

Personality Profile of Illicit Intravenous Substance Abusers

Prerana Baruah*, Dr. Dipesh Bhagabati**

*Research Scholar, Department of Psychology, Gauhati University, Assam

**Professor (Retd.), Department of Psychiatry, Gauhati Medical College and Hospital (GMCH)

ABSTRACT

Background: The problem of substance abuse in our society is increasing which has drawn both public and scientific attention. Substances are abused in various forms such as inhalation, oral or injectables. The courting among personality and substance abuse is complicated because the variety of personality profiles that have been hypothesized to exist to steer substance abuse is extraordinarily wide and the personality elements can also impact the use of substances in different degrees. The objective of this study is to investigate the personality profiles (neuroticism, extraversion, openness to experience, agreeableness and conscientiousness) of illicit intravenous substance abusers.

Method: The sample of this study (N= 50) has been divided into two groups of 25 subjects in each group comprising of the study group i.e., the illicit intravenous substance abusers (Group I) and the control group i.e., the matched non- substance users (Group II). The study group for this study is drawn from the population of patients registered at the Opioid Substitution Therapy Centre, Gauhati Medical College and Hospital with the diagnosis of illicit intravenous drug abuse by using simple random sampling technique. The NEO-PI-R was administered to both the groups.

Result: The results indicate that the control group scored higher on neuroticism, extraversion, openness to experience and conscientiousness, whereas the study group scored higher on agreeableness.

Conclusion: In addition to confirming high levels of negative affect and impulsive traits, this study highlights the links between substance abuse and low conscientiousness. These hyperlinks offer insight into the etiology of substance abuse and future implications for public health interventions.

KEY WORD: Substance abuse, intravenous, personality

Date of Submission: 25-07-2020

Date of Acceptance: 09-08-2020

I. INTRODUCTION

The problem of substance abuse in our society is increasing which has drawn both public and scientific attention. Substance abuse generally involves a pathological use of a substance resulting in potentially hazardous behavior such as such as driving while intoxicated or continued use despite a persistent social, psychological, occupational or health problem. Unable to obtain drugs through legal sources, many turned to illegal channels.

Substances are abused in various forms such as inhalation, oral or injectables. Considering all of the different methods of taking drugs, injected drugs are more dangerous. Due to the direct delivery method of injected drugs into the blood stream, the side effects of the chosen drug occur faster, and the effects are felt even more profoundly. Intravenous substance use means administering the drug directly into a vein. The Latin translation of 'intra venous' means 'within the vein'. The simplest and most common way of intravenous drug use for recreational users is by the utilization of a hypodermic needle.

The relationship between personality and substance abuse is highly complex because the range of personality dimension which have been postulated to exist and which have been hypothesized to influence substance abuse is extremely broad and the personality factors may influence the use of substance at several levels (Cox, 1985). Lots of studies in different settings among different samples have showed the link between personality characteristics and substance abuse (Booth-Kewley and Vickers, 1994; Lawal and Ogunsakin, 2012).

Personality can be defined as a dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviors in various situations. The word "personality" originates from the Latin persona, which means mask. Personality traits have significant effects on substance abuse disorders and related psychiatric symptoms. Personality traits along with risk-taking behaviors and familial factors affect the positive attitude toward engaging in the substance abuse behaviors. According to

the conceptualization of the Big Five model, personality traits not only affect initiation of substance abuse, but also influence maintaining abstinence from substance abuse after 12-month follow-up. One relevant study showed significant associations among the Big Five personality traits and positive attitudes as well as engaging in unhealthy behaviors such as smoking and substance abuse in college students. Most evidences indicate that in comparison to some favorable personality traits such as conscientiousness, destructive personality traits such as neuroticism predispose to positive attitude towards substance abuse.

