

Smoking in Greek educational context

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Abstract:The aim of this work was to investigate the presence of smoking in the Greek educational environment. More specifically, the target of the research was to investigate the environment that the student/smoker moves in, the factors that contribute to making the student begin and then continue to smoke as well as the age at which the student starts. The research included 1350 male and female school students from North Greece (Macedonia and Thrace). The participants were randomly selected. The data was collected by a questionnaire constructed by the students during the courses. The statistical analysis of the data included elements of descriptive statistics. The conversations were analyzed by the use of the qualitative research method of data analysis. From the results of the research and the conversation that followed them up we can conclude that: a. gender is a differentiating factor of the smoking rates, with the female students having a higher percentage than the male students. b. The female students tend to start to smoke at an earlier age than the male students. c. Curiosity, family, and the friendly environment are the most important starting causes of smoking.

Keywords: Smoke; high school students; health; technology .

1. Introduction

Over the last few years more and more researches were conducted targeting the investigation of the consequences of smoking as well as second-hand smoke. There are a lot of reasons justifying that. Perhaps one of the main reasons is the increase of cardiovascular diseases and lung cancer, especially in women. Another factor might be the increasingly lower age that people start smoking. A reality that a few years ago was hard to imagine now is present in Greece. Children between the ages of 10 and 11 begin to smoke while the difference among the sexes is not substantial (Stavgianoudaki, 2020).

According to the estimation of the World Health Organization (WHO, 2007), almost 1.1 billion adults are smokers whilst the deaths related to smoking are more than 5 million a year. The predictions are that by 2030 the deaths related to smoking will reach the 8 million a year mark (Warren et al., 2009). Something like that is expected to happen since according to Sokou (1994) is estimated that every year 30 million children and teenagers are starting to smoke.

The numbers regarding the rates in Greece according to the Institute of Health of the Greek American College, the Anticancer Association, and the Research University Institute of Mental Health in a sample of 1908 adults (Kathimerini, 2019), 17.0% of the sample identified as a chain smoker whilst 96% identified as a habitual smoker. While according to the results of the research the number of smokers has decreased significantly during the years 2008-2018, the age group that presents almost no reduction is the adults between 45 and 50. In that age group, 26.1% smoke, in comparison to only 7.9% of the people between 18 and 24 and 9.9% of the people between 25 and 34.

One decade ago, during May of 2009 and World No Tobacco Day, the head of the National Department of Smoking professor Bechrakis announced that approximately 80% of young boys start to smoke around the age of 18. Actually, one out of every four starts smoking before the age of 15. The fact that highlights the importance of these statistical results is that 70-90% of the adult smokers stated that began to smoke before the age of 18. The crucial age that government agencies, teachers, and parents must zero in on is between 12 and 13, a period during which many children try smoking as the deputy director (Anastasea - Vlachou) of the Greek Company of Teenage Medicine highlighted. The cause of this is that at such a young age even a few cigarettes are enough to create an addiction to nicotine, a substance highly addictive. According to the American Lung Association, it is exceedingly difficult for the majority of teenagers that have smoked 100 cigarettes to withdraw from smoking, since the addiction has already formed (Nea, 28/05/2009).

According to the results of the research of Kokkevi, Fotiou, Kanavou, Stavrou, and Richardson (2016) 39.2% of the students at the age of 16 have smoked at least one time in their life whilst 11.1% are chain smokers. One-third of the students that have smoked at least one time, did it at the age of 13 or earlier. The number of boys who smoke on a daily basis (13.7%), is higher than that of the girls (8.6%). The boys are more fanatical smokers than the girls, with a percentage of 3.9% in comparison to only 1.9%. In addition to that, boys are beginning to smoke at an earlier age than girls. Finally, one of the few results that inspire hopefulness, is that since 2015 there is a measurable decrease in most of the indexes regarding smoking. Similar were the results of a research that was conducted in 2013 with a sample of approximately 4000 students, which were

publicized in 2017. According to that research, 13.3% of the students between 13 and 15 are smokers whilst the percentage of the boys was again higher than that of the girls (Kathimerini, 2014).

