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Impacts of Smoking Habit by Young Generation in Our Society

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Abstract

Tobacco use, which is rising quickly in developing countries, kills 5.4 million people a year worldwide. This paper explores the impacts of smoking habit by young generation in our society. Using 180 primary data from different public and private university students of Bangladesh, the analysis finds that smoking is associated with poor overall health and a variety of short-term adverse health effects among young people and may also be a marker for underlying mental health problems, such as depression among adolescents. The habit of smoking is largely seen among young generation because of lack of the awareness & proper education. There are some other causes like- peer pressures; attractive advertising, desire to look mature etc. & also some biological factors encourage young people to smoke.

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1.0 Introduction

Tobacco use kills 5.4 million people a year.[1] This is likely to increase over the next decades as tobacco consumption in developing countries. In addition to the health impacts, smoking diverts poor households' resources away from other more productive use. For example, Banerjee and Duflo (2007) report that in Mexico, the extremely poor in rural areas spend about 8.1 percent of their budget on tobacco and alcohol. The literature on the determinants of smoking behavior points to a clear link between price increases and a reduction in the number of cigarettes smoked. Increasing taxes on tobacco has therefore often been advocated as a means to reduce smoking.

However, recent evidence casts some doubts on the health of tobacco taxes. Indeed, Adda and Cornaglia (2006) show that the price increases lead smokers to smoke more intensively (i.e., extract more nicotine per cigarette) which is detrimental to health. Youth smoking behavior is the object of both extensive public-policy interest and academic research. This interest arises due to two main reasons. Firstly, most smokers start as youths and youth smoking often is being translated into adult smoking, with the well-known consequences on morbidity and mortality. Bangladesh, with a population of about 150 million people, is one of the poorest countries in the world. About 15 local companies compete for the lower end of the cigarette market. In Bangladesh the habit of smoking is gradually increasing & addiction has come as a dreadful curse on social life. The young generations of all social classes are now involved in smoking habit. According to Bangladesh Bureau of Statistics- among youth generation in this country (Age 13-18), 4% currently smoke cigarettes (Boys 3%; Girls 1%); 42% of youth (Age 13-18) are exposed to secondhand smoke in public places and 35% of youth are exposed to secondhand smoke at home. It was found that nearly 60 percent of new smokers were under the age of 18 when they first smoked a cigarette. Smoking is associated with poor overall health and a variety of short-term adverse health effects in young people and may also be a marker for underlying mental health problems, such as depression, among adolescents. The habit of smoking is largely seen among poor young generation because of the lack of awareness & proper education. There are some other causes like- peer pressures; attractive advertising, desire to look mature etc. & also some biological factors encourage young people of all social classes to smoke. Consequently the youth, the future of the nation, are running to the depth of darkness.

[1]http://www.who.int/tobacco/mpower/tobacco_facts/en/index.html
Accessed 5/17/2008

2.0 Literature Review

A wide range of studies in the economics literature has evaluated the responsiveness of cigarette consumption to different anti-smoking policies. These include the establishment of smoking bans, age restrictions, the implementation of information campaigns on the negative health effects associated with smoking and, most often, the increase in cigarette prices through higher taxes (see, among others, Chaloupka and Grossman, 1996; DeCicca, Gilleskie and Strumpf, 2005; Gruber; 2001; Kenkel and Mathios, 2002; Lewit, Coate and Grossman, 1981; Powell, Tauras and Ross, 2005; Ross and Chaloupka, 2004; Ross et al., 2005; Tauras and Chaloupka, 1999; Tauras, O'Malley, and Johnston, 2001). DeCicca et al. (2002) find that prices and taxes have a non-significant (and sometimes positive) effect on smoking initiation during high school. They also find that the price elasticity of smoking participation becomes less negative as the cohort ages. In contrast, Gruber (2000) finds that prices have a significant negative effect on smoking participation and that this effect is more remarkable for older teens.