The spurt in the production of injectable heroin in Myanmar and the trans-oceanic and trans-continental trafficking in that substance from the “Golden Triangle” of which Myanmar is a core area. The geographical and ethnic proximity of India’s north eastern tribal population with northern Myanmar and the presence of long-perforated border with Myanmar, made the region more prone for the spread of this new form of drug consumption. The main threat to public health and social-stability comes from opiate addiction and more particularly from the consumption of heroin through intravenous injections. The pattern of intravenous substance abuse in the north-eastern states is also more or less same as that of Bangkok and Myanmar. A general impression prevails that the major cities, towns, urban and the semi-urban, even rural areas of Assam are well effected by the menace of drugs. According to a statistics prepared by a non- governmental organization namely Society for Promotion of Youth and Masses (SPYM) 2015, the urban, semi-urban and rural youths are well under the grips of drugs. The incidence of substance abuse has been found to be highest in the capital city of Guwahati. The most commonly abused substances in Assam are alcohol, bhang, ganja, brown sugar, heroin and pharmaceutical drugs like spasmoproxyvon, relipen, phensidiyl, tosex, calmpose, placidox etc. The present study aims to explore the personality profile of illicit intravenous substance abusers in Guwahati.

Hypothesis:

1. There will be no significant difference in the level of neuroticism between illicit intravenous substance abusers and matched non- substance users.
2. There will be no significant difference in the level of extraversion between illicit intravenous substance abusers and matched non- substance users.
3. There will be no significant difference in the level of openness to experience between illicit intravenous substance abusers and matched non- substance users.
4. There will be no significant difference in the level of agreeableness between illicit intravenous substance abusers and matched non- substance users.
5. There will be no significant difference in the level of conscientiousness between illicit intravenous substance abusers and matched non- substance users.

II. MATERIAL AND METHODS:

The sample for this study is drawn from the population of patients registered at the Opioid Substitution Therapy Centre, Gauhati Medical College and Hospital with the diagnosis of illicit intravenous drug abuse by using simple random sampling technique. The total number of sample is 50. It has been divided into two groups of 25 subjects in each group comprising of the study group i.e., the illicit intravenous substance abusers (Group I) and the control group i.e., the matched non- substance users (Group II).

Inclusion criteria for Group I:

- Seeking treatment for substance abuse, as diagnosed by a qualified physician.
- Age Group: 18- 40 years
- Current substance user: Intravenous drug use for more than 60 days (WHO, 2000)
- Either sex
- Education: Minimum qualification- Xth standard

Inclusion criteria for Group II:

- Method matching sample: In the inclusion criteria for Group II i.e., the control group, the age, gender and marital status were matched with those of Study group.
- No history of illicit intravenous substance use.

Procedure Methodology:

After written informed consent was obtained, a standardized questionnaire was used to collect the data. In view of the fact that the data under study derives from the individual in question, the self report modality was chosen for the educated but for illiterates the administration of all the tools was undertaken by the investigator. The tools used in the present study were as follows:

- Socio demographic proforma: This was developed for the study by the investigator to elicit the respondent’s basic information about age, gender, marital status and educational qualification.

- Revised NEO-Personality Inventory: The revised NEO personality inventory (NEO-PI-R) is personality inventory developed by Robert McCrae and Paul Costa, Jr in 1990. It comprises of 60 items (12 items per domain) answered on 5-point scale ranging from strongly disagree to strongly agree and yields scores on the five major domains of personality. It assesses the Big Five personality traits: Neuroticism (N), the tendency to experience negative emotions such as anxiety and depression; Extraversion (E), the tendency to be sociable, warm, active, assertive, cheerful, and in search of stimulation; Openness to Experience (O), the tendency to be imaginative, creative, unconventional, emotionally and artistically sensitive; Agreeableness (A), the dimension of interpersonal relations, characterized by altruism, trust, modesty, and cooperativeness; and Conscientiousness (C), a tendency to be organized, strong-willed, persistent, reliable, and a follower of rules and ethical principle.

