# Fear and non fear inducing anti smoking advertisements



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The study examined Fear inducing and non fear inducing anti smoking advertisements, and how they would affect the change of intent to quit, and the general awareness of health risks, to heavy and social smokers. The change in behavior was measured using multiple adverts, either fear inducing or non, and a self report questionnaire. A 2×2 between groups design was used , the independent variables, were advertisement type, and type of smoker. The participants only took part in one of these variables. Previous research has shown that fear inducing adverts will give a higher measure of intent to quit, and general awareness. The hypothesis that both heavy and social smokers will be have a higher intent to quit smoking when watching the fear-inducing advertisements, and their general awareness will increase after watching fear inducing adverts. And that heavy smokers will have a greater intention to stop smoking over all was fully supported.

Every year it is estimated that around 114, 000 smokers in the UK die due to smoking related reasons. The government has spent £28. 38 million on education campaigns to encourage the public to stop smoking, and £73. 5 million has been spent on helping people to stop smoking (ASH 2009).

In the 1920s German scientists were the first to identify a link between smoking and lung cancer. They were the first to launch an anti smoking campaign in modern history, though this was not known until recently, as the movement did not mange to reach past German lines during the second world war (Proctor, 1999).

Since the relationship between cigarette smoke and lung cancer was discovered, a classic study has become most prevalent in quantifying the relationship. This was undertaken Sir Richard Doll (1950), the study looked at people who had been hospitalized due to lung cancer in 20 different London hospitals. It was first believed that lung cancer was caused by a new substance at the time called tarmac, or from car fumes, as the German knowledge had not yet become apparent in the UK. Therefore the discovery that tobacco smoke caused lung cancer was a new idea. Therefore since the link between lung cancer and smoking was made 70 years ago, it solicits the question of why people who smoke continue to do so?

Since this discovery health authorities have developed promotional campaigns to give people information about smoking, and make them aware of the health hazards, and ultimately get them to stop smoking. These informational campaigns, give people help to stop smoking, and the government is spending millions of pounds to help quit. a number of studies

confirm that more and more people are becoming progressively more aware of the consequences that cigarette smoking can have, for both smokers and non smokers alike (Bronson, R, C, Jackson-Thompson, J, Wilkerson, J, Davis, Owens, & Fisher 1992). The World Health Organization (WHO) set up the Framework Convention on Tobacco Control (FCTC), this agreement is dedicated to combat the smoking epidemic world wide, so far the treaty has been endorsed by 120 countries, and compels these countries to put into operation proper tobacco control strategies, to reduce exposure to smoking.

However prevalence of smoking in university student has increased, with the highest rates of men (34%) and women (30%) aged between 20-24, in university (ASH 2009), but subsequently in older aged groups there are increasingly less smokers. The royal college of Physicians of London Tobacco Advisory (2000) found a consensus within the literature " adults who smoke five or fewer cigarettes per day, but who smoke at least four per week, over a long period, are non-dependent."

Social smoking seems to be a recently acknowledged phenomenon, in young adults and students, however it is poorly understood, as there is inconsistency in definitions of social smoking . In a study by Levinson, Campo, Gascoigne, Jolly, Zakharyan and Vu Tran, (2007) who analyzed 1401 students that were currently smoke cigarettes aged 18-24, 56% denied being smokers regardless of their smoking behavior. They found that half of the individuals that denied smoking, and half of those who had admitted to smoking, described themselves as social smokers. Levinson et al. (2007) found that all of the people that denied being a smoker, said that they all smoked infrequently, and said they were not addicted to smoking, that their https://assignbuster.com/fear-and-non-fear-inducing-anti-smoking-advertisements/

friends were mostly non smokers, and did not smoke due to stress relief.

They were found to usually only smoke in social situations around other smokers.