Given these mixed results regarding the effectiveness of tax policies and the alarming youth smoking rates that still prevail, the consideration of other determinants of youth smoking behavior should be a priority for researchers and could be helpful for health policy makers when attempting to design more comprehensive anti-smoking policy tools. In this respect, a growing body of literature in several disciplines has assessed the role played by family and social interactions in determining many youth behavioral outcomes. Several studies (Gaviria and Rapahel, 1997; Smith and Stutts, 1999; Powell, Tauras and Ross, 2005) explore the influence of peers on smoking decisions, while Clark and Etilé (2003) analyze the spousal correlation on smoking behavior. Despite the potential importance of intergenerational influences on consumption habits, most of the previous literature has focused on income and earning transfers. An exception is Waldkirch, Cox and Ng (2004), who shows that although income is an important source of the intergenerational correlation, parental choices and experiences also affect children's consumption behavior. As for cigarette consumption and the intergenerational transmission of smoking habits, on which this paper focuses, has been the object of extensive physiological and medical research, the majority of which reveals that adolescents are significantly more likely to smoke if their parents smoke (see for instance, Ary et al., 1999; Harakeh et al., 2004; Hill et al., 2005; Jackson and Henriksen, 1997; Jackson et al., 1997; Lai, Ho and Lam, 2004;

Wakefield et al., 2000; Wen et al.,2004). However, studies that focus on the link between parental smoking choices and youth smoking behavior are rare in the economics literature.

3.0 Broad Objective of the Study

To gain understanding on the main impacts of smoking habit by young generation in our society.

3.1 Specific Objectives of the Study

1. To determine what variables are related in smoking habit by young generation.
2. To determine what are the impacts of smoking habit in society.
3. To determine what are the impacts of smoking habit on health.
4. To determine what are the impacts of smoking habit on economy.
5. To determine the causes why young people prefer to smoke.

4.0 Methodology

Our target population is young generation who smoke cigarette. We have mainly considered students of colleges & universities in Dhaka city.

4.1 Sampling Units

Students of colleges & universities in Dhaka city.

4.2 Sampling Frame

Our list of units contains several major educational institutions, like-

- Tejgon College

- Dhaka College
- Mirpur University College
- Mirpur Bangla College
- Dhaka Commerce College
- City College
- Dhaka University
- North-South University
- Jagannath University
- BRAC University
- Stamford University
- Bangladesh University of Science & Technology
- East-West University
- American International University of Bangladesh
- Bangladesh University of Business & Technology
- University of Development Alternative
- Daffodil International University

4.3 Sampling Elements

Every young people (mainly student) who smokes.

4.4 Sample Size Determination

To determine sample size we use the following formula:

$$n = \frac{z^2\ pq}{d^2}$$

where $n =$ the desired sample size

$z =$ the standard normal deviate, 1.96 which corresponds to the 95% confidence level.

$p =$ the proportion in the target population estimated to have particular characteristics.

$q = 1 - p$

$d =$ degree of accuracy desired (Precision level of the estimate)

P for different characteristics is different - ranging from 0 to 1.In the absence of prior knowledge we take, $p = 0.5$. $d = 0.0731$, $z = 1.96$, $p =$ 0.5, $q =$ 1-0.5 = 0.5.

$$n = \frac{(1.96^2)(0.5)(0.5)}{(.0731^2)} = 179.73 \approx 180$$

The necessary sample size is 180.

4.5 Data Collection/Sources of Data

Primary data collection is used here. To collect data we first built up a questionnaire. Afterwards we collected data by using personal interview method from the above universities students.

4.6 Sampling Design

The non-probability snowball sampling was used in our study. For our study we selected different sampling units but it was difficult to identify the target population young people who smoke. So at first we went one university or college and found out one smoker. After completing his response from the chain response we selected another respondent who was also smoker from those units. In this way we went to one by one sampling units and collected the target sample 180 by snowball sampling. From 180 samples 2.2 percent respondent age is 15-17, 6.1 percent respondent age 18-20, 53.9 percent respondent age 21-23 and 37.8 percent student age above 23.Table 1 shows the age of respondent of the young people.

