Scale standardization tendency to addiction (with emphasis on MMPI-ARF) secondary school students and pre - university

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ABSTRACT

The main purpose of this study was to standardize the scale tendency to addiction (with emphasis on the MMPI-ARF) secondary school and pre- university students. The major research question was whether the tendency to addiction scale, community psychometric characteristics of adolescents in Tehran is desirable or not? Present methodologies, survey type standardization and seek are with the emphasis on process. The present survey, all boys and girls (14 to 18 years) in Tehran and its suburbs that are on the target population are considered infinited. Direct sampling was used for selection of research. 1,000 normal adolescents (500 girls and 500 boys) and 100 addicted adolescents (50 girls and 50 boys) were considered as examples. Finally, using statistical methods t-test compared the two groups separated by independent validity, exploratory factor analysis to construct validity, internal consistency to Cronbach alpha and Pearson correlation to calculate correlation between two spilit-half and test-retest was paid too. Results showed that lists tendency to addiction, have validity and can be separated and non-addicted teenagers addicted to separate from each other. Also, having good credit is the coefficient.

Key words: *standardization, scale, Tendency to Addiction*

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INTRODUCTION

Drugs, alcohol, tobacco, opium, heroin, and many synthetic and semi-synthetic materials are about abuse, a major part of today's world of form. These materials not only individual health but also directly on the economy, the foundations of social, cultural and other aspects also affect people's lives. In other words, drug addiction or drug abuse, including issues and problems in today's world each year, which costs a lot to fight it is just that our society as part of the world, a lot of expenses spend each year to deal with this problems. It is said about the illegal trade of materials almost 400 billion dollars in illicit profits went organize businessmen. Despite spending a lot of costs to deal with entry and is offered in the community, but due to the high volume of income and activities of traffickers, the problem is not so much work preparing materials and it is accessible easily. In this regard, some researchers are hopeful that the causal factors are identified through the talented people be able to recognize substance abuse. But also very different in terms of cultural, social, ethnic, because there are many differences in personality structure and the people in this regard between the various ethnic groups Iranian people in western countries, there is not cause to research findings in western countries with the drug and the Iranian people to generalize. These leads have been used to issues of validity, Validation and Standardization of tests and scales that are made and use in Western societies. Minnesota multiphasic personality Inventory is the most common and most prestigious in the fields of mental health professionals and by Trained Professionals used to identify complementary structures around the

1868

obtained personality and mental pathology. By this test, more accurate knowledge about personality disorders and psychological subjects obtained by interview, observation and data collection resources will be more accurate in measuring psychological domains of mental health. High effectiveness of this test in identifying trends shows teens are addicted.

Minnesota multiphasic personality Inventory, published in five continents and are interested in the frequency domain of psychological pathology has attracted. The list of great applications in the domains of psychotherapy and counseling, selection and placement, prevention and treatment and, above all, documentation of psychological measures, has led to consensus in the field of comprehensive feasibility of this test among the assistants, especially psychiatrists and psychologists; and make a huge wave of research in about this issue. However, the scale should be applied to the fields mentioned in the domains of personality in adolescents and young adults to identify trends and personalities prone to addiction, drug abuse, and was considered emphasize the psychometric measures. Before standardization process of scales for the tendency to addiction, alcoholism scale McAndrew, talent and accepting drug addiction are known to be multi Persian version of the Minnesota multiphasic personality Inventory, should be emphasized that the development process. In this process, should validity scales, clinical content and supplementary scales, and finally, emphasized the comprehensive nature of this list by identifying Minnesota multiphasic personality Inventory-2 Restructured Form (MMPI-2RF). It should be mentioned in either ignorant of inattention and complex dimensions of this list can be terrible blow to the Persian version of the corpus created and its psychometric properties can be falsify. In addition, you can enjoy the latest technology and the list shall complete and accurate version of it in 2008, have been developed and known as the MMPI-2RF, considered. Through psychometric characteristics of MMPI-2RF, strategies can be developed for the preliminary version, testing, standards and scales of final disposition of addiction won this way, good psychometric properties for these three scales obtained and training Development and application fields and prevention among adolescents and young adults up to the level and quality of psychological services in the system of psychology and increased consulting .

 MMPI-2RF for 13 to 18 years range does not always use the age range of adolescent Minnesota multiphasic personality Inventory-2 Restructured Form (MMPI-2RF) should list, it is used. The list of psychological precision by providing a high capacity 50 clinical scales in measures related to psychological assessment in adolescents and could have adequate and reliable information about the psychological traits associated with Adolescence to provide psychopathology. Considering the list of standard MMPI-ARF is not stressed as a variety of more detailed fields and validity scales in Iran, It is essential to be considered completion in clinical content. Since the scales of tendency to addiction as a subset of upgraded scales is considered essential to be able to accurately evaluate the psychometric properties of the pay Inventory. Various uncertainties identified in adolescents and young adults prone personality profiles of substance there. Some of these uncertainties to the lack of relationship between personality profile and tendency to focus on substance abuse and in some other cases, the influence of social factors, cultural and economic trends for adolescent substance abuse are emphasized. However, still experimental and cannot be precise relationship between personality characteristics and psychological traits of adolescents and young adults with substance abuse is remarkable personality and veins to detect fields as juvenile delinquency will use to practice [15]. With emphasis on personality profiles and Tendency of neuroticism associated with substance abuse, there are many valid studies and theories. As the Eysneck turynh device personality as a factor affecting learning and the important element to consider the incidence of addiction. In addition, the adjective sense in Zackerman theory adventuring acts and abuse of drugs, as other theories of personality are considered related to drug addiction. However, the figures are still not susceptible to drug abuse and will speak to the various uncertainties in this field exists. Contradiction between the theories of personality in the domains of substance abuse has led to a relationship cannot be straightforward personality profiles of substance abuse and pointed, but always trends anxiety and depression in adolescents and young people can lead to abuse the substance. MMPI-2 supplementary scales and MMPI-A to identify personality profiles and life styles associated with the incidence of drug addiction designed to investigate the frequency of fuel placed. In some studies, scales tendency to lack predictive validity for the prevention and incidence of drug addiction in adolescents and young adults has been mentioned [20] and in contrast, a wide range of performance measures tendency to addiction research for prognosis, prevention, identification and even treatment of susceptible adolescents has focused on substance. Review related research in alcoholism McAndrew scale, can raised Litt et al. (2003) research about the psychometric characteristics of MMPI-A scale as did, to survey 242 adolescents (121 boys and 121 girls), to survey the construct validity of the present scale around the scale factor structure, it was shown that the mentioned scale has six main factors and each of these factors, the Eigen value beyond the 1 showed. Analyzed of scale that took place about the Reliability, Reliability coefficients showed that the scale mentioned in the desirable Reliability and 0.78 – 0.85 in the field of internal consistency with alpha reliability coefficients Cronbach, the clinical applications of this test are emphasized for adolescents. Ben- Porath and Forbey (2003), during the validity and reliability of the scale MMPI-2, meta-analysis technique, predictive validity McAndrew alcoholism scale scores in the 161 and all research conducted in 161 study subjects who were around 31,320 people, as the samples considered. Then, try to toward the correct classification with emphasis on