However regardless of their identity, smoker or non, over half of the social smokers, wanted to quit by graduation. In accordance to this study, Berg, Lust, Sanem, Kirch, Rudle, Ehlinger, Ahluwalia and Lawerence (2008) also found unifying results, that of 2255 students that gave evidence smoking in the past 30 days, 50. 7% did not regard themselves as a smoker. A qualitative study by Moran (2007) established that when university students describe themselves as social smokers, they consider smoking as a social activity, rather than smoking because they are addicted to the nicotine. Thus, will give up after leaving university environment (Moran 2007).

It seems that smokers deny the risk they are putting themselves at , evidence does suggest they are aware of the information of the health risks that smoking proposes (Goodin 1989). This is made even more strongly aware, by the fact that the cigarette companies now have to put health warnings on the each box of cigarettes, making the health risks obvious. Further to this, the common view of young people is that they are less likely to acquire smoking related diseases , and that they are at less risk (Leventhal , Glynn and Fleming 1987). Falomir and Invernizzi(1999) examined the view that smokers do acknowledge anti-smoking information, but "do not intergrate it into their individual action systems-i. e smoking behavior is resistant to change- and the efficiency of anti-tobacco campaigns still needs to be improved"(Falomir &Invernizzi 1999).

In 1998 the Government produced its first white paper on tobacco, set out to reduce the number of early deaths due to smoking, and prevent young people starting smoking. They pledged around £110 million over three years, to inform the public about smoking hazards to your health, and to help people stop smoking.

The first mass media campaigns were started in the USA and Australia; McVey and Stapleton (2000) established that both these programs had three common ideas: "(1) tax increases on tobacco products simultaneous with mass media education and publicity campaigns; (2) multi-component education and publicity mass media campaigns; (3) extensive use of antismoking TV advertising" (McVey and Stapleton 2000). They also found using cross sectional surveys, that after the programs were in put into action, both countries accounted a drop in cigarette use, compared to other US states where the program was not imposed. However in the US tests McVey and Stapleton (2000) were not able assess the effects of the TV anti-smoking advertisement campaign autonomously. Conversely the campaign in Australia called "Quit for Life" proved to be quite effective. The advertisements used a strong "fear arousal theme", which consequently produced a 1.5% reduction in smoking frequency (McVey and Stapleton, 2000). Further to this Veer, Tutty and Willemse (2008) studied reactions from long term smokers, when presented either a graphic NHS advert compared to a more gentle Heart foundation advert found that 22% more people were likely to intend to stop smoking after seeing the high impact graphic NHS advert, than the more gentle advert. However, those who did not have any

conscious aspiration to stop smoking reported a higher obligation to stop smoking when watching the more gentle Heart foundation advertisement.

Thus research conducted by Dahl, Darren Frankenberger, Kristina Manchanda, and Rajesh (2003) on shocking content in advertising campaigns(though mainly on HIV/AIDs) found that to get an advertisement noticed, shocking techniques are needed, as they defy social norms and ideals. Dahl et al(2003) reported that it seems this "development in advertising is so productive that it has its own name "yobbo" which is" roughly translated as "the desire to shock the audience into taking notice by whatever means possible" (Cooper, 1996). Which is why some of the fear inducing advertisements are so graphic, as it makes the audience take notice.

Dahl et al (2003) found that by using these shocking advertisements especially in public service messages, such as drink driving, smoking, and condom use etc. That the shock will gain the "publics attention, encourage cognitive processing, and have an immediate impact" (Dahl et al 2003).

Therefore it is widely known that anti-smoking advertisements can be seen in the media every day, it is a large campaign by the NHS. Most adverts either evoke fear and disgust, or display a encouraging messages to quit smoking many using children. This study will examine the effects of both these different types of advertisements. Although smoking is usually seen as an all or nothing activity, within university life a large number of people now define themselves as social smokers. Social smokers usually define themselves as people who are not addicted to cigarettes, but smoke

occasionally, usually in groups, and usually while out socializing and drinking alcohol. However, previous research has shown that there is not a completely unambiguous definition of what social smoking actually is.

