PRINT: ISSN 0973-5070 ONLINE: 2456-6772
Ethno Med, 10(2): 156-165 (2016)
DOI: 10.31901/24566322.2016/10.02.08

3D Scale for Awareness, Attitude, Stigma of Addiction

Nihan Potas[1], Sefika Sule Erçetin[2], Mehmet Yilmaz[3], Suay Nilhan Açikalin[4], Halime Güngör[5] and Esra Soydas Akyol[6]

[1]Gazi University, Faculty of Economics and Administrative Sciences, Department of Healthcare Management, Ankara, Turkey.
[2]Hacettepe University, Faculty of Education, Ankara, Turkey
[3]Ankara University, Faculty of Science, Department of Statistics, Ankara, Turkey
[4]Middle East Technical University, International Relations Department, Ankara, Turkey
[5]Hacettepe University, Department of Educational Management, Planning, Supervision and Economics, Ankara, Turkey
[6]Yildirim Beyazit University, Ankara, Turkey
e-mail: [1]<nihan_potas@hotmail.com>, [2]<sefikasule@gmail.com>, [3]<yilmazm@science.ankara.edu.tr>, [4]<suaynilhan@gmail.com>, [5]<halime_gngr@yahoo.com> and [6]<esra_akyol@hotmail.com>

KEYWORDS Stigmatization. Substance Addiction. Substance Addicts. Three-dimensional Scale

ABSTRACT This study's aim is to develop a three-dimensional scale for awareness, attitude, stigma of substance addiction and addicts. The awareness dimension is composed of knowledge, comprehension, application, analysis, synthesis and evaluation sub-dimensions. Validity and reliability of the study were conducted to understand that the scale items of intended to measure and also validity and meaningfulness of collected data by applying the scale to 317 people. The three-dimensional scale for awareness, attitude and stigma of addiction is valid and reliable. The scale is provided to get simultaneous results on three interrelated dimensions such as awareness, attitude and stigmatization, and is facilitated to deal with the subject with a more holistic approach.

INTRODUCTION

Substance addiction is a phenomenon that damages countries at national and international platforms with its all dimensions. Although scientific and social struggles, strategic action plans and politics and strategies developed on behalf of fight to addiction over the world, cost of substance addiction to societies is too high to be ignored. According to data from 2013 Turkey Drug Report, the expenditures made in fighting with drugs in 2012 was 395.792.280, 50 TL. In USA, the cost of fighting against alcohol, cigarettes and other drugs is more than USD 700 billion annually (NIDA). According to World Drug Report of 2015 magnitude of world substance use problem becomes more apparent when considering that more than 1 out of 10 substance users is suffering from drug use disorders or drug dependence.

Address for correspondence:
Dr. Nihan Potas
Gazi University, Faculty of Economics and Administrative Science,
Department of Health Care Management,
Ankara, Turkey
Telephone: +905334611496
E-mail: nihan_potas@hotmail.com

During the process of fighting against addiction, many scientists and national and international organizations have tried to contribute to this process by giving suggestions with making evaluations and analysis. When the researchers examine measurement instruments applicable for addiction, they see that the addiction problem is considered as one-dimensional. Substance addiction is a multidimensional problem which effects human, family, environment, society and the world in macro aspect. In this context, development of instruments, which is taken and analyzed this problem in deep and multidimensional could affect the concept of fighting addiction. Furthermore, made studies put forth the necessity of instruments to be developed to measure both addicts and non-addicted people and necessity of analysis of problem from a global perspective. People make decisions almost every day related to subjects that conditions are more or less vague and results cannot be predicted, they develop habits and strategies to make this decision and to provide time circulation in their daily lives (Murray and Hillson 2008). Attitudes of people determine the result that they will live. People may have to make this risky decision on beginning or rejecting drug use in different social environments. Results of pos-

itive attitudes in the face of behavior also will be positive for individuals (Hamilton-McGinty 2000). The factor which affects displaying positive or negative attitude is awareness of individuals on subject. Stigmatization is one of the main problems which inhibit fighting with addiction is related in direct with attitudes of individuals and societies on context. So, in this study a three-dimensional scale was developed based on awareness, attitude and stigmatization of addicts and non-addicted individuals to substance addiction. Awareness dimension is composed of knowledge, comprehension, application, analysis, synthesis and evaluation sub-dimensions by considering the basic cognitive taxonomy of Bloom. Measurement of attitudes in second dimension and measurement of stigmatization in third dimension was aimed.

