#### **Abstract**

**Objective:** The present study was attempt to explore the relationship of addiction potential with resiliency and subjective vitality. Method: This was a descriptive-correlational study. Lordegan Pavame Noor University students constituted the population of this study. Then, the number of 172 students was selected as the participants via random sampling and responded to Resilience, Addiction Potential. and Subjective Vitality questionnaires. Results: analysis indicated that resiliency and subjective vitality were correlated negatively with addiction potential. Furthermore, the results showed that resiliency subjective vitality were predicators of addiction potential. Conclusion: According to the findings of this study, it can be concluded that subjective vitality and resiliency are one of the factors effective in the generation of potential for substance use in individuals.

**Keywords**: Resiliency, Subjective Vitality, and Addiction Potential

# On the Relationship of Resiliency and Subjective Vitality with Addiction Potential among Students

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# Introduction

Human societies have always faced many problems and injuries. Social problems constitute a significant portion of the capitals and affairs; therefore, attention to them will lead to the prevention and treatment of such problems. Addiction is one of the major social ills that society is constantly involved with (Naghibossadat & Ghane, 2012). Addiction and drug abuse as a social problem, is a phenomenon that is followed by the deterioration of society's ability to organize and maintain the existing order of society. It disrupts the normal performance of social life and causes structural changes in the economic, social, political and cultural systems of the community (Miri Ashtiani, 2006). Drug use in the past was limited only to adults; however, it suddenly became prevalent among young people in the early 1970s (Sotoudeh, 2006). Drug use is a growing phenomenon that increases linearly from early adolescence to early adulthood (Zeynali, Vahdat & Isavi, 2008). The increasing number of addicts has turned addiction into a national crisis in the country (Mohammadi, 2005). The challenging and shocking point in this regard is low average age and high rates of drug abuse tendency among youth, teenagers and students which leads to the spread of addiction and its transmission speed among this population (Javadi, Rafi'ea, Aghabakhshi, Askari & Abdi Zarin, 2011).

Statistics show that about 16 percent of Iranian addicts are under 19 years old and 28% of them are between 20 and 24 years old (Barghi, 2002). Substance abuse disorder has poor prognosis, and directly and indirectly inflicts huge treatment costs on families and society. At least half of treated addicts turn to drugs up to 6 months after treatment and this amount reaches 75 percent for a year after treatment (Vazirian & Mostashari, 2002). On the other hand, adolescent drug users are more likely to experience anxiety, low self-esteem, depression, and other psychological problems. Substance abuse puts adolescents at risk of academic failure, low adjustment, and low academic achievement; therefore, they lose job opportunities and income in the future (Meschke & Patterson, 2003). Some conditions should be provided for the emergence of drug use before its initiation. This background and preparation is referred to as addiction potential (Franke, et al., 2003). Addiction-prone personality theory asserts that some people are predisposed to drug addiction and become addicted if they are exposed to it. However, some people are not prone to addiction and, thereby, do not become addicted that much easily (Gendreau & Gendreau, 1970). Those who are prone to addiction tend to use multiple substances (Hiroi & Agatsuma, 2005).

Franke, et al. (2003) pointed to the growth of this proneness and readiness in lifetime and suggests that people prone to addiction may suffer from different psychological risk factors. They found that environmental risk factors facilitate availability of drugs, but psychological risk factors facilitate the increased likelihood of drug dependence. Minooei & Salehi (2003) showed that there was a significant difference between the scores of students and addicts in addiction

potential scale. Vahdat (2005) examined the prevalence of drug abuse among high school students of Urmia based on addiction potential scale and showed that 42.8 percent of students have moderate to high addiction potential and 14.1% of them have very high levels of addiction potential. The important point in these studies is that some people with addiction potential are at risk.

Since adolescence is the time of gaining experience and making personal choice, personal identity is shaped at this time. Therefore, youth and adolescents are very vulnerable against drug use and risky behaviors (Rotherman-Borus, Miller, Koopman, Haignere & Selfringe, 2002). For this reason, it is very important to identify the factors effective in addiction prevention and protection of youth from drug use and risky behaviors and to apply effective teaching methods in order to raise awareness and improve attitudes and life skills among adolescents and young people.