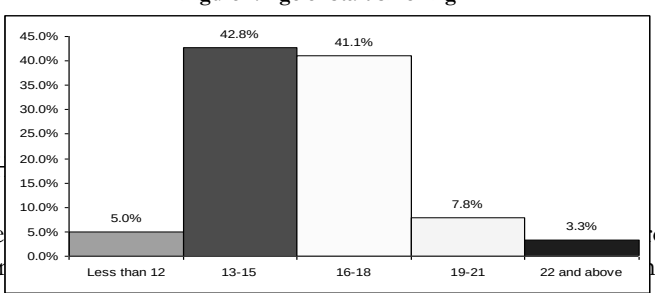
Table 1: Age of the Respondent

Age	Frequency	Percent
15-17	4	2.2
18-20	11	6.1
21-23	97	53.9
Above 23	68	37.8
Total	180	100.0

5.0 Findings

From the figure we see that young smokers commonly start smoking at the age of 13-15. About 42.8% smokers start smoking at the age of 13-15. Then 41.1% smokers start smoking at the age of 16-18. Thus we may conclude that 13 to 18 years age group is vulnerable for start smoking. This is the time periods of teenagers. According to our research 88.9% smokers start smoking before the age of 19 years. We also see that only 3.3% smokers start smoking at the age of 22 and above.

Figure 1: Age of Start Smoking

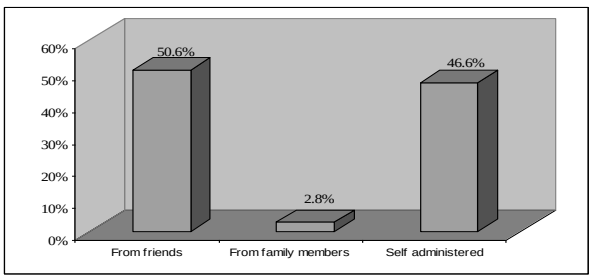


5.1 H

From the ound 50.6% learn to s oke through self-administered and interest and 2.8% young smokers are the influenced by

the family members if their family member smokes. It is clear that friends are the main influenced factor for smoking. So when they start smoking they also motivate other friends to smoke. It is also seen that some smokers are encouraged for starting smoking by his smoker father or their smoker family members.

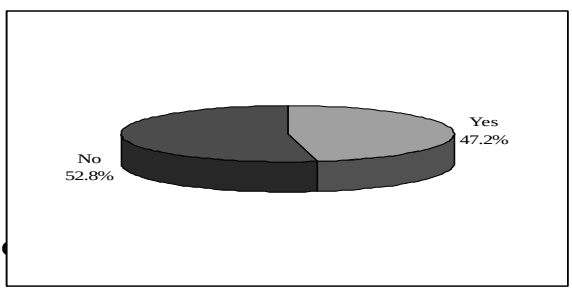
Figure 2: Source of Learning Smoking



5.2 Parents' knowledge about Smoking Habit

From the figure 3 we have found that among 180 young smokers 47.2% smokers' families know about their sons' smoking habit and 52.8% families are not aware about their sons' bad habit like smoking. It is also seen that most of the parents are not conscious about their sons' smoking habit.

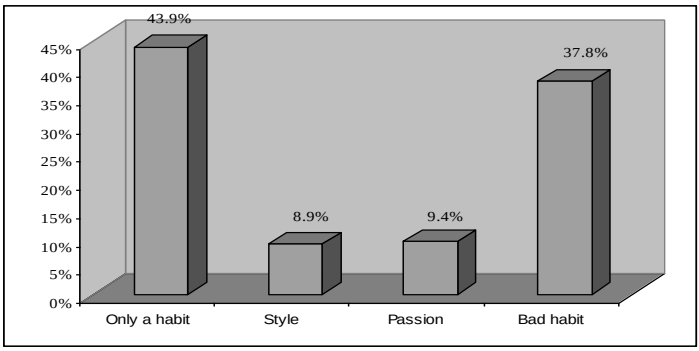
Figure 3: Parents Know About Smoking Habit



5.3 Resp

In our Research we have also investigated what are the perceptions about smoking are. We have found that most of the young smokers (43.9%) think that smoking is only a habit, 37.8% smokers think smoking a bad habit and 9.4% smokers consider it as a passion and 8.9% consider smoking a style. Therefore there are several perceptions about smoking but it is clear that near about 37% smokers know that it is bad habit but they continue smoking.

