#### Abstract

Objective: The aim of this study was to investigate the relationship of positive youth development and life satisfaction with attitude toward substance use in high school students of Qom city. Method: This study was a descriptive research, which falls within the category of correlational studies. The senior high school students of Oom city constituted the statistical population of this study, among whom the number of 385 students (198 girls and 187 boys) was selected through multistage cluster sampling. The participants completed Geldhof et al.'s Positive Youth Development Scale, Diener et al.'s Satisfaction with Life Scale, and Rezaee et al.'s Attitude toward Substance Use Questionnaire. Results: Pearson correlation results indicated that the components of positive youth development has a significant negative relationship with attitude toward substance use. In addition, a significant negative relationship was observed between the components of attitude toward substance use and life satisfaction. Stepwise regression analysis revealed that the components of positive youth development (connection, character, and caring) and life satisfaction respectively make the highest contribution to the prediction of attitude toward substance use. Conclusion: The current research findings emphasized the need attention to the assets and resources of positive youth development and life satisfaction as the effective factors in reducing addiction and substance use among students.

**Keywords:** attitude toward substance use, positive youth development, life satisfaction, school students

# Prediction of Attitude toward Substance Use on the Basis of Positive Youth Development and Life Satisfaction among Adolescents

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#### Introduction

Addiction has spread in today's societies, so that not only adults and elderly but also adolescents are involved in it and the age range of addicts and drug users has declined (Mc crady & Epstein, 2013; Centers for Disease Control and Prevention (CDC) 2009). According to the National Center of the effect of DRUGS AND ALCOHAL ON HEALTH in 2016, six percent of the US population is affected by drug use and nearly 135,000 people die each year due to drug and alcohol use before they reach puberty. Quoted by Badiani, Berridge, Heilig, Nutt, & Robinson, 2017). Researches have shown that there is a high prevalence of mental disorders among drug-dependent individuals. Some of the side effects of the drug that occur at the same time include: high-risk sexual behaviors, AIDS, educational problems, respiratory problems, high-risk driving, violence, physical illness, loss of life satisfaction and comorbidity with mental disorders (Control Center and Disease Prevention, 2009). Drug dependence is associated with poor mental well-being and low level of self-esteem and decision-making power and high levels of morbid stress (Ansell, Gu, Tuit, & Sinha, 2012; Philips, & Ogeil, 2015). Also, dependence on drugs use is considered as an important risk factor in suicide and self-mutilation in patients with post-traumatic stress (Gradus et al., 2017). In addition, young people tending to drug use face problems in adulthood, including poor coping skills, unemployment, job dissatisfaction, high stress, continued drug use, and a low to continue studying at levels higher school(Fergusson & Boden, 2008). De Olivera et al. (2009) in an extensive study showed that 76 percent of men and 65 percent of women with substance abuse suffer from a mental disorder simultaneously. According to Schinke, Schwinn, Hopkins, & Wahlstrom (2016), negative self-conception, high levels of stress and coping skills and poor self-efficacy are among the risk factors for drug use in Spanish adolescents in the future. The prevalence of drug use in young people is often a function of demographic characteristics such as gender, age, race, ethnicity, and socioeconomic status. According to a report by the Youth Risk Behavior Survey (YRBS) in the United States in 2007, men are at a higher rate of drugs use compared to women in all types of drugs. Also older young people are more likely to experience different kinds of drugs. For example, high school students reported the use

of 7 types of eleven types of drugs (Centers for Disease Control and Prevention, 2009). The lower the age of adolescents to use drugs, the higher would be the tendency to different types of drug use in adulthood (Higson, Heeren & Winter, 2006). Since drug use has many complications, and health, social and human resource costs are billions of dollars for its treatment, preventive efforts are indispensable and the best time to prevent is early adolescence and the relevant efforts should focus on pre-adolescence (National Institute on Drug Abuse, 2014; United Nations Office on Drugs and Crime,

