency

1. PREFACE

1.1. Research Background of Drug Rehabilitation

Drug addiction (Drug Addiction) is generally defined as a behavioral pattern of continuous, regular intake of addictive psychotropic drugs and an inability to stop medication through volitional effort (Koob, 2001) [1]. According to a report released by the United Nations Drug and Crime Studio, more than 29 million drug users suffer from addictive diseases, accounting for 4.83 percent of the world's population, 200,000 people have died from drug involvement, drug use has become a very serious social problem, the impact and consequences are disastrous. Drug addicts face many difficulties in the process of getting rid of drug dependence, among which relapse is one of the main factors leading to drug rehabilitation failure. Restoration not only hinders the rehabilitation process of individuals, but also brings a significant burden to the society.

Personality is a relatively stable and unique psychological behavior pattern formed by the interaction with the acquired environment on the basis of genetic quality [2]. Personality traits, as important indicators of individual differences, influence multiple aspects of individual behavior and psychological responses. Therefore, studying the relationship between personality traits and relapse tendency of drug addicts has important practical significance for preventing relapse and designing personalized interventions.

1.2. Study Status

1.2.1. Study on the personality traits of drug addicts

Previous studies on the personality characteristics of drug addicts believe that drug addicts show personality characteristics that are obviously different from those of normal people. By searching the existing literature, it was found that the domestic research on the personality characteristics of drug addicts is similar to the personality classification study, which discusses the personality of drug addicts from the perspective of personality type and personality traits.

One study made a further analysis of the personality characteristics of drug users, and the characteristics were divided into three aspects: self-cognition, emotion and behavioral personality [3]. The self-awareness of drug users is mainly manifested as repeated drug use and drug rehabilitation experience, which leads to learned helplessness and self-denial, lack of belief, reduced self-efficacy, and thus escape from real life. Therefore, they will view themselves negatively, classify themselves as different, and abandon themselves. Emotional instability, emotional indifference and pessimism, which make them lack a sense of family responsibility, empathy with vulnerable groups, and too pessimistic, sensitive and suspicious. The main characteristics of drug users are lazy behavior; this makes them prone to blind conformity, conformity, inefficient, procrastination, lack of perseverance and poor self-discipline. It believed that drug users have common points in personality, and they may have some deficiencies in personality, which leads to their lack of correct pictures and relieve their negative emotions. And when faced with the pleasure of drugs, they can temporarily paralyze themselves and get rid of the feeling of psychological imbalance [4].

Someone used the cartel scale to conduct psychological tests on compulsory drug addicts in Nanning, Guangxi, and they found that drug addicts generally have different degrees and different psychological problems in different aspects [5]. The personality characteristics of drug users show different gender, age and cultural level, but generally show low stability, consistency and intelligence, and high group and sensitivity. They also found that drug addicts were anxious, prone to conformity, poor self-discipline and lack of independence. Another study also use cartel psychological test, test Xiamen drug addicts personality characteristics, the results found that drug addicts have higher dare and worry [6], with Liu Huizhen (1998) similar results, addicts in intelligence, stability, strong, constant and self-discipline level is low, different gender of addicts in different personality characteristics. A study believe that the spiritual personality characteristics of drug addicts are obvious. They used EPQ to test adult male drug addicts, and found that adult male drug users through labor had typical mental quality, mainly manifested as the disregard of legal and moral constraints, impulsive behavior, aggressive, and incompatible with the external environment. Therefore, they believe that highly typical psychiatric personality traits may be an important personality factor for drug users to take the road to drug use [7].

1.2.2. Study on the relapse tendency of drug addicts

The relapse rate of drug rehabilitation in China is always high [8], so the real problem of drug rehabilitation lies in how to effectively prevent relapse [9].

The relapse tendency is the possibility of addiction caused by drug addicts after a period of rehabilitation treatment. In the analysis of the influencing factors of relapse tendency, some scholars believe that the reasons come from the physical, psychological and social aspects. Zhang Jianjun and Cao Chang'an (2000) [10] believe that the main reason for relapse is the temptation of heart addiction and drug friends, but also affected by mood changes. A study believe that the relapse factors are mainly caused by psychological dependence and conditioned reflex, negative emotions are the fuse, at the same time, social factors such as toxic friends and drug environment [11]. Another study believe that strong will and belief in drug rehabilitation are also important reasons for repeated relapse after drug rehabilitation [12].