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cut-off point of 24 to 0.70 and 0.72. In order to calculate Reliability coefficients were determined using two methods Cronbach alpha and test - retest, numbers 0.82 and 0.84 as the optimum Reliability coefficients were obtained. Finally, as can be that alcoholism scale of MMPI-2 validity and reliability and has good prediction power alcoholism among adolescents and young adults offers. Kamierczak et al. (2005) to survey the reliability and validity of alcoholism scale MMPI-2, 120 men treated for alcoholism, which were examined after the above scale validity coefficients through Spearman-Brown test and methods spilt-half figure 0.87 have reported. Also, using the coefficient of reliability test-retest number 0.89 for the test has reported above. Also, for the differential validity of the above scale separation, alcoholism scale scores of the men with alcoholism other men were treated, were compared and significant differences between them, respectively. Thus, the rate coefficient was obtained in 0.75. Arbisi and Seime (2006), about the research that validitation and reliabilitation of MMPI-2 scale were done, in order to determine the scale tendency of alcohol MMPI-2 validity concurrent validity, criterion used to determine the action brought, after calculating the correlation coefficient between MMPI-2 scale with the MMPI-A scale count of 0.64 have reported. Also, to Construct Validity scales mentioned software using the LISREL confirmatory factor analysis and was determined to pay scale shall have a validity criterion (same type) and Construct Validity (Factor). It should mentioned that the validity of the scale shall differential validity is also desirable. Scale scores obtained in clinical samples from alcoholism in two groups of people with mental disorder and substance abuse with normal subjects, showed no significant difference between two groups. In order to calculate reliability coefficients obtained showed that the numbers 0.85 and 0.87 scale shall, in addition to authentic validity is also good. Archer et al. (2006), the research reliabilitation and Validation of Minnesota multiphasic personality Inventory-restructured clinical (MMPI-2RF) MMPI-RC pay scale and calculate the criterion validity of the type concurrent with tendency to scale, MMPI-A alcohol began. They validated the method used a mixed group validation procedure. The method by Dawes and Meehl in 1965 was reported. Using this method, two specific groups studied were identified. The first group was those in the field of family history of alcohol abuse showed the second group was those who score above 24 on the scale of MMPI-RC tendency were obtained to alcohol. Overlapping between the two of the type groups was calculated as the validity coefficient and Range of validity coefficient concurrent criteria with emphasis on time was obtained between 0.82 and 0.92. Therefore, researchers concluded that the tendency towards alcohol scale MMPI-RC has good concurrent validity, and it can identify teens at risk for alcoholism to be used. Review related research in the addiction potential scale will raise the research. Camara et al. (2002), which psychometric characteristics of addiction proneness scale of 338 students began with a sample size, was determined from the mentioned scale has high sensitivity. In order to investigate validity coefficients calculated from the present scale test-retest methods (4-week intervals) in order to determine the stability coefficient and Kooder – Richardson in order to determine the internal consistency questions were used and were determined that the resulting figures were 0.87 and 0.89 are coefficients indicating reliability is desired coefficients. Cochrane, Tett and Vandecreek (2003), research by the addiction proneness scale if they were considered, for construction proneness scale of Addiction, 706 samples as a sample of healthy or unwonted female and 434 male samples and 164 female samples drug addicts. Also, sample 120 male psychotic and 90 psychotic female sample were considered unwonted hospital as the experimental groups. Reliability scales in assessing proneness addiction, while construct a scale, the different subjects mentioned were lots of similar environments. The data indicate that this scale can be a good talent among addiction and mental illness abuse is allowed substances consumer differentiation. In research of Borum and Grisso (2003), the reference in criterion validity, internal consistency and effective diagnostic statistics in the field of complementary scales drugs of abuse was performed to evaluate more accurately the scale psychometric characteristics McAndrew alcoholism, was discussed addiction proneness scale. Sample size 69 patients with chronic alcoholic subjects and 51 healthy controls, were studied to compare the results showed that the addiction proneness scale has good internal consistency coefficients Kooder - Richardson higher than 0.80 was obtained for this scale.

Research of Archer (2004), about the validity and reliability of the scale addiction proneness, with addiction proneness scale refer Construct Validity and the statistical analysis using statistical analysis and approved the higher Eigen value of 1.5. All the factors have a higher loading factor of 0.3. Also, all questions have validity and content validity is formal. In the domain of reliability coefficients calculated using the alpha and Cronbach and spilit-half to test the resulting coefficients were 0.89 and 0.92 , both coefficients statistically optimal method and test – retest , scale reliability coefficients The resulting equivalent is 0.91. Finally, he concluded that the scale of proneness addiction can have validity and reliability is desirable. Watkins (2004), research about supplemental MMPI scales and then addiction proneness scale, and that Article 228 in order to estimate reliability instruments shall put in meta-analysis method and was used statistical calculations. Through reliability generalization methods coefficients to previous research, their reliability coefficients reported 0.70. Morey (2007), the study compared validity and reliability coefficients of three scales addiction proneness, the MMPI-2 and scale McAndrew payment methods and internal consistency (Cronbach alpha) and stability coefficient (test-retest), the reliability coefficients of three scales pay scales that were mentioned coefficients 0.79, 0.82 and 0.84 in the method and coefficients alpha Cronbach 0.77, 0.81 , 0.82 was obtained by test-retest. Miller (2007), during the survey proneness addiction of young male and

