Factors Affecting Substance Non-Use Behaviors of High School Students*

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Abstract

This study was performed to determine the factors affecting the substance non-use behaviors of adolescents. This cross-sectional and correlational study was conducted with 983 students studying at three high schools during the 2015-2016 academic year and who were not using substances. The study was designed by cluster sampling method, and all volunteer students were included in the study. Data were collected using the Personal Information Form, Substance Abuse Information Questionnaire, and Self-Efficacy Scale in Preventing Abuse. Appropriate statistical analyses were used to assess the data. It was determined that 43% of the individuals not using substances were females and 57% were males. When the reasons for their non-use were examined in terms of sex, type of school, class, age group, addiction information score, and self-efficacy, statistically significant differences were seen between groups (p < .05). It was determined that students abstained from using substances because they were afraid of becoming addicted and of suffering psychological and physical problems, because addiction contradicted their beliefs, their families did not approve of such use, they did not want to associate with individuals who used addictive substances, and their friends did not use such substances, because substance use was expensive, contradicted their principles, and led to a loss of energy, ambition, and control, and because they were afraid of being caught by the police.

Keywords

Adolescent • Nursing • Reasons for non-use • Substance abuse • Self-efficacy

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Addictive substance abuse, a risky behavior among adolescents, is a common problem globally (Kann et al., 2014; Marschall-Lévesque et al., 2014). Individual and environmental risk factors and protective factors should be investigated to determine the reasons for substance abuse in adolescents (Albayrak & Balci, 2014). Some studies emphasize adolescents’ reasons for not using addictive substances. Based on the results of these studies, adolescents do not use addictive substances because of the potential harm to human health (Koca & Oğuzöncül, 2015; Küçükavruk, 2002; Pirinçci & Erdem, 2004), because their religion considers it a sin (Hemphill et al., 2011; Pirinçci & Erdem, 2004; Razali & Kliewer, 2015), or because it can affect their academic success (Razali & Kliewer, 2015).

A multidisciplinary team approach is necessary to fight against addictive substance use and dependency effectively (Albayrak & Balci, 2014). Prevention of harmful habits such as substance abuse should be the primary goal of nurses working in the units where care service is offered to a healthy population, such as in schools, in workplace nursing, and in community health centers. Nurses in these units can take the initiative to evaluate each person they serve and their families in terms of substance abuse risk, identify individuals who display potential for risk, and avoid those risks (Asi-Karakas & Ersögütçü, 2016). Nurses can develop plans for treatment and rehabilitation of adolescents who have a diagnosis of substance abuse and, if necessary, refer their families to the relevant health institutions. In this context, having knowledge of adolescents whose behaviors do not include using addictive substances will guide nurses in the prevention and treatment process of substance abuse in other adolescents. Most studies of substance abuse have focused on substance abuse frequency and the identification of groups at risk. There have been no studies conducted in Turkey to determine behavior of adolescents who do not use addictive substances. Therefore, this study aims to determine the factors that affect behavior among those adolescents who do not use addictive substances.

**Method**

The population of this cross-sectional and relational study consisted of high school students who were educated in the 2015–2016 academic year in the Düzce province center in Turkey. There are 18 public and 9 private high schools in Düzce and a total of 19,908 students (9,517 female, 10,292 male). A disproportionate cluster sampling method was used to select the study sample of 983 students who did not use addictive substances, who voluntarily agreed to participate in the study, and who filled out the relevant data collection forms completely.

Research data were collected using a personal information form, a questionnaire on substance abuse, and the Self-Efficacy in Protecting from Substance Dependence Scale. The IBM SPSS 22 program was used for statistical evaluations: p <0.05 was considered statistically significant. The normality and variance homogeneity
assumptions of quantitative variables were examined using the Kolmogorov-Smirnov and Levine tests, respectively. The Kruskal-Wallis (post-hoc Dunn test) and Mann-Whitney U tests were used to compare quantitative variables (i.e., dependency knowledge score, total, and subscale self-efficacy scores) of the groups organized according to participating students’ socio-demographic characteristics. Chi-square (post-hoc Bonferroni adjusted method) and binomial tests were used to compare the ratios of the students’ reasons for not using addictive substances.

Results

The students’ reasons for not using addictive substances were examined in terms of gender, school type, age group, addiction information score, and self-efficacy. The ratios of the male students who did not use addictive substances because of fear of having mental disorders ($p = .001$), physical discomfort caused by substance use ($p = .003$), fear of becoming addicted ($p = .001$), contradicting their religious beliefs ($p = .001$), family disapproval ($p = .031$), not wanting to be with addictive substance users ($p = .001$), having no friends who used an addictive substance ($p = .001$), cost of using those substances ($p = .003$), and that those substances contradict their principles ($p < .001$) were found to be significantly higher than those of the female students. Only the ratio of the female students who did not use addictive substances because of fear of being caught by the police was found to be significantly higher than those of the male students ($p = .001$).