Awareness

Awareness, which has been discussed for many years that make individuals conscious and this part that makes one human is a capacity that is consistently current time consciousness especially in the midst of emotional turmoil (Siegel et al. 2009). Considering the history of the concept that Buddhists have begun as part of the meditation practice (Williams and Kraft 2012). The most common definition in the literature made by Jon Kabat-Zinn (1994, 1996) as "…it is for a purpose, turn the people's attention in a certain direction in present time and without judging", " ... awareness process moment to moment deliberately without judgment ".

According to another definition, awareness is a fundamental psychological process that alters responses to the inevitable difficulties of life and is a skill that can be learned, is power and attention naturally occurring in humans (Siegel et al. 2009). Awareness occurs when individuals focus attention in a particular direction for any purpose and as a natural consequence of that individual's attitude is determined.

Although researchers have no consensus about differences of awareness as structure and content, necessity of multi-faced structural conceptualization view is dominant (Baer et al. 2008). Indeed, development of awareness on addiction and addicts effect life of individuals in multidirectional. Emerged awareness of individuals without addictive substances trial is a powerful aspect that constitutes the basic aim of prevention activities. It can provide individuals to exhibit an aloof attitude from drug addiction during their life. On the other hand, acceptance and success of addiction treatment of individuals who are aware of addiction of themselves and the substance, which is threaten their life is a natural consequence of awareness.

To sum up, awareness can be defined as the consciousness level of individuals about addictive substances and effects of these substances and consequences of addiction on the addicts' lives. Awareness level of individuals is related with protection from the use of addictive substances. Scientific researches on awareness of substance abuse in Turkey is not too much but in the international literature some researches are carried out on the subject. Although concept consists of multiple components such as attention, consciousness, openness, acceptance, judgment of others, non-avoidance in measuring instruments used to measure the awareness, awareness is measured with a single total score (Baer et al. 2008) but the real question is that how does one increase awareness? (Hayes and Levin 2012).

Attitude

Individuals' attitude about substance addiction can be defined as whole exhibited behaviors of individuals to substance addiction and addicts. Factors that determine the attitudes are that firstly emotion and thoughts of individuals and then awareness which is based on these emotions and thoughts, and finally attitudes occur as shown in Figure 1.

According to Figure 1, it is possible for individuals who have aware of the addiction to develop positive attitudes and vice versa. Because individuals who develop positive attitudes have developed awareness, the risk of being addicted on a period of life of those individuals who have not met with the substance is reduced. On the other hand, even if they may be addicts, acceptance and maintenance the treatment are easier for them. Because individuals who develop negative attitudes have not developed awareness, the risk of rejecting when they met with substance is reduced. They have low consciousness level on harmful effect and consequences of substance use and on chaos will drag the lives of substance use. When they are addicted, acceptance and maintenance of the treatment becomes difficult for them.

