

ATTITUDES TOWARD CIGRETTE SMOKING AS
DEVIANT BEHAVIOR

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Abstract

This study investigates on-going changes in the attitudes towards cigarette smoking. It examines changes in the attitudes of both students and employees for two periods of time 1991 and 1995. It consists of 417 males (54.58%) and 347 females (45%). A total of 35% of the sample are smokers. It is made up of more than half males (59%) and (9%) of them females. Findings show a significant increase in opposing cigarette smoking for males and female in 1995 compared to 1991.

Significant differences were found in the attitude towards cigarette smoking attributed to time lag, smoking status, sex, and job ($F= 7.713, 81.892, 25.017, 34.399$; $P=.005, .0001, .0001, .0001$ respectively).

Moreover, significant changes in the process of labeling deviance categories over time (1991 vs. 1995) are obvious. Smokers have accepted negative social labels attached to their smoking behavior. There is an increase in the amount of this acceptance over the time. Non-smokers are tougher on labeling smokers. Significant changes has occurred in defining and redefining cigarette smoking as deviant behavior.

Introduction

People have been using tobacco for over (3000) years. Even before the invention of cigarette-making machine in 1818 (Kane, Blake, Frye, Miller, Wittington, 1987, p.260) people have used tobacco. Needless to say that cigarette smoking causes serious health problems to both smokers and those exposed to smoking (passive smoking) (Warner, 1989), harm to people, threat to public health (Dekker; Looman, Andriaanse and Van Der Mass, 1993), and economy. As a result of these negative functions on the macro levels of society, smoking behavior may be viewed as a "deviant" behavior (Robbins & Kline, 1991, Markle & Troyer 1979).

Cigarette smoking has not become only a national social problem, but a global one. Worldwide, the World Health Organization (WHO) estimates that smoking is responsible for 2.7 million deaths per year, two thirds of whom live in non western nations (Stebbins, 1991 P.1318). Smokers need 20 years on average to start suffering from smoking-related diseases. (Stebbins, 1994). An estimated one billion smokers consume 5 trillion cigarettes per year whose lives will be in danger (Stebbins, 1991, P.1317).

There has been a global awareness for the negative impact of smoking on health. The World Health Organization (WHO) has called for "Health For all by the year 2000" as a goal to be achieved to eliminate the increasing number of smokers in the world, who suffer from the smoking-related diseases. This goal is far from being achieved in the Third World countries.

The WHO estimates that 3 million persons will die annually during 1995 as a direct result of smoking (Stebbins, 1994, P.106). Global cigarette consumption over the past 30 years has been growing at a rate of about 2.1% each year, exceeding the world's 1.2% population growth rate. Worldwide approx. 5.3 trillion cigarettes were produced in 1989. Cigarette production in less developed countries is increasing by 3% per year while decreasing 1% annually in the developed nations (Battlefield, P.28 1989). In 1990 U.S. exported 164.3 billion cigarettes representing a 41.3% increase over 1989. These cigarettes are equivalent to (18) round trips to the moon. Three of the U.S.A. companies accounted for 40% of the world cigarette productions. (Stebbins, 1994, P.106).

The Importance of the study

Cigarette smoking for a large number of people over the world is an every day activity. However, the attitudes towards smoking is changing over the time (Markle & Troyer, 1979). The change in attitudes is attributed to factors such as male's masculinity, and women's independence and liberation, gender differences, public awareness, socialization, the use of tobacco at wars, advertisement, anti-smoking forces, and medical facts about smoking. Cigarette smoking can be seen as social problem which provides a potential area for research. Smoking is harmful for self and for others. Smokers have been labeled as polluters of food and air. Some places are smoking free places (food factory, doctor) (Markle, Troyer, 1979). Cigarette smoking accounts for cancer deaths more than any other factor not only for smokers but also for passive smokers (Higgmson, Muir and Munoz, 1992).

Cigarettes smoking deserves special attention from researchers in the fields of health , sociology, Psychology, Political science and medicine. This attention is based on the fact that tobacco is the only legally available product that causes serious danger to human health (Stebbins, 1991). Cigarette smoking has be become an interesting area of research in different disciplines (i.e,sociology, Psychology,&Medicine). from a socilogical point of view ,Mainstream smokers harm side streams' health by ingestion of the nicotine which is a drug behavior. Cigarette smoking is emerging as a multifaces problem (i.e.,health,economic, social, legal, national & international problem).

