

# **Reducing Smoking Behavior in the Middle-East: Effectiveness of Anti-Smoking Message Themes**

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## **Abstract**

Tobacco use is the second major cause of death in the world, killing around 6 million people a year. (World Health Organization 2015). The associated risks (health, social and economic costs) of tobacco used have led to many anti-smoking campaigns worldwide. However, there is a gap of knowledge on the effectiveness of advertising (message) theme in anti-smoking campaign among the populace in the Middle-East countries. This study addressed this gap and the results from 1206 surveys revealed that irrespective of nationalities (including expatriates) in the Middle-east, anti-smoking messages based on fear theme (disease and death) were not effective in reducing smoking behavior among smokers but could be a deterrent among non-smokers. However, anti-smoking messages based on social disapproval theme were not effective among both groups. This suggests that anti-smoking advertisement dollars should focus on preventive among non-smokers rather than on reducing smoking behavior among smokers.

Keywords: Anti-smoking message, fear-related (disease and death) theme, social disapproval theme

## **Introduction**

The Middle East (ME) is a diverse and heterogeneous region with high expatriates population, mostly from Asia, Africa and the Middle East, estimated at 48 per cent of the Gulf Cooperation Council(GCC) member states' total population (Emirates 24/7 News, 8 Nov 2015). GCC member states are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. Shisha or hookah smoking has been part of the daily life of Middle Eastern people since its origination from India/ancient Persia (American Lung Association 2009). The introduction of modern cigarettes in recent times have added to the anxiety of the governments in this region because of the health, social and economic costs associated with smoking. For instance, smoking causes cancer, emphysema and bronchitis, and is the leading cause of heart attacks and strokes. Passive smoke also damages non-smokers health. To reduce the number of smokers among its population, the governments of ME have initiated anti-smoking campaign on the public health agenda in the past three years. The anti-smoking campaign in these countries includes stickers, posters and emblems containing various slogans. However, the efficacy of anti-smoking advertisements in these efforts and in literature is varied (Chung & Rybina 2011; Harris, Connolly & Davis 1996; Goldman & Glantz 1998). For example, studies by Goldman and Glantz (1998) found anti-smoking advertisements effective in reducing cigarette consumption. In contrast, Harris et al. (1996) suggested that anti-smoking advertisements are not effective in reducing smoking behavior.

This study investigates:

- i) The effectiveness of fear-related (disease and death) and social disapproval themes in reducing smoking tendencies among non-smokers in ME.

- ii) The effectiveness of fear-related (disease and death) and social disapproval theme in reducing smoking tendencies among smokers in ME.

The ME refers to residents of GCC's member states including expatriates(non-GCC nationalities).

### **Relevant literature and hypothesis development**

Several studies (Pechmann & Knight 2002; Andrews et al. 2004; Netemeyer, Andrews, Burton 2005) have indicated that the increased demands for cigarettes are the results of advertisement and other promotional activities like product placement in movies, retail display advertising, free product sampling, sports sponsorship, packaging graphics, filter design and product attributes. Further, smoking scenes in television and movies positively aroused young viewers, enhanced their perceptions of smokers' stature, and increased their intent to smoke (Pechmann & Shin 1999). Andrews et al. (2004) suggests that adolescents' antismoking beliefs are affected by advertising attitudes, prior trial behavior, and social influence affect; and that well-designed anti-smoking advertisement can decrease smoking-related behaviors among adolescents. However, knowledge about the impact of anti-advertisement on smoking habit are varied and limited within the context of the Middle East.

#### *Anti-smoking message themes*

In general, message themes in anti-smoking campaigns or advertisements can be classified as either fear-related (disease and death) or social disapproval-related (Uusitalo & Niemela-Nyrhinen 2008). Thus, most anti-smoking campaigns portray smokers as people at risk, either physically or socially (i.e. how they influence not only the smoker but those around them).