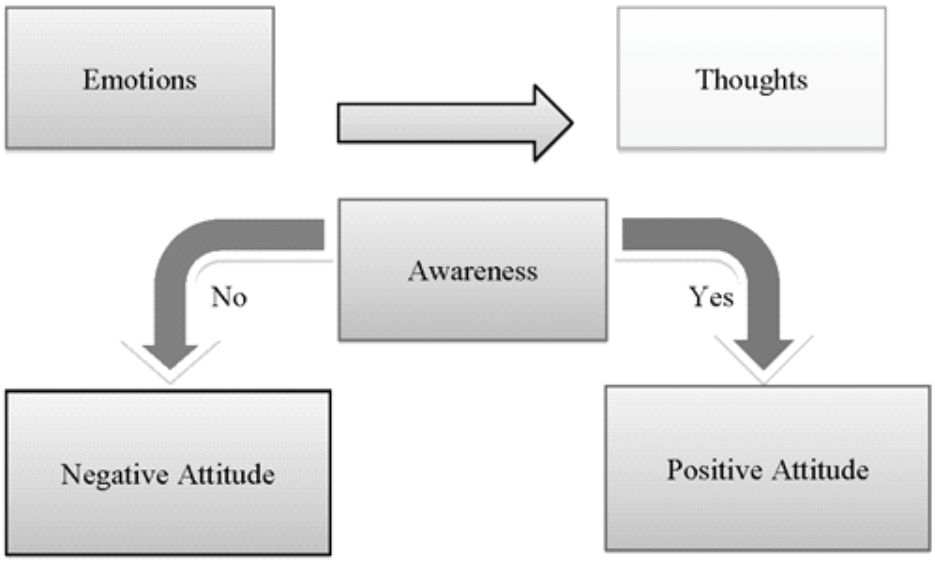

Fig. 1. Awareness-attitude relationship in addictions
Source: Authors

Stigmatization

Although history of stigmatization is as old as human history but scientific studies begun with Erving Goffman in 1963. Stigmatization can be defined as humiliation of individuals or groups by society due to a feature of them. The stigma related to substance and alcohol abuse is often in the form of negative judgments such as low worthiness morally, personality weaknesses, personality disorders and criminal tendency (Can 2012). According to Corrigan (2004), stigmatization to substance addiction can be considered in two categories:

1. Social Stigma: Social stigma is based on stereotypes, prejudice and discrimination, and individuals avoid seeking treatment a way of avoidance from living negative consequences of associated with the socially humiliated group.
2. Self Stigma: Self stigma can be defined as internalized negative beliefs of individuals about themselves, negative consequences such as low self-esteem that caused by self stigma can be minimized by avoiding treatment.

The general characteristics of the stigmatization to substance addiction are as follows (UKDPC n.d.; Brubaker et al. 2012):

- Stigma prevents seeking help.
- Stigma is contagious.
- Stigma is cumulative and long lasting.
- Stigma undermine employment and the social reintegration of individuals.
- Stigma effects families of individuals who use substance.

Stigmatization to substance addiction is more dangerous than substance itself, stigmatization aggravates social problems rather than alleviates (Winkelstein n.d.; Anderson and Ripullo 1996). From point of view the people who apply stigmatization others; stigmatization is directly affected from some features such as personal characteristics, criminal situations, gender of addicts, (women stigmatized more than men), the properties of the substance used (illegal), unemployment (users with low socio-economic status are more stigmatized), marital status, comorbid mental illness, comorbid mental illnesses (Ögel 2010). Fear and worthlessness are seen in individuals who are stigmatized because of substance addiction, this individuals live isolation and discrimination in many domains of their life (UKDPC n.d.).

In recent years, studies on substance addiction and addicts have been increased in increasing rate of substance use and effects on society.

The main aim of preventive studies provide conscious individuals on substance use before they try to use substance and also to ensure that never start to use substance. To ensure people who are equipped with knowledge and self-worthiness individuals are sometimes the only precautions taken (Balseven et al. 2002).

A method of preventing individuals from substance abuse before they try to use substance by providing awareness on behalf of the dangers of substance use is to measure the perceptions of individuals. When measurement instruments are examined on substance addiction and addicts, there has been some instruments that measure awareness, attitudes and stigmatization in separate scales, but a scale that measures individuals' perception of three dimensions in the same measurement instrument has not been found. When current state of substance abuse that increasing threaten for societies in today and future are evaluated, this study's aim is to develop a three dimensional scale on awareness, attitude, stigmatization of substance addiction and addicts. An important contribution to the literature of this scale is expected to provide.

METHODOLOGY

Population and Sample

Validity and reliability study was conducted to understand that the scale items of intended to measure and validity and meaningfulness of collected data by applying the scale to 317 people. StataSE 13 Program was used in data analysis.

