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# Examining the Adolescents' Smoking According to Their Peer Pressure Levels and Gender

Binnaz KIRAN-ESEN\*

## Abstract

In this research the difference in the students' smoking according to their peer pressure levels and gender is examined. This study is executed in 2001-2002 academic year on 718 2<sup>nd</sup> grade high school students (311 girls and 407 boys) between ages 15-17 who are impartially selected by cluster sampling and random sampling techniques. A *Peer Pressure Scale*, developed by the author, is used to determine the peer pressure. Information about the frequency of students' smoking is calculated according to the answers of students. The relations between variables and the difference between scores are analyzed by chi-square test. The results show that, there is a significant relation ( $p < 0.05$ ) between peer pressure levels and smoking. It is, however, determined that gender does not bring about a meaningful differentiation on adolescents' smoking. Existence of a relation between smoking and peer pressure among adolescents makes it necessary for the schools' psychological counseling and guidance services to cover studies about decreasing peer pressure.

## Key Words

Adolescent, Peer Pressure, Smoking.

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Individuals study, have fun, and socialize in a social group. These groups determine how the individual will live and what kind of person he or she will be. It is a strong desire, for an adolescent, to have a peer group and to be appreciated by that group (Kulaksızoğlu, 2001). Meanwhile, one of the primary characteristics of adolescence is to become a member of the peer group. Peer groups are small groups who are formed by close friends with similar ages and share similar behaviour (Kircler, Palmonari & Pombeni, 1993). Adolescent peer groups present independence from parent control, having precocious and confident feelings, and group approval and acceptance (Cook & Daley, 2001).

Although some authors ascribe peer groups some very valuable positive functions related to adolescence (Castrogiovanni, 2001; Cook & Dayley, 2001; Dacey & Travers, 1996; Lingren, 2001), the opinion about its negative effects is dominant (Aydın, 1999; Brown, Feldman & Elliott, 1990; De Coursy, Halperin & Samson, 2001; Helsen, Vollebergh & Meeus, 2000; Ryan, 2000). The group may well serve adolescents' needs and thus can take control over them and this brings about peer pressure.

Santor, Messervey and Kusumakar (2000), define peer pressure as urging and encouraging the individual to join in the activities of the same age group. Peer pressure may be occurred indirectly as well as directly. Indirect effects can occur without the young realizing it (Ryan, 2000). Adolescents can be affected more by their peers wishes of him than what they actually do (Fischhoff, Crowell & Ripke, 1999).

As a result of peer pressure, adolescents demonstrate many unwanted habits, and one of these negative habits is smoking. If the other members of the age group smoke, this makes usually an enough reason for the adolescent who had joined the group to start smoking. Young people may see this as a way to be accepted by the group and to prove that they are not children. Besides, smoking in peer groups, can create a suitable environment for smoking and may be encouraging (Ogden, 1997).

Piko (2001) states that adolescents usually use cigarette, alcohol, and drugs when they have difficulties in dealing with their problems and can't estimate future consequences. It is known for years that one of the reasons of increasing ratio of illness and death is smoking. Smoking addiction is included in *defeat in using psychoactive substances* with the

name *nicotine addictiveness* in DSM IV (1994). It is true that in the recent years, there is an increase in cigarette, alcohol, and drug use in Turkey and while it has become a widespread addiction, the age of meeting these substances, on the other hand is, decreasing. Researches conducted in schools show that smoking has increased from 18.7 % to 29.4 % between the years 1991 to 1995 and also adolescents who smoke everyday forms 22 % of the group (The Research and Medical Treatment Center for Alcohol and Substance Addicts (AMATEM), 1999). Studies in Turkey and in the world show that starting age for using these substances is approximately age of 15 which is in the adolescent age range (Ataklı, 1996; Guttman, 1995; Hawkins & Hane, 2000).

As for Baykan and Bulduk (1990), the main reasons of youngsters for starting smoking are; encourage of friends, adapting to the group, and imitating others. Smith and Stutts (1999), found out the causes of smoking as peer pressure and smoking habits in the family. Ogden (1997) too, states that smoking of parents, brothers of sisters, and peers is an important risk factor for starting smoking. It appears from many study results that peer effect is usually an enough factor in itself to start smoking and continuing this behavior.