female talent in the age range of 18 to 25 years were, addiction proneness scale used to evaluate the operation and brought questions of internal consistency-Cronbach alpha method used in young males 0.87 and female youth 0.85 has been reported. Also, to assess the validity factor, confirmatory factor analysis with varimax rotation the norm and the Eigen value 1.5 and have used the act was reported that all questions had high internal consistency involved with each other and only one operating. Ben-Porath and Tellegen (2008), about Standardization, reliabilitation, and addiction proneness was validation scale, scale, proneness addiction on 250 male individuals addicted to alcohol and 250 healthy men in the age range of 20 to 30 were run. Psychometric properties with reference to the present study, is proposed that the present scale of validity and reliability coefficients is desirable. Thus, the reliability coefficient test-retest number 0.78 and using reliability coefficients Kooder-Richardson number 0.82, indicating validity coefficients is desirable. In order to calculate concurrent validity, the Pearson correlation coefficient was used to measure the relationship between addiction proneness scale was paid McAndrew coefficient obtained in figure 0.48 significant; coefficient obtained in $\alpha=0.01$. Also to factor validity, Exploratory factor analysis using the act and it was shown that the scale of proneness drug related indicators highly correlated with each other shows and actually all of them a talent agent named form of addiction. In acknowledgment to review research related to addiction scale, such as mentioned by Friedman et al. (2001), internal consistency scale acknowledgment of addiction and alcoholism addiction proneness scale internal McAndrew higher. In addition to internal consistency advantage addiction scale acknowledgment, the incremental Validity and added it as a good measure to predict the acknowledgment of addiction with emphasis on areas talks about argumentative, impulsive and antisocialism. It should be mentioned that the above scale reliability coefficients higher than 0.87 using the formula coefficients have validated all of which are indicated high reliability coefficients. Dana (2004), in order to standardize the scale acknowledgment of addiction, which can make a Spanish version of MMPI-2 and note that this scale has the characteristics desirable for standardization because the equivalency of psychoticism constructs between cultures, ethno-psychological conceptualizations of mental health reflected has been developed in the questions.

Also, the scale acknowledgment criterion validity with the type of concurrent with addiction proneness scale is the correlation coefficients and 0.41. Also, the above scale using coefficient alpha and test Cronbach and test-retest, 0.89 has been reported. Finally, research Kordmirza (2009) in the field of psychometric characteristics of scales of MMPI-2 supplementary was material addiction, volunteers treated 108 addicts and 500 students from four groups of medicine education, the arts, humanities and technical and engineering universities in Tehran were selected as samples. Once addicted, and unwonted in the two groups was considered to compare these two groups to investigate the validity was discussed differential or discriminat. Findings related reliability coefficients showed that the acknowledgment scales, drug addiction, alcoholism Modified McAndrew addiction and proneness were reliability coefficients with 0.78, 0.81 and 0.85. Considering cronbach alpha values can be reliability scales mentioned in internal consistency cited. Dehkordian (2001), as well as research in diagnostic individuals at risk of drug abuse in Iran, entitled "Construction and Standardization of diagnostic test subjects exposed to drug abuse among students in public universities did in Tehran. In this study, 60 questions related supplementary scales tendency was used to addiction MMPI-2. In this study samples from 90 addicts and 520 students from four groups, Medicine Education, Arts, Engineering and Humanities at Tehran University who were enrolled, of which two were experimental and control groups were studied. reliability of this test method Kooder-Richardson, cronbach alpha ranges were 0.78, and 0.81, respectively. Also, research by Minouie (2006) psychometric characteristics of scales toward addiction in adolescents in Tehran in the schools of education related to Tehran was conducted to investigate the exact validity differential using independent groups t test were paid in two groups of addicts and Students. Findings related to psychometric analysis showed that the scales of addiction can be separated from adverse drug users who have had substance abuse and should be mentioned validity subscale differential cited.

In this study, the mean scores of addict samples equal 5.21 and non-drug samples (students) equal to 4.81 has been referring to the mean value can be related to the tendency to standardize emphasized the scales of addiction. In addition, the reliability coefficients were calculated using Cronbach alpha, indicating internal consistency than 0.70 respectively. On the other hand, standardization of scales tendency to addiction MMPI-ARF and even the MMPI-2RF is increasingly important because in the fields of prevention and can ensure accurate measurements in the incidence of addiction is effective. Since the personality profiles and life styles as predisposing factors for drug use and drugs known stimulator of the logs can be valid in the Inventory of psychological psychopathology to identify psychological mechanisms are talking to the brings of addiction act. Scales of MMPI-ARF tendency to addiction, including advanced and developed Instruments is an important contribution in identifying trends teens about abuse taking offers. Given the importance of scales tendency to addiction, which scales as supplementary MMPI-ARF is known essential to their case could be validated and put the accreditation norms for quantitative and qualitative studies in the context of more accurate identification of adolescents at risk or those tendency would work to have addiction. Finally, the tendency to standardize the scales of drug combination is corrected scale McAndrew alcoholism, addiction proneness scale and scale acknowledgment of addiction and seeking compliance with the culture of Iranian youth in the area of psychometric measures of effective identification and prevention of addiction.

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Emphasized that the tendency to standardize the scales of addiction can complete information for the identification of cut-off point, and even teenagers at risk of substance to offer, prepared essential Instruments to the prevention of addiction is not only precious and economically cost-effective is but in the field of therapeutic efficacy and changes are continuing. Therefore, the process of standardization in IRAN country psychological scales, was faced with many problems and design the main question is as follows: whether the scale tendency to addiction, optimal psychometric characteristics of adolescents in Tehran, has or not? With emphasis on three scales constructive tendency to addiction in Minnesota multiphasic Inventory three questions below as applied to minor:

- identify high school students in Tehran that are addict acknowledgment scale to substance abuse favorable psychometric properties (validity, reliability and norm quality and quantity) is or not?
- addict proneness scale to identify high school students in Tehran that are prone to substance abuse, the psychometric characteristics desired (validity, reliability and norm quality and quantity) is or not?
- MacAndrew Alcoholism scale to identify high school students in Tehran that exposed and are susceptible to alcohol abuse, the psychometric characteristics desired (validity, reliability and software quality and quantity) is or not?