Structuralization of Scale

The "Three-Dimensional Scale for Awareness, Attitude, Stigma of Addiction" is composed of four sections and three dimensions as awareness, attitudes and stigmatization. Information on the participants' personality traits are in the first section. Scale consists of three dimensions. Regardless of the awareness level of individuals about substance addiction and addicts, awareness level of individual directly effects individual's attitude, attitudes of them directly effects individual's stigmatization level, so individual's awareness level indirectly effects stigmatization level. As shown in Figure 2, scale is structured with waterfall model.

The researchers benefited from the relevant literature in the development process of the scale, after the item pool was consisted, and the final version is given after the reference of expert opinion. Parts of the scale and its contents are given above.

In the first part of the scale, there are some questions on their personal characteristics such as gender, age, educational status, working status of the participants, educational status of participants' parents, definitions about themselves and their families, people get the idea that they take any decision and educational level about substance addiction.

In the second part of the scale is the awareness dimension. Awareness dimension is composed of knowledge, comprehension, application, analysis, synthesis and evaluation sub-dimensions by considering the basic cognitive taxonomy of Bloom. There are 5-point Likert type 46 items in this dimension. These sub-dimensions consist of items that emphasized in the addiction and addicts context. Distribution of the items according to sub-dimensions is given in Table 1.

There are 7th Bogardus Attitude Scale typed 7 items to determine attitudes on substance addiction and addicts in third part. There are 5-point Likert typed 10 items in stigmatization di-

Fig. 2. Structuralization of three dimensional scale for awareness, attitude, stigma of addiction
Source: Authors

Table 1: Distribution according to the dimensions of the awareness

Dimensions	*Total*
Knowledge	8
Comprehension	8
Application	7
Analysis	8
Synthesis	8
Evaluation	7
Total	46

mension, 4 of the items are on addiction, 6 of the items on addicts in this dimension.

In response of the participants, "totally agree" means "quite high", "agree" means "high", "partly agree" means "moderate", disagree means "low", completely disagree means "quite low". Averages and standard deviations of the scale items are given in Table 2 and Table 3.

RESULTS

Factor analysis was performed to ensure the construct validity of the scale. Factor analysis is one of the multivariate statistical methods, p unit interrelated variables are reduced by factor analysis and units that associated with each other are collected together and factor analysis is intended to achieve k unbound variable component (k<p). KMO and Barlett's statistical test result should be checked to make factor analysis (Chi-Square = 5180.222; p<0.05). According to this, factor analysis can be made because there is no relationship between items. Fallen loads of each item are given in Table 4.

Axis of rotation is applied by researcher in factor analysis to explain and interpret easily m unit important factor by applying the technique. So Varimax-rotation is applied to interpret and explain clearly distributed loads. According to this, as result of the rotation, items that factor loads are under the 0.4 should be removed from the scale. However, any item was not removed from the scale, because there is no item that has under 0.4 load factor.

Items that have under the r=0.2 should be removed to make the scale homogenous and to ensure items that measure the same attitude. On this scale, it is not necessary to remove items. Pearson product moment correlations of dimensions among themselves, sub-dimensions and Three-Dimensional Scale for Awareness, Attitude, Stigma of Addiction" are checked in construct validity study addition to the factor analysis. Correlation coefficients are given in Table 5.

It can be said that the Three-dimensional Scale for Awareness, Attitudes, Stigma of Addiction is valid and reliable with 0.866, 0.799, 0.807 Cronbach Alpha values respectively for awareness, attitude, stigmatization dimensions. Cronbach Alpha value for scale is 0.895 (Table 4).

DISCUSSION

This scale is provided to get simultaneous results on three interrelated dimensions such as awareness, attitude and stigmatization and is

Table 3: Average and standard deviation of attitude and stigmatization dimensions' items