2015). Teens look for danger due to their youthful spirit and curiosity. For this reason, they may be interacting with people who are in some way related to drugs and thus have a positive attitude towards narcotics. Thus, to create negative attitudes, at first we should be aware of their attitude and position. Cognitive structures in addiction and drug use are described with terms such as tendencies. attitudes, beliefs, expectations, and schemas. These structures are related to action. In other words, if one has a firm and lasting attitude and belief, he will behave in a way that is consistent with his belief (Kuther, 2002; Taylor, Peplau & Cears, 2000). Studies indicate that students' attitudes and beliefs elucidates the major contribution of alcoholic beverages variance (Ybranth, 2010); Therefore, by timely identification of drug attitudes, basic measures can be taken to prevent drug use; therefore, we need extensive research to find out the attitudes of different classes of society, especially students about drugs. In addition to the negative effects of drug use mentioned above, researchers indicate a relationship between drug use and life satisfaction reduction in adolescence and adulthood (Kuntsche & Gmel, 2004; Tu, Ratner & Johnson, 2008). Satisfaction with life is the core of mental well-being and is a key determinant of mental health. The meaning of life satisfaction is a cognitive judgment process in which people evaluate their quality of life on the basis of their own criteria. In fact, life satisfaction depends on the position and perception of individuals and is not a stable trait (Pavot & Diener, 1993). In society, they consider the youth potentially unstable and believe that this group of people shows the highest sensitivity to changing environmental conditions emotional states (Steinberg, & Morris, 2001). On the other hand, young people show low levels of life satisfaction in dealing with their problems and changes in their various areas of life and transition from one stage to another. (Suldo, & Hubner, 2004a). In addition, they may choose harmful and inappropriate solutions because of inadequate experiences and ineffective coping strategies in dealing with problems. For example, Mohamad, Mohammad, Ali & Awang (2016) found in their research that delinquency in adolescents acts as a mediator between life satisfaction and drug use; on the one hand, there is a negative relationship between delinquency and life satisfaction, and on the other hand, delinquency has a positive impact on drug use. Zullig et al. (2001) also found that some people may resort to harmful behaviors such as violence, hazardous sexual activity, and substance abuse in response to a reduction in their satisfaction with life, thereby hiding their feelings of reduced living satisfaction. In another case, choosing risky behaviors may reduce one's satisfaction of life. Rooks (2010) states that the relationship between life satisfaction and substance use, is bilateral. In other words, the reduction in life satisfaction results in the drugs use, and the drugs use can lead to a reduction in life satisfaction. Recent studies have shown that mental well-being of youths and adolescents is consistent with physical and non-drug use and purposeful attitudes (Proctor, Linley, & Maltby, 2009). Piko, Luszczynska, Gibbons, & Teközel (2005) also

stated that there was a significant relationship between high levels of life satisfaction with low smoking by investigating the relationship between smoking, academic performance, life satisfaction and future orientation. Kuntsche & Gmel (2004) investigated life satisfaction, behavioral violence and using alcohol drinks and found that drinking alcohol in both genders was associated with lower life satisfaction and high depression periods. Findings of the study of Tou et al. (2008) also show that high consumption of cannabis in men had significant relationship with a low level of satisfaction from family, friends and school, and high consumption of this drug in women had a significant relationship with low level of school satisfaction. Another concept that has been associated with health, life satisfaction and risky behaviors, including substance use in recent years is the positive youth development. This approach has criticized the deficit model. The deficit model typically focuses on the intervention and treatment of risky factors such as substance abuse, violence, sexually transmitted diseases, school failure, unwanted pregnancy, and risky behaviors and it seems that viewing adolescence is viewed as a complex problem (Lerner et al., 2005). Some of these deficit model plans, such as drug use resistance training, showed that the models presented were successful, but had short-term results. Therefore, we needed the programs that would have a more profound effect and that they should take into account the long-term development and involve the potential forces of adolescents. Then, in the early 1990s, using extensive researches on the resilience role in adolescent growth success, past views were faced with serious challenges, and it became clear that there was a need for specific programs for the extensive development of all teenagers. (Lerner and Steinberg, 2009). Integrating theoretical beliefs about the flexible growth of adolescents and practical findings about the multiple paths of children during adolescence, leads us to recognizing the framework for positive youth development. In this view, adolescents are as a source of growth rather than problem management (Lerner et al., 2005). On the other hand, by using positive youth development programs, it is possible to increase skills, empower youth and strengthen families, and the youth in their actual roles and activities in society and help them achieve physical, sexual and psychological well-being (Gavin et al., 2010; Bonell et al., 2016; Melendez et al., 2016). Positive youth development emphasizes the context and environment such as home, school and community, and it is part of transformational capital (Theokas et al., 2005). After discussing the topic of transformational capital and its impact on the development of adolescents, researchers seek positive signs of youth development. In response to this survey, various models have been presented in the last two decades, most notably the 5 Cs approach. This approach measures five attributes of competence, confidence, connection, character and caring. Competence is defined as having a positive view of one's actions in areas like social, academic, cognitive, health and vocation.

