Predictor Relations between Owned Values, Self-Efficacy for Protecting from Substance Abuse and Future Expectations among Adolescents

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Abstract

The aim of the research is to present precursor relations between the values which teenagers have, future expectations and self-efficacy of protection from drug abuse and test the model created with reference to these relations. The research is done in Accord with relational scanning which is a sub-genre of general scanning model. Study group of the research is selected by random sampling method from teenagers who have training in five different schools, one is a student at a vocational high school and four are a student at four Anatolian high schools, and in class levels in Konya in 2014-2015 academic year. 318 out of them is female students and 252 out of them is male students. Humanitarian Values Scale (HVS) developed by Dilmaç (2007), Self-Efficacy Scale of Protection from Drug Abuse (2013) developed by Eker, Akkuş and Kapısz (2013) and Teenagers’ Future Expectations Scale adapted by Tuncer (2011) into Turkish are used in the research. The research is used by using the AMOS 19 program according to “Structural Equation Model”. According to findings obtained from the research, it is seen that the values have direct impacts on self-efficacy of protection from drug abuse and future expectations and that future expectations have direct impact on self-efficacy of protection from drug abuse.

Keywords: Human Values, Future Expectations, Substance abuse, Self-efficacy.
1 Introduction

Technological changes and globalisation in the societies result in many problems, however these also contribute to longer human life. We must have opinions of future time, and what the meaning of life will be individually and socially. Individuals have little knowledge of themselves. What is humanity? What are our responsibilities? What is the moral dimension of events? These questions can be encountered in any society in any time (Dilmaç, 2012). At this point, the concept of value appears.

Values are phenomena that include every dimension of life, dominate and guide life. In individual terms, values are used in decision-making, standards, behavioural sanctions, motivation, ideological and political choices, social judgements and adapting to any community (Özensel, 2003). Social psychologists and behaviourists state that the concept of value affects individual attitudes, behaviours and mental processes in one hand, while it contacts with social rules and norms and transfers these on the other. As presented by behaviourists, who study the concept of value, values affect individual behaviours directly or indirectly (Özgüven, 2014). Similarly, Erdem (2003) claims that values are perceptions that source behaviours and are used to respond them. Additionally, values play an important role in behaviour selection, and examining and enlightening that selected behaviour (San, 2005).

There are many various definitions of the concept of value in the related literature. Since every field of study defines the concepts based on their expertise, it is difficult to mention a common definition (Dilmaç, Kulaksızoğlu and Ekşi, 2007). In general terms, Ulusoy and Dilmaç (2016) define the concept of value as “the whole of beliefs that guide human behaviours”. Robbins (1995) emphasizes that values are the guides of the decisions made.

Yapıcı and Zengin (2003) state that behavioural studies based on attitudes and behaviours are less functional that the studies conducted based on values. Accordingly, they claim that we can have a clearer idea of individuals’ attitudes, when these are studied in accordance with the values they have. Therefore, studies on values have an important place in understanding individuals’ behaviours and attitudes clearly. This perspective provides us with the idea that values can predict many variables in researches. Accordingly, values gain significance in adolescence when future plans are made and future expectations become more important.

“Adolescence is an important developmental period when future plans are made along with identity crises, and many physical, cognitive, social and moral changes are experienced” (Erikson, 1968). During adolescence, individuals try to find out who they are, what they are and in which direction they go in their lives. This is Erikson’s fifth developmental stage, “identity vs. role confusion”. If adolescents can discover their identities in a healthy way and reach at a positive route to follow in their lives, they can develop positive identities; and if they fail role confusion dominates their lives (Santrock, 2012). In accordance with the above mentioned information, we can claim that one of the important problems that
occupy young people’s minds in youth is their opinions and expectations related to future time.