Dimensions	*Items*	*N*	*Average*	*Standard deviation*	*Min.*	*Max.*
Attitude	1	317	1.9	.9	1	6
	2	317	1.9	1.1	1	7
	3	317	2.0	.9	1	7
	4	317	2.1	1.1	1	7
	5	317	1.9	1.1	1	7
	6	317	1.9	1.4	1	7
	7	317	3.1	2.2	1	7
Stigmatization						
Addiction	1	317	2.2	1.1	1	5
	2	317	2.8	1.4	1	5
	3	317	2.4	1.3	1	5
	4	317	1.7	.9	1	5
Addicts	1	317	2.3	1.1	1	5
	2	317	2.1	2.0	1	5
	3	317	2.7	1.2	1	5
	4	317	2.7	1.1	1	5
	5	317	2.3	.9	1	5
	6	317	2.9	1.2	1	5

Table 2: Average and standard deviation of awareness dimension's items

Awareness dimensions	*Item*	*N*	*Average*	*Standard deviation*	*Minimum*	*Maximum*	*Awareness dimensions*	*Items*	*N*	*Average deviation*	*Standard*	*Minimum*	*Maximum*
Knowledge	1	317	1.54	.7	1	5	*Analysis*	1	317	2.1	1.0	1	5
	2	317	2.0	.9	1	5		2	317	1.8	1.1	1	5
	3	317	1.9	1.3	1	5		3	317	2.1	1.1	1	5
	4	317	2.6	1.3	1	5		4	317	2.1	1.0	1	5
	5	317	2.4	.9	1	5		5	317	2.6	1.1	1	5
	6	317	2.6	1.0	1	5		6	317	2.1	1.0	1	4
	7	317	2.2	1.2	1	5		7	317	1.9	.6	1	4
	8	317	2.3	1.1	1	5		8	317	2.2	.9	1	5
Comprehension	1	317	2.6	.9	1	5	*Synthesis*	1	317	1.9	.9	1	4
	2	317	2.2	.8	1	5		2	317	2.7	1.3	1	5
	3	317	2.5	1.1	1	5		3	317	2.0	.9	1	5
	4	317	2.0	1.0	1	5		4	317	2.1	.9	1	5
	5	317	1.9	1.1	1	4		5	317	2.1	1.0	1	5
	6	317	2.0	1.2	1	5		6	317	1.8	.8	1	5
	7	317	2.6	1.4	1	5		7	317	2.4	1.2	1	5
	8	317	1.8	.8	1	5		8	317	2.1	.9	1	5
Application	1	317	1.9	1.1	1	5	*Evaluation*	1	317	1.9	1.0	1	4
	2	317	1.9	.9	1	4		2	317	2.2	1.0	1	4
	3	317	2.2	1.1	1	5		3	317	2.1	.9	1	5
	4	317	2.5	1.1	1	5		4	317	1.7	.7	1	4
	5	317	2.2	.9	1	5		5	317	2.3	1.1	1	4
	6	317	2.1	1.1	1	5		6	317	1.8	.9	1	4
	7	317	2.4	1.4	1	5		7	317	1.8	.7	1	5

Table 4: Factor analysis of scale

Awareness															
Knowledge		*Comprehension*		*Application*		*Analysis*		*Sythesis*		*Evaluation*		*Attitude*		*Stigmatization*	
Item	*Factor load*	*Item*	*Factor load*	*Item*	*Factor load*	*Item*	*Factor load*	*Item*	*Factor load*	*Item*	*Factor load*	*Item*	*Factor load*	*Item*	*Factor load*
K1	.7**	C1	.9**	AP1	.7**	AN1	.6**	S1	.5**	E1	.5**	AT1	.6**	ST11	.5**
K2	.7**	C2	.8**	AP2	.6**	AN2	.7**	S2	.7**	E2	.5**	AT2	.6**	ST12	.6**
K3	.6**	C3	.8**	AP3	.8**	AN3	.7**	S3	.6**	E3	.6**	AT3	.6**	ST13	.5**
K4	.7**	C4	.8**	AP4	.8**	AN4	.7**	S4	.5**	E4	.5**	AT4	.7**	ST14	.6**
K5	.8**	C5	.7**	AP5	.7**	AN5	.7**	S5	.6**	E5	.7**	AT5	.5**	ST21	.5**
K6	.7**	C6	.7**	AP6	.8**	AN6	.5**	S6	.6**	E6	.7**	AT6	.6**	ST22	.6**
K7	.7**	C7	.7**	AP7	.6**	AN7	.5**	S7	.6**	E7	.7**	AT7	.7**	ST23	.6**
K8	.7**	C8	.8**			AN8	.7**	S8	.5**					ST24	.7**
														ST25	.7**
Cronbach Alpha .7		*Cronbach Alpha* .8		*Cronbach Alpha* .9		*Cronbach Alpha* .8		*Cronbach Alpha* .9		*Cronbach Alpha* .7		*Cronbach Alpha* .8		*Cronbach Alpha* .8	
Cronbach Alpha **.866**															
Cronbach Alpha .9															