Confidence is an inner feeling of self-efficacy and one's positive self-worth. Connection is the establishment of a positive relationship with the people and institutions that is reflected in the exchanges between the individual and the friend, the family, the school and the community, and in such a way that both parties are involved in the relationship. Character is defined as respecting the cultural and social norms and having some standards for good behavior, a sense of right and wrong, and integrity. Caring is the sense of empathy and sympathy with others (Lerner et al., 2005). Gestsdottir et al. (2010) pointed to a significant positive relationship between the components of positive youth development and self-regulation, and negative relationship with drug use, delinquency and depression symptoms. Sun & Shek (2010, 2013) also examined the relationship between life satisfaction, positive youth development and behavioral problems in adolescents. Their research findings show that satisfaction with life is positively associated with positive youth development. Also, life satisfaction has negative association with substance use, delinquency and behavioral problems in students. One of the assumptions of positive youth development program is that the positive youth development is inversely related to behavioral problems and risky behaviors, including substance use and sexual risky behaviors (Ciocanel, Power, Eriksen, & Gillings, 2017; Busiol, Shek, & Lee 2016).) Research suggests a negative relationship between positive youth development and behavioral problems and maltreatment in adolescents (Sun, 2016). Enriching environmental conditions like having positive communication with adults and involvement in activities helps be turned into a strong and skillful person with social competencies and forming positive identity in adolescents. The increase of power and skills of adolescents can prepare them to face the environmental changes such as social conflicts or group leadership to achieve or experience great things (Lerner et al., 2005). Although most of the researches done in prevention programs for risky behaviors and the positive youth development are based on school, it is necessary that intervention is considered at a wider level of society and with the coalition and collaboration of the school, home, government, and non-governmental institutions are considered as protective factors (Farrell et al., 2010; Allison et al., 2011). Hoyt, Chase-Lansdale, McDade & Adam 2012) studied the results of a longitudinal study on 1047 adolescents and found that positive youth development and adolescents' well-being predicted perceived general health and safe and healthy behaviors. Accordingly, based on the research literature, and considering the positive relationship between the positive youth development and positive psychological constructs and its effect on reducing risky behaviors, such as drug use tendency, the aim of this study was to answer the question whether there is a relationship between positive youth development and life satisfaction with drug attitudes and can these components predict the attitude toward drugs in adolescents?

#### Method

# Statistical population, sample and sampling method

This study was a descriptive research, which falls within the category of correlational studies. The senior high school students of Qom city constituted the statistical population of this study (girls and boys) (about 78000 students) in the academic year 2015-2016, among whom 385 students were selected through random multistage cluster sampling and Cochran's formula. The sampling was as from regions of Qom, two regions were selected randomly from each region and of each region, two schools were selected. The schools of each region were one for girls and the other for boys. In each school, the required numbers were selected among the first, second and third grade of high school randomly and the questionnaires were completed. The individuals selected were assured that their information would remain confidential.