Fear appeal has been a popular approach in anti-smoking campaigns in most developed countries, especially those related to health messages such disease and death (Beaudoin 2002). Disease and death themes describe how smokers suffer from diseases caused by smoking. The intent is to raise the perceived health risk severity ranging from serious diseases to eventual death as a result of smoking. This approach conformed to Witte's (1994) Extended Parallel Process Model which suggest that when individual is exposed to fear, he/she is highly motivated to control the danger by lessening their at-risk behavior or control the fear through denial when they feel that the threat is severe (that smoking leads to disease or death); feel vulnerable to the threat (the consequences of smoking will affect them personally); feel capable of changing their at-risk behavior (quit smoking); and perceive the behavior change is effective in averting the threat (quitting smoking effectively eliminates the risk). However there are mixed findings about the effectiveness of the health-related messages (disease and death) for adolescents in anti-smoking campaign. It is argued that youths exposed to anti-smoking health messages generated by tobacco companies were more likely to be open to smoking (Farrelly et al. 2002), thus, immune them to the anti-smoking health related (disease and death) theme. Further, young people do not appreciate the risk from smoking, as they believe that they can quit any time and are over-optimistic about health-related consequences of smoking (Weinstein 1998). Rogers's (1983) revised Theory of Protection Motivation explains the lack of effectiveness in fear-aroused messages by relating rewards to perceived severity and susceptibility when analyzing a particular course of action. For instance, if the reward (e.g. pleasure, social pleasure or hedonic effect) of an action is greater than the perceived consequences, susceptibility and severity of the danger of the action (e.g. smoking cause cancer), individuals will continue to practice maladaptive behavior (eg. continue to smoke). Nevertheless, fear-related themes continued to found favor among anti-smoking proponents in the last few decades (Prevention First 2008). Consequently, this study proposed:

*H1: Messages related to fear-related (disease and death) theme is effective in reducing smoking behavior among the non-smokers in ME countries.*

*H2: Messages related to fear-related (death) theme is effective in reducing smoking behavior among the smokers in ME countries.*

Netemeyer et al. (2005) indicate that advertisements that target specific anti-smoking beliefs, such as addictiveness of smoking, dangers of environmental tobacco smoke to children, and tobacco industry's use of unethical or deceptive advertising practices enhance consideration of quitting among adult smokers, especially if they live with their children at home. Several other studies (Pechmann et al 2003; Pechmann & Ratneshwar 1994; Uusitalo, Niemela-Nyrhinen 2008) also argue that social disapproval theme is more effective in anti-smoking campaign. Pechmann and Knight (2002) reveal that cigarette advertising shown in conjunction with anti-smoking advertising evoked unfavorable impressions about smoking. Similarly, Pechmann and Ratneshwar (1994) indicate anti-smoking campaigns affect non-smoking teenagers' perceptions of peers who smoke, reinforcing preexisting beliefs that smokers foolishly endanger their health and are relatively immature or unglamorous, a perception absent among smokers. As such, this study proposed:

*H3: Messages related to social disapproval theme is effective in reducing smoking behavior among the non-smokers in ME countries.*

*H4: Messages related to social disapproval theme is effective in reducing smoking behavior among the smokers in ME countries.*

## **Methodology**

### *Sample and measurement scales*

Data was collected from university students at six major cities of the GCC member states, namely: Manama (Bahrain), Kuwait City (Kuwait), Muscat (Oman), Doha (Qatar), Riyadh (Saudi Arabia), and Dubai (United Arab Emirates). Semi-structured interview was utilised where respondents were initially presented with two anti-smoking advertisements, namely: *disease and death theme* with graphic depicting the formation of tumors in the lung airways and arteriosclerosis in the aorta; and *social disapproval theme* with picture of lighted cigarette and coughing children in the playground (to emphasize that other people may suffers from second-hand smoke), before being asked to response to a semi-structured questionnaire which comprised of 6 sets of scales: The first two scales (5-point likert scale) asked respondent about the perceived effectiveness of the respective presented anti-smoking advertisements in reducing smoking behavior, namely: i) "I think the 'disease and death' anti-smoking advertisement (poster A) is effective in reducing smoking behavior" (1- strongly disagree to 5 – strongly agree); ii) "I think the 'social disapproval' anti-smoking advertisement (poster B) is effective in reducing smoking behavior" (1- strongly disagree to 5 – strongly agree). The third scale asked respondent to indicate whether they are smokers or non-smokers while fourth and fifth asked their reasons for smoking and non-smoking respectively. The sixth scale relates to demographic variable (age, gender, number of cigarette smoked per day). Overall, 2000 surveys were distributed but only 1206 questionnaire were returned. The composition of nationalities is shown in Table 1. Of these, 38% are females while 63% are smokers.

