



## Compare the nature of aggression and impulsivity in people with AIDS and healthy people

Yalda RezazadehKermani<sup>1</sup>, Noshirvan KhezriMoghadam<sup>\*2</sup>

1. MA of psychology, Department of Psychology, Islamic Azad University, Kerman Branch, Iran.

2. Assistant Professor, Shahid Bahonar University of Kerman, Kerman, Iran.

### A B S T R A C T

It is known that patients with HIV infection at the same time have mental disorders. The present study was done to compare the nature of aggression and impulsivity between AIDS patients and healthy people. This study is descriptive and causal-comparative and the statistical population included all the patients referred to positive club of Kerman in 2016, a total of 45 people. For sampling, in this study, according to Cohen table, 20 patients referred to positive club through simple random sampling, were selected. The research tools were Impulsive/Premeditated Aggression Scale (IPAS) and Barratt Impulsiveness Scale-II. To analyze the data, the analysis of multivariate variance and t-test in the spss-19 software, were used. The results showed a significant difference between aggression and impulsivity of ordinary people and people with AIDS. Accordingly, it can be concluded that patients with HIV compared to healthy people reported more aggression and impulsivity.

**Keywords:** Impulsivity, Aggression, AIDS

### INTRODUCTION

In modern societies, AIDS is one of the social problems that exist in all countries and there are some ways to combat with it (Parker & Aggleton, 2003). The people who are HIV-positive patients mentally suffer from a lot of pressure and have difficult psychological conditions and are very vulnerable. They due to Bad behavior of the society and their entourage may hide their disease (Grinstead & Straten, 2000; Valente & Saunders, 1997). AIDS is a kind of disease that physical pain caused by it is a small part of the problems, which the patient is grappling with them. It can be said that AIDS in Iranian society is equal to stigma such as sexual promiscuity. However, almost 90 percent of the population know that this relationship is one of the reasons for AIDS and other factors are present. In the meantime, AIDS patients face with serious problems because they cannot assertive like other patients with incurable diseases such as cancer, multiple sclerosis or ... and cannot sometimes benefit from sympathy of others and the disease with a strange loneliness is associated. So obviously these people have more aggression and impulsivity compared to ordinary people (Haghdoost et al., 2011; Razavi et al., 2012; Tavoosi, Zaferani, Enzevaei, Tajik, & Ahmadinezhad, 2004).

Violence and aggression is a complex and multi-dimensional phenomenon of human behavior; therefore, it is acceptable to say that a simple explanation of it is wrong. In fact,

\* . Corresponding Author: khezri147@yahoo.com

DOI: [In pressing](#)

To cite this article: RezazadehKermani, Y., KhezriMoghadam, N. (2017). Compare the nature of aggression and impulsivity in people with AIDS and healthy people. *Iranian Journal of Positive Psychology*, 3 (2), 43-49.

aggression includes a complex realm of human experience and behavior. So that it puts the human violence, mental disorders and criminals together. Extreme aggression and violent is now one of the most common and most persistent social problems seen all over the world and is one of the major threats for public health(Dorfman, Wallack, & Woodruff, 2005). Researches have demonstrated a number of factors are involved in aggression. Understanding the internal relations of these factors is necessary to predict aggression and for the treatment of aggressive behavior is very important. Previous studies have considered the potential role to solve social problems as a mediator variable between impulsivity and aggression(Murray, 2002; Straus, 1999).

Impulsivity is a multi-dimensional concept in relation to a person's ability to stop or adjust his\her behavior. Impulsivity at the time that setting normal behavior does not work properly is appeared. People with impulsivity in delaying their satisfaction are weak and often worried about their new demands and in showing emotions in a socially appropriate manner especially in the expression of sexy emotions and aggression are facing with problem(Barratt, Felthous, Kent, Liebman, & Coates, 2000). However, impulsivity can be with or without psychiatric disorders, but impulsive behaviors more likely are the constituent components of certain disorders including personality disorders, mania and abuse(American Psychiatric Association, 2013). Impulsivity with negative emotional states and emotional disorder has been associated although it is not clear whether impulsivity is one of the consequences or contributing factors for emotional disorder or not(Chambers, Gullone, & Allen, 2009; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007).