# Instrument

- 1- Attitude toward Substance Use Ouestionnaire: This questionnaire was developed by Rezaei, Delawar and Najafi (2012) and includes 50 questions measuring five factors of interest in consumption, attitude toward risks, attitude towards physiological effects, attitude towards psychological effects and attitudes toward the social effects of drugs. The responding is on a three-point scale. The number of items in each scale is 10 and as follows. The subscales of interest in consumption with questions (2, 7, 12, 17, 22, 27, 32, 37, 42 and 47), the subscale of attitude to risks with questions (1, 6, 11, 16, 21), 26, 31, 36, 41 and 46) and the subscale of attitude towards physiological effects, with questions (3, 8, 13, 18, 23, 28, 33, 38, 43 and 48), subscale of attitude toward psychological effects with questions (4, 9, 14, 19, 24, 29, 34, 39, 44 and 49) and the subscale of social effects attitude with questions (5, 10, 15, 20, 25, 30, 35, 40, 45 and 50). To determine the reliability of the questionnaire, the Cronbach's alpha method was used for the whole scale of the alpha coefficient of 0.94 and for the subscale of the attitude toward the physiological effects we have 0.77, attitude toward social effects 0.80, the attitude toward the psychological effects 0.81, the attitude toward the risks was 0.82 and the interest in consumption was 0.86 (Rezaei et al., 2012).
- 2. Satisfaction with life Scale: It determines the overall judgment of an individual of life satisfaction, which is developed by Diener, Emmons, Larsen, & Griffin (1985) and consists of 5 questions. The responding on a seven-point Likert scale ranges from strongly agree to strongly disagree. Internal consistency of scale has been reported between 0.79 and 0.89 (Diener et al., 1985). The test retest reliability of this scale was reported by Diener et al. (1985) with a time interval of two months of 0.84, and its structure was reported using one-factor exploratory analysis method. This scale was standardized in Iran by Sheikhi, Hooman, Ahadi and Sepah Mansour (2010), with an internal consistency of 0.85 and a test re-test of 0.75.

3- Geldhof et al.'s Positive Youth Development Scale (17 items): This scale measures the positive youth development through five indicators of competence, confidence, connection, character and caring, and is developed by Geldhof et al. (2014). This scale has an acceptable validity and reliability. The 17-item scale has a factor structure of 80 questions. The 17-item questionnaire has a convergent validity with community participation scores (0.21 to 0.56) and divergent validity with depression (-0.40 to -0.68) and risky behaviors (-0.46 to -0.66). Its reliability has been reported by Milut (2014) using the Cronbach's alpha method for the total score of 0.74. The 17-item form requires the teenagers to select one between the two terms that mostly explain them, then rank the phrase between two sentences "It's really true about me" or "almost it is true about me". Each of competence, confidence and caring indices is measured by three items, and character and connection are measured by four items. The subscale of competence has questions 1, 2, 3, confidence with questions 4, 6, 7, caring with questions 11, 12, 13, character with questions 5, 8, 9, 10 and the connection with questions 14, 15, 16, 17. The reliability of this study was 0.82 using the Cronbach's alpha method.

#### Results

Of total number of students participating in this research (385 people), 198 were female (51.4%) and 187 were boys (48.6%). Also, the frequency of first senior high school students is 45 (11.7%), the second, 131 (34%), and the third grade is 209 (54.3%). The descriptive statistics of the studied variables and the correlation matrix are presented in Table 1.

**Table 1: Descriptive Statistics and Correlation Matrix of Research Variables (n = 385)** 

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1-Competence	17/67	3/40	1	-	-	-	-	-	-	-	-	-	-	-
2-confidence	19/55	3/73	0/59**	1	-	-	-	-	-	-	-	-	-	-
3-Character	23/79	5/06	0/40 **	0/40 **	1	-	-	-	-	-	-	-	-	-
4-Caring	23/35	5/59	0/26 **	0/25 **	0/48 **	1	-	-	-	-	-	-	-	-
5-Connection	28/16	5/52	0/50°°	0/62**	0/48 **	0/42**	1	-	=-	-	-	=	-	-
6-Positive youth development	94/80	15/51	0/57**	0/65°°	0/80°°	0/74**	0/83**	1	-	-	-	-	-	-
7-Life satisfaction	22/92	7/12	0/39**	0/65 **	0/43 **	0/33 **	0/71 **	0/67**	1	-	-	-	-	-
8-Interest in consumption	13/32	4/24	-0/36**	-0/42°°	0/47**	-0/39°°	-0/58**	-0/62°°	-0/55°°	1	-	-	-	-
9-Attutyde to risks	13/28	3/61	-0/23 °°	-0/29**	-0/41 °°	-0/43 **	-0/46**	-0/54**	-0/43 °°	0/79**	1	-	-	-
10-Attitude of physiological effects	12/41	3/07	-0/28°°	-0/30°°	-0/44°°	-0/41**	-0/43	-0/53**	-0/43 °°	0/65**	0/70°°	1	-	-
11-Attitude to psychological effects	14/52	2/97	-0/28**	-0/35°°	-0/38°°	-0/36**	-0/48**	-0/52**	-0/46**	0/73**	0/71 **	0/75**	1	=
12-Attitude to social effects	11/87	2/96	-0/25**	-0/33°°	0/43 **	-0/42°°	-0/42°°	-0/53°°	-0/43 °°	0/76**	0/77**	0/82°°	0/80°°	1
13-General attitude to substance use	65/44	15/09	-0/32°°	-0/38°°	-0/48°°	-0/45**	-0/54**	-0/62**	-0/52°°	0/90°°	0/90°°	0/86**	0/88°°	0/92°°