Table 1

<table>
<thead>
<tr>
<th>Gender by Reasons for not Using Substance (n = 983)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Fear of suffering mental disorders</td>
</tr>
<tr>
<td>Concern for physical discomfort</td>
</tr>
<tr>
<td>Fear of being caught by the police</td>
</tr>
<tr>
<td>Fear of becoming addicted</td>
</tr>
<tr>
<td>Contradictory to religious beliefs</td>
</tr>
<tr>
<td>Leading to loss of energy and ambition</td>
</tr>
<tr>
<td>Losing self-control</td>
</tr>
<tr>
<td>Uninteresting</td>
</tr>
<tr>
<td>Family disapproval</td>
</tr>
<tr>
<td>Friend disapproval</td>
</tr>
<tr>
<td>Not wanting to be with addictive substance users</td>
</tr>
<tr>
<td>No friends who use an addictive substance</td>
</tr>
<tr>
<td>Being expensive</td>
</tr>
<tr>
<td>Being unable to find</td>
</tr>
<tr>
<td>Being against their principles</td>
</tr>
<tr>
<td>Other reasons</td>
</tr>
</tbody>
</table>

j: Binomial test, €: $p < .05$ and significantly higher percentage value.
The ratios of the students who did not use addictive substances because of fear of suffering a mental disorders \( (p = .003) \), physical discomfort being caused by substance use \( (p = .006) \), fear of being caught by the police \( (p < .001) \), fear of becoming addicted \( (p = .001) \), contradiction with religious beliefs \( (p = .001) \), loss of energy and ambition caused by substance use \( (p < .001) \), not wanting to lose self-control \( (p < .001) \), family disapproval \( (p = .001) \), not wanting to be with addictive substance users \( (p = .001) \), contradiction of their principles \( (p < .001) \), and other reasons \( (p = .007) \) were found to be significantly different according to school types.

### Table 2

<table>
<thead>
<tr>
<th>Reason</th>
<th>School Type</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear of suffering mental disorders (^*)</td>
<td>Girls' Vocational H.S.</td>
<td>96</td>
<td>38.9</td>
<td>57</td>
<td>23.1</td>
<td>94</td>
<td>38.1</td>
<td>247</td>
<td>0.25</td>
</tr>
<tr>
<td>Causing physical discomfort (^*)</td>
<td>Industrial Vocational H.G.</td>
<td>61</td>
<td>46.6</td>
<td>35</td>
<td>26.7</td>
<td>35</td>
<td>26.7</td>
<td>131</td>
<td>0.13</td>
</tr>
<tr>
<td>Fear of being caught by the police (^*)</td>
<td>Düzce Anatolian H.S.</td>
<td>1</td>
<td>1.9</td>
<td>32</td>
<td>60.4</td>
<td>20</td>
<td>37.7</td>
<td>53</td>
<td>0.05</td>
</tr>
<tr>
<td>Fear of becoming addicted (^*)</td>
<td>Total</td>
<td>100</td>
<td>27.6</td>
<td>92</td>
<td>25.4</td>
<td>170</td>
<td>47.0</td>
<td>362</td>
<td>0.37</td>
</tr>
<tr>
<td>Contradictory to religious beliefs (^*)</td>
<td></td>
<td>123</td>
<td>38.7</td>
<td>75</td>
<td>23.6</td>
<td>120</td>
<td>37.7</td>
<td>318</td>
<td>0.32</td>
</tr>
<tr>
<td>Leading to loss of energy and ambition (^*)</td>
<td></td>
<td>10</td>
<td>11.1</td>
<td>35</td>
<td>38.9</td>
<td>45</td>
<td>50.0</td>
<td>90</td>
<td>0.09</td>
</tr>
<tr>
<td>Losing self-control (^*)</td>
<td></td>
<td>48</td>
<td>28.6</td>
<td>38</td>
<td>22.6</td>
<td>82</td>
<td>48.8</td>
<td>168</td>
<td>0.17</td>
</tr>
<tr>
<td>Unamusing</td>
<td></td>
<td>40</td>
<td>40.4</td>
<td>31</td>
<td>31.3</td>
<td>28</td>
<td>28.3</td>
<td>99</td>
<td>0.10</td>
</tr>
<tr>
<td>Family disapproval (^*)</td>
<td></td>
<td>63</td>
<td>28.5</td>
<td>57</td>
<td>25.8</td>
<td>101</td>
<td>45.7</td>
<td>221</td>
<td>0.22</td>
</tr>
<tr>
<td>Friend disapproval</td>
<td></td>
<td>21</td>
<td>31.3</td>
<td>25</td>
<td>37.3</td>
<td>21</td>
<td>31.3</td>
<td>67</td>
<td>0.07</td>
</tr>
<tr>
<td>Not wanting to be with substance users (^*)</td>
<td></td>
<td>47</td>
<td>29.2</td>
<td>38</td>
<td>23.6</td>
<td>76</td>
<td>47.2</td>
<td>161</td>
<td>0.16</td>
</tr>
<tr>
<td>No friends who use an addictive substance (^*)</td>
<td></td>
<td>38</td>
<td>52.1</td>
<td>22</td>
<td>30.1</td>
<td>13</td>
<td>17.8</td>
<td>73</td>
<td>0.07</td>
</tr>
<tr>
<td>Being expensive (^*)</td>
<td></td>
<td>35</td>
<td>61.4</td>
<td>14</td>
<td>24.6</td>
<td>8</td>
<td>14.0</td>
<td>57</td>
<td>0.06</td>
</tr>
<tr>
<td>Being unable to find</td>
<td></td>
<td>8</td>
<td>34.8</td>
<td>6</td>
<td>26.1</td>
<td>9</td>
<td>39.1</td>
<td>23</td>
<td>0.02</td>
</tr>
<tr>
<td>Being against the principles (^*)</td>
<td></td>
<td>131</td>
<td>41.3</td>
<td>43</td>
<td>13.6</td>
<td>143</td>
<td>45.1</td>
<td>317</td>
<td>0.32</td>
</tr>
<tr>
<td>Other reasons (^*)</td>
<td></td>
<td>0</td>
<td>0.0</td>
<td>20</td>
<td>32.3</td>
<td>42</td>
<td>67.7</td>
<td>62</td>
<td>0.06</td>
</tr>
</tbody>
</table>