Future expectations are mental maps that cover individual opinions, concerns and interests related to the future. In theoretical terms, future expectations are important, as they are the strongest motivators of decisions related to future (Nurmi, 1991). Related studies on future expectations in the literature focus on young people’s expectations related to “education and professional achievement”. Besides, some studies focused on expectations related to a healthy life, setting a good family order and beliefs (Mello, 2008; cited in: Uluçay, Özpolat, İşgör and Taşkesen, 2014). Generally, according to studies on future expectations, personal expectation are elements that vary by family, environment, culture and gender (Uluçay, Özpolat, İşgör and Taşkesen, 2014). From a holistic perspective, the directions of the individual future expectations are determined with the interaction of variables, such as clues in their environment, and the attitudes and values used as references while evaluating these clues (Bozkurt and Tevruz, 2000). Accordingly, it is clear that the values individuals have underlie their future expectations. Personal values are of utmost importance in developing expectations and presenting behaviours accordingly. Individuals gain experiences related to different areas of life during adolescence. They encounter new competition areas and make discoveries related to their new worlds. This period of time helps them to shape their views of the world, and complete the information they have. Risky behaviours during adolescence may help young people to prove themselves, obtain a status in their friendship environment and develop their identities (Ponton, 1997; cited in: Uysal and Yılmaz-Bingöl, 2014).

Risk-taking behaviours that may contribute the adolescent may also make them exposed to damage on the other hand. Researches show that, this period is a process when individuals establish closer and more intimate relations with their peers, take steps to minimize their dependency on their families, and are more free in their choices; while many risky behaviours, such as substance abuse, unconscious sexuality, riding in a car driven by a drunk person and theft are observed (Kelley, Schochet and Landry, 2004; Taper, Aarons, Sedlar and Brown, 2001; cited in: Uysal and Yılmaz-Bingöl, 2014). Additionally, besides risk-taking behaviours that form the basis for substance abuse among adolescents, other factors related to family, peer groups, individual characteristics, school, and social environment, can be included in the reasons for substance abuse. Moreover, overcoming personal problems, having a different kind of exciting experience, and meeting psycho-social needs can be other factors (Ercan and Alicasifoğlu, 2002). In accordance with Hall (1904)’s perspective, it is also seen that adolescence is a period of time full of conflicts and mood swings. Based on the mood swings experienced in this period, the protection of adolescents from substance abuse becomes very important.

Adolescence is also the period when self-efficacy belief, which can be defined as the confidence in having the required the skills do perform a certain task, comes into prominence (Bandura, 1994). Many previous researches reported that self-efficacy belief was related with health and therapy behaviours (Schunk, 2009), taking up and going on smoking (Schwarzer and Fuchs, 1995; cited in:
Kılınç, 2010), and giving up and re-taking up smoking behaviours (Carey & Carey, 1993; cited in: Yazıcı and Özbay, 2004). In this context, investigation of self-efficacy for protecting adolescents from substance abuse from values perspective becomes crucial.

### 2 Method

#### Research Model

The purpose of the present research is presenting the relationships between values which teenagers have, future expectations and self-efficacy of protection from drug abuse and test the model created with reference to these relations. Relational screening model which is a subtype of general screening model is used in the research. Relational screening is a research model that is conducted in order to define the relationship between two or more variables, and to obtain clues related to cause and effect relationship (Buyukozturk, Kilic-Cakmak, Akgun, Karadeniz and Demirel 2008).

#### Work Group

Study group of the research is selected by random sampling method from teenagers who have training in five different schools, one is a student at a vocational high school and four are a student at four Anatolian high schools, and in class levels in Konya in 2014-2015 academic year. 318 out of them is female students and 252 out of them is male students.