Statistical Analysis: The data obtained in the study was coded for computer analysis using SPSS (Version 17.0). Data obtained was analyzed using descriptive statistics such as mean, standard deviations and frequencies. Parametric tests such as t test was carried out to determine the variables on which the groups differed significantly as well as to examine the associations among the variables.

III. RESULT

Table 1: Showing the age, gender and marital status of illicit intravenous substance abusers (Group I) and matched non-substance users (Group II).

Socio Demographic Variables		Group I	Group II
Age Groups	19-25	11	11
	26-30	7	7
	31-35	7	7
	Total	25	25
Gender	Male	21	21
	Female	4	4
	Total	25	25
Marital Status	Married	5	5
	Unmarried	18	18
	Separated	2	2
	Total	25	25

Table 1 shows the socio- demographic characteristics of the study group and the control group. Initially, data was collected from the study group. Later, data was collected from the control group by matching their age, gender and marital status. In the above table it can be seen that most of the substance abusers are 19-25 years of age. It also indicates that most of the illicit intravenous substance abusers are male. In the marital status category, it can be seen that out of 25, 18 of them are unmarried, whereas only 5 are married and 2 are separated.

Table 2: Comparison of personality factors among illicit intravenous substance abusers (Group I) and matched non- substance users (Group II) using ‘t’ test.

Variables	Category	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2 tailed)
Neuroticism	Group I	25	23.92	4.804	.961	-1.685	48	.098
	Group II	25	26.36	5.415	1.083			
Extraversion	Group I	25	21.92	5.049	1.010	-5.191	48	.000
	Group II	25	28.52	3.864	.773			
Openness to experience	Group I	25	21.24	7.247	1.449	-5.018	48	.000
	Group II	25	29.72	4.345	.869			
Agreeableness	Group I	25	20.08	6.861	1.372	.933	48	.355
	Group II	25	18.08	8.231	1.646			
Conscientiousness	Group I	25	15.08	4.769	.954	3.170	48	.003
	Group II	25	20.08	4.778	.956			

Significance level is at *p < .05 level

**p< .01 level

The above table indicates that both the groups differ significantly on personality factors- extraversion, openness to experience and conscientiousness. However, there is no significant difference in neuroticism and agreeableness.

Table 3: Comparison of illicit intravenous substance abusers (Group I) and matched non- substance users (Group II) in terms of severity of the five factors of personality.

		Neuroticism	Extraversion	Openness to Experience	Agreeableness	Conscientiousness
Low	Group I	4%	76%	68%	96%	100%
	Group II	8%	16%	16%	40%	8%
Moderate	Group I	56%	20%	20%	4%	36%
	Group II	36%	64%	40%	12%	0%
High	Group I	40%	4%	12%	0%	56%
	Group II	56%	20%	44%	48%	0%
Total		100%	100%	100%	100%	100%

IV. DISCUSSION

The present study examined the personality profile of illicit intravenous substance abusers and non-substance users. The results of the study are discussed with reference to research in this area and the objectives of the study.

In the present study in order to assess the role of personality factors in the two groups referring to illicit intravenous substance abusers and control group, Revised NEO Personality Inventory was used for assessing five factors of personality namely, neuroticism, extraversion, openness to experience, agreeableness and conscientiousness

In table 2. the mean scores of neuroticism indicate that the control group scored higher than the study group on neuroticism and there is no significant difference between the study group and the control group on this personality factor. Table 3 indicates that 56% control group scores high on neuroticism whereas only 40% study group scores high on neuroticism (table 3). A number of studies suggest that neuroticism/negative emotionality is associated with substance abuse. Substance abusers typically score high on psychometric measures of neuroticism and negative emotionality (Meszaros, Willinger, Fischer, Schnobeck, & Aschauer, 1996; Bronner, Templer, Svikis, Schmidt, & Monopolis, 1990; Kannapan & Cherian, 1989; Mullan et al., 1986). Furthermore, rates of substance abuse are particularly high among individuals with extremely elevated negative emotionality scores as measured by the multidimensional personality Questionnaire (McGue et al., 1997). Hence the findings of the present study do not support the findings of the previous studies