Table 5: Inter-dimensional correlation coefficients

	Dimensions	*Awareness*							*Stigmatization*		
		Knowledge	*Comprehension*	*Application*	*Analysis*	*Synthesis*	*Evaluation*	*Attitude*	*Stigmatization (Addiction)*	*Stigmatization (Addicts)*	*Total*
Awareness	Knowledge	1.0*									
	Comprehension	0.8*	1.0								
	Application	0.6*	0.4*	1.0							
	Analysis	0.7*	0.5*	0.5*	1.0						
	Synthesis	0.6*	0.5*	0.6*	0.5*	1.0					
	Evaluation	0.5*	0.5*	0.5*	0.4*	0.6*	1.0				
Stigmatization	*Attitude*	0.7*	0.6*	0.6*	0.6*	0.7*	0.5*	1.0			
	Stigmatization (Addiction)	-0.6*	0.5*	0.4*	0.7*	-0.8*	0.7*	0.7*	1.0		
	Stigmatization (Addicts)	0.6*	0.6*	0.5*	0.7*	0.8*	0.6*	0.7*	0.7*	1.0	
	Total	0.2*	0.5*	0.7*	0.5*	0.6*	0.6*	0.5*	0.8*	0.7*	1.0

facilitate to deal with the subject in more holistic approach. In this context, scale is considered to be extremely useful in fighting to substance abuse studies by providing multidimensional and in-depth research.

Graduate thesis on substance addiction in Turkey is evaluated by Sahin (2007), 20 graduate thesis written until 2007 are examined. Measurement instruments used in thesis are surveys that were prepared on the aim of the studies. Published organizational and national reports on fighting to substance addiction are examined. The researchers can see that statistical data that reveal the current state of substance addiction in Turkey is located in these reports. However, used measurement instruments in national and international studies have been measured the substance addiction on one dimension.

Awareness dimension, which is the first dimension of scale is composed of knowledge, comprehension, application, analysis, synthesis and evaluation sub-dimensions by considering the basic cognitive taxonomy of Bloom. Although researchers have no consensus about differences of awareness as structure and content, necessity of multi-faced structural conceptualization view is dominant (Baer et al. 2008). However, considering awareness in composed of knowledge is different from the other awareness scales on substance addiction with regard to demonstrate awareness level of individuals clearly to substance addiction and addicts. Namely, awareness level of individual who is applied the scale can be high in knowledge sub-dimension but she/he may not be sufficient to perform analyzes on subject. The biggest difference in the scale of measurement instruments used to do similar research, and the scale provides data on awareness level of individuals in knowledge, comprehension, application, analysis, synthesis and evaluation sub-dimensions. For example, Mindful Attention Awareness Scale (MAAS), which has 15 items in one dimension developed to measure individual's general awareness level on day to day experiences by Brown and Ryan (2003). Examples of items of the scale are that "I find it difficult to stay focused on what's happening in the present.", "I break or spill things because of carelessness, not paying attention, or thinking of something else." Another measurement instrument used in international literature on awareness is the Kentucky Inventory of Mindfulness Skills (KIMS), which has 39 items in 4 dimension as observing, describing, act with awareness, and accept without judgmentdeveloped by Baer and others in 2004.Examples of items of the scale are, "I notice when my moods begin to change." (Observing), "When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words." (Describing).