Historically, much of the preventive research and the development of interventions have been focused on identifying risk factors and problematic behaviors in sensitive populations. However, the current research trend has now created a wider area via attention to and concentration on protective factors (Kegler & Oman, Vesley, McLeroy & Aspy, 2005). One of the protective factors in this domain is resiliency (Mohammadi, 2005). Resiliency increases the ability to withstand and cope with life crises and overcome them. It also prevents the occurrence of problems among adolescents and young people and protects them against the psychological effects of problematic events (Pinquart, 2009). Resilient people benefit from a higher level of mental health, greater self-regulation skills, self-confidence, and social support; and are less involved in risky behaviors (Cuomo, Sarchiapone, Giannantonio, Mancini & Roy, 2008). Self-discovery, problem-focused coping skills and positive assessment of social support are among the factors that increase resiliency.

Resiliency is related to the positive emotions that play a protective role for people in situations of depression and drug use after a critical situation (Bonanno & Galea, Bucciareli, & Vlahov, 2007). The concept of resiliency is based on the idea that although some people might encounter several risk factors or they may be prone to the incidence of a disorder, they will not get entangled in these disorders and risk factors. Accordingly, researchers and scholars place resiliency and vulnerability in two extremes of one continuum. Vulnerability refers to the likelihood of negative consequences in the face of hazards and resiliency leads to the increase of positive outcomes in problematic situations (Zemmerman & Fergus, 2005).

Resilient people are characterized with four attributes in common: (1) Social competence (understanding, flexibility, empathy and compassion, communication skills, and sense of humor); (2) Problem solving skills (planning, seeking help from others, and critical and creative thinking); (3) Autonomy (identity, self-efficacy, self-awareness, and mastery of tasks); and (4) A sense of purpose and future (goals, optimism and spirituality) (Garmezy & Masten,

1991). Some studies have shown that resiliency is negatively correlated with anxiety and depression and resilient people can overcome the variety of adverse impacts (Good & McKay, 2006). These people assess adverse situations as challenging ones, hold a greater sense of commitment to themselves and their situation, and experience a higher sense of control over their lives (King, Keane, Faribank & Adams, 1998). People with high resiliency hold such personality characteristics that increase their mental health. Resiliency reduces threat assessment (negative thoughts) and increases the success of one's expectations. Resiliency and hardiness promote one's ability to make a trade-off between biological and mental conditions in difficult situations (Connor & Davidson, 2003). Those who benefit from higher emotional autonomy are conservative in tendency to drug abuse (Nicholas & Robert, 2014). Social skills training also reduces the tendency to addiction in students (Kakia, 2010). High levels of resiliency lead to a reduction of substance abuse among adolescents via the generation of adaptive flexibility (Barbara & Wieland, 2012). In addition, resiliency influences absence of substance use with mediation of motivational adaptive structure (Salehi, Azad & Nemati, 2010). Arevalo, Guillermo & Hortensid (2008) showed that coping responses in relation to stress are associated with trauma symptoms and when there are higher levels of sense of coherence and coping responses, pressures resulting from better treatment are controlled. Those with higher problem-focused coping ability will be less prone to addiction (Feizollahi & Feizollahi, 2012). One of the factors effective in tendency to addiction is to use emotion-focused and stress avoidance coping strategies while problem-focused strategies have a deterring role in tendency to addiction (Ahmadi, Ahmadi & Mirshekari, 2012). Membership in groups of drug addicts and drug use are predictable via resiliency component and non-addicts have a higher level of resiliency (Hosseinolmadani, Karimi, Bahrami & Ma'azedian, 2012).

The factors effective in subjective well-being are among the other protective psychological components affecting people's lack of tendency to high-risk behavior. One of the most important components of this category is subjective vitality. However, little research has been done in this area. Bostic (2003) regards subjective vitality as the inner experience rich in energy. In fact, subjective vitality refers to the mental and physical energy to experience a sense of joy, liveliness, and enthusiasm (Riyan & Deci, 2008). Subjective vitality reflects a positive state and is derived from such feelings as freedom, autonomy and internal motivation. Subjective vitality increases with the conduct of acts with a sense of independence and increased intrinsic motivation. If one feels s/he is being controlled by others, his/her subjective vitality decreases (Nix, Rayan, Manly & Deci, 1999). Subjective vitality is sometimes generated in particular situations or after the accomplishment of a particular activity; and is something beyond motivation, activity or pure physical energy. This is some psychological experience in which people feel a sense of vitality and liveliness (Ryan &