MATERIALS AND METHODS

We realize survey type normalization with emphasis on standardization and its trend. In areas of development and standardization, research test should emphasize in process standardization. In the process of compiling and standardizing collection of psychological tests and even Inventory personality, should spend the different steps and measures with special emphasis on specific skills, if that. In these cases, as measures related to the research stages, which are considered a special delicacy and complexity and has a growing sensitivity to need. In this research, with emphasis on some parameters of standardization designs what had dealt with three successive phases, which are as follows:

Phase I: measures related to theoretical literature and history of research
Browse deep psychological theories about personality characteristics associated with alcohol and drug Inventory with emphasis on personality and multi Minnesota took the theories and research related to that criticism and were, people like Wade and Butcher research, Miller, Friedman, Wong, Archer, and Dana in line with the three personality scales multiphasic Minnesota or MMPI-2RF (revised alcoholism scale MacAndrew scale talent Addiction Admission Scale) were evaluated narrowly and to develop theories about issues related to standardization Scale with tendency of addiction and paid travel for it and were developed the theoretical second season. In this process, all research related to validity and reliability of these scales were used in past years. The first stage of the final outcome, Minnesota multiphasic select Inventory of personality characteristics of MMPI-A were identified with emphasis on the MMPI-2RF version in (2007), was reviewed and revised scale was found Tuesday subscales MacAndrew alcoholism, addiction proneness scale and scale acknowledgment of this drug Inventory, also has good psychometric properties. All artifacts associated with the first phase or actions related to theoretical and research background, led to this study was that the second season, will be developed.

Phase II: measures related to Persian version of the scale developed tendency to addiction MMPI-A
At this stage, staff, expert consultants, reviewers and Examiners were related to team development and scales standardization complementary of Persian version of the materials list MMPI-A were determined. The main axis of the process of development and standardization these people and should be considered the expert consultants with technical guidelines and operational Examiners measures the path data collection, the main frameworks to reviewers and provide the team and integrated through the above process, to the development and compiling an Inventory of trends with emphasis on addiction MMPI-ARF began to Inventory. After compiling and sampling method to determine the sampling units, mentioned on the Measure 30 the study, conducted and a brief report about the difficulty index, incomprehensibility questions and perform certain facilities essential for communicating with the subjects and cases such as this, were prepared. The report led to revision of several questions and questions with little emphasis on the cultural conditions, social and economic process of our country, matching were reviewed, thus, try-Out Edition was designed. Once the qualitative and quantitative analysis was done and some questions about the guidelines in the process, the Examiners were used and considered psychometric analysis, try-Out Edition developed and performed on 30 person. Try-Out Edition implementation, in addition to partial reform review process, some questions, training and paid careful examiner process, Inventory three tendencies to addiction (alcoholism Modified MacAndrew, proneness and acknowledgment drug addiction), the action was taken under standard conditions. outcome at this stage, we can create conditions for standardizing the same conditions with emphasis on implementation and scoring to Examiners and cited the same environmental conditions. Also, the final published edition was designed to define a brief, within the first part framework and third research were provided.

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Phase III: the implementation of measures related Inventory
At this stage that the final Inventory for the standardization process has been developed, a field sample groups under normal and clinical samples are considered. Normative sample of adolescents that focused unwonted Drug and alcohol do not experience an addiction like habit and are known as healthy specimens. Versus normal samples or samples unwonted, a sample was selected for clinical drug and related measures in this way was to be followed for implementing Inventory in four different layers with emphasis on addiction and sex factor, the experimental data can be collected.

At this stage as the third phase or Inventory implementation and clinical norm groups is known, the number of professional Examiners 10 with a master's degree and working in each of 100 samples of normal subjects and 10 clinical samples and other experimental data Inventory with the aim of performing statistical analysis and psychometric characteristics of MMPI-A in the Persian version of associated software, entered and this was done through the standardization process.

Statistical Population: However, in researches related to standardization, the term target population is remembered as a population, but in the present research attempted to target population with emphasis on the so-called Infinite population characteristics mentioned above will be paid and raised, all boys and girls 14 to 18 years in Tehran and its suburbs were considered as Infinite target population. It should be mentioned that due to the precise list above does not exist for community members should use the term infinite. With emphasis on population levels of society, as two teenagers addicted and unwonted as applied, should the second layer or drug samples as a society can learn emphasized because teenagers can be hard in school in Tehran and identified them in a list said. However, the samples adolescent female addicts, focusing was done.

Sample and sampling method: Emphasized that the list was not accurate for the research population and clinical samples cannot be easily or addicted teenagers to be selected and sampling , direct research samples used for selection will act, should be considered that had adequate sample size and power estimation of parameter through Statistics exist. Therefore, the following table with emphasis on two layers of adolescent sex and status of adolescent drug addiction is presented:

Table 1. The population with emphasis on study groups			
Addiction status	Male	Female	Total
Addicted	50	50	100
Non-addicted	500	500	1000
Total	550	550	1100

It should be mentioned in each Region to select 100 samples each normalized to the sample in two groups of 50 female and 50 male samples were divided into 10 clinical samples including 5 girls and 5 boys are addicted, the same selection comprise Region. All observers related to geographical regions, at least 5 year experience in research and have a Examiner and licensed professional employment or permit the legal organization and counseling psychology are using precious experiences in education, especially counseling and addiction centers, to collect experimental data accurately addressed and increased psychological specificity learning subjects. According to this research and the importance of a comprehensive sampling standardization research (Ben–Porath, 2007) with emphasis on sensitivity and sample size determination in researches, especially research and standardization in this research, geographic region with emphasis on sampling units discussed below are coming:

Table 2. The population with emphasis on layers Region		
Region	Samples of normal	clinical specimens
Region One	100	10
Region four	100	10
Region seven	100	10
Region eleven	100	10
Region thirteen	100	10
Region three	100	10
Region seventeen	100	10
Region twenty-second	100	10
Region of Lavasan	100	10
Region of Islamshahr	100	10

Finally, with respect to characteristics related to ethics in the research process, Full Name addicted subjects and authorities that the necessary cooperation, respectively, which were confidential status in societies and centers related will also apply to addiction.