Study discussed the influence of sensation seeking, negative emotions and risk cognition on the relapse tendency of drug addicts, and found that all three had a significant impact on the tendency of relapse [13]. A study tried to use group psychological intervention to effectively reduce the tendency of relapse correction [14]. They used various group counseling interactions such as lectures, scenario simulation and projection contact to assess the change of the relapse tendency of drug addicts. The results found that group counseling was well targeted and effective in reducing the tendency of relapse. They believe that the high relapse rate of drug users is due to the lack of sense of responsibility for life and confidence in self-potential. The group psychological counseling can deepen their self-understanding, reduce interpersonal conflicts, alleviate negative emotions, and be of great help to reduce the relapse rate.

In summary, there have been studies on the relationship between personality traits and relapse tendency, and certain results have been obtained, but the relationship between the two is not clear. Therefore, it is necessary to study it.

1.2.3. Study Hypotheses

According to the previous research on personality characteristics of drug addicts and the results of relapse tendency, drug addicts often show different personality traits from ordinary people, such as higher self-denial tendency and low self-discipline. These personality traits are likely to affect the drug withdrawal process, leading to increased relapse tendency. Therefore, the present study proposed the following hypotheses:

- (1) The personality traits and relapse tendency of drug addicts showed significant differences in demographic variables;
- (2) There is a significant negative correlation between the emotional stability of the personality traits and the relapse tendency of drug addicts;
- (3) There is a significant positive correlation between the personality traits of drug addicts and the tendency of relapse.

2. STUDY OBJECTS AND METHODS

2.1. Study Subjects

A total of 187 valid questionnaires were collected, all were male with a mean age of 39.18 ± 9.94 years.

2.2. Study Methods

The questionnaire survey method of collective test was adopted, and the main test was unified training before the questionnaire was sent, so as to ensure that the questionnaire instruction could be smoothly and clearly expressed. Data entry and analysis were performed using SPSS24.0, difference testing for demographic variables and correlation between variables.

2.3. Research Tools

Personality traits were measured using the Eysenck Personality Questionnaire (EPQ) revised by Chen Zhonggeng. The questionnaire consisted of 85 questions, all using 2-point alternative answers, including three subscales (E), emotional stability (N) and spirituality (P) and the polygraph (L) scale. Long-term practice indicates a good reliability and validity of this scale.

The self-programmed relapse tendency scale was used to measure the relapse tendency of drug addicts. The questionnaire included 18 questions, all using 5-point alternative answers, and higher scores indicate a greater tendency to relapse. The Cronbach α reliability of the questionnaire was 0.78, half score of 0.76 and validity of 0.80, indicating high reliability and validity of the scale.

3. RESULTS AND ANALYSIS

3.1. Basic Information of the Subjects

The results of the subject's basic information distribution are shown in Table 1.

Table 1. Basic information of the subjects

demographic variables	class	number of people	percentage (%)
Education situation	Literacy or semi-illiteracy	12	6.42
	primary school	56	29.95
	junior middle school	87	46.52
	College or above	32	17.11
occupation	Cadres and scientific researchers	4	2.14
	worker	18	9.63
	peasant	28	14.97
	self-employed	38	20.32
Marriage situation	unemployed	74	39.57
	other	26	13.90
	unmarried	71	37.97
	divorce	45	24.07
Drug duration	married	27	14.43
	Divorce has a partner	44	23.53
	Within three months	11	5.88
	Three months to one year	167	89.30
Number of visits to the rehab facility	One year or more	9	4.81
	1	81	43.32
	2-3	74	39.57
	More than 3 times	32	17.11

3.2. Difference Test of Personality Traits

One-way ANOVA with personality trait scores for different education, occupation, drug use, and number of visits to drug rehabilitation, and the results are shown in Tables 2 and 3. The results showed that there was no significant difference in the scores of education, occupation, drug duration, and number of visits to drug rehabilitation centers ($p > 0.05$).