In a research conducted in 2018 with a sample of 3863 students of the final grade of the elementary school, the second grade of junior high school, and the first grade of high school it is clearly shown that: a) 15.5% of the teenagers between 11 and 15 have smoked at least one time; b) the boys and the girls are smoking equally since 14.9% of the boys stated that are smokers and 16.1% of the girls; c) in a period of 20 years between 1998 and 2018 the number of those who have smoked at least one time has decreased from 22.3% to 15.5% and we must also take note of the fact that until 2009 the decrease had been equal among boys and girls whilst since 2010 it has occurred only to boys; d) 3.3% stated that is smoking daily (3.9% of the boys and 2.7% of the girls). Regarding the differences in age groups, the percentage is almost zero in 11 years old children whilst it raises to 1.5% in 13-year-olds and reaches 8.1% for the 15 years old children. In this time span of 20 years has also been noticed no statistically significant rise in the percentage of students that smoke daily. Nevertheless, there has been a slight drop in the female students in particular, from 5.4% to 2.7% (Kokkevi, Fotiou, Kanavou, Stavrou, & Richardson, 2019). The location that students tend to choose to smoke the most is the toilet room in their school and the schoolyard (13%) after that comes their house (10.6%), the coaching school (6.5%), and their friend's houses (13.9%).

According to Stavgianoudaki (2020), children that grow up in a family with parents who smoke are more easily addicted to smoking therefore there is a higher chance for them to start smoking in comparison to children that grow up in a non-smoking family. Other factors influence children towards making them start smoking, are the easy access and the social environment that they grow up in. Approximately 90% of chain smokers begin to smoke at an early age. Additionally, it is worth mentioning that children that have smoker friends are more likely to start smoking themselves.

Research regarding smoking in school spaces showed: a) 38.4% of the students have parents that neither one of them smokes, 22.9% have both of their parents smoking, 22.4% that only the father smokes and 14.7% have only the mother smoking; b) 66.8% do not have siblings that smoke, 12% that do not have siblings, 2.1% that do not know whether they smoke or not and 17.5% that their siblings smoke; c) 58.6% of the students would not smoke if their best friend suggested smoking with him/her, 21.1% of the students would definitely smoke with their best friend if he/she suggested it to them; d) 73.3% of the sample stated that has noticed teachers of the school smoke.

The purpose of this study was to investigate the presence of smoking in the Greek educational environment. Specifically, the main target of this research was to investigate the environment in which the student/smoker moves in, the factors that contribute to a student start and continue to smoke as well as the age at which he/she starts smoking.

2. Method

2.1 Participants

The research included 1350 male and female high school students from North Greece (Macedonia and Thrace). The participants were randomly selected. The demographic characteristics of the participants are shown in Table 1.

Table1. Demographic characteristics of participants by gender & age

Age	Gender		Total	
	Male	Female		
15	50	50	100	7.41%
16-18	425	695	1120	82.96%
18+	55	75	130	9.63%
Total	530	820	1350	
	39.26%	60.74%		

2.2 Procedure / Instrument

The research was conducted during the course of Technology and it served the purpose of getting the students acclimated to the way survey research is made. The way that students got familiar with the methods used during survey research, was to analyze throughout the teaching hours the proper terms that are used during this kind of research as well as some data analysis basic terminology.

After an incredibly detailed bibliographic research regarding smoking specifically in school spaces but in general, as well, the research axes were set. As a result, the notions and concepts that were about to be researched were determined. Consequently, a survey was put together with the purpose of showcase the causes that push young people to start smoking, the spaces that they smoke, and the age that they began to smoke. This survey was given to 20 students of both sexes that answered positively in the initial question which was whether

they smoke or not. This procedure was done two times to ensure that the way that the questions were formulated was adequate.

The final survey was made up of two parts. The first part included 5 questions regarding the sex, age, grade of the student, and the profession of the father and mother. The second part was formed by 7 questions about whether or not the student smokes, the age that he/she started to smoke, the reasons that made him/her start smoking, the places that he/she usually smokes in, and which are the people from their family environment that influenced them regarding start smoking.

2.3 Statistical Analyses

The statistical analysis of the data included elements of descriptive statistics. The conversations were analyzed by the use of the qualitative research method of data analysis.