According to the research conducted and the issues discussed it is clear that people with the disease (AIDS) more than healthy people are at risk of mental diseases such as aggression and impulsivity. It is clear that in the case of impulsivity and aggression among people with AIDS, the disease is the main factor and the central core for their suffering from many social problems such as substance abuse, gambling abuse, and personality disorders and etc. Because in our society there is not a good view towards people with AIDS and it also makes them be placed at risk of social problems and mental diseases, therefore in this study, we want to show that significantly the nature of aggression and impulsivity in people with HIV is more than healthy people. Therefore it is necessary that the subject on comparison of nature of aggression and impulsivity of people with HIV and healthy people in Kerman by using of precise methods be examined and investigated.

Given that impulsivity and aggression are two of the most important factors of life in modern societies, people with AIDS severely deal with it, so this study by comparing aggression and impulsivity in patients with AIDS and healthy people tries to show their nature among people with HIV.

## **METHODOLOGY**

This research in terms of aim is Ex post facto study and in terms of gathering data is descriptive and causal-comparative. It is descriptive since it studies the current situation of aggression and impulsivity of people and since it tries to compare these two variables between the two groups, people with HIV and healthy people, is causal comparative.

## **Compare the nature of aggression and impulsivity in people with ...**

In this study, statistical population included all healthy people and patients with AIDS in Kerman. The total number of people with HIV in Kerman is not specified, so for determining the sample size by taking into account the power of test of 0.8 and the effect volume of 50% and in alpha-level 0.05 according to Cohen's table for each group 14 to 20 people with simple random sampling method were selected.

To determine the sample size by taking into account the power of test of 0.8 and the effect volume of 50% and in alpha-level 0.05 according to Cohen's table for each group 14 to 20 people with simple random sampling method were selected.

### **Barratt Impulsiveness Scale:**

The eleventh edition of the questionnaire by Professor Ernest Barrett has been made. The questionnaire has a good correlation with the questionnaire of Eysenck Impulsivity. The questionnaire has 30 questions and based on the 4-point Likert scale has been produced and measures the multi-dimensional nature of impulsivity. This questionnaire has three subscales, cognitive impulsivity, motion impulsivity and disorganization / impulsivity. In addition to the score of each subscale, a score for the entire scale of impulsivity is calculated. The internal consistency of this tool in the samples of offenders, undergraduates and psychiatric patients respectively 0.80, 0.82, 0.83 has been obtained.

### **Impulsive/Premeditated Aggression Scale (IPAS):**

The questionnaire has 30 questions. Respondents are asked to recall their previous reactions during the past 6 months and each question is used to score the people as impulsive aggressive and intentional aggressive and identify the behavior of a person as intentional aggressive (19 to 30) or unintentional aggressive (1 to 18). Identifying the behavior of a person as an intentional aggressive or unintentional aggressive is based on answer to 20 questions from 30 questions that are 8 questions for impulsive aggression and 12 questions for deliberate aggression. Confirming these questions as I completely agree and I agree is seen as positive, with the exception of questions 5 and 8, which are scored reversely. Classification of people in the groups with the highest percentage of questions that have been confirmed as positive will be determined. If the scores given to a person in the calculated coefficient for both scales are equal, a person cannot be in any of the classes. In addition to classify a person as impulsive aggressive or intentional aggressive, the average of each subscale can be calculated. The higher average indicates the person's class. Principal components analysis with varimax rotation has confirmed that there are two factors, impulsive aggression and intentional aggression. Validity at the same time significantly with the personality questionnaire has been approved. A number of studies have reported internal consistency of IPAS, especially Stanford and his colleagues, who have reported Cronbach's Alpha for the subscales of impulsive and intentional, 0.77 and 0.82. Before implementing IPAS questionnaire it has been implemented on the sample group of addicts that were the member of Narcotics Anonymous Forum in the city of Rafsanjan and Cronbach's alpha for the subscales of impulsive aggression, intentional aggression and total aggression respectively 0.78 and 0.82 and 0.80 has been obtained. Also, the questionnaire with Buss Perry aggression questionnaire showed a significant correlation of 0.75.