The aim of this experiment is to see if social/ heavy smokers have a greater intention to give up smoking after watching advertisements that either inducing fear or non-fear inducing advertisements. Therefore it was hypothesized That both heavy and social smokers will be have a higher intent to quit smoking when watching the fear-inducing advertisements, and their general awareness will increase after watching fear inducing adverts. And that heavy smokers will have a greater intention to stop smoking over all.

#### Method

## Design

The design used was a between groups 2(smoker type: heavy smoker vs social smoker)x2( type of advertisement: fear inducing vs non-fear inducing). Because it is a between groups design, each participant will only take part in a single category, therefore there will be a different participant for each group.

# **Participants**

The sample consisted of 60 participants; 27 males and 33 females aged between 18 and 26, with the mean age of participants were 20 years old. All the participants were smokers; 30 being heavy smokers that smoke more than 5 a day, and 30 are social smokers who smoke less than 10 a week. Opportunity sampling was conducted, as the first students available at the https://assignbuster.com/fear-and-non-fear-inducing-anti-smoking-advertisements/

time were used. All participants were from Goldsmiths college; they were preferably not psychology students, so not to lower the validity of the experiment, and as a result there will be less demand characteristics. All participants were able to understand English, as the advertisements played, were all in English

#### **Materials**

Numerous advertisements for each condition were downloaded from online websites (mainly NHS and youtube), and linked together on windows moviemaker., to make two 4. 30 minute clips of either fear inducing advertisements or non fear inducing advertisements.

The fear inducing advertisements were defined as advertisements which displayed images such as lung cancer, heart disease, blood, organs, hospitals etc. Non fear inducing advertisements displayed encouraging messages, emotions, and used children to encourage smoking cessation. The participants only ever saw one of these clips. A questionnaire was compiled, which had two parts; the first was the intent to stop smoking, which was taken from the original study that this research paper was based on by (Falomir and Invernizzi). The second part was questions about the general acknowledgment of health risks of smoking (taken from an online smoking questionnaire) This can be found in Appendix 1. A computer was used to view the clips, and noise reducing headphones were worn to prevent distractions from the environment.

#### **Procedure**

Participant who smoked were invited along to take part in the experiment, they were given a consent form and standardized instructions to read and sign. They were told that they could withdraw from the experiment at any time, or they could withdraw their results if they wish to do so.

The participants were then asked to fill in the questionnaire, they were then told they would be viewing a short clip. The particiants viewed either a fear inducing or a non-fear inducing clip of around 6 or 7 advertisements that last 4. 30 minutes. The participants were asked to wear the noise reducing headphones provided to limit distraction. Once the participants had viewed the clip, they were given another copy of the same questionnaire and asked to repeat it again. After the participants had taken part in the study, the participants were thanked and given a debrief sheet. They were then told they could receive their results if they felt it was necessary, or be given any feedback they felt important.

## Results

The results are split into two sections for the two Dependent Varibles measured .

# Intent to quit smoking

This investigation explored whether smoker type (social vs heavy)and advertising type (fear vs non fear inducing) affects the intent to quit smoking. A 2 (fear inducing vs non fear inducing) x 2 (heavy vs social) between groups ANOVA was conducted with the change of intent to quit smoking as the dependent variable. The main effects of smoking type (F (1,

56) = 8.389, p < 0.05) and the main effect of advertisement (F (1, 56) = 85.389, p < 0.00) were both found to be significant. A significant interaction between smoking and advertisement was also observed (F (1, 56) = 12.8, p < 0.01).

To examine the cause of the significant interaction and to protect against inflation of likelihood of Type-1 error Bonferroni-corrected simple effects analyses were conducted. Four paired sample t-tests (0.05/4 = 0.0125), were conducted.