Statistical models: After compiling the final version and its implementation in both normal and clinical groups of male and female, to calculate validity coefficients paid through three different tests–retest, spilit-half and internal

consistency, the three scales of validity coefficients were calculated for drug disposition. Thus, through the test - retest with 14 days interval for 50 normal samples and 10 clinical samples were evaluated in this way obtained until stability coefficients. In addition, the method for spilt-half Cronbach alpha for internal consistency was used to calculate average and standard error and average reliability coefficient was paid. Also, confirmatory factor analysis using AMOS and LISREL software used and minimum 5 fit index, to provide documents in the domain of validity of the experimental was discussed construct validity. By t-test using two independent groups, to calculate the differential validity of each question and each subscales divided in two groups of normal (unwonted) and clinical (drug) was paid in this way was to be tried differential for the validity of each question, each subscales and total scales tendency to addiction, can be determined. The question analysis indicators, calculated on the factor index, discriminate coefficient for each of the questions were trying to test and use two independent ratio for each of the three detailed tendency to addiction, accurate was obtained information. Analysis in order to discriminate or complementary indicators of psychological questions that can be accurately distinguished the two groups have unwonted addict and was placed in a new Inventory and then using Impressionism operation characteristics curve (ROC) to identify exact cut-off point addressed and sensitivity, and characterized accuracy above Inventory using advanced psychometric theories, respectively.

RESULTS

Table 3. Test of two independent questions related to "Major Addiction" To assess the validity of separating							
Question	Group		Total		Error ratio	T index	Significance
I read the newspaper sector events	Normal	673	997	0.68	0.048	-2.40	0.05
	Addicted	79	100	0.79			
I am a very social person	Normal	725	995	0.73	0.046	-1.07	-
	Addicted	77	99	0.78			
My, , life method have not integrity	Normal	258	993	0.26	0.048	-8.48	0.01
	Addicted	66	99	0.67			
I think of things like the thing a forest care doing, enjoy	Normal	357	997	0.36	0.51	-7.10	0.01
	Addicted	72	100	0.72			
I do a lot of regret after I get (in comparison with others, I get regretted more)	Normal	620	995	0.62	0.037	-14.65	0.01
	Addicted	69	100	0.69			
"One or more times due to bad behavior was expelled from school"	Normal	98	999	0.10	0.052	-1.57	-
	Addicted	64	100	0.64			
When the bet on a race or game, I enjoy it more	Normal	528	999	0.53	0.050	2.04	0.05
	Addicted	61	100	0.61			
I know who is responsible for more problems	Normal	616	997	0.62	0.051	1.58	-
	Addicted	72	100	0.72			
See blood, or even frightening, Don't make me sick	Normal	584	997	0.59	0.051	2.52	0.05
	Addicted	50	99	0.51			
I love cooking	Normal	611	996	0.61	0.051	-3.86	0.01
	Addicted	48	99	0.48			
I am repeatedly noticed that when I'm busy doing something, He shakes my hand	Normal	397	995	0.40	0.047	-4.37	0.01
	Addicted	59	99	0.60			
Sometimes, I think of suicide	Normal	274	997	0.27	0.048	-10.09	0.01
	Addicted	48	100	0.48			
Completely independent of the laws have been in the family	Normal	262	987	0.27	0.053	-2.26	0.05
	Addicted	75	100	0.75			
No or very low I feel pain	Normal	497	996	0.50	0.046	-6.40	0.01
	Addicted	60	97	0.62			
Magic has often come forward and activities have been disrupted and what passed around me, I had no knowledge	Normal	229	991	0.23	0.046	-4.69	0.01
	Addicted	52	99	0.53			
Even in the cool days, I sweat easily	Normal	253	995	0.25	0.046	0.86	-
	Addicted	47	100	0.47			
If I was a reporter, I much loved that report sport news	Normal	433	998	0.43	0.046	-6.44	0.01
	Addicted	59	99	0.60			
Sometimes the soul is separated from the body	Normal	317	993	0.32	0.049	-7.26	0.01
	Addicted	49	100	0.49			
I think like others can quickly find a friend	Normal	726	995	0.73	0.052	-4.02	0.01
	Addicted	69	100	0.69			
When the subway and bus ... I often speak with others	Normal	243	996	0.24	0.039	-14.78	0.01
	Addicted	54	100	0.54			
I enjoy from gambling on the condition of small	Normal	292	993	0.29	0.038	0.39	-
	Addicted	65	100	0.65			
I wear the expensive clothes	Normal	556	995	0.56	0.26	0.90	-
	Addicted	76	99	0.77			
Although the school should leave, but I used to often absent	Normal	123	994	0.12	0.051	-4	0.01
	Addicted	70	100	0.70			
Sometimes people have become rude and annoying , I have a tough	Normal	827	990	0.84	0.046	-2.71	0.01