When considering attitude dimension of the scale, it can be said that to take place7th Bogardus Attitude Scale typed items in and to analyze attitude in connection with awareness ensures data on awareness level of individuals reflect

consciously or not to attitude. Mayda et al. (2015) conducted a study to assess attitudes of general population and medical doctors towards alcohol addiction, apply stigmatization questionnaire to 99 medical doctors and 101 people who selected from the community and according to research results both medical doctors and general population appear to have negative thoughts about alcohol dependence.

The biggest difference in the scale of measurement instruments used to do similar research with stigmatization dimension is that scale measure stigmatization level of individuals on substance addiction and addict, it does not measure stigmatization level of addicts themselves. For example, the Internalized Stigma Scale of Mental Illness (ISMI) and Social Functionality Scale (SFS) was applied to 105 patients who diagnosed as substance addicts according to DSM-IV diagnostic criteria and continued inpatient treatment in Gaziantep University Sahinbey Research and Application Hospital Psychiatry Clinic at the time of the research was done for Can's (2012) research with the aim of determining social functionality and internalized stigmatization level of substance addicts. ISMI which has 29 items developed to measure internalized stigmatization level by Ritsher and others (2003) and made validity and reliability studies in Turkish by Ersoy and Varan is a self-report scale. Reliability coefficient was found as 0.94 in the Ersoy and Varan's (2007) study. Scale is consisting of 5 dimensions of alienation (6 items), stereotype endorsement (7 items), discrimination experience (5 items), social withdrawal (6 items), stigma resistance (5 items).

CONCLUSION

Procedures made in the development process of scale shows that the Three-Dimensional Scale for Awareness, Attitude, Stigma of Addictionis a valid and reliable scale. Conducting research using the Three-dimensional Scale for Awareness, Attitude, Stigma of Addictionin literature will contribute significantly to the measuring power of the scale.

RECOMMENDATIONS

Measuring interconnections and relationships between dimensions provide data on individual's deficiencies and needs related to the subject in awareness, attitude, stigma of addiction. In this sense, the Three-Dimensional Scale for Awareness, Attitude, Stigma of Addictioncan be used in national and international platforms for preventing use substance of individuals who have not substance addict yet, increasing awareness level and supporting the process of starting treatment of individuals who are substance addicts and developing new politics and strategies on subject.

REFERENCES

Anderson TL, Ripullo F 1996. Social setting, stigma management, and recovering drug addicts. *Humanity and Society,* 20(3): 25-43.

Baer RA, Smith GT, Lykins E, Button D, Krietemeyer J, Sauer S, Walsh E, Duggan D, Mark J, Williams G 2008. Construct validity of the Five Facet Mindfulness Questionnaire in meditating and non-meditating samples. *Assessment*, 15(3): 329-342.

Baer RA, Smith GT, Allen KB 2004. Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment,* 11: 191–206.

Balseven A, Özdemir Ç, Tug A, Hanci IH, Dogan YB 2002. Madde kullanimi, bagimliliktan korunma ve medya. *STED*, 11(3): 91-93.

Brown KW, Ryan RM 2003. The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology,* 84: 822–848.

Brubaker MD, Nabors LA, Pangallo J, Shipley H 2012. Stigmatization of Adolescents Who Use Alcohol and Marijuana: A Counseling Concern. *Paper Based on a Program Presented at the 2012 American Counseling Association Conference*, San Francisco, CA, March 21-25.

Can G 2012. *Madde Bagimliligi Tanisi Alan Bireylerin Sosyal Islevsellik ve Içsellestirilmis Damgalanma Düzeyleri.* Yüksek Lisans Tezi. Saglik Bilimleri Enstitüsü Gaziantep: Gaziantep Üniversitesi.

Corrigan P 2004. How stigma interferes with mental health care. *American Psychologist*, 59: 614-625.

Ersoy MA, Varan A 2007. Ruhsal hastaliklarda Içselleþtirilmis Damgalanma Ölçegi Türkçe Formu'nun güvenilirlik ve geçerlik çalismasi. *Türk Psikiyatri Dergisi*, 18(2): 163–171.

Hamilton-McGinty R 2000. *A Winning Attitude to Change Your Life - Change Your Attitude*. Glasgow: Caledonian International Book Manufacturers.