3. Results

3.1 Smoking Students

From the results that are displayed in the second board, we can come to the conclusion that 20% of the students are chain smokers whilst 18.52% of them used to be chain smokers but quitted smoking. We can also notice that the percentage of female student smokers (16.3%) is quadruple in comparison to the percentage of male student smokers (3.7%). Additionally, 190 female students (14.07%) used to be smokers, but they quitted

Table 2. Smoking Students

Are you smoking?	Male		Female		Total	
Yes, I smoke	50	3.70%	220	16.30%	270	20.00%
I smoked but now no	40	2.96%	80	5.92%	120	8.89%
I tried sometimes	20	1.48%	110	8.15%	130	9.63%
No, I do not smoke	420	31.11%	410	30.37%	830	61.48%
Total	530	39.26%	820	60.74%	1350	100%

3.2 Students' family and friendly context as differentiate factor of smoking

From the results that are shown on the third board, it is concluded that the vast majority of the students are living in a friendly environment towards smoking, since 59.52% of the students live in a household that at least one of the parents is a smoker. We should also take note of the fact that 22.21% of the students live in a household that both parents are smokers.

Table 3. Smoking parents

Smoking parents	
Both parents	300 22.21%
Father only	320 23.72%
Mother only	170 12.59%
Neither the father nor the mother	560 41.48%
Total	1350 100%

The situation that is depicted by the numbers in these boards is deteriorated by the fact that 36.96% of the students have siblings who smoke on a consistent basis. (Table 4). Furthermore, from the 270 student smokers, 240 of them live in a household that everyone smokes (every sibling and both parents). While 30 of the student smokers live in a household that the mother and the sibling's smoke.

Table 4. Smoking brothers & sisters

Smoking brothers & sisters	
All of them	220 16.30%
Some of them	260 19.26%
None of them	830 61.48%
I have not brother & sister	40 2.96%
Total	1350 100%

From the total sample, only 300 students do not have friends who smoke. On the contrary, 940 students have at least one friend who smokes whilst the remaining 110 students do not have any friends that do not smoke (Table 5).

Table 5.Smoking friends

Smoking friends			
All of them	110	8.15%	
Some of them	940	69.63%	
None of them	300	22.22%	
Total	1350	100%	

3.3 Starting smoking age

The female students are leading the race on the age that students begin to smoke too. More specifically 10 female students smoked for the first time in an age before 12 while none of the boys started smoking at such a young age. The majority of female students (44.23%) started smoking between 13-15 whilst most of the boys started at 15 years old or later (Table 6).

Table 6. Starting smoking age

Starting smoking age	Male	Female	Total
<12	-	10 1.92%	10 1.92%
13-15	305.77%	230 44.23%	260 50.00%
15+	8015.38%	170 32.69%	250 48.08%
Total	11021.15%	410 78.85%	520100%

3.4 Causes that led to starting smoking

According to the findings that are displayed in board number 7, we can safely assume that the family environment does not play a major role in students starting to smoke since only 20 students started to smoke to imitate their parents. Friends however might be a bigger influence according to the 117 students that started to smoke to imitate their friends. Quite interesting is the fact that some students start smoking with the purpose of attracting a mate. Finally, we can notice that curiosity is the biggest factor that gets people to start smoking since 335 students stated that they began to smoke out of curiosity to what it feels like.

Table 7.Causes that led to starting smoking

I started to smoke because...	Male	Female	Total
Wanting to imitate their parents	10 1.92%	10 1.92%	20 3.84%
Wanting to imitate a favorite teacher/ professor	--	10 1.92%	10 1.92%
Wanting to imitate a friend	40 7.69%	37 7.12%	77 14.81%
Wanting to attract a mate	25 4.81%	53 10.19%	78 15.00%
Out of curiosity	35 6.73%	300 57.69%	335 64.42%
Total	110 21.15%	410 78.85%	520 100%

Students tend to smoke in most places they got to. Some of these places are the school (even though is not permitted), the coaching school, and in their nights out. There is a big number of students that are so addicted to smoking that they smoke in every place they go to, even though it might not be permitted (Table 8).