The first t test examined effect between heavy smoking and fear inducing advertisement (t (28) = 9.578, p> 0.00), this shows that there is an significant effect taking place between Heavy smokers and fear inducing advertisement as it produces a high change of intent. The results for social smoking while watching fear inducing advertisements (t(28)= 3.807, p < 0.001), this shows that there is a significant interaction between social smoking and fear inducing advertisements, as it also produces a higher change of intent to quit smoking. Subsequently two more t tests were demonstrated that for non fear inducing advertisements (t (28) = -0.904, p> 0.374), there was no significant difference between heavy and social smokers. But for the fear inducing condition (t (28) = 3.506, p < 0.002), there is a significant difference between heavy and social smokers.

Figure 1: The interactions between heavy and social smoking, vs fear, or non fear inducing advertisement, on the intent to quit. This graph shows a large difference in means between the fear inducing advertisement, for both heavy and social smokers, however there is a very small interaction between

heavy and social smokers when watching the non fear inducing ads the main effect of change in intntent looks to be significant because the means are very different.

## General

This investigation explored whether smoker type (social vs heavy) and advertising type (fear vs non fear inducing) affects the the general awareness of smoking. A 2 (fear inducing vs non fear inducing) x 2 (heavy vs social) between groups ANOVA was conducted with the change general awareness of smoking as the dependent variable. The main effects of smoking type (F(1, 56) = 2.655, p < 1.09) was not found to be significant. Which means the type of smoker did not affect the general awareness of smoking and the main effect of advertising (F(1, 56) = 8.130, p < 0.006) was found to be significant, which concludes the type of advertisement did increase the general awareness of smoking. However a non significant interaction between smoking and advertisement was also observed (F(1, 56) = 3.360, p < 0.072).

Additionally because the interaction was not shown to be significant, no further post hoc tests were needed.

Table 1: Descriptive statistics, showing mean and standard deviations. The table shows a very clear difference between fear and non fear inducing advertisements for social smokers, and a slightly smaller but still significant figure for social smoking.

#### Mean

# Standard deviation

1.6

Standard deviation
Heavy smoker
Fear inducing
6. 8
2. 25
Non fear inducing
0. 60
1. 12
Social smoker
Fear inducing
3. 6
2. 6
Non fear inducing
0. 9

Figure 2: shows the interactions between heavy and social smoking and fear inducing and non fear inducing advertisements for change in general view.

There is a large difference between heavy and social smokers for fear

inducing advertisements, but only a very small difference between heavy ad social smoking for non fear inducing advertisements.

### **Discussion**

The experiment aimed to establish whether both heavy and social smokers will be more affected by the fear-inducing advertisements, whether their general awareness will increase after watching fear inducing adverts. And if heavy smokers will have a greater intention to stop smoking over all.

The results for the ANOVA on change of intent to quit smoking were highly significant for, smoking type, advertisement type and the interaction between them. Further post hoc testing showed that both heavy and social smoking were both highly significant when compared to fear inducing advertisement. It was shown to be non significant when heavy smoking and social smoking was compared to the non-fear inducing advertisements. Further to this the t tests demonstrated that there was a difference between heavy and social smokers when watching the fear inducing advert. This can be clearly shown in Figure 1 Where the mean for heavy smoking on the fear condition is greater than social smoking. Table 1 also clearly demonstrates the difference in the means between fear inducing advertisements and non fear inducing advertisements, as there is a extremely big difference between them ( by two decimal points). The results for change of intent, completely support my experimental hypothesis.

However the results for the general awareness towards smoking hazards were only partly significant. The main effect of advertising was highly significant, which means the type of advertisement was an important factor.

But the main effect of smoking, and the interaction between advertisement and smoking were not significant. Thus, because the main affect on advertising was significant, it does support the hypothesis that the fear inducing advertisement would increase general awareness.

Furthermore for general awareness of smoking Figure 2 indicates the same trend as Figure 1 for intent to quit smoking, which was highly significant, however although the graphs look similar the interaction between type of smoker (heavy vs social) and type of advertisement( fear vs non fear inducing) was not significant. Because the trends look similar, the reason the interaction may not have been significant is because of the limited number of participants for the experiment, as there is a lack of statistical power. Possibly if there were more participant the interaction may have shown to be significant as the graphs suggest.