#### Measurement Tools

**Human values scale (HVS).** In the present research, “Human Values Scale” (HVS) developed by Dilmac for secondary education students (adolescents) was used to determine the students' human values. The scale measures the human values process with 42 items under these six sub-dimensions: a. Responsibility (7 items) b. Friendship (7 items) c. Peacefulness (7 items) d. Respect (7 items) e. Tolerance (7 items) f. Honesty (7 items). This scale is a Likert-Type scale that can be conducted individually or on groups. The items in the scale is expressed in a 5-level “Likert-Type” grading (A: Never, B: Rarely, C: Sometimes, D: Frequently, E: Always). The items are scored this way: A:1-B:2-C:3-D:4-E:5. Increase/decrease in the scores indicates having higher/lower human values. For the reliability studies of HVS, internal consistency coefficients (Cronbach Alpha) were calculated. Internal consistency coefficient of “Responsibility” sub-dimension consisting of 7 items was calculated as alpha:0.73. Internal consistency coefficient of “Friendship” sub-dimension consisting of 7 items was calculated as alpha:0.69. Internal consistency coefficient of “Peacefulness” sub-dimension consisting of 7 items was calculated as alpha:0.65. Internal consistency coefficient of “Respect” sub-dimension consisting of 7 items was calculated as alpha:0.67. Internal consistency coefficient of “Honesty” sub-dimension consisting of 7 items was calculated as alpha:0.69. Internal consistency coefficient of “Tolerance” sub-dimension
consisting of 7 items was calculated as alpha:0.70, and internal consistency coefficient for the whole scale consisting of 42 items was calculated as alpha:0.92. The stability factor was calculated as 0.73 for “Responsibility”, 0.91 for “Friendship”, 0.80 for “Peacefulness”, 0.88 for “Respect”, 0.75 for “Honesty”, 0.79 for “Tolerance”, and 0.87 for the whole scale (Dilmac, 2007).

**Self-efficacy for protecting adolescences from substance abuse scale.**
Self-Efficacy for Protecting Substance Abuse Scale was explained 50.3% of the total variance. The scale was composed of 24 items with four factors and one control item. Regarding to experts’ opinion sub scales were named as Staying Away from Drugs/ Stimulant Drugs- General (12 items), Staying Away From Drugs/ Stimulant Drugs- Under Pressure (4 items), Help-Seeking about Drugs/ Stimulant Drugs (4 items), Supporting a Friend about Drugs/ Stimulant Drugs (3 items). Cronbach internal consistency coefficient of the whole scale was found to be 0.81. Internal consistency of sub scales were ranged 0.45-.87. Test-retest correlation was significantly positively correlated (p<0.001). (Eker, Akkuş ve Kapış, 2013).

**Adolescent future expectations scale.** Another scale of Adolescent Future Expectations Questionnaire used in the study (adolescent future expectations scale A) was adapted into Turkish by Tuncer (2011). The scale consists of 25 items and four subscales. Sub-dimensions of the scale; business and education (Article 11), marriage and family (7 items), religion and society (3 items), health and life (Article 4) d. Reliability and validity of studies of scale were conducted with 175 secondary school students. According to the exploratory factor analysis applied to data obtained KMO coefficient was .93 Barlett test sample value was found to be 3571,466. According to the results of exploratory factor analysis, 25 items were obtained and scale consisting of 4 sub-dimensions. Business and education subscale explain 48.561% of total variance, the marriage and family subscales explain 9.073% of the total variance, religion and society subscale explain 5.416’s% of the total variance, health and life subscale explain the 4.308% of the total variance. Four-dimensional model of the conformity index values in order to verify the implementation of the confirmatory factor analysis = 1282.02, df = 727, /sd=1.76, RMSEA = .085, CFI = .91, was found as GFI = .78. The factor load was observed between .53 and .90. For reliability, internal consistency coefficients were calculated for Adolescent Future Expectations Scale (Cronbach Alpha). Accordingly, internal consistency reliability coefficient of .92 was found (Gediksiz, 2005).

**Data Analysis**
In the present research, predictor relationships between adolescents' relationships between values which teenagers have, future expectations and self-efficacy of protection from drug abuse they have were analyzed using AMOS 10 Software according to “Structural Equation Model”. Structural equation modeling is a statistical approach that reveals the causative and reciprocal relationships between observed and latent variables (Shumacker and Lomax, 2004). The model related to relationships between subjective well-being, social appearance anxiety and values that is proposed in the present study is presented in Figure 1.

