

The Relationship Between the Turkish Adolescents' Smoking and Their Family Environment

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Abstract: Adolescence is a critical period at beginning to smoking and many factors have affect on the adolescents' smoking behavior. This study aims to investigate the relationship between the adolescents' smoking and their family environment. 615 adolescents took part in this study (girls= 283, boys=332). The ratio of the smokers that participated in the study is 13.00% (n=80), the ratio of the non-smokers is 87.00%(n=535). The unity-solidarity and control scores that are perceived by the non-smoking adolescents are found reasonably high. At the same time, meaningful relationships are brought to light between the adolescents' smoking behavior and the gender, socio-economic status, maternal smoking.

Key words: Adolescents • Smoking • Family environment

INTRODUCTION

Smoking is accepted as the second reason of the death in the world and the fourth general risk factor that causes various illnesses [1]. This behavior appears generally in adolescence[2]. Early smoking is a serious public health problem that is difficult to be prevented. Approximately 80 % of the adult who begun smoking before the age of 18 [3]. In the last years it has been observed that a significant increase in the cigarette and drug abuse ratios of the adolescents in the developed countries [4-5].

In a study that has been conducted in Turkey among 18599 adolescents, it is found that the ratio of the students who smoke every day is 22 % [6]. 4.9% of the French adolescents who are between 12 and 15, and the 25.2 % of them who are between 16-18 smoke regularly [7]. According to the study that has been conducted in Greece, it is found that among the adolescents between 15 and 18, the ratio of the boys who smoke is 32.45% and the ratio of the girls who smoke is 27.19% [8]. The first smoking experience during the adolescence is caused the fact that adolescents can find cigarettes easily [9]. The parents, adults and close friends who smoke are the three potential sources for the on the adolescents' smoking behavior. In this study, only the attitudes of the parents are emphasized. The attitudes of the parents are defined in four types in the literature as follows; authoritative, disciplined, and permissive and free [10]. The adolescents

are affected by the smoking behaviors of the parents. This situation results from the attitudes of the parents rather than their beliefs regarding cigarette [11]. Some studies set forth that the authoritative attitudes of the parents decrease the risk of the adolescents' smoking, but the negative attitudes of the parents regarding smoking decreases the possibility of smoking more significantly [12].

The fact that the parents have little function impact on their children and besides they are models for them as they smoke have impact upon the adolescents' getting to smoke [13]. The risk of smoking of the children whose parents smoke are relatively high in comparison with the children whose parents do not smoke and these adolescents perceive themselves more addicted in comparison with the children who smoke the same amount of cigarette [14].

There is a relationship between the, smoking consumption of other substances and the expectations concerning them [15]. Social-cognitive theory emphasized that the social environment has an impact on the behaviors of the children. Social environment can impose smoking on children and adolescents. In this process adolescents develop some expectations about smoking. Adolescents structure the information that they gain from the experiences in to the individual schemata suitably that they own. As the schemata are formed as peculiar to the individual, while some information is obtained totally some is obtained selectively during

structuring the information [17]. As happening in the other behaviors, this selectivity is valid for the information related with smoking. The selectivity in the course of getting the information designates the attitudes and expectations of individual smoking [18].

The individual schemata of the people who smoke are different from the people who do not smoke and the ex-smokers [19]. These diagrams that begin to develop during childhood affect the smoking habits of the individuals who are at different ages [11]. In the formation of the beliefs and the fundamental ideas that develop according to the schemata, the inadequate and inaccurate instruction have some roles. The information that is negative in reality but transformed into positive information with the social processes increases the tendency for smoking among adolescents of [20]. The requirements of the period of adolescence [21], environmental and biological factors, social development process, psychiatric past, genetic infra-structure and gender variable affect smoking [22].

The main aim of this study is to examine the relationship between the attitudes displayed in the family atmosphere and the adolescents' smoking habits. In this regard, it is dwelt upon some kind of differences of the adolescents' some demographical features and their family atmospheres, who smoke and who do not smoke.