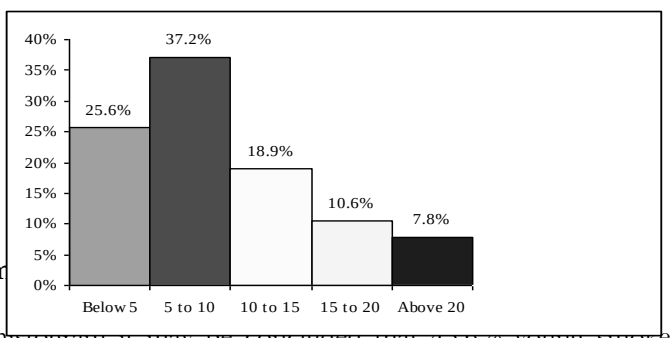
Figure 4: Smoking Habit Considered By Respondents



5.4 Number of cigarettes in a Day

From the figure 5, among 180 respondents 37.2% young smokers regularly smoke 5 to 10 times a day. In the second position there are 25.6% smokers who smoke below 5 times per day. But it is clear that young chain smokers is 7.8%.

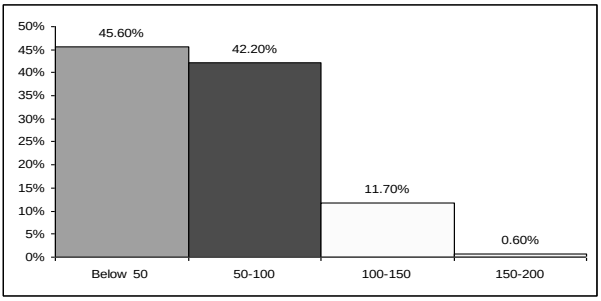
Figure 5: Number of Smoke in a Day



5.5 Am

From the histogram it may be concluded that 43.6% young smokers spend below TK. 50 per day on smoking. Besides 42.2% smokers spend TK. 50-100, 11.7% spend TK. 100-150 and around 0.6% smokers spend TK.150-200 daily on smoking. Therefore, 87.8% smokers spend TK.0-100 daily on smoking on an average. The figure shows that the distribution of amount spent on smoking in a day is positively skewed.

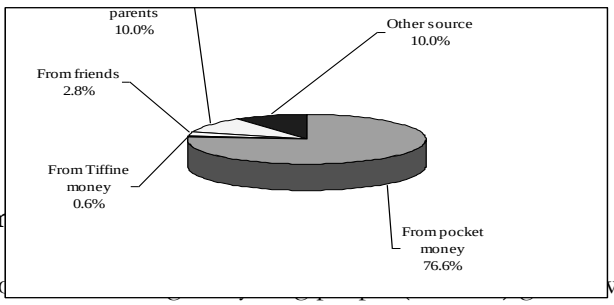
Figure 6: Daily Spent on Cigarette



5.6 Financing the Purchase of Cigarettes

From our study, we have found that among 180 young smokers 76.7% smokers finance for cigarettes from their pocket money, 10% smokers collect takas by giving false statement to their parents, 2.8% from their friends-circle, 06% from tiffin money, and the rest 10% smokers finance for cigarette from various sources and self-income. It is clear that some parents give their sons enough monthly pocket money and therefore, they have sufficient money for smoking.

