

Compared the Activation System Dependent People

Rezgar Majidi^{1,a}, Yahya Yarahmadi^{2,b *}

¹ Department of Psychology, Kurdistan Science and Research branch, Islamic Azad university, Sanandaj, Iran.

^{2*} Department of Psychology, Sanandaj branch, Islamic Azad university, Sanandaj, Iran.

^aMajidi.rezgar@gmail.com, ^bYarahmadi@gmail.com

Keywords: Behavioral Activation System, dependence on the glass, dependence on opium, revised reinforcement sensitivity theory.

Abstract. The purpose of this study compared, the activation system dependent people, glass, opium and ordinary on the basis of revised reinforcement sensitivity theory was. Therefore, of among the population of through available sampling a total of 90 people in three groups of 30 selected, and data were collected using a questionnaire Gary – Wilson. The results of analysis of variance showed that between the activation system dependent people, glass, opium and ordinary there is a significant difference. Also Tukey test results showed that between ordinary people and dependent people of glass, and ordinary people and dependent people of opium in behavioral activation system were significant differences, but in the activation system between the members of glass and opium, significant difference was not observed.

1. Introduction.

In society nowadays we have, taking drug addiction as one of the main issues of concern raised is the field of healthcare that the international community and the World Health Organization (who) paid them and our country as compared to the global average among the countries that more efforts are needed to control this problem [2]. Consumer behavior and substance abuse is one of the most dangerous behaviors which can be seen in adolescence and young. The growing prevalence of new drug addiction and drug use has led as a source of revenue and profit seeking of majority in our country, statistically more than 1.8 million people was registered [2]. Approach on the issue of drug addiction abuse in recent years has developed the world and it is a one of the most successful theories in this field, is a "drug addiction as a brain disease". World Health Organization and the American Psychiatric Association defined drugs addiction as a chronic disease with a strong bias in drug use and related problems. Development studies are indicate that the physiological context for clinical problems in patients affected by chronic drug to abuse drugs mentioned [4]. For decades research has confirmed that substance use were hurt the normal function of the brain's rewarding cortex and continuous use of narcotics caused to the perversion of the brain rewarding system. Such as deviations in brain tissue, neurotransmitters and levels of brain information processing appears following the narcotics use both in animals and in human cases has been proven. In addition, the reason why some addicts develop mental disorders is not clear. There are different perspectives that try to explain this [5, 17].

Etiology of mental disorders and addiction issues, separately these two disorders are described in the following way that mental disorders increase the risk of drug addiction and as well as consumption of drugs could increase the risk of mental illness [10, 19]. Over the past few decades the range of personality psychology by the theorists in this field looking for finding individual differences through variables that have a biological basis. So today enter the neuroscience to the field of character clearly seen. Pioneer in this area can be noted Hans Eysenck and Jeffrey Gray [16]. Gary neuropsychological theory in 1993 is known to name the reinforcement sensitivity theory (RST) that of inception nearly four decades have significant progress and has also been a change even it was [9] specified that Gray scale than White and Carver scale is to efficiently [13] Behavioral activation system (BAS) answers to stimulus that they are associated with reward or

punishment remove and lead to arousal behavioral attitude. People with high BAS are more likely that be impulsive and experience more positive effects and give High scores in their extraversion scale [16].

In the field of addiction most attention is focused on behavioral activation system and more results of activity this system in humans arises the studies related to the neurotransmitter dopamine. Release of dopamine in the dopaminergic pathway associated with behavioral activation system is associated with the movement program of this system [14]. Thus, according to the mentioned issues in this research sought to investigate this issue. Whether are there differences between behavioral activation system dependent glass, opium and ordinary?

2. Research Methodology.

Research projects: The present study method, of terms of purpose, function and of terms of manner of implementation, causal-comparative, of type then event. Given that, in this study, we plan, variable the behavioral activation system dependent people, glass, opium and ordinary compared, causal-comparative method in mode is useful. Since these features are already happened. So the causal-comparative method of then event.

Statistical Society: The population of this study included all drug addicts referred to the Medical Center Hospital of Sanandaj gods who first referred to the center (New Case) and have not received any medical treatment. And ordinary people through patients referred to ENT clinic and Medical Center Hospital of tawhid sanandaj were selected.

Sampling method: Using available sampling. so that of each patient referring to the center if the previously untreated patients and for the first time referred to the center, of the consent, according to the prevailing usage in one group were related to opium or glass.

Was used, in this study, the formula for determining the sample size Cochran – Cox.

$$n = (N \times t^2 \times p \times q) \div (N \times d^2 + t^2 \times p \times q).$$

The maximum permissible error (d) is considered equal to 0.05, confidence coefficient 0.95, $t = 1.96$, and the values of p and q are each equal to 0.5. P values are considered equal to 0.5 (3). So based on the above formula, 90 people were considered in three 30-people groups (30 person, dependent on glass, 30 person, dependent on opium and 30 person, normal people).