MATERIALS AND METHODS

Participants: The precedents of this study are 615 adolescents (girls= 283, boys=332), who study in different high schools of the city of Trabzon in Turkey (Science High School, Anatolian High School, Technical School, Normal Programmed School). The data was gathered between the months of April and June. The adolescents who took part in the study were between 14 and 19 years old (Mean = 16.02, SD = 1.01). The ratio of the adolescents who smoke is 13.00 % (n=80), while the ratio of the adolescents who do not smoke is 87.00 % (n=535). The average cigarette smoked by the smokers is 8.91 pieces. The first cigarette smoking experience age is eight.

Measures: *Personal Information Form.* This form was developed by the researcher. There are socio-demographical data (age, gender, economic status) and smoking habit (being smoker or non-smoker, the smoking habit of the parents and number of cigarettes they smooke per day in the form.

Family Environment Questionnaire [23]. It is a Likert kind of measure which was developed by Fowler (1982)

and adopted to Turkish by Öner and Usluer. The psycho-social perception of the family environment is measured with this measure. The test which is composed of a total 26 substances has the sub-measures called unity-solidarity (16 substances) and control (10 substances). The correlations of the substances in the unity-solidarity test were found between 23 and 65, while it was found in the control test between 19 and 56. It was counted that the assurance of the test was 82 for unity-solidarity and 74 for control. Factor analysis was conducted for the construction validity.

Processing: The measure tools were applied after the permission was obtained from the schools. The application was conducted by the counselors who were informed about the measure and its application. The students were informed about the aim and significance of the study before the application. The students did not have to write their names on the measures. The application which was conducted in one session in the class atmosphere lasted 30 minutes.

Statistical Analysis: SPSS 15.0 package program was used for the data analysis. For the nominal data Ki-kare test was used, while for the constant scores the independent test was used.

RESULTS

Table 1 shows the relationship between some variables and the adolescents' smoking. According to this, smoking is found to be reasonably related with the sex ($\chi^2= 8.07, df = 1, p < .004$), socio-economic income level ($\chi^2= 6.60, df = 2, p < .04$) and mother's smoking ($\chi^2= 15.84, df = 1, p < .001$). These symptoms show that the

Table 1: The summary of the smoking according to some features of the students

Variables	Nonsmokers		Smokers		χ^2	P
	f	%	f	%		
Gender						
Female	258	91.2	25	8.8	8.07	.004
Male	277	83.4	55	16.6		
Socio Economical Status						
Low	41	75.9	13	24.1	6.60	.04
Moderate	437	88.3	58	11.7		
High	57	86.4	9	13.6		
Paternal Smoking						
Yes	282	86.2	45	13.8	.35	.55
No	253	47.8	35	12.2		
Maternal Smoking						
Yes	36	69.2	16	30.8	15.84	.001
No	499	88.6	64	11.4		

Table 2: The relationship between the family status of the students and the smoking habits

Family environment	Smoking status	N	Mean	SD	t	p
Unity-solidarity	Nonsmokers	535	56.34	6.54	3.07	.002
	Smokers	80	53.92	6.66		
Control	Nonsmokers	535	34.81	4.84	2.35	.02
	Smokers	80	33.16	5.99		

smoking ratio of the boys is higher than the smoking ratio of the girls. The smoking ratio of the adolescents who have the low socio-economic status level is higher than the others. It is found that the smoking ratio of the mothers of the smoking-adolescents is high.

Table 2 shows the difference between the family relationships of the smoking adolescents and the non-smoking adolescents. According to this, there is a considerable difference between the unity-solidarity perception of the smoking and non-smoking families ($t = 3.07$, $p < .002$). According to this result, the scores ($M = 56.34$, $SD = 6.54$) that the non-smoking adolescents obtain from the unity-solidarity measure are higher than the scores ($M = 53.92$, $SD = 6.66$) of the smoking adolescents. It is also found that there is a significant difference between the control scores of the smoking and non-smoking adolescents ($t = 2.35$, $p < .02$). Hereby it is seen that the scores ($M = 34.81$, $SD = 4.84$) of the non-smoking students are higher than the scores ($M = 33.16$, $SD = 5.99$) of the smoking students.