**Findings**
In the latest model obtained ($X^2 = 201.711$, df = 71, $p < .001$); there are six exogenous (responsibility, friendship, peacefulness, respect, honesty and tolerance), two endogenous (future expectations and self-efficacy of protection from drug abuse) data. Each path shown in the model are found to be statistically meaningful. The Bentler-Bonett normed fit index (NFI), The Tucker-Lewis coefficient fit index (TLI) and other fit indexes showed that model is pretty well fit (Table 1). Each of the two-way correlations between the endogenous data in the model have high values and are statistically meaningful. This is also affected from the correlation values that the sub-dimensions in the values scale used in the present study have.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Good fit</th>
<th>Acceptable fit</th>
<th>Fit Index Values of the Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>($X^2$/sd)</td>
<td>$\leq 3$</td>
<td>$\leq 4-5$</td>
<td>2.84</td>
</tr>
<tr>
<td>RMSE</td>
<td>$\leq 0.05$</td>
<td>$0.06-0.08$</td>
<td>0.57</td>
</tr>
<tr>
<td>RMSEA</td>
<td>$\leq 0.05$</td>
<td>$0.06-0.08$</td>
<td>0.05</td>
</tr>
<tr>
<td>SRMR</td>
<td>$\geq 0.95$</td>
<td>$\geq 0.95$</td>
<td>0.93</td>
</tr>
<tr>
<td>NFI</td>
<td>$\geq 0.95$</td>
<td>$0.94-0.90$</td>
<td>0.95</td>
</tr>
<tr>
<td>CFI</td>
<td>$\geq 0.95$</td>
<td>$0.89-0.85$</td>
<td>0.93</td>
</tr>
<tr>
<td>GFI</td>
<td>$\geq 0.95$</td>
<td>$0.94-0.90$</td>
<td>0.94</td>
</tr>
</tbody>
</table>

When the fit values in Table 1 is examined, the following values are found; $X^2$/sd = 2.84, RMSEA = 0.57, SRMR = 0.05, NFI = 0.93, CFI = 0.95, GFI = 0.93, AGFI = 0.93 ve TLI = 0.93. It can be observed that, the model has the fit values at a desired level in general (Bollen, 1989; Browne ve Cudeck, 1993; Byrne, 2010; Hu and Bentler, 1999; Kline, 2011; Tanaka and Huba, 1985). Single factor model that was tested is presented in Figure 1. All the paths shown in the model are meaningful at 0.001 level.
Figure 1. The path diagram of the model of this study

Table 2. Model on Predictor Relations between Values, Perception of Self-efficacy for Protecting Adolescents from Substance Abuse and Future Expectations

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Dependent Variable</th>
<th>Total Effect</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Standard Error</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance Abuse Self-efficacy</td>
<td>Value</td>
<td>.043</td>
<td>.043</td>
<td>0</td>
<td>0.37</td>
<td>4.04*</td>
</tr>
<tr>
<td>Value</td>
<td>Future Expectation</td>
<td>.043</td>
<td>.043</td>
<td>0</td>
<td>0.65</td>
<td>3.92*</td>
</tr>
<tr>
<td>---------------------</td>
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<td>------</td>
<td>------</td>
<td>---------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Future Expectation</td>
<td>Substance Abuse</td>
<td>0.10</td>
<td>0.10</td>
<td>0</td>
<td>0.61</td>
<td>3.91*</td>
</tr>
<tr>
<td></td>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Total Effect = Direct Effect + Indirect Effect, *p<0.01, **p<0.05.

As presented in the model above, the most important independent variable affecting self-efficacy for protecting from substance abuse is values ($t=-4.04$, $p<0.01$). Correlation coefficient value related to this factor is calculated as $\beta = -0.043$. The predictor correlation between the values adolescents have and their perception of self-efficacy for protecting from substance abuse is a positive linear correlation. In other words, according to the findings obtained in the present research, as the values adolescents have increase, their self-efficacy for protecting from substance abuse increases accordingly.

Additionally, according to the tested model, the second most important variable affecting self-efficacy for protecting from substance abuse in future expectation ($t=-3.91$, $p<0.01$). Correlation coefficient value related to this factor is calculated as $\beta = -0.10$. The predictor correlation between the adolescents’ future expectations and their self-efficacy for protecting from substance abuse is a positive linear correlation. In other words, according to the findings obtained in the present research, as adolescents’ future expectations increase, their self-efficacy for protecting from substance abuse increases accordingly.