The mean scores of extraversion in table 2 indicate that the control group scored higher on extraversion than study group. There is a significant difference at .000 level in extraversion between the study group and the control group. 76% of the study group scored low on extraversion and only 4% scored high on this factor (table 3). Studies which observed low extraversion in heavy users of substance abusers (Rankin, Stockwell, & Hodgson, 1982, Tarter 1982, Rydehus 1984), while some studies have observed high scores for heavy users on extraversion (Kate Wilson 2004, Johnson & Leff 1999, Brennan & Shaw 1991.

The mean scores of openness to experience in table 2 indicate that the study group scored lower on openness to experience than the control group. The study group and the control group are significantly different at .000 level on this factor. Table 3 shows that 68% study group and 16% control group scored low on openness to experience. 44% of the control group scored high on openness to experience whereas only 4% of the study group scored high on openness to experience. This reflects that they have narrow interest and imagination and muted in display of emotions. Substance abusers reported that they have lack of attentiveness to inner feelings and intellectual curiosity. Earlier studies by Arora, M., et al., (2010); Flory et al., 2002; Sher et al., 2000 support the findings of the present study in this of personality.

In the table 2, the mean scores on agreeableness show that the study group scored higher than the control group. There is no significant difference between the two groups. Table 3 indicates that 96% of the study group and 40% of the control group scored low on agreeableness. 4% of the study group and 12 % of the control group scored moderate on agreeableness and 48% of the control group scored high on agreeableness. Agreeableness scale reflects a tendency to compassionate and cooperation (Costa & Widiger, 1993). Agreeableness is associated with positive interpersonal qualities such as altruism and positive attitudes towards others. These are traits not commonly associated with the hardened life of substance abusers. Hence, a lower Agreeableness score is unsurprising, but this result is contrary to Brooner et al. (1993).

The mean scores of conscientiousness in table 2 shows that the study group scored lower than the control group on this factor. There is significant difference at .003 on this factor. Table 3 shows that 100% of the study group scored low on conscientiousness. Among the control group, 8% scored low, 36% scored moderate and 56% scored high on conscientiousness.

Conscientiousness measures the level of control, organization and determination. Conscientiousness is a tendency to show self discipline, act dutifully and aim for achievement. In the present study non-substance users scored higher on this scale as compared to substance abusers. This implies that substance abusers had a lower opinion of their abilities and admits that they were often unprepared and inept as compared to the control group. They were not driven to succeed. They reported lack of ambition and aimlessness. They had low self discipline and poor self-control. They were more unorganized and unreliable as compared to the control group. This result is in accordance with earlier findings (Flory et.al, 2002, Martin & Sher, 1994; Malouff, Thorsteinsson, Rooke, & Schutte, 2007; Trull & Sher, 1994; Tucker et.al, 1995; Walton & Roberts, 2004). Thus, the result of the present study supports the findings of the previous studies.

V. CONCLUSION

In addition to confirming high levels of negative affect and impulsive traits, this study highlights the links between substance abuse and low conscientiousness. These hyperlinks offer insight into the etiology of substance abuse and future implications for public health interventions.

This study, however is subject to few limitations. Firstly, as the findings are from self- report measures, so high susceptibility to social desirability biases is present. Secondly, it is an arduous task to collect data and consent of the irregular substance abusers registered at the Opioid Substitution Therapy which makes data collection a dilatory process.

As for the direction of future research, a sophisticated qualitative investigation could be planned to find out moderating and confounding variables among the substance abusers and might provide a more refined understanding of personality profile of substance abusers.