<sup>\*</sup> P <0.05, \*\* P <0.01

In order to determine the contribution of the components of positive youth development and life satisfaction in predicting drugs attitude, stepwise multiple regression was used. Before the implementation of the regression, its assumptions were examined. Dispersion diagram of dense distribution of the observed values show a 45-degree slope and all points are on the line, indicating the normal distribution of the residuals. In addition, Watson-Durbin statistics were used to determine the independence of errors. The results showed that the assumption of independence for the drug attitude variable (DW = 1.784) is satisfied. Multiple co-linearity assumption is evaluated through tolerance and Variance Inflation Function (VIF). The results showed that the minimum tolerance for drug attitudes is 0.441 and the maximum value of variance inflation is 2.268, which shows that there is no multiple colinearity between independent variables. After analyzing the multiple regression assumptions and ensuring the satisfaction of assumptions, stepwise multiple regression analysis was used to determine the predictive variables in explaining the criterion variance variables. In the first step, the connection variable was analyzed and 29% of the variance of the attitude toward drugs was explained. In the second step, by adding character, the explained variance was increased from 29% to 35%. In the third step, the caring variable was analyzed and the amount of variance explained increased from 35 to 38%, and in the fourth step, life satisfaction variable was analyzed and the explained variance increased from 38 to 41%. Totally, 41% of the variance of drug attitudes was explained by predictor variables. Standard and non-standard coefficients of drug attitude regression are presented in the last step in Table 2.

Table 2: Standard and Non-standard Regression Prediction of Drug attitude in the Last Step

Last Step									
Variables	В	B error	Beta	t	P	Tolerance	Variance inflation		
Constant	117/95	3/59		32/831	0/0005				
Connection	-0/53	0/16	-0/19	-3/25	0/0005	0/44	2/27		
Character	-0/56	0/14	-0/19	-3/88	0/0005	0/66	1/50		
Caring	-0/55	0/13	-0/20	-4/36	0/0005	0/72	1/38		
Life satisfaction	-0/50	0/12	-0/24	-4/24	0/0005	0/48	2/07		

As can be seen, among the predictive variables, connection, character, caring and life satisfaction are have negative beta coefficients, which means that by increasing these variables, the attitude toward drugs decreases and vice versa.

# **Discussion and Conclusion**

The present study was aimed to determine the relationship between the components of positive youth development and life satisfaction with attitude towards drugs. The results of this study showed that there is a negative relationship between the components of positive youth development