### 3 Discussion, Results and Recommendations

In this part, the findings obtained from the model suggested in accordance with the investigation of the predictor relations between adolescents’ values, future expectations and self-efficacy for protecting from substance abuse are discussed and interpreted. According to the findings obtained in the present research, the most important independent variable affecting the self-efficacy for protecting the adolescents from substance abuse is the values variable. Accordingly, as the values that adolescents have increase their levels of self-efficacy for protecting from substance abuse increase as well. The related literature doesn’t include any specific researches on the specific subject matter. The concept of self-efficacy for protecting from substance abuse can be defined in accordance with Bandura (1982)’s self-efficacy belief definition as: Individual’s personal belief on whether they can be successful in avoiding addictive substances and how they can cope with
this. Erdem, Eke, Öge and Taner (2006), who conducted a research on high school students’ friend characteristics and substance abuse, reported that among the friend characteristics that increase the risk of substance abuse, being friends with people who present anti-social personality features has an important place. Anti-social personality disorder is defined according to DSM-V as; making a habit of abusing others’ rights without any sense of remorse (American Psychiatric Association, 2013). Similarly, Quaranta (1997), who conducted a research on “Attitudes of Adolescents who Present Extreme Behaviour Disorders Towards Addictive Substances” in the Ohio State of America, studied students’ attitudes towards addictive substances, and found that adolescents who had behaviour disorders were more prone to substance abuse. It was also reported that truancy, cheating and theft were more common among students who had substance abuse, and these students didn’t like their teachers, schools and thought that lessons were boring. A careful investigation of the findings of this research shows that adolescents who are prone to substance abuse lack human values, have difficulty in developing empathy, don’t avoid hurting others, and members of the friendship groups of anti-social features. The findings of this research are in agreement with the findings of the present research. It is significant that, according to the findings of the present research, there is a positive linear correlation between human values and self-efficacy for protecting from substance abuse. Similarly, Gezek (2007) investigated the substance abuse levels and in-family relations among young people who were related with Umut Çocukları Derneği (Children of Hope Association), lived on the streets and had substance abuse. All the participants continued to live on the streets, and saw their families with low frequency. Crime rate, primarily for theft, is high among young people who live on streets and have substance abuse. For their in-family relations, the participants have problems in problem-solving, and expressing feelings of love and affection. According to the related literature, young people, who have substance abuse, have higher criminal tendencies, and lack communication, and basic human values, such as love and affection in their in-family relations. The findings of the present research are in agreement with the related literature. According to the findings of the present research, as the human values increase among adolescents, their levels of self-efficacy for protecting from substance abuse increase accordingly.

According to another finding of the present research, values variable is the most important independent variable affecting the future expectations of the adolescents. In other words, as the values adolescents have increase, their future expectations increase accordingly. The concept of future expectations refers to the cognitive maps including individuals’ ideas, interests and worried about the future (Nurmi, 1991). In this context, Armağan (2004) conducted a study to find out the sources of happiness for young people and reported that 21.02% of the young people saw love, 18.20% saw freedom, and 17.83% saw profession as the source of happiness in 1979; while 20% saw money, 19% love and 18% profession as the source of happiness in 2002. Accordingly, even the priority of the values change among young people in years, human values are still reflected on their future expectations. Similarly, Konrad Adanuear Association (1999) found that, among
the things that made the lives of young people in Turkey, social values were in the third place. “Fight for ideals” and “leaving traces behind” formed the 15% of the expectations of the young people. According to the related literature, values affect the future expectations of young people. Likewise, according to the findings of the present research, as the values of adolescents increase their future expectations increase as well.