## **RESULTS**

In this section, the results of the analysis of the data have been provided. First, the

descriptive report of information and then the final results obtained by using of t-test and multivariate analysis of variance to compare aggression and impulsivity as well as aspects of each in the sample group with AIDS and the normal sample group have been provided.

Table 1. Mean and standard deviation of scores of aggression and its components in the sample groups

Index Scale	With HIV		Normal	
	Mean	SD	Mean	SD
Impulsive Aggression	37.25	6.24	34.14	5.92
Intentional Aggression	36.37	5.88	33.07	5.26
Total Aggression	73.62	9.02	67.31	7.18

According to information of the relevant table, the average of the sample group with AIDS in the component of impulsive aggression (37.25) in the component of intentional aggression (36.37) and in the overall scale of aggression is (73.62). Also the average of the normal sample group in the component of impulsive aggression (34.14) in the component of intentional aggression (33.07) and in the overall scale of aggression is (67.31).

Table 2. Mean and standard deviation of scores of impulsivity and its dimensions in the sample groups

Index Scale	With HIV		Normal	
	Mean	SD	Mean	SD
cognitive	26.59	3.17	20.40	3.19
motion	31.76	2.75	25.91	3.27
disorganization	22.32	3.51	18.01	3.42
Total	80.67	5.82	64.31	4.78

According to Table 2, the average of the sample group with AIDS in the component of cognitive impulsivity (26.59), in the component of motion impulsivity (31.76) and in the component of disorganization impulsivity (22.32) and in total impulsivity is (80.67). The average of the normal sample group in the cognitive impulsivity component (20.40), in the motion impulsivity component (25.91) and in disorganization impulsivity component (18.01) and in total impulsivity is (64.31).

Table 3 shows the result of t-test to compare the mean of overall aggression of HIV-positive sample group and normal sample group.

Table 3. The result of t-test to compare the mean of overall aggression

Index	Levin test		Independent t-test result		
	F	Sig	t	df	Sig
Amount	1.15	0.24	7.54	38	P<0.01

Based on the Levine test results for investigating the assumption of homogeneity of variances, the value obtained (F = 1.15) in the level higher than (0.05) is significant. Therefore it can be said that a significant difference between the two groups variance does not exist and there is the assumption of homogeneity of variances in the aggression variable. T test results also show that the amount of (t = 7.54) with degree of freedom (df = 38) at the level of (0.01) is meaningful and as a result with 99% certainty we can say that there is a significant difference between aggression of AIDS patients and normal sample. According to the obtained result, the hypothesis is confirmed.

## Compare the nature of aggression and impulsivity in people with ...

Table 4 shows the result of t-test to compare the mean of overall impulsivity of HIV-positive sample group and normal sample group.

Table 4. The result of t-test to compare the mean of overall impulsivity

Index	Levin test		Independent t-test result		
	F	Sig	t	df	Sig
Amount	0.97	0.32	10.12	38	P<0.01

Based on the Levine test results for investigating the assumption of homogeneity of variances, the value obtained ( $F = 0.97$ ) in the level higher than ( $0.05$ ) is significant. Therefore it can be said that a significant difference between the two groups variance does not exist and there is the assumption of homogeneity of variances in the impulsivity variable. T test results also show that the amount of ( $t = 10.12$ ) with degree of freedom ( $df = 38$ ) at the level of ( $0.01$ ) is meaningful and as a result with 99% certainty we can say that there is a significant difference between impulsivity of AIDS patients and normal sample. According to the obtained result, the hypothesis is confirmed.