Table 8.Smoking Places

I smoke at...	Male	Female	Total
School	10 1.92%	509.62%	60 11.54%
Coffee-bar	50 9.62%	18034.62%	23044.24%
Coaching school	10 1.92%	--	10 1.92%
House	--	10 1.92%	10 1.92%
Wherever I am	407.69%	17032.69%	21040.38%
Total	11021.15%	41078.85%	520100%

4. Discussion-Conclusions

Before a few decades, the fact that someone was smoking was seen as a symbol of freedom, independence, and prestige. Presently due to the results and the information that is provided by researches and medical examinations to people who smoke, it would be logical for smokers to reconsider and make the decision to quit smoking since it has a bad effect on their health and quality of life. In contrast to that according to the researches, it is exactly the opposite that is happening.

The main target of the assignment was to study the factors that contribute to a student starting and continue to smoke. Additionally, the starting age and the family environment were examined as influence factors. Although there were indirect purposes of the research such as getting the students to understand terms like research methods, survey research, sample/research population, and statistical analysis. This research focuses on the findings of the poll that was conducted after certain courses.

According to the results of this research, 20% of the students of the sample are chain smokers whilst 18.5 either used to smoke but has quit or just smoked a small number of times. These findings agree with other researches results that were conducted at a national level in Greece. (Kathimerini, 2019; Kokkevi, Fotiou, Kanavou, Stavrou, & Richardson, 2016; Nea, 2009). It is really impressive and worrying at the same time that even today, smoking is being seen as a symbol of freedom, independence, or style according to a lot of students.

Regarding gender as a differentiating factor, the results of this specific research are in contrast with the findings of other researches since it shows that the female students are the majority of the chain as well as habitual smokers. Contrary to the research that was conducted in 2013 (Lakasas/Kathimerini, 2014), according to which the male students that smoke (14.9%) tends to be more than the girls (11.6%) while in 2018 3.9% of the male and 2.7% of the female students smoke daily. As far as the number of students that have smoked at least one time, once again the results of this research are in contrast with the findings of the research of Kokkevi, Fotiou, Kanavou, Stavrou and Richardson (2019). According to which the gender does not differentiate the percentage of the students that have smoked at least once in their lifetime. This differentiation might be caused due to the fact that the sample of each research comes from a different geographical location and social background.

The differentiation due to gender can also be observed in the starting smoking age. The majority of the female students have smoked at least one time during the crucial age of 13-15. While the male students start smoking mostly during the age between 15 and 17. Maybe this is caused by the ignorance of the students regarding the serious health consequences that smoking has on the cardiovascular system as well kidneys, bone marrow, reproductive and respiratory system especially when the individual begins to smoke at an early age (Varvarigos, 2016; Goldman, & Schaffer, 2012; Horn, Pao, & Johnson, 2012).

Ms. Vlachou (Nea, 2009) highlights the risk of smoking for women. Specifically, when women start smoking before the age of 18, there is a considerably large danger of infertility or miscarriage. Additionally, she mentions that the risk is even higher in the case of pregnancy and that the baby is in danger of been born underweight or with a smaller head than normal. As a result, she suggests that the ideal for women who try to get pregnant is to quit smoking a lot earlier before they intend to try to get pregnant. This is to give a break to their body, so the baby does not suffer the consequences. Also, the risk continues to exist even during breastfeeding since the nicotine is passed to the baby directly since nicotine is being concentrated in the milk twice as much as in the blood.

Regarding the reasons that students start to smoke, curiosity is the main one. Taking into consideration the family environment of the students it is noticed that the students live in an environment that favors smoking (Stavgianoudaki, 2020). This situation is only getting worse in school since the students do not learn about the health risks that smoking has and in addition to that, they are able to observe their own teachers smoke which can influence consciously or subconsciously. That is being confirmed by the fact that 10 female students started smoking to imitate these teachers that they were seeing as “role models”.

Lastly from the results of the research and the conversation that followed them up we can conclude that:

- a. gender is a differentiating factor of the smoking rates, with the female students having a higher percentage than the male students.
- b. The female students tend to start to smoke at an earlier age than the male students.
- c. Curiosity, family, and the friendly environment are the most important starting causes of smoking.

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