Frederick, 1997). This type of experience is different for everyone and is affected by physical and psychological factors; indeed, subjective vitality is a reflection of a person's mental and physical health (Ryff, 1995). Sylvester (2011) indicated that the satisfaction of the need for competence and independence has the predictive ability of subjective vitality and mental health. In addition, quality of life, life skills, ability to adapt to the conditions, and mental well-being are significantly associated with vitality. Muraven & Russman (2008) showed that behavioral disorder and vitality are mediated with self-control. Moreover, vitality is negatively correlated with feelings of pressure and positively related with positive response to stress (Baard, Deci & Rayan, 2004). Research literature indicates that some factors associated with resiliency such as emotional autonomy, social skills, coping responses in relation to stress, and problemsolving strategy are negatively correlated with high-risk behaviors such as substance abuse and are directly correlated with mental and emotional health and social adjustment (Nicholas & Robert, 2014; Kakia, 2010; Feizollahi, et al., 2012; Ahmadi, et al., 2012; Hosseinolmadani, et al. 2012). Studies have suggested the presence of a significant relationship between subjective vitality and well-being, life skills, and psychological health (Moraven, & Rosman, 2008; Baard, et al., 2004).

The important point is that the construct of subjective vitality has not been examined along with addiction potential on the one hand. However, the construct of resiliency has been compared between addicts and non-addicts. In the same way, addiction potential has been neglected in studies. Based on the theoretical foundations of addiction, prevention is superior to all aspects. Given that no research has still examined the relationship of resiliency and subjective vitality with addiction potential, this study mainly aims to examine the issue in the student sample.

# Method

# Population, sample, and sampling method

This is a descriptive-correlational study. Lordegan Payame Noor University students (n=320) in 2013-2014 constituted the population of this study. Then, the number of 172 students (113 males and 59 females) was selected as the participants via random sampling and according to Morgan table.

#### Instrument

1- Addiction Potential Scale: This scale was constructed by Weed, et al. (1992). Thereafter, attempts have been made to determine the validity of the scale in Iran. As a result, Iranian version of addiction potential has been developed with respect to the psycho-social aspects of Iranian society (Zargar, 2006). This scale consists of two factors, 36 items plus 6 items measuring lying. The items are scored on a continuum from zero (completely disagree) to 3 (strongly agree). The two following methods were used to examine the validity

of the scale. The criterion validity of addiction potential questionnaire discriminated drug addicted and non-addicted groups from each other well.

Convergent validity of the scale was calculated by correlating it with Symptom Checklist-25 and resulted in the correlation coefficient of .45. Cronbach's alpha was obtained equal to .90 which represents its desirable reliability (Zargar, 2006). Two examples of the questions include: Companionship with drug users does not matter. / Drugs have beneficial properties.

- 2- Connor-Davidson Resilience Scale (2003): This questionnaire contains 25 items that are scored on a 5-point Likert scale from zero (not at all true) to four (true nearly all of the time). The maximum and the minimum scores are placed between 0 and 100. This scale was validated in Iran by Mohamadi. To determine the validity of the scale, the correlation of each item was first calculated with the total score of the scale and, then, factor analysis was used. The correlation coefficients of each score with the total score ranged from .41 to .64. Cronbach's alpha of the scale was reported .89 (Mohammadi, 2005). In the current study, Cronbach's alpha was equal to .74 and factor analysis with varimax rotation was used to explore the validity. The results confirmed the existence of one factor. Two examples of the questions include: I believe that in any good or bad event, there is some advisability. / If I fail, I do not get easily discouraged.
- 3- Subjective Vitality Questionnaire (SVQ): Ryan & Frederick's subjective vitality scale (1997) was used to measure one's positive feeling of aliveness and energy. This scale consists of 7 items that are scored on a 5-point Likert scale from 1 to 5 (strongly agree to strongly disagree). Cronbach's alpha coefficient of .89 was obtained for the reliability of the scale (Sheikholeslami & Daftarchi, 2011). In this study, Cronbach's alpha was obtained equal to .81 and factor analysis with varimax rotation was used to determine the validity of the scale. Two examples of questions in this scale are as follows: I'm feeling refreshed and rejuvenated now. / I am energetic and spirited now.

# Results

Due to the incompleteness of the number of 34 questionnaires, the analyses were done on 138 questionnaires. Descriptive statistics of the variables under study are presented in the table 1.