Cigarette smoking is contains drugs which cause physical as well as psychological dependence. Nicotine is a chemical in tobacco which produces depenence and tolerance. Both mainstream smokers and side stream smokers are harmed from smoking, the former is harmed directly and the later is harmed indirectly (Meeks-Mitchell&Heit,1987). On the macro level, Cigarette smoking accounts for cancer deaths more than any other khown factor. A large amount of the nationalbudget goes to cigarette smoking, for example jordan imorted

(JD12340698) tobacco in 1994 (Department of Statistics, 1994). Bystanders who are exposed to smokers (passive smoking) may develop a cancer (Higginson, Muir, Munoz,1992). Cigarette smoking is harmful for babies even before birth. An advertisement like the following one reflects the fear that babies may be harmed by smoking.

"Now that you're Pregnant
You're not eating for two
You're breathing for two
Quit smoking....

for both of you. " (Meeks & Heit, 1987, P. 364).

Developed countries have been aware for long time to the harm smoking causes to people, especially to the adolescents. For example, between 1895-1921 fourteen states in U.S.A. completely band cigarette smoking . Michigan law enacted in 1915 stated :

" Any person within this state who
sells, gives, or in any way furnishes
any cigarette in any form to a
person under twenty-one years of age
shall be punished by a fine not to be
exceed fifty dollars or imprisonment in
the county jail for a term not to
exceed 30 days " (Complied Michigan Law;
722 611 el seg cited Nuehring and
Markle, 1974, P. 515).

Moreover, the possession of cigarettes by minors is illegal and it is punished for more than ten dollars or a five days in jail for each offense (Nuehring & Markle, 1974, P. 515). Military profession found to be much higher in cigarette smoking than the general population (Cronan, Conway, & Kaszas, 1991, P. 1349).

University and governmental departments are vary in their structures, and this variation raises the question of whether differences in the structure are related to differences in the behavior and attitudes of their members. University structure is different from governmental structure. University have moving audience of students who are in dependent position and vulnerable to

research. It is nonprofit organization. On the other hand governmental departments have a captive audience for eight hours a day, independent, expensed, self-reliant, with some bureaucratic rules governing their behavior.

Attitudes determine behavior, knowing the attitudes of people help controlling and modifying their behaviors. especially with deviant and health behavior. Cigarette smoking is considered a major health problem to all people in society, smokers and non-smokers (passive smokers) are affected by smoking. This problem dangerous the life of a significant portion of people who will occupy the social positions in society in the near future. Healthy members is a demand for society in order to function properly . Smoking in the essence of this study to explore the differences between different social groups (students vs. employees, males vs. females, smokers vs. non-smokers....etc.) in terms of smoking behavior. This study also measure the awareness of people to the health problems caused by smoking and to their rights to have clean air .

Cigarette Smoking in the developing countries

Because of the increasing pressure on smoking in the U.S.A. and UK. from the anti-smoke forces, the Multinational cigarette companies moved with their deadly products to the developing countries with strong encouragement from the government of the U.S.A. and UK. (Stebbins, 1994) . Cigarette sales in under developing countries are increasing at least three times as fast as elsewhere. There are more tobacco smokers in developing countries than in developed nations . As a result, the risk of cigarette-related disease in developing countries is increasing at "alarming" rate (Ball, 1986, P. 215).

Efforts to control and prevent smoking in the developing countries are far less than needed. Governmental policies and practices to discourage smoking is disappointing in the third world countries. Developed countries are making progress in preventing smoking especially among adolescents. Anti-smoking forces siege tobacco companies, and increase their efforts by focusing on the health of babies, pregnant women, adolescents, and bystanders. The annual increase of the cigarette consumption between 1974-1984 in U.S.A. and UK., decreased 0% and - 3.1%

respectively, while increased in china and Egypt 6.2%, 8.7% respectively. An "alarming" increase was noticed in cigarette smoking for the period 1979-1983 in the developing countries. For example Algeria, Egypt, China and Indonesia are reported the highest increase(25%, 50.7%, 47.5%, & 31.9%) respectively .