REFERENCES

- [1]. Chidi, O.V., Wakama, I.A., Kwajaffa, P.S., Makput, D., Ali, M.A., Isa, R.B., Mukhtar, Y.M & Karatu, B.A. (2015). Personality traits of in-patients with substance use disorders in a mental health facility in Nigeria. *Journal of Neuroscience and Behavior Health*. Vol.8, No.1. Pp. 1-8.
- [2]. Booger, I.R., Tabatabee, S.M & Tosi, J. (2014). Attitude to Substance Abuse: Do Personality and Socio-Demographic Factors Matter? *International Journal of High risk Behaviors and Addiction*. Vol.3. Pp. 167-172.
- [3]. Sanja, T.V., Elizabeth, D.H & Klementia, R. (2013). The relationship between personality traits and anxiety/ depression levels in different drug abusers group. *Ann 1st Super Sanita*. Vol.49. No.4, pp. 365-369.
- [4]. Turiano, N.A., Whiteman, S.D., Hampson, S.E., Roberts, B.W & Mroczek, D.K. (2012). Personality and substance Use in Midlife: Conscientiousness as a Moderator and the Effects of Trait Change. *Journal of Research in Personality*. Vol.46. Pp. 295-305.
- [5]. Madhuri. (2012). Comparison of Personality of Alcoholics and Drug- Addicts versus Non- Alcoholics and Non- Drug Addicts. *International Journal of Science and Research*. Vol.1. Issue.3. pp. 27-35.
- [6]. Amity, M.E., Doneberg, G.R & Oullet, L.J. (2012). Prevalence of Psychiatric Disorders Among Young Injection Drug Users. *Drugs Alcohol Depend*. Vol.124. Pp. 70-78.
- [7]. Roy, J., Morshed, N.M., Qusor, M.M.A.S., Nahar, J.S., Miah, M.A.S, Shah, M.A., Shams, S.F., Shahid, S.F.B., Ikbal, M.M & Khanom, M.M. (2010). Personality Traits of Substance Users in Bangladesh. *Bangabandhu Sheikh Mujib Medical Univeristy Journal*. Vol.3, No.2, pp. 76-81.
- [8]. Arora, M., Dubey, C., Gupta, S & Kumar, B. (2010). Five Factor Correlates: A Comparison of Substance- Abusers and Non-Substance Abusers. *Journal of the Indian Academy of Applied Psychology*. Vol. 36, No. 1, pp. 107- 114.
- [9]. Bienvenu, O. J., Costa, P. T., Crum, R. M., Lockenhoff, C. E & Terracciano, A. (2008). Five- Factor Model Personality Profiles of Drug Users. *BioMed Central Psychiatry*. Vol. 36, pp. 56-62.
- [10]. Brooner, R.K., King, V.L., Kidorf, M., Schmidt, C.W & Bigelow, G.E. (1997). Psychiatric and Substance Use Co morbidity among treatment- seeking Opioid Abusers. *Arch Gen Psychiatry*. Vol.54, No.1, pp. 71-80.
- [11]. Trull, T.J., & Sher, K.J. (1994). Relationship between the Five-Factor Model of Personality and Axis 1 disorders in a nonclinical sample. *Journal of Abnormal Psychology*, Vol. 103, pp. 350-355.
- [12]. Costa, P.T., Herbst, J.H., Brooner, R.K., Schmidt, C.W & Bigelow, G.E. (1993). Anti- Social Personality Disorder among Drug Abusers. *Journal of Nervous and Mental Disease*. Vol. 181, No.5, pp. 313-319.

- [13]. Latkin,C.A & Mandell,W. (1993). Depression as an antecedent of Frequency of Intravenous Drug Use in an Urban Non- Treatment Sample. *International Journal of the Addictions*. Vol.28, No.14, pp. 160-167.
- [14]. AuBuchon P., Brennan A & Walfish S, (1986). Alcohol use and abuse in college students: II.Social/environmental correlates, methodological issues, and implications for intervention. *International Journal of the Addictions*. Vol. 21, No. 4, pp. 75-93.

Prerana Baruah. "Personality Profile of Illicit Intravenous Substance Abusers." *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 25(8), 2020, pp. 39-44.