1874

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behavior	Addicted	85	100	0.85			
I love the excitement	Normal	922	995	0.93	0.046	-9.37	0.01
	Addicted	95	100	0.95			
Because my sins, I deserved severe punishment	Normal	567	984	0.58	0.048	3.92	0.01
	Addicted	78	100	0.79			
Easily influenced by a good idea,	Normal	721	994	0.73	0.041	-2.81	0.01
	Addicted	85	100	0.85			
Most have worked for people who work for encouraged and praised gents , but ……..	Normal	202	958	021	0.048	-4.35	0.01
	Addicted	61	95	0.64			
That's very attached to and I admire much about was a women.	Normal	697	976	0.71	0.052	-3.01	0.01
	Addicted	83	92	0.90			
I often cough	Normal	170	981	0.17	0.048	4.79	0.01
	Addicted	28	97	0.29			
I am sure that I have confidence	Normal	287	995	0.29	0.045	3.72	0.01
	Addicted	49	98	0.50			
In the lower house observed eating customs until I am outside the home	Normal	414	984	0.42	0.053	-1.64	0.01
	Addicted	56	97	0.58			
Never has not been blood in my vomited and cough	Normal	698	984	0.71	0.053	-4.14	0.01
	Addicted	47	98	0.48			
I have a diary	Normal	227	985	0.23	0.063	-3.73	0.01
	Addicted	39	98	0.40			
Sexual issues, I am concerned	Normal	413	975	0.42	0.052	-4.78	0.01
	Addicted	49	96	0.51			
Often feel I have seen others that are criticizing me	Normal	494	978	0.51	0.051	5.16	0.01
	Addicted	71	98	0.72			
Some of my dreams in the fields of sexual	Normal	413	976	0.42	0.046	8.69	0.01
	Addicted	59	95	0.62			
My mind cannot focus on a subject	Normal	404	983	0.41	0.051	0.61	-
	Addicted	64	97	0.66			
Concentration difficult for me than others	Normal	351	977	0.36	0.049	-7.36	0.01
	Addicted	61	98	0.62			
Sometimes I've stolen things	Normal	207	982	0.21	0.039	3.34	0.01
	Addicted	58	95	0.61			
I do not say is always right	Normal	599	985	0.61	0.051	-4.97	0.01
	Addicted	62	97	0.64			
Parents, do not like my friends	Normal	290	975	0.30	0.047	-6.73	0.01
	Addicted	64	98	0.65			
I love to party and go weekend which is full of joy and happiness	Normal	831	984	0.84	0.051	-6.48	0.01
	Addicted	70	98	0.71			
Sometimes at school due to behavior manager do before I am sent	Normal	352	981	0.36	0.053	-0.34	-
	Addicted	60	98	0.61			
If I enter the theater without buying tickets and I am sure that someone does not see me, maybe I do this	Normal	241	984	0.24	0.053	-5.09	0.01
	Addicted	55	98	0.56			
Parents, often in connection with whom I am opposed	Normal	347	982	0.35	0.051	-6.65	0.01
	Addicted	67	98	0068			
Do not attribute importance to meet with strangers	Normal	507	979	0.52	0.052	-4.91	0.01
	Addicted	52	97	0.54			
Most of my friends are trouble	Normal	410	967	0.42	0.037	-14.38	0.01
	Addicted	68	98	0.69			
If I was with some friends became trouble and we were all equally guilty, I would prefer	Normal	326	975	0.33	0.053	-5.48	0.01
	Addicted	66	98	0.67			
One or more family members are very nervous	Normal	369	978	0.38	0.052	5.51	0.01
	Addicted	62	98	0.63			
Always at school, I had a bad score in act behavior	Normal	95	982	0.10	0.031	-17.07	0.01
	Addicted	61	97	0.63			
Prefer instead to address the educational activities or sports, I spend my time with my friends	Normal	400	974	0.41	0.052	-5.18	0.01
	Addicted	68	97	0.70			
Parents do not understand me very well	Normal	418	977	0.43	0.049	8	0.01
	Addicted	70	98	0.71			
A few nights I have passed out of the house while the parents did not know where I am	Normal	47	977	0.05	0.053	-3.82	0.01
	Addicted	56	97	0.58			
Friends are the only good thing about school	Normal	542	973	0.56	0.046	-0.12	-
	Addicted	81	98	0.83			
I say often enough that others do not respect	Normal	277	972	0.28	0.039	-2.23	0.05
	Addicted	65	96	0.68			
I am often forced lie, to order something or get me to do so,	Normal	440	977	0.45	0.051	-7.31	0.01
	Addicted	64	98	0.65			
Friends have secrets that I can share with them	Normal	731	975	0.75	0.042	-6.73	0.01
	Addicted	74	98	0.76			
I judge it is better than in the past	Normal	799	973	0.82	0.048	2.07	0.05
	Addicted	89	98	0.91			

Throughout life, never feeling better now, has not been	Normal	314	978	0.32	0.041	3.21	0.01
	Addicted	68	98	0.69			
Sometimes I feel that my head high, taking the pain	Normal	172	975	0.18	0.048	-7.07	0.01
	Addicted	45	98	0.46			
I loved school	Normal	707	976	0.72	0.048	-5.42	0.01
	Addicted	60	96	0.63			
I like "Knowledge"	Normal	805	975	0.83	0.051	0.58	-
	Addicted	68	98	0.69			
Never in love with someone	Normal	247	971	0.25	0.052	0.04	-
	Addicted	57	96	0.59			
If possible, collect refuse in the presence	Normal	263	973	0.27	0.051	-3.90	0.01
	Addicted	52	98	0.53			
I love the scientific studies have	Normal	623	973	0.64	0.053	0.20	-
	Addicted	65	97	0.67			
I spent more time of Work – off with myself	Normal	569	975	0.58	0.036	6-99	0.01
	Addicted	57	98	0.58			
I am not responsible for bad things that happen to me	Normal	351	969	0.36	0.050	-5.84	0.01
	Addicted	55	98	0.56			
These days, I don't feel stress or severe stress	Normal	528	967	0.55	0.043	2.45	0.05
	Addicted	54	97	0.56			
I want to go to university	Normal	863	976	0.88	0.043	6.80	0.01
	Addicted	62	98	0.63			
In my family, when we have problems talking with each other	Normal	302	974	0.31	0.049	7.29	0.01
	Addicted	59	98	0.60			
	Normal						
	Addicted						
I do work that is home for me	Normal	773	971	0.80	0.043	-5.50	0.01
	Addicted	67	97	0.69			
My education level is average or in good condition	Normal	803	974	0.82	0.052	-3.65	0.01
	Addicted	50	94	0.53			
I have not never run away from home	Normal	683	970	0.70	0.036	-19.22	0.01
	Addicted	34	98	0.35			
I have close friends	Normal	181	972	0.19	0.051	-2.74	0.01
	Addicted	41	97	0.42			
Sometimes I wish that severe destructive and shocking work to do	Normal	373	962	0.39	0.039	-14.13	0.01
	Addicted	56	97	0.58			
I am involved drugs or alcohol	Normal	71	968	0.07	0.051	-4.76	0.01
	Addicted	75	98	0.77			
Sometimes the things that I've done that didn't remember them	Normal	584	965	0.61	0.053	-4	0.01
	Addicted	73	98	0.74			
I consumption the extreme alcohol	Normal	108	962	0.11	0.038	-16.12	0.01
	Addicted	65	98	0.66			
Parents and family, too me are delivered	Normal	323	965	0.33	0.052	-4.55	0.01
	Addicted	56	97	0.58			
I remember sometimes getting rid of something, I act myself sick	Normal	427	961	0.44	0.035	-14.67	0.01
	Addicted	63	96	0.66			
I can expression of my true feelings only in the mode drunk	Normal	92	961	0.10	0.036	-19.22	0.01
	Addicted	68	96	0.71			
Some of my habits are really harmful	Normal	559	964	0.58	0.051	-2.73	0.01
	Addicted	80	98	0.82			
Sometimes when drunk, get involved with others	Normal	73	959	0.08	0.039	-14.13	0.01
	Addicted	56	95	0.59			
Enjoy cannabis use	Normal	42	964	0.04	0.030	-15.55	**0.01**
	Addicted	50	98	0.51			
Most people tell me that I use too much alcohol	Normal	71	951	0.07	0.035	-17.69	0.01
	Addicted	68	98	0.69			
Never had no legal involvement	Normal	534	966	0.55	0.052	1.80	-
	Addicted	45	98	0.46			
To reduce the problems and concerns, talk with others using drugs is useful	Normal	780	963	0.81	0.041	-1.90	-
	Addicted	87	98	0.89			