DISCUSSION

In this study significant differences are found between the family environments of the smoking and non-smoking adolescents. According to these results, the level of the non-smoking adolescents' perception of the family attitudes as unity-solidarity is higher than the smokers. This event is parallel with the results of the previous studies. Wilson *et al.* [24] determined that the forms of the family relationships (close relationships between the parents and the children, passing time together, being in a healthy relationship and the habit of having dinner together protect their children from the smoking habit who study in high schools and universities.

The non-smoking adolescents' perception level of the family control is found to be higher than the smokers. These results demonstrate that the family attitudes affect the smoking habits of the adolescents. This result is similar also to the previous studies. Castrucci and Gerlach [12] determined that the attitudes of the parents

decrease the risk of smoking reasonably (OR = 0.74, % 99 CI: 0.58-0.95). The mothers' smoking related rules or their transmitting messages to their children against smoking are found to be related with the smoking habits of the children [25]. Beside that kind of messages, parents' being models by smoking and their positive attitudes to the smoking form a significant synergy on adolescents' obtaining smoking habit [26].

According to the findings that we obtain, there is a relationship between the sex variable and the smoking habit. The smoking ratio of the boys is higher than the girls. This result is parallel with the literature findings [27-28]. Soldz and Cui [29] determined that the smoking risk indexes of the boys are five times more than the risk indexes of the girls.

The researches that have been conducted in the last years apply new dimensions to the relationships between gender and the smoking habit. For instance a negative relationship was observed between the age of the boys and the smoking habits in the study conducted in Cho *et al.* [30]. That is, the older the boys, the less they smoke have a tendency for smoking. On the other hand, it was determined that the smoking habit of the girls increases parallel with their age. It was found in Morley and Hall that [31] the smoking experience began to increase in the last years but the amount of the cigarette consumption decreased.

We also determined a significant relationship between smoking and the socio-economic status level. According to this result, the smoking ratio of the individuals who have a low socio-economic status level is higher. Some of the previous research result also determined that the smoking risk decreases by the increase of the economic income level [32]. According to a research conducted in the USA, it was found that the people who have the income under 20 thousand dollars have more smoking risk by 16 % in comparison with the people who have high income level [33]. SED in low level increases the smoking risk [34]. It was also observed in the research conducted on the American Africans that the people who have a low level income have a high smoking ratio [35]. According to some researches, poor individuals spare a significant part of their income to the cigarette expenditures [36].

In our study, while the smoking habit of the adolescents is found to be related with their maternal smoking, it is not found to be related with the smoking habit of the fathers. Similar and different results were obtained in also the previous studies. For instance according to the research that was conducted on 7426

adolescents in the Netherlands, it was found that the smoking habits of the parents not only increases the smoking risk of the adolescents but also it is affective on the monthly and even daily smoking habits of their children [37].

Chassin *et al.* [11] emphasized that the parents have an important role in forming the attitudes contributing to the emergence of the smoking habit besides getting smoking habit. Doherty and Allen [13] determined that there is not a significant relationship between the smoking habits of the parents and the smoking habits of the adolescents. Fidler *et al.* [38] suggested that the smoking habits of the biological parents do not have a significant effect on the risk of getting to smoking of their children. In a research that was conducted in the South Korea it was found that there is not a significant relationship between the adolescents' smoking habit and the paternal smoking habits ($r=0.02$), the friendship effect and smoking habit is reasonably related ($r=0.64$). In the same study it was determined that the parents' pressure and the smoking habits of the adolescents are not related [39].

As a result in this study, the scores of unity-solidarity and control show that the non-smokers adolescents perceived about their families turned out to be reasonably higher than the scores of smokers. This case shows that the attitudes of the families are effective on smoking. This study has some limits. The smallness of the precedent group and the answers are based on the personal expressions are one of the overriding reasons of these limits. In addition, negligence of the other psycho-social variables related with smoking is another limit. The most important feature of the research is that this study examines the relationship between smoking and the family attitudes that is formed with the effect of the Turkish culture. It is suggested that the studies which will be conducted in the future should be in extensive groups and longitudinal.

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