The import of cigarettes in the Gulf states also witnessed an increase of 39% in 1984 (Stebbins, 1991 P. 1318, 1322). Tobacco consumption has fallen by about 1% per annum in developed countries, and increased by 1.2% in the developing countries (Higginson, Muir, and Munoz, 1992, P. 117).

Because developing countries are still fighting health problems, such as malnutrition and communicable diseases, the WHO fears that dramatic increases of cigarette smoking will occur and cause more smoking related-diseases in these countries, before being able to control communicable diseases and malnutrition (Stebbins, 1991).

Developed nations have exercised their power over developing nations in the battle against smoking. On the one hand, multinational cigarette corporations, located in the developed countries, make profit from cigarettes' sale, and as a consequence increase health problems in the third world countries. On the other hand, developed nations (i.e., U.S.) spend large sum of money on programs designed to prevent drug use, and even declare war against countries of Latin America, which consider them as a source of drugs that enters U. S. Drug use accounts for few deaths in US whereas cigarette smoking accounts for millions. U.S. prevent drugs from entering its borders, while encouraging tobacco companies to export cigarettes to the third world countries and enforce developing countries to import American cigarette.

RELATED LITERATURE view

Cigarette smoking is legal but it is not socially or religiously desirable, and this makes it less deviant compared to other drugs. Social norms guide social behavior and encourage conformity and discourage deviance. Conformity to social norms is reinforced by society, and violation of norms and rules will be punished. Tobacco use is culturally patterned, created, defined and redefined as a social activity. It is governed by social rules and represented symbolically with different meanings (Doherty & Whitehead, 1986).

Cigarette smoking can foster reciprocity of interpersonal interaction. This can be seen from causal request for or offer of a cigarette to initiate social contact. Clark (cited in Robbins & Kline, 1991, p.1344) illustrates various stages in the social process of smoking .

- 1- light -up. prior to initiating behavior(e.g., beginning to speak).
- 2-Drags and taps. When silent and others speaking, while others looking elsewhere, taps occur with speaker looking downward.
- 3-Exhale. Directed at someone creates barriers, but in the line of regard, affects their eyes to smoker.
- 4-Holding Distance to mouth inversely related to active involvement.
- 5-Put-out culmination of action .

Smoking is the number one cause of preventable death in the U.S (Stebbins 1994 P. 105). Cigarette smoking can represent the individual mental states, and this can be socially shared. For example it can represent the state of sadness, happiness, thinking ...etc. Cigarette can be served in different occasions like wedding, death, parties .. etc. It can be used as a tool for communication between people as in the case in the Gilbert Islands of Oceania; it was noted that "pressing a cigarette or other small object discreetly into a girl's hand signals an interest in intercourse, a favorable reply can be given in the same manner." (cited in Robbins & Kline, 1991, P. 1345).

Many factors are attributed to the widespread behavior of cigarette smoking. Robbins&Kline (1991) identified nine of these factors .

- 1-Malleability. Tobacco can be physically shaped and used in many forms (pipe) cigar, snuff, chew, etc.) , and used in many ways (smoked chewed, sniffed , imbibed,

licked, etc.,)

2-Portability. Tobacco is easily and conveniently carried in various forms and quantities.

3-Accessibility. Tobacco is widely available, easily obtained and relatively inexpensive.

4-Durability. Tobacco is storable, retainable, and can be saved for a long duration.

5-Divisibility. Tobacco is partible into countable or measurable quantities for personal use, storage, or exchange.

6-Dispensability. Tobacco is sharable and easily distributed in discrete or continuous quantities.

7-Testable. It can be self-tested for pleasurable or aversive properties and its use is relatively simple to learn.

8-Perceptibility. Tobacco can be exhibited or concealed. It can convey via thermal, visual and tactile signals a person's mood, social status or definition of the situation.

9-Compatibility. Tobacco use is compatible because other actions and thoughts can be performed while using it. (PP 1343-1344)

Markle and Troyer (1979) discuss the process of social definition and redefinition of social deviance and concluded that the topic has been overlooked in the sociological research. They distinguish between two processes in which deviance is defined and redefined based on Gusfield's work. The first process is the assimilative model. In this model the violator admits deviance, and is being viewed with sympathy by the reformer. The second model is the coercive model, in which the violator engages in the political and legal conflict as an enemy, and coercive measures are taken against the violator to prohibit the act (Markle & Troyer 1979).