Table 2. Descriptive statistics of personality traits

variable	class	extroversion	stability	psychoticism
Education situation	Literacy or semi-illiteracy	49.09±9.00	50.52±9.96	48.09±8.21
	primary school	49.06±9.96	49.71±9.11	50.85±11.57
	junior middle school	50.78±9.90	49.18±10.33	49.61±9.94
	College or above	49.94±11.04	53.01±10.06	48.07±7.94
occupation	worker	51.28±9.90	48.89±11.21	48.59±11.07
	peasant	46.99±8.64	50.20±9.23	49.34±10.74
	self-employed	52.83±9.87	48.55±11.17	51.38±8.36
	unemployed	48.71±10.50	52.08±9.25	51.06±10.97
	other	51.45±9.31	46.95±9.59	47.67±8.12
marriage	Cadres and scientific researchers	54.12±12.04	52.16±7.34	44.10±10.00
	unmarried	50.78±9.90	49.18±10.33	49.61±9.94
	divorce	49.94±11.04	53.01±10.06	48.07±7.94
	married	49.06±9.96	49.71±9.43	50.85±11.37
Drug duration	Divorce has a partner	50.78±9.90	49.18±10.63	49.61±9.94
	Within three months	50.84±13.47	47.17±7.04	48.18±10.39
	Three months to one year	50.84±9.02	51.50±8.88	53.08±4.97
Number of visits to the rehab facility	One year or more	49.91±9.87	50.20±10.14	49.96±10.19
	1	52.30±11.01	50.12±8.97	49.65±8.65
	2-3	47.47±7.95	50.93±10.98	50.83±9.68
	More than 3 times	48.05±9.39	52.10±10.53	53.35±12.03

Table 3. Test of differences in personality traits on demographic variables (F)

variable	Education situation	occupation	marriage	Drug duration	Number of drug rehab
extroversion	0.37 (0.77)	1.6 (0.14)	0.38 (0.76)	0.0 (0.93)	1.75 (0.13)
stability	1.21 (0.31)	1.39 (0.23)	1.65 (0.20)	0.58 (0.56)	1.11 (0.36)
psychoticism	0.22 (0.88)	0.96 (0.44)	1.41 (0.22)	0.61 (0.55)	1.75 (0.13)

3.3. Test of Difference in Relapse Tendency

Separately, one-way variance test was conducted for relapse tendency of different education, occupation, drug use, and number of visits to drug rehabilitation centers, and the results are shown in Table 4. The results showed that there were no significant differences in education, occupation or drug duration ($p>0.05$), but the relapse tendency varied in the number of times individuals entered drug rehabilitation centers ($F=5.99$, $p<0.001$).

There were significant differences in the number of relapse visits, and further LSD test found that the first and second relapse visits were significantly lower than three times ($p<0.05$); the fourth visit was

significantly less than five times ($p < 0.05$); there was no difference among individuals in the different number of visits ($p > 0.05$).

Table 4. Description statistics of relapse propensity on demographic variables

variable	classify	M±SD	F	p
Education situation	Literacy or semi-illiteracy	31.08±15.15	0.84	0.48
	primary school	28.32±12.13		
	junior middle school	26.47±11.85		
	College or above	25.34±14.97		
occupation	worker	26.28±12.24	1.98	0.08
	peasant	27.50±9.85		
	self-employed	24.78±10.58		
	unemployed	30.03±14.44		
	other	24.08±12.70		
	Cadres and scientific researchers	16.25±4.03		
Drug duration	Within three months	20.27±13.37	1.71	0.18
	Three months to one year	27.56±11.71		
	One year or more	27.56±12.67		
Number of visits to the rehab facility	1	23.10±11.32	4.69	<0.001
	2-3	29.24±11.53		
	More than 3 times	33.28±15.14		

3.4. The Relationship Between Personality Traits and Relapse Tendency

In order to explore the relationship between personality traits and relapse tendency, the correlation between personality traits and relapse tendency was analyzed, and the results are shown in Table 5. Results found a significant positive relationship between the stability of personality traits and spirituality ($r=0.36$, $p < 0.001$). There was a significant negative correlation between tipping and relapse ($r=-0.21$, $p=0.003$); a significant positive correlation between neuroticism and relapse ($r=0.14$, $p=0.05$); and a significant positive correlation between psychoticism and relapse ($r=0.24$, $p=0.001$).

Table 5. Results related to personality traits and relapse tendency

	extroversion	nervosity	psychoticism	Recovery propensity
extroversion	1			
nervosity	0.02	1		
psychoticism	-0.04	0.36**	1	
Recovery propensity	-0.21*	0.14*	0.24**	1

4. ANALYSIS AND DISCUSSION

This study attempts to integrate the relationship between personality characteristics, demographic characteristics and relapse tendency of drug addicts, broadening the psychological research field for drug addicts and providing a new cognitive perspective for psychological counseling for drug addicts.