3. Method of the research practice.

In this study, after the selection of samples that the samples were selected from among those who quit for the first time to the Medical Center Hospital of gods to leave within 6 months of the year 93 admitted. The initial interview was conducted by researchers if they satisfy the criteria for inclusion to the questionnaire was presented to them, the questionnaire was completed in the presence of the researcher, to select the sample of patients referred to ENT Clinic Medical Center Hospital Tawhid Sanandaj that do not have a history of any drug samples were selected.

4. Research Tools.

Gary- Wilson personality questionnaire (GWPQ):

Gary - Wilson personality questionnaire the amount activity system in the brain-behavior and assesses their components it is a self-assessment personality questionnaire, Wilson, Barrett and Gary have designed it in 1989 and consists of 120 articles .According to the Gary's theory of personality, there are three separate systems - but interact with each other - in the brains of mammals, that's control exciting behavior.. The predominance of the activity of each of these

systems in person, it is resulting to different exciting states such as soon anxiety, arousal and fear and excites ways to confront and different behavioral responses. Gary's cognitive theory is based on the principle that individual differences in personality reflect differences in the sensitivity of the BAS and BIS [7]. According to the Gary's theory of sensitivity to reinforce two exciting system by adjusting the sensitivity person the threats and incoming rewards informed the Character. This questionnaire that evaluates activity of brain systems behavior and assesses its components, a self-assessment questionnaire of personality designed by Wilson and Gary and Barrett in the UK and psychometric properties in addition to Britain also assessed of the two countries, Japan and Russia [18, 20]. The questionnaire was translated into Persian by Azadfallah et al (1999), and has been implemented of 211 people in a group of Iranian students. This scale evaluates amount activity in the brain / behavior systems and component of them, and contains 120 articles, to evaluate each of the behavioral activation systems, behavioral inhibition and fight / escape were considered 40 items. Of 40 items related to behavioral inhibition system activity devoted 20 of the component to avoid possible action And 20 of the components blackout, 40 articles on behavioral activation system activity have been avoided 20 of intention components and 20 of the active Avoidance components Finally, Article 40 of the anti-system activity / escape activity have been avoided 20 of the components of the conflict and 20 of the component escape [1].

5. Method analysis the data.

The descriptive analysis of the data, from the mean, standard deviation and descriptive tables for analysis inferential data, and research to investigate questions of independent one-way variance analysis and Tukey test. In order to answer the questions of descriptive and inferential statistical analyzes were performed using SPSS 22 software.

6. Findings.

As shown in Table 1, Descriptive Index, the average activation system in the opium group 48.40, and in the glass group 43.20, and in the ordinary people 43.57. Also the standard deviation activation system in the opium group 20.78, and in the glass group 6.32, and in the ordinary people 5.03.

Table 1. Descriptive information activation system.

Activation system	group	Abundance	mean	Standard deviation
	Opium	30	48.40	20.78
	Glass	30	43.20	6.32
	Ordinary People	30	43.57	5.03

Question: there does difference between the activation system dependent people, glass, opium and ordinary on the basis of revised reinforcement sensitivity theory?

Table 2. Results of one-way variance analysis about activation system level, members dependents the opium, glass and ordinary people.

The origin of the dispute	SS	df	MS	F	sig
Between-group	23140.56	2	11570.38	69.39	0.001
Within the group	1367.66	87	166.74		
Total	368132.22	89			

The results of analysis of variance showed that the level of significance (0.001) is less than %5, as a result of the confidence level %95, there difference, between activation system level members dependents the opium, glass and ordinary people on the basis of revised reinforcement sensitivity theory.

Table 3. Results of Tukey test for activation system, members depends the glass, opium and ordinary.

Variable	Variable	mean difference	standard deviation	sig
Glass	Opium	1.87	3.48	0.845
	Ordinary People	35.41**	3.39	0.000
Opium	Opium	33.54**	3.475	0.000
0** The mean difference is significant at the level of 0.01				

On based, Tukey test results, there significant differences between behavioral activation system dependent people of glass, and dependent people of opium with ordinary people. But significant difference was not observed between dependent people with dependent people of glass. also descriptive data also confirm that there significant differences between the mean and standard deviation the behavioral activation system dependent people, glass and opium with ordinary on the basis of revised reinforcement sensitivity theory.