Smoking is a role and gender status and reflects the distribution of power of social groups. Men smoke. Women do not smoke at least in the presence of others (especially men). Young people are not allowed to smoke in the presence of parents and other significant others. Role identification is linked with smoking. Females spend more time at home and socialized toward motherhood affairs. Males spend more time with friends outside the home and may smoke with friends. A cigarette is most often shared with others, and most smokers reported smoking with others (Mc Graw Smith, Schensul and Carrillo, 1991). Who is allowed to smoke and when depends on gender, age, and position in the hierarchy in the social system.

Smoking behavior is more prevalent among those who have a low than those who have a high socio-economic status in the developed countries (Pierce, 1989). On one hand, high socio-economic status adolescents viewed a strong relationship between smoking behavior and number of health-related, personal and social disadvantages. On the other hand, less socio-economic status adolescents viewed smoking as a way of meeting people. For this group smoking is embedded in the social culture and has a strong social culture and has strong social functions (De Vries, 1995, P. 419).

Both the role incompatibility and pseudo maturity predict significant relations between substance use and conventional social role occupancy in opposite directions. Smoking could be seen as an impairment that makes it difficult for individuals with the role occupancy

affect substance use, and that enhances or impairs one's performance in the role (Chassin, Presson, Scherman&Edwards, 1992, P.329).

Regardless of the differences between cigarette smoking and other drugs, Smoking has been stigmatized by anti-smoking forces, (i.e., Eysenck's (1965), and Fisher (1976). All reached similar findings that smokers tend to be more extroverted, neurotic, disorder (cited in Markele&Troyer, PP.137-138).

MCGraw, Smith, Schensul and Carrillo (1991) have identified four major factors on which cigarette smoking depends :

- 1- The availability of cigarettes as determined by geographic, economic, and political constraints;
- 2- The cultural rules for cigarette use, or the Prohibition and prescription for smoking-related behaviors, defining access to and use of cigarette by designated individuals within cultural groups;
- 3- The demonstration and reinforcement of smoking - related behaviors by role models established through social and ideational systems, and
- 4- The culturally defined use of cigarette for the fulfillment of social and psychological needs. (PP 1359).

High positive correlation between cigarette smoking and lung cancer was responsible for the move of public against smoking. Chemically speaking cigarette smoking is a complex mixture which contains over (3000) chemicals (Higginson, Muir&Murz, 1992, Marshall, 1991).

Using Logit models Bush and Wooden (1995) found that smoking is consistently found to have a large and significant impact on the absence from work (Bush and Wooden, 1995).

Research Questions

This study aimed to answer the following questions.

Question 1

Are there any significant differences in attitudes towards cigarette smoking between 1991 and 1995?

Question 2

Are there any significant differences in attitudes towards cigarette smoking between smokers and non-smokers?

Question 2

Are there any significant differences in attitudes towards cigarette smoking between males and females

Question 3

Are there any significant differences in attitudes towards cigarette smoking between students and employees?

METHODOLOGY

The sample

A random sample of five university-required courses were taken in 1991 and in 1995 out of 22 courses. All subjects were university students (Mu'th University) and governmental employees (JORDAN). Five governmental organizations were selected randomly out of 25 organizations. The governmental organizations are: Department of Social Development, Department of Health, Department of Communication and Department of Youth. A sample of 417 males and 347 females was taken. Of those 464 subjects were taken in 1991 and 300 subjects were taken in 1995, and 489 (64%) were students and 275 (36%) were employees. In terms of smoking status, 173 subjects were current smokers, 62 irregular smokers, 41 ex-smokers and 488 subjects who never smoked. More than third (35%) of all respondents was smokers.

Research Instrument & Procedures :

A research instrument was developed by the author, using Markle and Troyer (1979) and Nuehring & Markle's, (1974) statements. Demographic questions and some other questions regarding the age of respondent that start smoking at are added. Questionnaires were distributed to students and collected at the beginning of their class. Also questionnaires were distributed to all employee who accept participation and collected at the same day .

Validity and Reliability

A judgment validity procedure was used to estimate the validity of instrument. Five academic staff evaluated the instrument. Questions rating 95% of judges' agreement were remained, otherwise deleted. Using Cronbah's alpha for estimating intemal consistency, reliably coefficient was 0.94 .