\(^*\): Chi-square test (post hoc Bonferroni adjusted method), \(^*\): For girls' vocational high school-industrial vocational high school \( p < .05 \), \(^\&\): For industrial vocational high school-Düzce Anatolian high school \( p < .05 \), \(^\$: For girls' vocational high school-Düzce Anatolian high school \( p < .05 \).

The ratios of 14 to 16 year old students who did not use addictive substances for fear of suffering mental disorders \( (p = .001) \), fear of getting caught by the police \( (p < .040) \), contradiction with religious beliefs \( (p = .001) \), not wanting to lose self-control \( (p < .0017) \), family disapproval \( (p = .001) \), friend disapproval \( (p = .001) \), its cost \( (p < .001) \), being unable to find such substances \( (p = .011) \), and contradiction with personal principles \( (p < .033) \) were found to be significantly higher than those of the students aged between 17 and 19 \( (p < .05) \).
The ratios of the students who did not use addictive substances because of fear of becoming addicted ($p = .001$), being unable to find sources of those substances ($p = .009$), and contradictions with personal principles ($p < .001$) were found to be significantly different by grade or class ($p < .05$), whereas no significant difference was found between the students who did not use substances for other reasons by grade or class ($p > .05$).

Discussion

This study determined that male students did not use addictive substances because of fear of having mental and physical problems, fear of becoming addicted, contradictions to their religious beliefs, family disapproval, not wanting to be with people who abuse substances, not having friends who use addictive substances, the cost of those substances, and the use of such substance being contradictory to their principles. Female students, however, did not use addictive substances only because of fear of being caught by the police. The study results are similar to the results of other studies on this subject. Koca and Oğuzöncü (2015) and Pirinçci and Erdem (2004) found that students did not use addictive substances because of the potential harm to their health caused by substance use and because they considered addictive substance use as a sin based on their religious beliefs.

Parents, siblings, and friends are powerful determinants of adolescents’ behavior as to whether they will or will not use addictive substances (Alikaşifoğlu, 2005). Studies determined a strong relationship ($r=0.43-0.60$) between current and future substance abuse in adolescents and their status of having close friends who abused addictive substances (Allen et al., 2003; Branstetter et al., 2011; Marschall-Lévesque et al., 2014; Simons-Morton, 2004). The present study found that the status of having friends who do not abuse addictive substances was very influential, especially on male students’ behavior of not abusing substances.

Previous studies with adolescents showed that male students had higher rates of substance abuse and substance-abuse related problems than female students. However, recent studies revealed the exact opposite of that result, stating that the rate of substance abuse in female adolescents has been increasing rapidly, and that they use more harmful substances than male adolescents (Landsverk & Reid, 2013; Mitchell et al., 2016; Schinke et al., 2008). Despite the present increase in substance abuse, women still want to avoid involvement with the police and the justice system than do men and so commit fewer crimes (Hodgins et al., 2014: Mitchell et al., 2016). This study suggests that the female students’ fear of being caught by the police arises from sociocultural expectations from the female gender and through perception of females’ committing crime as a humiliating and stigmatizing phenomenon in society.
This study determined that industrial vocational high school students did not use substances only for fear of being caught by the police. Secondary education in Turkey is divided into two types: (i) general secondary education and (ii) vocational and technical education. Vocational schools are the schools easiest to enter and have the worst reputation among Turkish secondary education institutions (Günbayı & Tokel, 2014). Akkuş et al. (2016; 2017) found that the frequency of smoking and abusing alcohol, marijuana, and ecstasy among students in industrial vocational schools was significantly higher than that among students from general secondary education schools.

The fact that the students aged 14 to 16 years received higher addiction information scores and had more reasons for not using addictive substances is thought to arise from their developmental period. This result also shows that the effects of education and conferences on prevention of substance dependence in primary education should continue during the first years of secondary education.

Kaynakça/References