First, in terms of the demographic variables of drug addicts, some domestic and foreign studies have found that drug addicts have low education, low employment rate and poor marital status [15]. This study also found that drug addicts were generally poorly educated; they had poor employment, mostly no permanent occupation; their marital status was uneven, and the proportion of individuals were unmarried or divorced. The drug use survey found that most of them took drugs for three months to a year, and mostly entered rehab for less than three times.

Secondly, the personality traits and relapse tendency of drug addicts were tested on demographic variables. This study found that there were no significant differences in the personality traits and relapse tendencies among drug addicts, nor in the length of drug use. However, it is worth noting that there are significant differences in the tendency of relapse, and the more times the entry is, the higher the tendency to relapse. By analysis of life events and personality traits of drug users found similar results. He found no significant differences in gender, education, and occupation, factors that did not influence the causal behavior of drug addicts. Analysis of the correlation between personality traits and relapse tendency found a significant correlation, the more personality, the higher the stability, the higher the mental quality, the higher the tendency of relapse. The regression analysis found that the three factors of personality traits had high explanatory power for the relapse tendency of drug addicts. This showed a high agreement with the results of the correlation analysis. The relapse of drug addicts is largely influenced by subjective psychological factors, which is consistent with previous studies.[9]

Previous studies have found that married subjects had a slightly lower severity of drug addiction than unmarried and divorced subjects, and such results are not expected. The reason is likely to be that married subjects tend to take more family and social responsibilities in life, and still have concerns in front of drugs and properly restrain themselves. The participants with the lowest education level had a higher addiction scale score than any other group, and they believed that the subjects with relatively low education level received a short social standard education, lacked the ability to judge the wrong and the harm of the drugs. In addition, the lower education level increased the possibility of exposure to the adverse environment. However, this study found that there was no difference in the relapse tendency of subjects with different educational levels from illiterate to university. This result is not contradictory with the existing studies. The possibility of exposure and abuse of drugs among individuals with different educational levels before exposure does vary, but after exposure to drugs, the tendency to relapse in the process of drug rehabilitation is no longer affected by the educational level, but more affected by individuals' drug rehabilitation environment, drug rehabilitation will and personality characteristics.

In addition, the following results of the personality traits, the tendency and the relationship. Personality traits are not affected by education, occupation, drug duration and number of drug rehabilitation visits. Drugs relapse tendency in education situation, there is no difference between professional, but on the number of rehab, different differences between different addicts, into the rehab times in three times addicts relapse obvious than four times, five times into the rehab addicts lower, when addicts into the rehab more than five times, relapse tendency is the highest. Research on the personality traits and relapse tendency of drug addicts shows that there is a significant negative correlation between the more introverted drug addicts, the higher the possibility of relapse after detoxification; the stability of personality traits and the relapse tendency, which indicates that the more stable the personality traits, the more serious the relapse after detoxification; there is a significant positive correlation between mental quality and the relapse tendency of drug addicts, which indicates that the more independent and indifferent are.

Previous studies on the correlation of personality characteristics and addiction have found that the personality characteristics of drug addicts have different effects on addiction. Among them, there is a significant negative correlation between persistence and self-discipline and the severity of addiction, that is, the more perfunctory, the less law-abiding spirit of the more poisoned by drugs; the more conflict and unknown, the more vulnerable to more serious negative effects of drugs after using drugs. Sensitivity and anxiety are significantly positively correlated with the severity of addiction. Drug addicts are more sensitive, emotional, more depressed and troubled.

Reducing the relapse tendency of detoxification individuals is the focus of research to explore the physical and mental health and success of drug addicts. On the one hand, neuroendocrine and other physiological and biochemical disorders are common, and the resulting symptoms generally last for months to years, which brings great pain to the addicts, and also constitutes the physiological basis of long-term psychological dependence; on the other hand, the physical and mental damage caused by detoxification will in turn become the cause of relapse. Drug users have common points in personality, which shows that they may have some deficiencies in personality, which leads to their lack of correct pictures and relieve their negative emotions. And when faced with the pleasure of drugs, they can temporarily paralyze themselves and get rid of the feeling of psychological imbalance. In the face of the pain suffered in the process of drug rehabilitation and below the temptation of relapse, drug addicts need a strong psychological force. When the drug addicts have their own personality problems, the process of drug rehabilitation brings many difficulties. According to Eisenke's personality trait theory, the inner-outward representation of individual mental activity tends to point to the internal world or the external world, and also represents the exciting and inhibitory activity of the nervous system. This study found that the drug addicts have a higher tendency to relapse, which indicates that the process of individual psychological activities is more inclined to the internal world than the external world, which is more unfavorable for the drug rehabilitation. When drug addicts pay more attention to the outside world, they have more opportunities to communicate with others, which is more helpful to express emotions and divert attention, which is important in the process of detoxification and relapse. This study adopts the classification of personality traits, including the stability of the personality and relapse tendency related results can be seen, high anxiety and emotional individuals are more prone to relapse tendency, this kind of drug addicts in the life and work with low constant and low self-discipline individuals similar characteristics, lack of self-discipline, loose behavior, so in the process of drug abuse and get rid of drugs showed similar characteristics. However, the mental quality of Eisenk personality traits is highly similar to the sensitivity and anxiety of drug addicts in previous studies. Individuals with high personality traits are indifferent and melancholy, which is difficult to communicate with people, and their performance in the difficulty of drug rehabilitation and the tendency of relapse is relatively consistent. Drug addicts with typical mental quality will have the characteristics of ignoring legal and moral constraints, behavior impulse, strong aggression, and incompatible with external environment. Therefore, typical mental personality characteristics may be an important personality factor for drug addicts to embark on the road of drug use.

5. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

Through the study, the conclusion can be drawn as follows: (1) the drug addicts are mainly young and middle-aged people without practitioners, with low education level and poor marital status. With a low education level, a lack of understanding of the harm of drugs, a spiritual emptiness, and a lack of family warmth, this group is the group that must be paid attention to in the drug rehabilitation work. (2) The tendency of drug addicts who go to drug rehabilitation centers for more than three times to relapse is high. The way and intensity of drug rehabilitation should be strengthened, and more attention should be paid to the addicts who enter the drug rehabilitation for many times. (3) According

to the analysis of the correlation between personality traits and relapse tendency, it is found that the internal and external tendency and relapse tendency of the drug addicts are higher, and the more introverted, the more likely to relapse. There is a high correlation between the personality stability and the relapse tendency of drug addicts, and those who are more likely to show high anxiety and emotional behavior are more likely to relapse. There is a high correlation between the level of mental quality and the tendency of drug addicts, and the more people who tend to care about others and lack empathy are more likely to relapse.

5.2. Suggestions

Based on the findings, we made the following recommendations for interventions in drug addicts.

First of all, they can enhance their training, on the one hand, enrich the life and fill the time in the rehabilitation, on the other hand, allowing the addicts to be able to find a job or start a family, better integrate into society.

Secondly, additional guidance and help should be added to the drug addicts who have entered the drug rehabilitation center for more than three times. By popularizing the knowledge of drug rehabilitation, we can help them to understand that relapse occurs in the process of drug rehabilitation, guide them to correct attribution and establish confidence in drug rehabilitation.

In addition, in the process of helping drug addicts, individuals should pay more attention to their introverted personality traits, and do not ignore their emotional state and mental health because of their lack of expression. For drug addicts with introverted personality traits, they can start with one-on-one psychological counseling to enhance their self-confidence and express their emotions. Then encourage them to apply it bravely in all kinds of team activities. Psychological counseling is also the appropriate use of emotional catharsis treatment, music catharsis, sand table treatment, and so on, so that drug addicts can eliminate the desire for drugs through these ways. Some team competitions can be held at the institute. Such as basketball games or sports games. This allows them to experience a disciplined and purposeful life, including the importance of the experience team, learning how to express their emotions and how to reintegrate into a new group. This plays a better role in the improvement of personality personality.

Detailed drug rehabilitation counseling is provided for drug addicts with different personality traits. In the process of assisting drug addicts, attention should be paid to the emotional regulation of drug addicts. On the one hand, the emotional counseling can be strengthened for drug addicts, and on the other hand, it should also help them master the skills of self-regulation. For example, the intervention of group cooperation and emotional management can be strengthened when drug addicts conduct group psychological counseling and other intervention activities, and the probability of relapse after drug rehabilitation can achieve twice the result with half the effort.

The results of this study can preliminarily show that there is a close relationship between personality traits and the relapse tendency of drug addicts. However, overall, this study only conducted a preliminary exploration of the two relationship, and the data in the study are horizontal. Therefore, future studies can explore whether there are other mediation variables or mediation variables between personality traits and relapse tendency, or tracking studies on drug addicts, based on which regression models can be constructed to more effectively test the relationship between relapse and personality traits. In addition, there are some errors in the self-evaluation scale. In future studies, behavioral experiments or combined with electrophysiology, eye movement and other technical means can be used as indicators to quantify the relapse tendency of drug addicts.

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