FINDINGS

Question 1

Are there any significant differences in attitudes towards cigarette smoking between 1991 and 1995?

Table (1) illustrates the differences in the total attitudes towards smoking for the time lag (1991-1995). Differences between the two points of time were found to be significant ($F=7.713$, $\alpha 0.0005$). Moreover, positive increase toward opposing cigarette smoking can be noticed in 1995 compared to 1991.

Table (1)

Analysis of Variance table testing the differences between 1990 and 1995 in attitude toward as deviant behavior smoking

Source:	DF:	Sum Squares:	Mean Square:	F-test:
Between groups	1	1642.65	1642.65	7.713
Within groups	762	162293.219	212.983	$p = .0056$
Total	763	163935.869		

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
1990	464	76.834	15.315	.711
1995	300	79.837	13.401	.774

Table (2) Shows an increase in all statement in opposing cigarette smoking in 1995 compared to 1991 in most statement. Females showed higher increase than males in all statement, an increase of 12% of females who agree that "cigarette smoking is a deviant behavior". More than 80% of the females in 1991 & 1995 agree that: "cigarette advertising should be stopped completely, smoking must be prohibited at hospitals and clinics, smoking should be prohibited at public transportations, cigarette smoking is enough of health hazard for something to be done about it, hope my children never smoke, doctors and teachers should set a good example by not smoking, cigarette smoking is harmful to health, smoking is a dirty habit". Whereas males agree on the following statements: smoking must be prohibited in hospitals and clinics, cigarette smoking is

enough of health hazard for something to be done about it, doctors should set a good example by not smoking, cigarette smoking is harmful to health, smoking is a dirty habit.

Table 2
Percentages of who "strongly agree" or "agree" with each statement by year and sex.

Statement	Year	1991			1995	
		Sex	#	%	#	%
Laws about young people smoking should be strongly enforced	M	162	61.1%	100	67.6%	
	F	148	77.9%	128	84.2%	
Smoking of cigarette should be allowed in fewer places that it is now	M	201	75.6%	114	77%	
	F	148	75.9%	129	84.9%	
Cigarette advertising should be stopped completely	M	20	77.7%	115	77.7%	
	F	155	80%	124	81.6%	
Smoking must be prohibited in clinics & hospitals	M	244	90.7%	135	91.2%	
	F	179	92.7%	144	94.7%	
Smoking legal regulations should be implemented	M	19	70.6%	109	73.6%	
	F	153	78.5%	134	88.2%	
Smokers should be separated from non-smokers at work	M	134	49.8%	75	50.7%	
	F	120	61.5%	98	64.5%	
Cigarette companies should pay high tax	M	153	56.5%	92	62.3%	
	F	148	75.9%	118	77.6%	
Cigarette companies should pay costs of treating smoking diseases	M	175	65.5%	100	68.5%	
	F	123	63%	107	70.8%	
Smoking should be prohibited at public transportation	M	213	79.5%	128	86.5%	
	F	168	86.2%	136	89.5%	
Cigarette smoking is enough of health hazard for something to be done about it	M	222	82.8%	129	87.2%	
	F	174	89%	142	93.4%	
Hope my children never smoke	M	222	82.5%	115	78.2%	
	F	173	88.7%	139	91.4%	
Doctors should set a good example by not smoking	M	240	89.2%	120	81.6%	
	F	177	90.7%	140	92.1%	
People in health profession should set a good example by not smoking	M	174	64.9%	96	66.6%	
	F	147	75.7%	121	80%	
Teachers should set a good example by not smoking	M	227	84.4%	115	79%	
	F	173	88.7%	139	91.4%	
Cigarette smoking is harmful to health	M	240	89.2%	132	89.2%	
	F	182	93.8%	148	97.4%	
Cigarette smoking is socially unacceptable	M	144	53.7%	84	56.8%	
	F	117	60%	101	66.5%	

Smoking laws & regulations must be enforced in all public organizations	M	174	65%	96	66.6%
	F	147	75.7%	121	80%
Smoking is a dirty habit	M	217	81%	127	86%
	F	166	85%	141	92.8%
Cigarette smoking is religiously wrong	M	105	39%	78	52.7%
	F	82	42%	84	55.3%
It is annoying to be near a person who is smoking	M	66	24.6%	46	82.8%
	F	55	28%	63	41.5%
Cigarette smoking is a deviant behavior	M	85	31.6%	69	46.9%
	F	81	41.5%	81	53.3%

Question 2

Are there any significant differences in attitudes towards cigarette smoking as deviant behavior between smokers and non-smokers?