The experiment did have some faults, as defining the groups for social smoking, and heavy smoking, may not have been to clear. As the definition to be a social smoker; was that the participant must smoke less than 10 a week, this was based on the finding stated in the introduction by The Royal College of physicians, that adults that smoke fewer than 5 cigarettes a day were not addicted. There may be some extraneous variables due to this, that could not be controlled for, as each participant wont smoke a set number of cigarettes each day, and all the participant wont smoke the same number of cigarettes each day, the amounts will vary. Therefore the classification of social smoker is hard to define. Furthermore, non smokers were not used in this research paper, as non smokers, are a well defined group, and it could be predicted that the results would be too obvious. But because social https://assignbuster.com/fear-and-non-fear-inducing-anti-smoking-

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smokers are not a well defined group, and poorly understood it leaves the results open to some variance.

The experiment did show confounding results with previous research by Levinson et al (2007), which established that social smokers, were more likely to quit, "that they wanted to quit by graduation". Whereas this research found that heavy smokers were more likely to quit. In addition the sample of university students was used, because of opportunity sampling, yet the sample was categorically relevant to the experiment, because university students aged between 18-24 have a higher prevalence of smoking (ASH 2009), and are the largest population of social smoking. However, because this is only a very small sample the research cannot be easily generalized, as these results are biased to the sample.

One of the problem that occurs throughout all shock and fear advertising, is the fact that due to the graphic images used in the fear inducing advertisement, it could offend or distress people. After one advertising campaign by the NHS in 2007, the Advertising Standards Authority Agency (ASA) revealed that it had its highest ever number of complaints about advertising in 2007. The ASA Agency revealed that the source of complaints were about "high levels of violence, and misleading claims" (ASA 2009), around 2, 450 adverts had to be changed or removed following complaints.

Furthermore because the participants are only exposed to 4. 30 minutes of advertisement, there may not be enough time for cognitive processing, and for the participants to really be effected by what the advertisements are trying to say to them. This was because the experiment was a lab based

study, to increase the power of the experiment a field study may have been a better choice. McVey and Stapleton (2000) produced successful results when controlling anti-smoking campaigns in different TV regions. However, similar to McVey and Stapleton's (2000) research and this research both used self report measures, which could lack validity, and be less reliable.

Heavy smokers did have a greater intention to quit smoking after watching the fear inducing advertisements, as the advertisements are aimed at people who have smoked for a long period of time, as many of the fear inducing stimuli are long term effects of smoking and eventually the fatality of smoking. Heavy smokers can more closely relate, as these symptoms could happen to them in the future. However social smokers don't associate themselves with these conditions, as they feel they are not addicted to cigarettes, and that they are at less risk of acquiring smoking related diseases (Leventhal et al 1987). Yet this does not correspond with Falomir and Inernizzi's (1999) theory, that smokers are resistant to change in behaviour. Although this could be because this theory was from research in 1999, which is over 10 years ago, and the media campaigns are currently far more effective. More recent research has shown that in England, smoking rates have fallen from 28% in 1998 to 21% in 2007, which is a decrease of nearly 2.5 million.

The non fear inducing variable, was shown to be less successful, however this may be because many of the non fear inducing advertisements on the television at the moment, and some that were based in this experiment, were based at parents, using children to ask their parents to quit smoking. But this is not significant to anyone who does not have children, and the

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advertisement would not necessarily relate to the age group used. Therefore a further experiment, could use fear and non fear inducing stimuli to an adult population who are parents, and smoke. This could be a better indication to whether or not the non fear inducing stimulus may bring about any significant affects, on different population groups.

In conclusion the experimental hypothesis was proved to be significant, both heavy and social smokers had a higher intent to quit smoking when watching the fear-inducing advertisements, and their general awareness. Also that heavy smokers had a greater intention to stop smoking over all. Although people are still smoking, empirical evidence has shown that slowly the number of people smoking is decreasing, and that government media campaigns are working.