Table 4. Differential validity related scales, "tendency to Addiction"						
Index	Group	mean	Standard deviation	t-Value	Freedoon	Significance
Alcoholism	Normal	22.18	4.13	13.89	891	0.001
	Addicted	29.48	4.23			
Addiction proneness	Normal	15.36	4.19	8.55	950	0.001
	Addicted	19.51	4.32			
Acknowledgement addiction	Normal	3.45	2.01	17.14	1000	0.001
	Addicted	8.04	2.47			
Tendency to addiction	Normal	38.22	7.01	14.47	816	0.001
	Addicted	51.50	7.42			

1876

Due to the significant level of scales observed in Table 4, significant differences between the two groups and there are addicts and scale "tendency to addiction," with differential validity that can be divided in two groups of normal and addicted to separate from each other.

Table 5. The reliability coefficients internal consistence scales "tendency to addiction"			
Index form	Normal	Addicted	Total
Alcoholism	0.420	0.430	0.515
Addiction proneness	0.618	0.576	0.633
acknowledgement addiction	0.538	0.601	0.669
Tendency to addiction	0.658	0.652	0.721

According to Table 5, which can be as subscales "tendency to addiction," the lowest reliability coefficients and has good psychometric characteristics with emphasis on internal consistency does not have a high measurement error shows. Whereas, subscales "addiction proneness" and " acknowledgment of addiction" reliability coefficients have been desirable, and finally, the scale "tendency to addiction (total)" reliability coefficients is desirable.

Table 6. To investigate the reliability coefficients internal consistence scales "tendency to addiction"						
	Normal		Addicted		Total	
Index form	Spilit-half	Spearman-Brown	Spilit-half	Spearman-Brown	Spilit-half	Spearman-Brown
Alcoholism	0.500^*	0.666	0.876^{**}	0.933	0.557^{**}	0.715
Addiction proneness	0.541^*	0.702	0.480	0.648	0.529^{**}	0.691
acknowledgement addiction	0.671^*	0.803	0.689^*	0.815	0.675^{**}	0.805
Tendency to addiction	0.500	0.666	0.944^{**}	0.971	0.636^{**}	0.777

According to Table 6, with emphasis on the rate coefficients between the two half-tests (even-odd) that everyone, except the "proneness addiction in are significant, the scale is considered" tendencyαrehab, at $\alpha=0.01$ to Addiction, authentic and has the internal consistency.

Table 7. Test - Retest reliability coefficients evaluate Stability coefficient scales "tendency to addiction			
Index form	Normal	Addicted	Total
Alcoholism	0.921^{**}	0.623	0.865^{**}
Addiction proneness	0.928^{**}	0.883^{**}	0.902^{**}
acknowledgement addiction	0.719^{**}	0.992^{**}	0.853^{**}
Tendency to addiction	0.898^{**}	0.873^{**}	0.858^{**}

According to Table 7 with emphasis on the rate coefficients between the test phase and retest that everyone, except the "tendency to alcohol abuse are significant, are considered the tendency in addicts, in $\alpha= 0.01$ to addiction scale, with validity stable.

Table 8. Norm of quantitative scales "tendency to addiction"							
		Female		Male		Total	
Group	Index	mean	Standard deviation	mean	Standard deviation	mean	Standard deviation
Addicted	Alcoholism	22.90	4.14	22.73	4.12	22.81	4.13
	Addiction proneness	15.43	4.19	15.27	4.19	15.35	4.19
	acknowledgement addiction	3.46	2.05	3.43	1.94	3.45	2.01
	Tendency to addiction	38.51	7.19	37.93	6.81	38.22	7.01
Normal	Alcoholism	29	4.10	30.87	4.21	29.84	4.23
	Addiction proneness	18.48	4.24	20.75	4.13	19.51	4.32
	acknowledgement addiction	7.26	2.41	8.84	2.29	8.04	2.47
	Tendency to addiction	49.18	7.26	54.66	6.52	51.50	7.42

Table 9. Norm of Quality scales "tendency to addiction"					
Index	Alcoholism	Addiction proneness	acknowledgement addiction	Tendency to addiction	Tendency toward addiction proposed
Reluctance	0-23	0-15	0-4	0-39	0-30
Field for tendency	24-28	16-20	5-6	40-47	31-37
Tendency to materials	Upper than 29	Upper than 21	Upper than 7	Upper than 48	upper than 38

Table 10. Psychometric properties related scales "tendency to addiction"		
Psychometric properties related to indicators Instruments	Value	interpretation
sensitivity	0.78	Suitable sensitivity involved
accuracy	0.81	Suitable accuracy involved
Clarify	0.84	Suitable clarify involved

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Considering that the situation in order to identify trends in drug samples of male and female adolescents, the difference was not significant, therefore, to provide quality software related cut points for both groups of male and female adolescents, the same as that used in the table above, indicating the quality of presentation software is for teenagers.