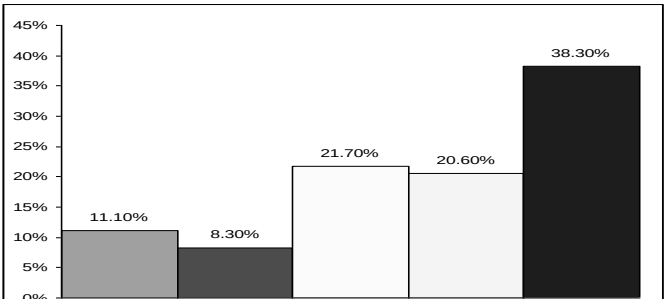
Figure 7: Financing for Cigarette Consumption



5.7 Am

Figure 8 sh ve Tk. 1500 as monthly pocket money. Secondly, 21.7% young people's monthly pocket money is Tk.700-1000 and 20.6% young people's monthly pocket money is Tk.1000-1500. The monthly amount of pocket money follows a negatively skewed distribution. So on an average, young people especially students of colleges and universities monthly get Tk.700-1500 per month as their pocket money.

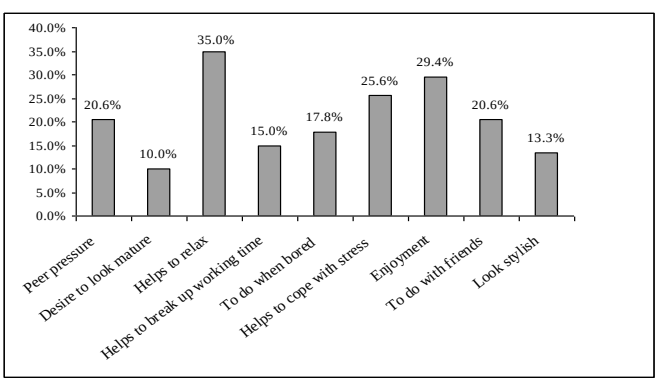
Figure 8: Monthly Pocket Money (Tk.) of Young Smokers



5.8 Reasons of Smoking

There are several reasons behind smoking though the young people know the bad impacts of smoking habit. In our research we have tried to find out some major reasons. The reasons are peer pressure, desire to look mature, help to relax, help to break up working time, to do something when bored, helps to cope with stress, enjoyment, to do with friends, look stylish etc. According to our study 20.56% young people smoke for peer pressure or request, 10% smoke to look matured and 35% smokers believe that smoking helps to relax. Also 17.78% young people treat smoking as something to do when bored and 25.56% believe that smoking helps to cope with stress. A large amount of young people around 29.44% smoke cigarette as an enjoyment.

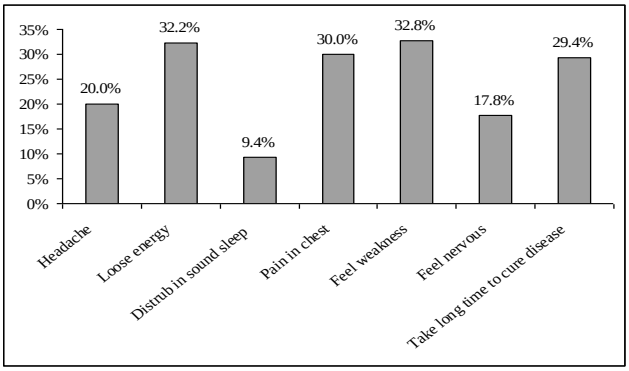
Figure 9: Reasons of Smoking



5.9 Impacts of Smoking on Health

Smoking has large impacts on health of young smokers. The main impact on health is headache, loose energy, disturb in sound sleep, pain in chest, feeling nervous and taking long time to cure disease. Most of young smokers feel more than one disease. From the figure 10 we can see that around 20% young smokers feel that smoking habit is responsible for headache, 32.2% feel that loose energy, 9.4% disturb in sound sleep, 30% pain in chest, 32.8% feel weakness, 17.8% feel nervous, 29.4% take long time to cure disease and they also feel the other minor problem on health.