While some researches shows a relation between smoking and peer pressure (Barber, Bolitho & Bertrand, 1999; Simons- Morton, Haynie, Cramp, Eitel & Saylor, 2001; Smith & Stutts, 1999), Guttman (1995) considers peer pressure as the chief cause of smoking. Besides, Singleton and Pope (2000), who say that stress and peer effect are two important reasons for smoking in adolescents, state that although usually the effects of peers decrease in the last years of adolescence, smoking probability increases if the close friends are smoking. Furthermore, Bauman and Fisher (1986); Krosnick and Judd (1982) state that the influence of peer pressure on smoking of the adolescent is between 10-40 % (as cited in Fischhoff et. al., 1999).

When the studies about this subject are examined, it is seen that the most important reason for starting smoking and continuing is the friends. The adolescents can perceive smoking as a way for acquiring a respectable status in peer group, so they can prove that they are not child any more and shows they can oppose adults' rules. Thus direct or indirect peer pressure is very effective in adolescents' smoking.

The aim of this research is examining the differences between the smoking behaviors of high school students whose gender and peer

pressure levels are different. Meanwhile, the relation between smoking behaviors of students and their peer pressure levels is also examined.

### Method

#### Sample

Cluster sampling and random sampling method is used while choosing the sample group. Firstly, 5 administrative districts are selected among 28 districts that have more than 2 public high schools in 2001-2002 academic year. Then, 10 high schools are selected with random sampling method by taking 2 from each district. A sample group is also chosen randomly from each high school in a way that it will form 1/3 of second grade students. After reaching 758 students, 40 of them are excluded because of various errors in their answers. At the end, 718 students between ages 15-17 form the sample group where 311 girls and 407 boys are present.

#### Measures

In this study, a *Peer Pressure Scale*, developed by author, is used to determine the peer pressure, while frequency of the student's smoking is determined by using the answers of students to the questions about smoking in the scale's personal information part.

#### Peer Pressure Scale (PPS)

*Peer Pressure Scale* (PPS), developed by author, is a five point Likert scale that has the goal of measuring adolescents' peer pressure. The Cronbach Alpha Coefficient calculated for the reliability of PPS is .90 for the whole scale (34 items), .89 for the direct peer pressure subscale (19 items), and .82 for the indirect peer pressure subscale (15 items). Also the retest reliability coefficient is; .82 for the whole scale, .74 for the direct peer pressure subscale, and .79 for the indirect peer pressure subscale. Factor analysis is used, in the study of the validity of structure. The total variance revealed by the two factors obtained is 40.527 %. A single score is calculated from the scale. While High scores mean high peer- pressures, low scores show low ones.

#### Procedure

PPS is applied to the research group by the researcher. It takes approximately 15 minutes answering the scale. The answers of students about their peer pressure levels and smoking give the data that is to be classified. Chi- square test is used in order to test the significance of the difference between observed and expected frequencies and the relation between two variables. That's why chi-square test is used to determine if there is a significant difference or not in the smoking of

groups whose peer pressure levels and gender are different. 718 students are arranged in rows according to their peer pressure scale points in order to determine the peer pressure level. Later, considering the mean ( $\bar{x} = 50$ ) and the standard deviation ( $sd=14$ ), peer pressure levels are separated from one another as low, medium, and high in order to standard deviation.

### Results

In the study, it has been examined that if there is a significant relation between students' peer pressure levels and smoking or not. 70 % of students never smoke while 10,2 % rarely, 10,7 % sometimes, 2,4 % usually, and 6 % regularly smoke. 92,3 % of students who have low peer pressure never smoke, while this percent is 72,8 % for normal peer pressure, and 39,3 % for the high. Meanwhile; 0,4 % of students who have low peer pressure always smoke while this percent is 2,2 % for normal peer pressure and 19,7 % for high. In respect of these findings, it can be concluded that smoking frequency goes down when peer pressure level decreases and smoking frequency goes up when peer pressure level increases.

The relation between students' peer pressure levels and smoking are analyzed by chi-square test and its value is 168,64 and this is greater than the critical value of 15,51. It is significant at 0.05 level and shows that there is a significant relationship between students' peer pressure levels and smoking.