As can be seen from Table (3), a significant differences were found between smokers and non-smokers ($F= 81.892$, $\alpha=0.0001$). People who never smoked are more opposing cigarette smoking.

Table (3)

One Way-ANOVA testing the differences between smokers (current smokers, irregular smokers, ex-smoker, and never smoked) in attitudes toward smoking as deviant behavior

Source:	DF:	Sum Squares:	Mean Square:	F-test:
Between groups	3	40047.642	13349.214	81.892
Within groups	760	123888.227	163.011	p = .0001
Total	763	163935.869		

Means of groups

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
Current Smoker	173	65.416	16.857	1.282
Irregular Smoker	62	74.548	12.526	1.591
Ex-Smoker	41	77.756	16.74	2.614
Never Smoked	488	82.941	10.552	.478

Scheffe's F test

Comparison:	Mean Diff.:	Scheffe F-test:
Smokers vs. Irregular smokers	-9.132	7.784 *
Smokers vs. Ex-smokers	-12.34	10.321 *
Smokers vs. Never Smoked	-17.524	80.207 *
Irregular smokers vs. Ex-smokers	-3.208	.519
Irregular smokers vs. Never smoked	-8.392	7.922 *
Ex-smokers vs. never smoked	-5.184	2.079

* Significant at 95%

A scheffe F-test was used to test the differences between each pair of groups. Significant differences were found between all pairs with the exception of irregular smokers vs. ex-smokers.

Table (4) shows the comparison between smokers and non-smokers according to each statement. Non-smokers opposed cigarette smoking more than smokers. More than 80% of both smokers and non-smokers, males and females, agree on the following statements: smoking must be prohibited in hospitals and clinics, doctors should set a good example by not smoking, cigarette smoking is harmful to health. Smokers and non-smokers agreed on attaching negative social labels to smoking on the following labels: dirty habit (S 56% vs. NS 94.7%), religiously wrong (S 35.8% vs. NS 53.7%), socially unacceptable (S 36% vs. NS 73%), annoying (S 19.7% vs. NS 37.6%), and deviant behavior (S 25% vs. NS 54%).

Table 4
Percentages of who "strongly agree" or "agree" with each statement
by smoking status and sex.

Smoking Status Statement	Smokers			Never Smoked	
	Sex	#	%	#	%
Laws about young people smoking should be strongly enforced	M	118	48.8%	143	84%
	F	15	48%	261	83.9%
Smoking of cigarette should be allowed in fewer places that it is now	M	166	68.6%	15	8.7%
	F	22	70.9%	255	80.7%
Cigarette advertising should be stopped completely	M	173	70.9%	150	87%
	F	21	67.7%	258	81.9%
Smoking must be prohibited in clinics & hospitals	M	210	86%	168	97.6%
	F	25	80.6%	298	94.9%
Smoking legal regulations should be implemented	M	143	58.6%	155	90%
	F	18	58%	269	85%
Smokers should be separated from non-smokers at work	M	87	35.6%	121	70%
	F	11	35.5%	207	65.5%
Cigarette companies should pay high tax	M	99	40.5%	145	84%
	F	13	42%	253	80%
Cigarette companies should pay costs of treating smoking diseases	M	152	63%	122	71%
	F	23	74%	207	65.7%
Smoking should be prohibited at public transportation	M	173	71%	167	97%
	F	22	70.9%	282	89%