7. Discussion and Conclusion.

According to the results obtained in this research it can be said that that there is a significant difference between the activation dependent on system of glass and ordinary and opium according to revised Gary's strengthen to sensitivity, the explanation for this finding it can be argued that in the framework of psychopathology as well Gary theory with the brain - behavioral systems, is known disorders reflect more or less fetch In one of these systems or functional problems in one or both systems. In the field of addictions most attention is paid to the activities of behavioral activation system and most findings of the activity in this system in humans is associated with the transfer a neurotransmitter Dopamine [13]. this finding have been conducted with the forecast of Gary in line various research have shown the positive relationship between substance abuse with high activity behavioral activation system and a negative relationship between substance abuse and behavioral inhibition system research of Morris (2006) and Hunt and Franken (2008) and colleagues. Favls (2000) believe that behavioral activation system, and control the behavior of intention and the desirable motivation and the desirable motivation have a positive states associated. Johnson et al (2003) in your own research showed that score of activation top is Predictors of addictive abuse and dependence, as a result, it is anticipated that People who are at highest risk for addictive problems is activity of system activation above the activity level of this system is in normal people. Therefore behavioral activation of system activity leads the person to the excitement, ecstasy and pleasant stimuli and sensitizes the person to get rewards without the person think of her negative results.

8. Acknowledgments.

Of all those who helped me in this research, including professor and all the ones participating in this research, I have my utmost gratitude.

References

- [1] Azad, Fallah, The effect of communication and problem - solving strategies of conflict resolution practices on student mental health, Third Seminar on mental health, 1999.
- [2] Ekhtyari, Hamed, Addiction as a brain disease, *Fslnam addiction*, 2008; (3) 4 – 3.
- [3] Sarmad, Z., Hejazi. E., Bazargan. A., Behavioral science research methods, Agah, Tehran, 2008.
- [4] Nemati, Moghadam, Treatment of drug addiction as a chronic disease, *Journal of Addiction*, 2008, (4 and 5) 67-64.
- [5] Ayyad, F., Mashaan, O., Self-esteem, depression and anxiety among addicts, *J. Social Sci.*, 2003, (31) 637-59.
- [6] Fowles, D. C., Electrodermal hyporeactivity and antisocial behavior. *Journal of Affective Disorders*, 2003, (61) 177- 189.
- [7] Franken. I. H, Muris, P & Georgieva, I, Gray's model of personality and addiction, *Addict Behav.*, (2006), (31) 399 – 403.
- [8] Gray, J. A., Brain systems that mediate both emotion and cognition, *Cogn. Emotion*, (1993), (4) 269 – 288.
- [9] Gray, J. A., Framework for taxonomy of psychiatric disorders, In S. Van. Goozen, De poll and J. Sergeant (Eds), *Emotions, Essay on Emotion Theory*, UK: Lawrance Erlbaum, 1994.
- [10] Green, AI, Treatment of schizophrenia and co morbid substance use disorder, *Current drug markets. CNS Neurol Disord*, 2003, (11) 29-39.
- [11] Hundt, N.E, Kimbrel, N. A, Mitchell. J. T & Nelson, Grey. R. O., High BAS but not low BIS, predicts externalizing symptoms in adults, *Personality and Individual Differences*, 2008, (44) 563-573.
- [12] Johnson, S. L., Turner, R. J., Iwata, N., BAS/BIS levels and psychiatric disorder/An epidemiological study, *J. Psychopathol. Behav.*, 2008, 25-36.
- [13] Knyazev, G. G, Slobodskaya H. R., Wilson, Glenn, D., Comparison of the construct validity of the Gray–Wilson Personality Questionnaire and the BIS/BAS scales, *Personality and Individual Differences*, 2004, (37) 1565–1582.
- [14] Michel, S., Regionally effects of nicotine, *Eur. J. Pharmacol.*, 1998, 167(3) 311 - 22.
- [15] Nathan, A., Kimbrel, N. Rosemary, O. Nelson, Gray & John, T, Mitchell, Reinforcement sensitivity and maternal style as predictors of psychopathology, *Personality and Individual Differences*, 2002, (42) 1139-1149.
- [16] Pickering, A., Corr., P, J.A, Gray's reinforcement sensitivity theory (RST) of personality, In G. Boyle, G. Matthews, & D. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment, Personality theories and models*, 2008, (1) 239 - 257.
- [17] Roberts, A., Psychiatric comorbidity in white and African-American illicit substance abusers: evidence for differential etiology, *Clin. Psychol. Rev.*, 2000, (20) 667-77.
- [18] Slobodskaya, H. R., The associations among the Big Five, Behavioral Inhibition and Behavioral Approach systems and child and adolescent adjustment in Russia, *Personality and Individual Differences*, 2000, (43) 913 – 924.
- [19] Sullivan, D, Regular use of prescribed opiates: Association with common psychiatric disorders, *Pain*, 2005, (119) 95-103.
- [20] Wilson, R.D. Gray, G. A & Barrett, P.T, A factor analysis of Gray-Wilson personality questionnaire, 1990, *Personality and Individual Differences*, 11(10) 37- 44.