Table 1: Composition of nationalities of sample population

Nationalities	n=1206	%
Emirati	147	12.18
Kuwaiti	120	9.95

Bahraini	86	7.13
Qatari	81	6.71
Omani	95	7.87
Saudi	67	5.00
Expatriates (non-GCC nationalities)	610	50.58

Table 2: Reasons for smoking and non-smoking

Category	N=1206	Reasons (%)
Smoker	760 (63%)	Socializing= 26% Peer influence= 20.5% Finding hard to quit= 16% For relieving stress= 13.8% Want to look cool = 7.7% Others= 16%
Non-smoker	303	Thinks that smoking is bad for health = 41% Dissuaded by parents= 15% Dislike cigarette smells= 12 % Need substantial money to buy= 7.5% Does not think it is cool to smoke = 6% Others= 28.5
Not-sure	143	

### Analysis

Analysis of the data histogram showed normal distribution. As shown in Table 2, main reasons for smoking are ‘socializing’ (26% of smokers), ‘peer influence’ (20.5%) and ‘finding hard to quit’ (16%); and reasons for non-smoking include ‘smoking is bad for health’ (41%), ‘dissuaded by parents’ (15%) and ‘dislike cigarette smells’ (12%). Multivariate analysis of variance using SPSS v.21 revealed gender and nationalities have no significant impact on the effectiveness of fear-related and social disapproval themes in reducing smoking behaviour at the 5% level. The respondents’ classification as smokers and non-smokers, however, does appear to impact on the perceived effectiveness of anti-smoking message theme (Wilks’ lambda=0.701, F=4.201, p=0.034). The ‘tests of between-subject effects’ revealed the ‘non-smokers’ variable recorded higher score (mean=4.33) than smokers (mean=2.39) on the perceived effectiveness of fear-related anti-smoking theme. There is no similar indication with the social disapproval theme. Post-Hoc test (Bonferroni) results were presented in Table 3.

Table 3: Post-Hoc statistics

Multiple Comparisons					
Bonferroni					
Dependent Value	(I) Q3	(J) Q3	Mean Difference (I-J)	STD.Error	Sig.

Fear related (disease & death) theme	smokers	non-smokers	-1.940*	0.217	0.000
		not sure	-1.220*	0.345	0.000
	non-smokers	smokers	1.940*	0.217	0.000
		not sure	0.310	0.316	1.000
	not sure	smokers	1.220*	0.345	0.000
		non-smokers	-0.310	0.316	1.000
social-disapproval theme	smokers	non-smokers	-0.720	0.202	0.060
		not sure	-0.730	0.348	0.052
	non-smokers	smokers	0.720	0.202	0.060
		not sure	0.620	0.320	1.000
	not sure	smokers	0.730	0.348	0.052
		non-smokers	-0.620	0.320	1.000

\*The mean difference is significant at the 0.05 level.

### Findings and discussions

The result of this study only supported *Hypothesis 1: Messages related to fear-related (disease and death) theme is effective in reducing smoking behavior among the non-smokers in ME countries*. This indicated that fear-related anti-smoking messages could be a deterrent factor to smoking behavior among non-smokers but has no significant impact on smokers (Hypothesis 2 not supported). The study also indicated that social disapproval themes are not effective in reducing smoking behaviour among both non-smokers and smokers (hypothesis 3 and 4 not supported). This could be the denial effect as per Witte's (1994) Extended Parallel Process Model. The above observation could also be explained that smoking is viewed as socializing activities (one of the main reason for smoking as shown in Table 2) for building friendship and communal bonds. Further, the numerous smoking cafes/bars in the Middle-east region may propagate this habit. As such, social disapproval anti-smoking theme does not carry much attention among the populace in the Middle-East region.

### Research limitations

Given that the data are collected only at few cities in the Middle East, further research is needed to revalidate this research finding. Second, the disparity in numbers of GCC nationalities compared with expatriates could skew the sampling result, resulting in unrepresentative response (Ticehurst & Veal 2000).

### Conclusion

The results of this further revealed that smokers are fairly immune to anti-smoking advertisement based on social disapproval and fear-related themes. However, fear-related anti-smoking theme could be effective in reducing smoking tendencies among non-smokers regardless of nationalities in the Middle-East. As such, future anti-smoking advertising effort in the Gulf region should focus on fear-related theme (disease and death) with non-smokers as its specific target for effective results.

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