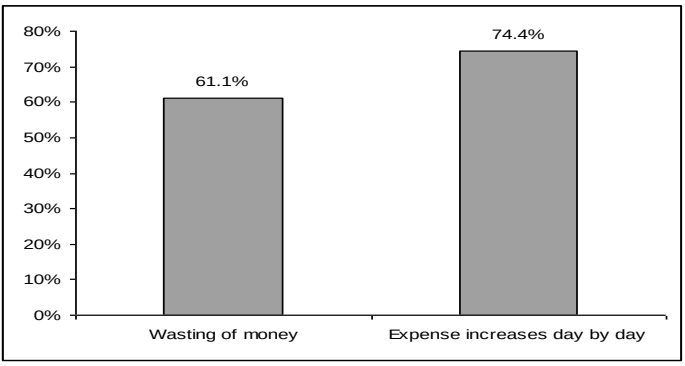
Figure 10: Impacts of Smoking on Health



5.10 Impacts of Smoking on Economy

Among 180 respondents, around 61.11% young smokers expressed that smoking is nothing but waste of money. Almost 74.4% young smokers have accepted that their expense is increasing day by day on cigarette consumption.

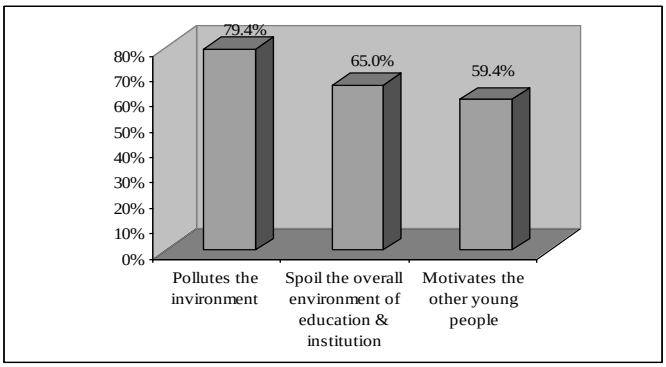
Figure 11: Impact of Smoking on Economy



5.11 Impacts of Smoking on Society and Environment

Analyzing the data we have found that 79.4% respondents believe that cigarette pollutes the environment, 65% respondents feel that smoking habit spoils the overall environment of education and institution, 59.4% young smokers agreed that a young smoker badly motivates the other young people in the society.

Figure 12: Impacts of Smoking on Society and Environment



5.12 Main Problems Smokers Feel about Smoking

Statement	Percent	Score	Average	Mode
Smoking is expensive	47.8	408	2.27	Very important
Smoking is bad for health	48.9	423	2.35	Very important
Don't like the feeling dependent on cigarettes	56.1	397	2.21	Important
Smoking makes clothes and breath smell	46.7	390	2.17	Important
Smoking makes bad presentation to others	55.6	360	2.00	Important
Smoking is unpleasant for near people	47.8	360	2.00	Important
Smoking makes less fit	59.4	339	1.88	Important
Smoking is bad for the near people	47.8	396	2.20	Important

5.13 Multiple Regression

In order to measure the average amount spent on smoking in a day, we consider a multiple regression which include the amount spent on smoking in a day as the dependent variable and number of smoke in a day, how learned to smoke, whether any family member is smoker or not, amount of monthly pocket money, whether close friend is smoker or not, whether friends encourage you to smoke, reason for smoking, time of starting smoking, age of the respondent are independent variables. Here we consider Backward method to fit the model. The following model is considered:

Model Summary

Model	R	R Square	Adjusted R Square
1	.800(a)	.640	.621
2	.800(b)	.640	.623
3	.800(c)	.640	.625
4	.800(d)	.640	.627
5	.800(e)	.639	.629
6	.798(f)	.637	.628

a. Predictors: (Constant), number of smoke in a day, how learned to smoke, whether any family member smoker or not, amount of monthly pocket money, whether any close friend is smoker or not, whether friends encourage you to smoke, reason for smoking, time of starting smoking, age of the respondent.
b. Predictors: (Constant), number of smoke in a day, how learned to smoke, amount of monthly pocket money, whether close friend is smoker or not, whether friends encourage you to smoke, reason for smoking, time of starting smoking, age of the respondent.
c. Predictors: (Constant), number of smoke in a day, amount of monthly pocket money, whether close friend is smoker or not, whether friends encourage you to smoke, reason for smoking, time of starting smoking, age of the respondent.
d. Predictors: (Constant), number of smoke in a day, amount of monthly pocket money, whether friends encourage you to smoke, reason for smoking, time of starting smoking, age of the respondent.
e. Predictors: (Constant), number of smoke in a day, amount of monthly pocket money, reason for smoking, time of starting smoking, age of the respondent.
f. Predictors: (Constant), number of smoke in a day, amount of monthly pocket money, reason for smoking, age of the respondent.

From the model summery it was observed that R Square and Adjusted R Square are high for the model 5 but it was observed that the coefficient of time

of starting smoking is not statistically significant. Thus model 6 is the best model. So we consider model 6 as our fitted model.

Model	Coefficients		t	P value
	B	Std. Error		
(Constant)	0.734	0.214	3.435	0.001
Age of the respondent	-0.103	0.053	-1.953	0.052
Amount of monthly pocket money	0.057	0.027	2.126	0.035
Reason of smoking	0.048	0.024	2.034	0.043
Number of smoke in a day	0.442	0.028	15.925	0.000

The fitted model is

$$\begin{aligned} \textit{Amount spend on smoking in a day} &= 0.734 - 0.103*(\text{Age of the respondent}) \\ &+ 0.057*(\text{Amount of monthly pocket money}) \\ &+ 0.048*(\text{Reason of smoking}) \\ &+ 0.442*(\text{Number of smoke in a day}) \end{aligned}$$

Hypothesis Testing

Let us consider the following hypothesis

$H_O: \mu_1 = \mu_2 = \mu_3 = \mu_4 = 0$ i.e., all the coefficients in the model are simultaneously zero.

Against $H_A: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq 0$ i.e., all the variables in the model are statistically significant.

Anova

	Sum of Squares	df	Mean Square	F	P value
Regression	55.808	4	13.952	76.652	0.000
Residual	31.853	175	0.182		
Total	87.661	179			

Based on the diagnostic test result we reject the null hypothesis. Thus we conclude that all the variables in the model are statistically significant, i.e. the fitted model is accepted.

6.0 Conclusion

In this paper, we explore the impacts of smoking habit by young generation in our society. Using primary data, we find that there are three sources of learning smoking those are from friends, from family members and self-administered. At present, young generation, is seemed of having uncontrolled smoking habit which is very dangerous for their immature age and health structure. Analysis suggests that up to 18 years, it is the most valuable time for human growth. We have found that among our survey respondents a large young people have started smoking at the age of 13-15 years.

Analyzing the data we have found cigarette pollutes the environment, smoking habit spoils the overall environment of education and institution, a young smoker badly motivates the other young people in the society.

Smoking has large impacts on health of young smokers. The main impact on health is headache, loose energy, disturb in sound sleep, pain in chest, feeling nervous and taking long time to cure disease. Most of young smokers feel more than one disease. Young smokers have accepted that their expense is increasing day by day on cigarette consumption.

There are several reasons behind smoking though the young people know the bad impacts of smoking habit. In our research we have tried to find out some major reasons. The reasons are peer pressure, desire to look mature, help to relax, help to break up working time, to do something when bored, helps to cope with stress, enjoyment, to do with friends, look stylish etc.

Young smokers sometimes encourage other young people to smoke with considering to look mature and smart and it is great stimulus for social dilapidation. Smoking habit not only harms smokers but also nearby people. So the overall impact of smoking habit by young generation does not bring any positive result rather than ruins.

In this paper, we set up a null hypothesis that there is no significant difference between the age of respondent, amount of monthly pocket money,

reason of smoking and number of smoke in a day. But the hypothesis was rejected. Therefore the variables are statistically significant.

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