Hayes SC, Levin ME 2012. *Mindfulness and Acceptance for Addictive Behaviors. Applying Contextual CBT to Substance Abuse and Behavioral Addictions*. Oakland, CA: Context Press, An Imprint of New Harbinger Publications, Inc.

Kabat-Zinn J 1994. *Wherever You Go There You Are*. New York: Hyperion.

Kabat-Zinn J 1996. Mindfulness meditation: What it is, what it isn't, and its role in health care and medicine. In: Y Haruki, Y Ishii, M Suzuki (Eds.): *Comparative and Psychological Study on Meditation*. Netherlands: Eburon, pp 161-170.

Mayda H, Soyuçok E, Güzel HI, Görücü Y, Bagcioglu E 2015. Attitudes of General Population and Physicians Towards Alcohol Addiction. *7thInternational Congress on Psychopharmacology,* 15-19 April 2015, Antalya, Turkey.

Murray WR, Hillson D 2008. *Managing Group Risk Attitude.*Hampshire, England: Gower Publishing Limited.

National Institute on Drug Abuse (NIDA). From <http://www.drugabuse.gov/related-topics/trends-statistics> (Retrieved on 14 August 2015).

Ögel K 2010. S*igara, Alkol ve Madde Kullanim Bozukluklari: Tani, Tedavi ve Önleme.* Istanbul: Yeniden Yayinlari.

Ritsher JB, Otilingam PG, Grajales M 2003. Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Res,* 121: 31-49.

Siegel RD, Germer CK, Olendzki A 2009. Mindfulness: What is it? Where did it come from? In: F Didonna (Eds.): *Clinical Handbook of Mindfulness*. New York: Springer, pp.17-35.

Sahin M 2007. *Madde Bagimliligi Konusunda Türkiye'de Yapilmis Olan Lisansüstü Tezler Üzerine Bir Degerlendirme*. Tezsiz Yüksek Lisans Dönem Projesi. Saglik Bilimleri Enstitüsü. Ankara: Ankara Üniversitesi.

Türkiye Uyusturucu Raporu 2013. Yeni gelismeler, trendler, seçilmis konular. *EMCDDA 2013 Ulusal Raporu* (2012 Verileri) T.C. Içisleri Bakanligi Emniyet Genel Müdürlügü Kaçakçilik ve Organize Suçlarla Mücadele Daire Baskanligi, Reitox Ulusal Temas Noktasi, Ankara.

UK Drug Policy Commission (UKDPC) (n.d.).*Getting Serious about Stigma: The Problem With Stigmatizing Drug Users: An Overview*. London: UKDPC.

Williams RE,Kraft JS 2012. *The Mindfulness Workbook for Addiction. A Guide to Coping with the Grief, Stress, and Anger that Trigger Addictive Behaviors*. Oakland, CA: New Harbinger Publications, Inc.

Winkelstein E (n.d.). *Understanding Drug-related Stigma. Tools for Better Practice and Social Change. Curriculum Outline for Trainers*. Harm Reduction Coalition, New York State Department of Health AIDS Institute.

World Drug Report 2015. United Nations Office on Drugs and Crime, United Nations Publication, United Nations.

APPENDIX

EXAMPLE ITEMS FROM THREE DIMENSIONAL SCALE FOR AWARENESS, ATTITUDE, STIGMA OF ADDICTION

Awareness Dimension

1. Excessive eating, sports, work are addiction behaviors.
2. "This will not be something one times" promise is not applicable for substance use
3. Getting help from experts is required to solve addiction problem.
4. One of the most important causes of substance addiction is the person himself.
5. Addicts may be the perception that they does not loved by others because of addictions.
6. Addicts can hesitate from seeking assistance in solving their problems.

Attitude Dimension

1. Smoking more than one or two cigarettes in one daycan become addiction**.**
2. Families should not allow their children to spend as much time as they want on the computer**.**

Stigmatization Dimension

1. Addiction is a display of flabbiness**.**

2. Addicts should not marry**.**

Paper received for publication on October 2015
Paper accepted for publication on April 2016