93,1 % of the girls who have low peer pressure state that they never smoke, while this percent is 72,5 % formal peer pressure and 39,5 % for the high. Meanwhile; 13,2 % of the girls who have high peer pressure smoke every time while this percent 2,1 % for normal peer pressure and none for the low. Likewise; for the boys, the per cents go as 91,8 %, 72,9 %, and 39,3 % for never smoking while peer pressure goes from low to high where the percents go as 21,4 %, 2,4 %, and 1 % for smoking regularly.

When the girls who have low, normal, and high peer pressure levels are compared with one another in respect of smoking frequency, chi-square value has been found greater than the critical value 9,49 in all conditions. These values are significant at 0.05 level with 4 degrees of freedom. Likewise, chi-square values have been found significant at the same study for the boys. According to these findings, it can be said that peer pressure level and smoking frequency are directly paralleled both for the girls and the boys. When the smoking frequencies

of the students with different peer pressure levels and gender are compared, chi-square value is found less than the critical value 9,49 at the comparison of girls and boys with low peer pressure, girls and boys with normal peer pressure, and girls and boys with high peer pressure. These three values are insignificant at 0.05 level with 4 degrees of freedom. In the light of this finding, we can say that gender does not make a difference in students' smoking frequencies.

### Discussion

In this research, it has been expected that there would be a significant relation between students' peer pressure levels and smoking. It is found that the results of the research have a characteristic that supports this expectation. It is the respect of the peer group to the adolescents that is important rather than thoughts of society for them. Sometimes they may do many things like smoking-even sometimes unwillingly- to achieve this. Some authors state that majority of adolescents start smoking because of peer groups' pressure (Guttman, 1995; Singleton & Pope, 2000; Yörükoğlu, 1996).

The findings of this research are paralleled with the previous findings of the researches on adolescents that examine relation between peer pressure and smoking. Results of many researches show that there is a significant relation between peer pressure and smoking (Barber et al., 2001; Dishion & Skaggs, 2000; Duncan et al., 1995; Hoffmann; 1993; Raniseski & Sigelman, 1992; Simons- Morton et al., 2001; Smith & Stutts, 1999; Steinberg & Fletcher, 1994; Unger, Rohrbach, Howard-Pitney, Ritt-Olson, Mouttapa, 2001). At the same time; the influence of smoking on continuing smoking because of presenting opportunities for making new friendships and the effect of smoking of friends in peer groups (Korkut, 1994; Ogden, 1997; Wang, Eddy & Fitzhugh, 2000) and the effectiveness of adolescents' friends' pressure on starting smoking are put forward (Aytaçlar, Ertekin, Türkcan, Ersül & Sirma, 1997).

In this study, also differences in students' smoking with respect to their peer pressure levels and gender had been searched. Result of research showed that peer pressure level and smoking frequency are directly correlated with each other for both girls and boys. When previous studies are examined, it will be seen that there are not too much studies about difference in students' smoking with respect to peer pressure levels and gender. Only Dishion and Skaggs (2000) state that smoking increases in relation with the increase in peer pressure. Another result obtained about this sub-

ject is that smoking frequency does not differentiate with gender. While there are researches that support the idea of gender does not affect smoking with taking peer pressure into consideration (Burt, Dinh, Peterson & Sarason, 2000; Simons-Morton et al., 2001), there are also researches which show that boys experience peer pressure more than girls in smoking (Dishion & Skaggs, 2000; Smith & Stutts, 1999; Wang et al., 2000), and boys start smoking in younger ages and their smoking frequencies are greater than girls (Korkut, 1994). When the researches that take only smoking among students into consideration are examined, it may be seen that boys smoke more than girls (Çöpür & Türkcan, 1999; Doğan, 1989).

By findings of this research, we come to a conclusion that there is a direct significant relation between peer pressure levels and smoking. This result shows the importance of control on youngsters and points out that especially families should know that peer groups interact and have a continual control on their members' smoking and other substance uses. As smoking becomes a greater problem today, it is suggested that especially adolescents should be informed on smoking and peer pressure, and schools' counselor should work on against peer pressure in necessary circumstances.

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