

Effect of the Written and Combined Warnings on the Cigarette Pockets on University Students

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Abstract

The general aim of this study is to analyze the effects of the written and combined (written and pictures) warning statements on the cigarette pockets on university students. The sample of the study includes a total of 231 undergraduate students. The participants were divided into two groups: the first group was presented only written warnings, while the second group was presented combined warning statements. In order to analyze the effects of these warning statements, the protection motivation model developed by Arthur and Quester was employed. The study has relational model. It is found that the variable of "severity of harm" has effects on the category of "fear" both in the written warning statements and in the combined warning statements.

Key Words

Protection Motivation Model, Cigarette, Cigarette Pack, Written and Combined Warnings, Fear Appeals, Biology Education.

Turkey is one of the leading producers and consumers of tobacco. It may be because of this reason the Turkish identity has become identified with smoking over time and then, smoking in Turkish society has become a traditional consumption item. For instance, some research findings indicate that nearly 750 thousand children and youngsters in each year begin to smoke in Turkey (Beelmann & Thomas, 2006; Bilir, Özcebe, Aslan, & Ergüder, 2008; Kersch, 1998; Leppin, Hurrelmann, & PETERMANN, 2000; Schill, Staack, & Teutloff, 2004; Wrede, 1996).

In various parts of the world, public institutions and NGOs attempt to take steps to reduce the rate of smoking. One of these steps is the use warning statements about the hazards of smoking on cigarette pockets. It is certain that such warning statements are significant steps to eliminate the rate of smoking. Those who smokes frequently come across these warning statements. For instance, a person who smokes a pocket of cigarette per day comes across such warning statements at least 7000 times annually. Therefore, smokers may develop a resistance to avoid smoking whenever they see such warning statements (Bilir et al., 2008; Currie et al., 2004; Çelik & Esen, 2000; Geistl, 2004; Hurrelmann, 1998; Holleederer & Bölcskei, 2002; Leppin et al., 2000; Ögel, Tamar, Evren, & Çakmak, 2001; Sezer, 1984).

In recent times, such warning statements become a combined form including visual and written warnings (Baran et al., 2010; Christiansen, Stander, & Töppich, 2004; Hammond, Fong, McDonald, Cameron, & Rown, 2003; Johnston & Warkentin, 2010; Zillman & Gan, 1996). WHO reported that such a combined way of warning has influences on quitting smoking. Combined warning statements are

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firstly used in Canada, Poland and Thailand. The use of combined warning statements became legally obligatory in Turkey by 01.01.2011.

Protection Motivation Theory assumes that warning statements on cigarette packets are fear appeals. A fear appeal is a message designed to elicit fear in an attempt to persuade an individual to pursue some predefined course of action against factors threatening health and therefore, individuals' life. Protection Motivation Theory (PMT) was developed by Rogers (1975) and it was reevaluated and redeveloped by Arthur and Quester (2004). The version of PMT developed by Arthur and Quester (2004), as in the version developed by Maddux and Rogers (1983), considers self-efficacy and the efficacy of response. The basic constituent of these stimulants is fear (Floyds, Prentice-Dunn, & Rogers, 2000; Milne, Sheeren, & Orbell, 2000; Ruiters, Abraham, & Kok, 2001; Tanner, Hunt, & Eppright, 1991).

The theory developed by Arthur and Quester (2004) states that fear occurs based on the effects of fear stimulants. Fear affects individuals both through the severity of damage and through as a mediator variable between the probability of damage and behavior. As stated earlier, PMT developed by Arthur and Quester considers self-efficacy and the efficacy of response and as a result of this consideration; it is assumed that threat appraisal will lead to related behavior. If an individual perceives that the threat will reduce (efficacy of response) and if he can maintain this behavior (self-efficacy), the fear will reduce.

There are many studies carried out in other countries rather than in Turkey employing PMT (Rogers, 1975). The basic assumption of PMT is the approach of fear appeals. PMT was also employed in the studies in regard to smoking. Within the framework of such studies that are rare and carried out in other countries about whether or not such stimulants have effects on the smoking behavior. However, this approach has not been adopted in the studies in regard to smoking in Turkey.

Purpose

This study deals with the effects of written and combined warning statements on cigarette packets on young people in Turkey. The research questions of the study are as follows: (1) do the variables, the severity of damage and the probability of damage, perceived from written and combined warning statements have any effects on smoking behavior

through fear? And (2) how do the model about the effects of fear, the efficacy of response and self-efficacy on smoking behavior function for the groups of written warning statements and of combined warning statements?

Method

Since the study aims at revealing the prediction levels of the variables for smoking behavior, it has a relational design.

Research Design

Universe and Sampling: The participants of the study are 231 undergraduate students attending Hacettepe University, Faculty of Education. They were selected randomly from any grade level. The gender distribution of the subjects are as follows: 101 males (44 %) and 130 females (56 %). Mean age of the participants is 22 (range 19-26) and their grade level is between first and fifth grades. The smoking status of the participants are reported as follows: 32,5 % of them either no smoke or less than one per day and 67,5 % of them smoke more than one per day.

Instrument

The data of the study were gathered through the administration of survey questionnaire similar to the questionnaire developed by Petersen and Lieder (2006).

Process

The participants of the study were divided into two experimental conditions: one with written warning statements and the other with combined warning statements. For the stimulants a cigarette packet was prepared without any brand name. Then, the samples sent by Dr. Petersen were reviewed. Written and combined warning statements were added to these samples and electronic demonstrations were developed. After obtaining necessary permissions, these demonstrations were presented to the study groups approximately for twenty minutes. Questions asked by the participants were answered before and after the presentation. After the presentation, the survey questionnaire was administered to the participants to obtain their views. These lasted approximately for one class hour. The study was carried out between December 2009 and April 2010.

During the process of data analyses, two study groups were compared in regard to the effects of the variables, the severity of damages and the probability of damages, perceived from the written warning statements and combined warning statements on the smoking behavior through fear and in regard to the model that shows the effects of the variables, namely efficacy of response and self-efficacy, on smoking behavior.

In order to compare the models, multi-group structural equation model analyses were employed. Analyses of the data were carried out using the Lisrell program (Baykul, 2010; Kline, 2005).

Findings and Discussion

The theory developed by Arthur and Quester (2004) states that fear occurs based on the effects of fear stimulants. Fear affects individuals both through the severity of damage and through as a mediator variable between the probability of damage and behavior. As stated earlier, PMT developed by Arthur and Quester considers self-efficacy and the efficacy of response and as a result of this consideration; it is assumed that threat appraisal will lead to related behavior. If an individual perceive that the threat will reduce (efficacy of response) and if he can maintain this behaviour (self-efficacy), the fear will reduce (Boster & Mongeau, 1984; Mongeau, 1998; Rogers, 1975; Witte & Allen, 2000).

Smoking that is began at adolescence causes to over smoking and physiological as well as psychological problems at later ages. Such people may come across fatal illness. Related studies suggest that social learning elements have significant contribution to smoking. Therefore, smoking addiction should not be seen only as a result of psychological factors but also as a result of environmental factors (Baran et al., 2010; Christiansen et al., 2004; Petersen & Lieder, 2006; Schwarzer, 2004; Tanner et al., 1991).

It is found that the variable of the severity of damage has effects on fear in both study conditions, namely written warning statements and combined warning statements. Furthermore, this model at two study conditions does not function at the expected levels in the Turkish context. These findings clearly suggest that long-term training activities to avoid smoking are needed.

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