Cigarette smoking is enough of health hazard for something to be done about it	M	184	75.4%	166	97%
	F	23	74%	293	92.7%
Hope my children never smoke	M	183	75%	153	89%
	F	26	83.8%	286	90.5%
Doctors should set a good example by not smoking	M	199	81.5%	160	93.5%
	F	25	80.6%	292	92.4%
People in health profession should set a good example by not smoking	M	174	64.9%	96	66.6%
	F	147	75.7%	121	80%
Teachers should set a good example by not smoking	M	183	73%	158	92.9%
	F	22	70.9%	290	91.8%
Cigarette smoking is harmful to health	M	205	84%	166	96%
	F	25	80.6%	305	96.8%
Smoking laws & regulations must be enforced in all public organizations	M	127	52%	143	85%
	F	15	48%	253	80.5%
Smoking is a dirty habit	M	178	72.9%	165	96.5%
	F	14	45.2%	293	92.7%
Cigarette smoking is religiously wrong	M	81	33%	101	58.7%
	F	12	38.7%	154	48.7%
Cigarette smoking is socially unacceptable	M	89	36.5%	138	80.7%
	F	11	35.5%	207	65.7%
It is annoying to be near a person who is smoking	M	42	17%	69	40.3%
	F	7	22.5%	111	35%
Cigarette smoking is a deviant behavior	M	51	20.9%	102	59.6%
	F	9	29%	153	48.4%

Question 3

Are there any significant differences in attitudes towards cigarette smoking as deviant behavior between males and females?

Similarly, Table (5) points that significant differences in attitudes towards cigarette smoking are found between males and females ($F= 25.017$, $\alpha=0.0001$). Females were found to be more opposing cigarette smoking more than males.

Table (5)

Analysis of Variance table testing the differences between males & females in attitude toward smoking as deviant

Source: behavior	DF:	Sum Squares:	Mean Square:	F-test:
Between groups	1	5211.071	5211.071	25.017
Within groups	762	158724.799	208.3	p = .0001
Total	763	163935.869		

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
Males	417	75.631	16.323	.799
Females	347	80.876	11.764	.632

Question 4

Are there any significant differences in attitudes towards cigarette smoking between students and employees?

Finally, Table (6) P.16 show significant differences between students and employees on attitudes towards smoking ($F=34.399$, $\alpha=.0001$). Employees showed more opposition towards smoking than students.

(Table 6)

Analysis of Variance table testing the differences between students & employees in attitude toward smoking as deviant behavior

Source:	DF:	Sum Squares:	Mean Square:	F-test:
Between groups	1	7080.956	7080.956	34.399
Within groups	762	156854.914	205.846	p = .0001
Total	763	163935.869		

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
Students	489	75.73	15.185	.687
Employees	275	82.073	12.719	.767

Employee mean total score was higher than students, this show that employee oppssed cigarette smoking more than students. Both students and employee agree that cigarette smoking must be prohibited in cliniks and hospitals. For the rest of the items employee opposed cigrette smoking more than students (Table 7).

Table 7

Percentages of who "strongly agree" or "agree" with each statement by Job.

Statement	Students		Employees	
	#	%	#	%
Laws about young people smoking should be strongly enforced	313	65%	225	83%
Smoking of cigarette should be allowed in fewer places that it is now	300	74%	232	85%
Cigarette advertising should be stooped completely	357	75%	246	89%
Smoking must be prohibited in cliniks & hospitals	450	92%	252	92%
Smoking legal regulations should be implemented	359	73%	227	83%

Smokers should be separated from non-smokers at work	243	50%	184	67%
Cigarette companies should pay high tax	308	63%	203	74%
Cigarette companies should pay costs of treating smoking diseases	304	63%	201	73%
Smoking should be prohibited at public transportation	399	82%	246	90%
Cigarette smoking is enough of health hazard for something to be done about it	413	84%	254	92%
Hope my children never smoke	395	81%	254	92%
Doctors should set a good example by not smoking	417	85%	260	95%
People in health profession should set a good example by not smoking	412	84	245	90%
Teachers should set a good example by not smoking	395	81%	259	95%
Cigarette smoking is harmful to health	433	89%	269	98%
Cigarette smoking is socially unacceptable	258	53%	188	67%
Smoking laws & regulations must be enforced in all public organizations	359	74%	227	83%
Smoking is a dirty habit	401	82%	250	90%
Cigarette smoking is religiously wrong	199	41%	150	55%
It is annoying to be near a person who is smoking	110	23%	120	44%
Cigarette smoking is a deviant behavior	171	35%	145	53%

Discussion

Findings of this study showed significant differences in attitudes towards cigarette smoking between subjects in terms of sex, job, smoking status and time lag. An overall profile indicated an increase in respondent's attitudes in opposing cigarette smoking. This result can be attributed to factors such as public awareness for the negative consequences of smoking, anti-smoking forces campaigns and formal participation against cigarette smoking in Jordan. *

