The Study of the Differences of Attention Bias, Executive Functioning, and Reaction Time of Amphetamine Consumers in Comparison of Non Consumers

Ghasemi, N.¹, Kiani, A. R.², Zerehposh, A.³, Rabiei, M.⁴, Vakili, N.⁵

Abstract

Aim: Addiction to opium can be resulted to different effects. Current research designed in order to comprise if neuro-psychological functions among Amphetamine consumers and normal people. Method: Research design was causal-comparative design which performed in consumers and normal people. Research population was all opium consumers of Bahar city. Addict group included of 33 Amphetamine consumers who were referred to Baharestan addiction withdrawal center by snowball sampling. The comparison group included 39 normal people that matched with addict group with consideration of age, sex, education. All samples were studied by technical management of center and by using of perceptual diagnostic tests. Wisconsin cards, reaction time tests (simple, diagnostic, and selective) and attention bias (Stroop) was used. Results: the results of the research indicated that Amphetamine consumers were significantly different with normal people in consideration of error number, but there wasn't significant difference on error in Wisconsin test. In reaction time Amphetamine consumers had least reaction time and highest number of errors, in three states. In simple trial there weren't significant difference, but two groups were significant different in selective and diagnostic trial on time and number of errors. Also, there wasn't significant difference on attention bias with consideration of error, but there was significant difference with consideration of time. Conclusion: on the basis of results it can be claimed Amphetamine consumption can be affected on neuro-cognitive functions. Identifying and understanding of these factors can be useful in better understanding of problem, and can be led to different therapeutic treatment.

Key words: Attention Bias, Executive Functions, Reaction Time, Amphetamine

^{1.} Author-in-Chief: Ph.D. Student of Psychology, Esfahan University. Email: nezamghasemi@yahoo.com

^{2.} Ph. D. Student of Family Counseling, Esfahan University

^{3.} M.A. of Clinical Psychology, Esfahan University

^{4.} Assistant Professor of Baghiatollah University, Clinical Psychology Department

^{5.} Ph. D Student of Psychology, Esfahan University