According to another research, the concept of ‘meaning of life’, which considered related with values, is related with the concept of ‘hope’ which includes positive expectations of realizing goals related to future. According to Baumeister (1991), four basic measures are based on while developing the meaning of life; objectives, self-efficacy, values, and self-value. The variety of the researches on the meaning of life created a broad web of relations. Meaning of life is positively correlated with many important variables, such as hope and life satisfaction (Mascaro and Rosen, 2005; Ryff, 1989; Zika and Chamberlain, 1992; cited in: Yüksel, 2013). Baş (2014), who conducted a research on the relations between values and meaning in life among university students, presented the predictor relations between values and meaning in life (sought meaning, present meaning). According to the findings, there are positive correlations between present meaning and social values, spirituality, human dignity, freedom, futuwwa, career values, and intellectual values. There are positive significant correlations between sought meaning and social values, materialistic values, romantic values, freedom, career values and intellectual values. Significant predictors of present meaning are spirituality, futuwwa and materialistic values. Significant predictors of sought meaning are romantic values, spirituality and freedom. According to the related literature, as the values individuals have increase, the meaning of life increases for them as well. Considering that, the concept of meaning of life is related with the concept of ‘hope’, which includes positive expectations in realizing the objectives related to the future, we can claim that “meaning of life” affects future expectations. The findings of the present research are in agreement. According to the findings of the present research, with the increase in the values adolescents have, their future expectations increase linearly.

Another finding of the present research that, future expectations variable in the second important variable affecting adolescents’ self-efficacy for protecting from substance abuse. It is projected that as future expectations increase among adolescents, their levels of self-efficacy for protecting from substance abuse increase accordingly. According to the studies in the related literature, realizing the future objectives is related with the concept of ‘hope’, which includes positive expectations.

Hope refers to positive expectations related to realizing future objectives. It is the belief in that most important feature is believing in the existence of a solution, and help can result in changes in the existence of individuals (Derebaşi, 1996). The concept of hopelessness refers to negative affects, negative consequences and despair expectations (Derebaşi, 1996). According to the definitions of hopelessness, negative cognitive structures guide the evaluation of experiences. In addition, hopelessness refers to disbelief, reluctance and lacking
well-being related to future (Tüfekçiyanışar, 2014). The relations between hopelessness and psychological problems, smoking, alcohol and drug addition, reported by the researches are remarkable.

Hopelessness experience related with pessimism is one of the basic symptoms of depression (Westefeld et al., 1990; cited in: Durak and Palabıyıkolu, 2004). Factors that are significantly related with depression are; feeling of loneliness, lack of self-confidence, problems in establishing relations with own and opposite sex, problems in expressing feelings, smoking and alcohol use, and chronic health problems (Türkleş, Hacıhasanoğlu and Çapar 2008). The findings of the research conducted by Konan (1997) are in agreement. Konan (1997) studied the relations between moods and future expectations among undergraduate students of Van Yüzüncü Yıl University. According to the findings of that research, students’ sub-scale scores varied significantly by gender, alcohol and smoking habits; and expectations related o future and anxiety affected psychological health significantly. Gümüş Babacan (2015), who studied the relations between smoking and alcohol use, depressive symptoms and hopelessness, reported that hopelessness levels were higher among students who used alcohol. Alpay, Maner and Beyazyürek (1991) conducted MMPI personality test on 21 male, 4 female, the total of 25 volatile substance addicts, who were treated in AMATEM (Alcohol and Substance Addiction Treatment Centre), and reported immature and self-centred personality features, deficits in self-conception, identity problems, dissonance, inter-personal problems, inefficacy in socializing, feelings of hopelessness, and dissatisfaction among these participants. Related literature shows that substance addiction is related with the concepts of ‘future expectation’ and ‘hope’. The findings of the present research are in agreement with the related literature. According to the findings of the present research, as future expectations increase among adolescents, their levels of self-efficacy for protecting from substance abuse increase accordingly. The data obtained accordingly are in agreement with the literature.

In general terms, the present research conducted on the adolescents is considered to contribute to the analysis and evaluation of young people in terms of their values, future expectations and self-efficacy for protecting from substance abuse. However, it would be better to repeat the study on adolescents accommodating in different cities, and studying at different levels of education, in order to generalize the findings. Moreover, in order to take necessary measures for preventing “substance abuse”, which is one of the most important problems in Turkey and the world, it is considered important that future expectations of the adolescents are studied in a way to reflect the present conditions and efforts are exerted to increase their future expectations.

Note: The present study was derived from Abdullah Selçuk Şen’s master’s thesis titled “Predictor Relations between Owned Values, Self-Efficacy for Protecting from Substance Abuse and Future Expectations among Adolescents” which was carried out under supervision of Associate Prof. Bulent Dilmac.
4 References