(competence, confidence, character, caring and connection) and attitude toward drugs. This finding is consistent with the research results of Gestsdottir et al., (2010), Hyatt et al. (2012) and Milut (2014), Sun and Shek (2010, and 2013). One of the hypotheses of the positive youth development approach is that the components of positive youth development and risk behaviors are inversely related and the best means of preventing problems related to the development and behavior of adolescents (e.g. depression, aggression, drugs use and abuse or improper sexual behaviors) is a positive development enhancement, and as the components of the positive youth development increase, the components of risky behaviors are reduced (Lerner and Stenberg, 2009; Ciocanel et al., 2017; Bossil et al., 2016). Some studies have shown that one of the causes of drug attitudes is living in families without coherence and warmth, and families with a cold emotional climate don't have discipline and physical and harsh punishment are factors associated with drug attitudes. Findings of Rezaie, Islami and Khorasani (2014) indicate that there is a significant difference between tendency toward substance use among family members, parental differences, parental control, leisure time, access to drugs and relationship with addicted friends and people's attitudes toward addiction. Skeer et al. (2009) investigated 1421 adolescents from ages 10 to 22 years between 1994 and 2001 and found that familial conflicts and exposure to adverse family environment in childhood had a significant effect on the tendency to drugs use in adolescence. In other words, the lack of a positive relationship with people in the community and the family, and the lack of connection attributes, which is one of the five components of the positive youth development, leads to behavioral problems and attitudes toward drugs. In a study, Lerner investigated the usefulness of positive youth development plans for drug use and dangerous sexual behaviors, and found that positive youth development can be protective for the girls who has started using Marijuana recently, and for both sexes it prevents long-term use. In fact, the positive youth development is inversely associated with the risk of drug use and dangerous sex, and is in some way a preventive measure (Lerner et al., 2011). The other results of the present study are that there is a negative relationship between components of attitude towards drugs and life satisfaction. This finding is consistent with the research results of Zullig et al. (2001), Kuntsche & Gmel (2004), Pico et al. (2005), Tu et al. (2008), Rooks (2010) and Mohammed et al. (2016). High levels of life satisfaction in adolescence can act as a protective factor against educational, behavioral and emotional and interpersonal problems (Piko, & Hamvai, 2010).

Some people may also resort to harmful behaviors such as violence, dangerous sexual activities, and substance abuse in response to a reduction in their satisfaction with life, thereby hiding their feelings of reduced life satisfaction. In another case, showing risky behaviors may reduce the satisfaction of one's life (Zullig et al., 2001). Raphael et al. (1996) found that there was a negative correlation between drug use and one's overall quality of

life. Findings of the study of Topolski et al. (2001) showed that young people who completely quitted drugs reported higher live satisfaction compared with those who used drugs recreationally or regularly. The results of Rooks's research (2010) suggest that the use of three substances including cigarettes, alcohol and marijuana has a negative relationship with life satisfaction, but the use of each of these substances alone has no significant relationship with life satisfaction. Tu et al., (2008) also found that people with high marijuana use (10 times and more in a month) reported lower life satisfaction than those who use less (3 to 9 times a month). Research findings of Suldo & Huebner (2004b) also show that although high life satisfaction is a protective factor against aggression and delinquency, it does not protect young people from using a specific drug.

The present study also examined the contribution of the components of positive youth development and life satisfaction in prediction of attitude to drugs. The results of this study indicate that each component of positive youth development and life satisfaction have a different role in predicting drug attitudes. According to the research findings, the connection variable has the most share in predicting the attitude toward drug, and after that, character, caring and life satisfaction are effective in prediction of drugs attitudes. These results are consistent with the results of Sun (2016) and Lerner et al. (2011). The results of various studies have shown that the adolescents with more external and internal capitals as one of the indicators of positive youth development are less exposed to risky behaviors such as substance abuse, violence and sexual activities and mostly show progress behaviors such as success in school, helping others, different values, and maintaining health at most times (Aspy et al., 2010). Hyatt et al. (2012) also found that positive youth development and adolescent well-being predict general health and non-hazardous behaviors. This research has some limitations. Using the correlation method and the impossibility of determining the causal relations between variables is the first limitation of this research. This study was conducted on high school students in Qom (Iran), and its findings can not be generalized to other cities and groups. Considering that the positive youth development is a new and emerging approach in the country, it is suggested that the role and relationship of other variables affecting the positive youth development be investigated in order to acquire coherent knowledge of the positive youth development in schools, and find about the relationship of this structure with other structures that have more capabilities in their respective plans. Also, by focusing on the effective and predictive factors regarding the positive youth development, intervention researches can be conducted. Finally, it is suggested to the education authorities of country to provide a training package and training on special skills in the field of positive youth development to increase satisfaction and reduce behavioral problems, especially at the level of students.

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