Table 1: Descriptive statistics of the variables under study

Variable	N	Min. Score	Max. score	Mean	SD
Addiction potential	138	11	74	32.65	12.11
Resiliency	138	55	98	82.78	13.67
Subjective vitality	138	8	34	23.43	8.21

The correlation matrix of the variables under study is presented in the table 2. As shown in the table 2, the correlation coefficient of resiliency and subjective vitality with addiction potential were equal to -.45 and -.34, respectively that are significant at the level of .01.

Table 2. Correlation matrix of the variables under study						
Variable	Addiction potential	Resiliency	Subjective vitality			
Addiction potential	1					
Resiliency	45*	1				
Subjective vitality	34*	.27	1			

Table 2: Correlation matrix of the variables under study

To investigate the role of subjective vitality and resiliency in predicting addictive potential, simultaneous multiple regression method was used. The results of this analysis are presented in the table below.

Table 3: Model outline and regression coefficient of addiction potential based on resiliency and subjective vitality

Predictor variables	В	t	Sig.	R	$R^2$
Constant	19.231	11.056	.001	.48	23.04
Resiliency	40	-9.09	.001		
Subjective vitality	11	-3.82	.001		

# **Discussion and Conclusion**

This study aimed to investigate the relationship of resiliency and mental vitality with addiction potential. The results showed that there was a significant negative relationship between resiliency and addiction potential. This means that those who are more resilient are less prone to addiction, and those who are less resilient are more prone to addiction. This finding is consistent with the results of the studies done by Connor & Davidson (2003), Nicholas & Robert (2014), Kakia (2010), Barbara & Wieland (2012), Salehi, et al. (2010), Arevalo, et al. (2008), Barbara et al. (2012), Feizollahi & Feizollahi (2012), Ahmadi, et al. (2012), Hosseinolmadani, et al (2012). These researchers have proved the relationship between addiction and resiliency in their studies. To account for this finding, one can argue that people with high levels of resiliency are stronger in controlling their impulses and this reduces their tendency to addiction (Spielberger & Sarason, 2005). People with low levels of resiliency have not set specific purpose in their lives and, thereby, have not found an important meaning for their lives. In the same way, such people lose their motivation in the face of difficulties, are not flexible to changes in life, always remain in fear, and, thereby, tend to drugs in threatening situations. These people are very vulnerable to problems and quickly give in and cannot control and manage their feelings and emotions. In times of crisis, they experience heavy loads of stress and imagine themselves as victimized and are not able to achieve safe and secure solutions using problem-focused coping techniques (Bagheri Yazdi, 2005). Resilient people benefit from such skills as problem-solving, efficiency explanatory style, self-efficacy, and social support. Such skills help them to selfadapt and keep their mental health when experiencing negative emotions in adverse conditions. Adolescents and young people can learn these from teaching environments. Thus, intervention is absolutely essential to increase the resilience

<sup>\*</sup>P<.01

of students. It seems that attention to protective factors is one of the effective approaches in tendency of people to drug use.

Another finding of this study was the availability of a significant negative relationship between subjective vitality and addiction potential. In other words, people with higher levels of subjective vitality have lower levels of addiction potential and people with lower levels of subjective vitality have higher levels of addiction potential. This finding is consistent with those of the studies carried out by Ryan & Deci (2008), Nix (1999), Sylvester (2011), Moraven, & Rosman (2008), and Baard (2004). These researchers examined some components of subjective well-being which are directly or indirectly associated with high-risk behaviors, including addiction potential. To interpret the finding suggesting the existence of the relationship between subjective vitality and addiction potential, one may assert that people with less subjective vitality benefit from lower degrees of self-esteem and self-concept due to the inability to control events and gain passion and liveliness, therefore, they suffer from lack of self-assertion and cannot reject the unreasonable requests of others. For the promotion of their poor self-concept, they may even approach and join addicts to gain pleasure and vitality so that they may be accepted by addicts. Such factors may increase addiction potential.

As per the findings of the present study, related authorities are suggested to hold training courses on reducing addiction potential among students to increase resiliency and mental vitality of the students. In addition, the identification of educational interventions on the students with low mental resilience and vitality and high addiction potential should take priority in the plans and policies of university authorities. Lordegan Payame Noor University students constituted the participants of this study; therefore, such a similar study should be replicated on other academic groups and universities to generalize these findings to other student populations. Similarly, attention to other psychological constructs and methods of data collection, including interviews of different groups can provide more precise information for the discovery of addiction potential. To prevent people from drug abuse, authorities are recommended to seriously include the promotion and improvement of resilience and mental vitality in the plans of educational institutions such as family, education center, universities, and the media.

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