## CONCLUSION

The present study was to evaluate and compare the nature of impulsivity and aggression in people with AIDS and ordinary people. According to t-test results we can say that there is a significant difference between aggression of AIDS patients and normal sample. According to the obtained result, the hypothesis is confirmed. The result with the results of Moeller, Barratt, Dougherty, Schmitz, and Swann (2001), Manuck, Flory, Ferrell, Mann, and Muldoon (2000), Evans (2006), and McMurrin, Blair, and Egan (2002) is consistent. A number of cognitive factors and individual/situational have been found that in interaction with each other they influence the impulsivity and aggression. Impulsivity is a multi-dimensional concept in relation to a person's ability to stop or adjust his/her behavior. It is believed that Impulsivity at the time that setting normal behavior does not work properly is appeared. People with impulsivity in delaying their satisfaction are weak and often worried about their new demands and in showing emotions in a socially appropriate manner especially in the expression of sexy emotions and aggression are facing with problem (Barratt et al., 2000; Patton & Stanford, 1995).

In people with HIV a combination of factors in the incidence of this disease has been identified. Based on the results of this study, the amount of impulsivity and aggression in these people is more than the normal people. However, whether the behaviors especially cognitive impulsivity or motion impulsivity in the incidence of AIDS have been effective or under the influence of exposure to it have arisen is unclear. However, two-way relationship between them has been confirmed. Impulsivity has both biological factors and cognitive and social factors. Impulsivity is a neurological characteristic in ADHD, antisocial personality disorder, delinquency, alcohol abuse and the risk of diseases such as AIDS. Some approvals on the overlap and continuity between impulsivity and aggression have been provided. However, an accurate understanding of this accompaniment is still unknown.

According to t-test results, it can be said that there is a significant difference between impulsivity of AIDS patients and normal sample. According to the obtained result, the hypothesis is confirmed. The result with the results of McMurrin et al. (2002), Manuck et al.

(2000), Evans (2006) and Slaby and Guerra (1988) is consistent. When the patient population is investigated, the deficit in solving social problems among a variety of them becomes clear.

A research on aggressive youth showed that these young people produce fewer solutions for solving various problems. On the other hand, the solutions, which they have produced, have been weak, ineffective and more aggressive than the solutions of their non-aggressive counterparts and in some cases they have been underlying some problems including problems related to physical and mental health. Among different patients, who are violent, researches show that aggressive patients use lower range of "alternative thinking" to solve problems. They rarely consider the consequences of their actions and more rely on the verbal aggression and physical aggression than non-aggressive controls(Slaby & Guerra, 1988).

Some psychologists have accepted the idea that there is a relationship between impulsivity and aggression. The connection, however, necessarily may not be one by one and in a way the potential mediator variables may contribute to the link. Solving routine problems is one of these variables.

McMurrin et al. (2002), have recalled a match between deficit in information processing and aggression. They also have noted the role of different diseases in disrupting cognitive function and solving social problems and abstract reasoning. In addition certain diseases such as cancer or AIDS by an individual with a defect in the processing of information may increase the risk of aggression.

The lack of complete confidence in self-reporting questionnaires results so that the person may answer socially friendly. In the present study as well as there is limitation especially in the aggression questionnaire and the likelihood that a person denies his\her aggression because of dressing up socially is high. Access to AIDS patient who are willing to cooperate is hard and doing the research was associated with limitations. The results of the present study only in comparing with people with AIDS and no other physical diseases have generalizability. That is one of the limitations of this study.

## REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*: American Psychiatric Pub.
- Barratt, E. S., Felthous, A., Kent, T., Liebman, M. J., & Coates, D. D. (2000). Criterion measures of aggression—Impulsive versus premeditated aggression. *The science, treatment, and prevention of antisocial behaviors: Application to the criminal justice system*, 4-2.
- Chambers, R., Gullone, E., & Allen, N. B. (2009). Mindful emotion regulation: An integrative review. *Clinical psychology review*, 29(6), 560-572.
- Dorfman, L., Wallack, L., & Woodruff, K. (2005). More than a message: framing public health advocacy to change corporate practices. *Health education & behavior*, 32(3), 320-336.
- Evans, H. (2006). Students with HIV/AIDS and school consideration teacher education and special education. *J Teacher Educ Division Counc Except Child*, 29, 213.
- Feldman, G., Hayes, A., Kumar, S., Greeson, J., & Laurenceau, J.-P. (2007). Mindfulness and emotion regulation: The development and initial validation of the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R). *Journal of Psychopathology and Behavioral Assessment*, 29(3), 177.

## Compare the nature of aggression and impulsivity in people with ...

- Grinstead, O. A., & Straten, A. V. D. (2000). Counsellors' perspectives on the experience of providing HIV counselling in Kenya and Tanzania: the Voluntary HIV-1 Counselling and Testing Efficacy Study. *AIDS care*, 12(5), 625-642.
- Haghdoost, A. A., Mostafavi, E., Mirzazadeh, A., Navadeh, S., Feizzadeh, A., Fahimfar, N., . . . Gooya, M. M. (2011). Modelling of HIV/AIDS in Iran up to 2014. *Journal of AIDS and HIV Research*, 3(12), 231-239.
- Manuck, S. B., Flory, J. D., Ferrell, R. E., Mann, J. J., & Muldoon, M. F. (2000). A regulatory polymorphism of the monoamine oxidase-A gene may be associated with variability in aggression, impulsivity, and central nervous system serotonergic responsivity. *Psychiatry research*, 95(1), 9-23.
- McMurrin, M., Blair, M., & Egan, V. (2002). An investigation of the correlations between aggression, impulsiveness, social problem-solving, and alcohol use. *Aggressive Behavior*, 28(6), 439-445.
- Moeller, F. G., Barratt, E. S., Dougherty, D. M., Schmitz, J. M., & Swann, A. C. (2001). Psychiatric aspects of impulsivity. *American journal of psychiatry*, 158(11), 1783-1793.
- Murray, B. (2002). Girls Wound Each Other With Invisible Weapons, Study Suggests. *American Psychological Association*, 4.
- Parker, R., & Aggleton, P. (2003). HIV and AIDS-related stigma and discrimination: a conceptual framework and implications for action. *Social science & medicine*, 57(1), 13-24.
- Patton, J. H., & Stanford, M. S. (1995). Factor structure of the Barratt impulsiveness scale. *Journal of clinical psychology*, 51(6), 768-774.
- Razavi, P., Hajifathalian, K., Saeidi, B., Esmaeeli Djavid, G., Rasoulinejad, M., Hajiabdolbaghi, M., . . . SeyedAlinaghi, S. (2012). Quality of life among persons with HIV/AIDS in Iran: internal reliability and validity of an international instrument and associated factors. *AIDS research and treatment*, 2012.
- Slaby, R. G., & Guerra, N. G. (1988). Cognitive mediators of aggression in adolescent offenders: I. Assessment. *Developmental psychology*, 24(4), 580.
- Straus, M. (1999). The controversy over domestic violence by women. *Violence in intimate relationships*, 17-44.
- Tavoosi, A., Zaferani, A., Enzevaei, A., Tajik, P., & Ahmadinezhad, Z. (2004). Knowledge and attitude towards HIV/AIDS among Iranian students. *BMC public health*, 4(1), 17.
- Valente, S. M., & Saunders, J. M. (1997). Managing depression among people with HIV disease. *Journal of the Association of Nurses in AIDS Care*, 8(1), 51-67.