* The National Jordanian Anti Smoking Society was established in 1981. Article 2 & 3 Focused on preventing public health from the negative consequences of smoking and stated that:

Females showed more unfavorable attitude toward smoking than males in the two points of time (1991 & 1995). This finding can be explained by the differences in role demands and the relationship between attitudes and behavior. Females are household oriented, where most of the concentration on the female role of caring and rearing, Females spent most of the time in the house helping their mothers, with limited opportunity to contact with others outside the house. This delimits the chance of interacting with friends and acquiring smoking behavior. Needless to say that most of the adolescents started smoking by the influence of friends (McGraw, Smith, Schensul & Carrillo, 1991). However, it is expected that smoking among working women will increase due to that fact that advertisement focuses on the idea of women liberation. The message is: "to be liberal is to smoke". Factors such as the increasing women independence and the participation in labor forces, the right to vote and to be elected, and the increasing opportunity to have friends (work colleague) all have impact on smoking behavior. Males do smoke more than females (58.7% & 8.9% respectively). The fact that behavior should be consisted with attitude is applied here. As a consequence, smokers are expected to express favorite attitudes toward cigarette smoking more than females.

University students move from big cities like Amman to the university surrounding areas (rural areas in general) having higher probability of living in small groups with weak paternal control, reinforce cigarette smoking behavior from other friends. Findings of, et al., (1993) support this conclusion.

An increasing opposition to cigarette smoking was shown, the majority of respondents favor using tough measures (coercive ones) against smokers. This may reflect a beginning of movement by the public against smoking similar to what happened in the developed countries (Kent, 1985). Also an increase was noticed in assigning negative social labels to cigarette smoking. Moreover, not only non-smokers came to attach negative labels to smokers but,

1. Smoking is prohibited in the following areas: seminar rooms, waiting rooms, hospitals, closed play yard, health centers, restaurants and public transportation.

smokers themselves accept the negative labels. This supports Williams's findings that cigarette smokers are increasingly feeling societal pressure to quit (Williams, 1991, p. 1365). The physiological and psychological independence and tolerance features of tobacco force smokers to smoke more cigarettes to get the same previous effect, smokers by accepting the labels will act in a manner corresponding to the expectations of other people. That is to say, they look at themselves as deviant and behave in that way (by smoking more and more). This result supports Freidson's (1970) conclusion that "illness as deviance"

Employees oppose cigarette smoking more than students. This finding can be looked at in terms of age, time lag and economic status. The average age of employees is higher than students, and it is expected that employees are affected by the negative consequences of cigarette smoking on the health and on the economic dimensions. Cigarette smoking related-diseases start to appear for employees and employees have to pay the costs of cigarettes and health problems from their own pocket whereas students rely on their parents for their living. This result supports Becker's analysis of marijuana smokers that some people favor marijuana smoking and see that it should be legalized and some people oppose it and see it as harmful to health. This analysis goes along with Lipowski's (1970) analysis that individual responses to illness can be classified as passive or active (cited in Cockerham, 1982, p. 117). Cigarette smoking can be seen as a sick role, it interferes with performance of people, causing harm, and society should do something about it by setting mechanisms to control it, prevent it and encourage people to quit it (Susman, 1994).

Future research is needed in the following areas: the size of the problem among young adults, and students in schools, the influence of friends on smoking behaviour.

Policy Implications

Government measures to reduce cigarette smoking is far from being satisfactory. Different measures must be taken to reduce cigarette consumption. Cultural and social factors should be taken into account when implementing policies to reduce cigarette smoking (Graham, 1994).

On the national level, the government should prohibit importing foreign cigarettes. Legal regulations must be enforced and sanctions should be applied to violators. Restrictions should be applied in the following areas: production, distribution, consumers and age (Cigarette should not be sold to individuals less than 18 years of age) situations (i.e., pregnant should not be allowed to smoke), places (i.e., cigarette smoking should be prohibited in the public offices, transportation, and health organizations). Other measures, like high fine on the cigarette companies and a certain percentage from profit of cigarette companies to treat smoking-diseases must be applied. These measures will save some money to situate social and development project, and avoid contamination of air and reduce the harm caused by smokers.

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