CONCLUSION

Major findings based on the tendency to addiction scale: using exploratory factor analysis, it was found that of these scales have not the construct validity. Also, the differential, proportion test and t-test methods using two independent groups was performed and the results indicated that the tendency to addiction Inventory the three subscales tendency to alcohol, addiction proneness, acknowledgement, and tendency to drug addiction (overall), has validity and is capable of separating two groups of normal adolescents addicted to separate from each other. While the emphasis on gender was found that the Inventory mentioned tendency to separate boys and girls are not addictive. This means that scores of two groups of boys and girls were similar and the same.

Major findings based on the reliability scale tendency to Addiction: using alpha Cronbach and spilt-half test the internal consistency of the questions addressed and ultimately was found that the tendency to addiction Inventory the three subscales tendency to alcohol, addiction proneness, acknowledgement and Addiction Major Addiction (overall), the reliability coefficients desirable and desirable (with emphasis on alpha cronbach) has. While using the Pearson correlation to survey the correlation between the two tests it was found that half of all reliability coefficients higher than this situation indicates that the high correlation α= 0.01 at 0.50 between the test and could be half as be mentioned that is desirable the Inventory of internal consistency. In order to calculate the stability test questions methods, test-retest using Pearson correlation and it was found that all correlation coefficients above 0.60 status indicates that the high correlation between the two implemented (test – retest) and as can be mentioned that the Inventory is stable.

Major findings based on the norm scale tendency to addiction: norm in order to provide qualitative and quantitative, the mean and standard deviation (to provide qualitative norm) and cut points (to provide qualitative norm) was used to the fact that significant differences between two groups of girls and son has not been observed statistically, therefore, the norm mentioned separately (male and female separately) on this topic and refused to provide only general is to soft. The following table represents a quantitative presentation norm:

The findings of this study compared with the scale of tendency to alcohol: The results of this study emphasize research of preng & clopton (1986), about the validity of differential Inventory tendency to alcohol, and Gottesman & prescott (1989), about the validity construct, and Ackerman and Ackerman (1997) and Arbisi and seime (2006), about the construct validity, is opposed because the scale of these studies have a tendency towards alcohol Construct Validity is the scale, while the tendency towards alcohol in this study have not Construct Validity. Also, research Ben-Porath and Butcher (1989), about cronbach alpha, and Gottesman & prescott (1989), about the differential validity, Allen (1991), about the validity coefficient alpha Cronbach, spilt-half, and test–retest, Ben-Porath & sherwood (1993), about norm quality, Butcher and Han (1995), about cronbach alpha reliability coefficients, Arbisi & Ben-Porath (1995), Duran Internal consistency questions about using the two methods and cronbach alpha & test-retest, and Ackerman & Ackerman (1997), Duran questions about Internal consistency using two methods cronbach alpha and test-retest, Litt, Babor, DelBoca, Kadden and Cooney (2003), Duran questions about Internal consistency using two methods cronbach alpha and test-retest method, Ben-Porath and Forbey (2003), Duran questions about Internal consistency using two methods cronbach alpha and test-retest method, Kamierczak, Smyth and Wodarski (2005), about spilt-half the test using the Modified Spearman–Brown, Arbisi and Seime (2006), Duran Internal consistency questions about using the two methods and cronbach alpha test-retest, Archer, Buffington-Vollum, Stredny and Handel (2006), about spilt-half the test using the Modified Spearman - Brown and alpha is coordinated cronbach because all the research also raised reliability coefficients is higher than 0.70 and 0.90 and also in the study except two methods cronbach alpha and test-retest reliability and spilt-half coefficients is higher than 0.70.

The findings of this study compared with the scale of addiction proneness: Research findings of this study Butcher, Dahlstrome, Graham, and Tellegen-Keammer (1989), and Ben-Porath and Tellegen (1995), and Boccaccini and Brodsky (1999), Gallagher, somwaru and Ben-Porath (1999), Camara, Nathan & Puente (2002), and Borum and Grisso (2003), Archer (2004), Watkins (2004), Murray (2007), Morey (2007), and Ben- Porath and Tellegen (2008), Duran Scaling questions about the reliability coefficients with two methods and Cronbach alpha test-retest, Cochrane, Tett & Vandecreek (2003), about the reliability and validity of differential, Cronbach alpha and test-retest, is coordinated. While the Miller research (2007) about the validity of differential with emphasis on gender and research and Ben- Porath and Tellegen (2008), about the construct validity opposes because the validity of this study divided between boys and girls and Construct Validity has not been observed.

1878

Compare the results of this study scale acknowledgement of addiction: current research findings and Gottsman & prescott Research (1989), questions about internal consistency, Hightower (1992), about the internal consistency and stability questions, Green and Roger (1994), about the validity differential, Ben-Porath (1997), about the validity of differential, Wong & Besett (1999), about the differential validity and internal consistency, Friedman, Lewak, Nicholas and Webb (2001), Dana (2004), Kordmirza (1999), Dehkordian (2001) and Minouie (2006), as well as questions about the internal consistency, a significant differential of validity, consistency. Finally, considered in addition to overseas researches of researches within the country in the field reliability & validity scale has been tendency to addiction, can Kordmirza Research (1998), Dehkordian (2001) and Minouie (2006) noted that three research questions to Major alcohol addiction proneness addiction and acknowledgement with higher reliability coefficients 0.70 and also has some validity is that the differential are used in Iran.

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