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# The Comparison between Self-Efficacy Level among Male Smokers and Nonsmokers in Kermanshah

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# ABSTRACT

Cigar is considered to be a common problem in health care system and it seems that psychological problems and especially low levels of self-efficacy are among the major causes of tendency to smoking. In this way, the present study tries to investigate self-efficacy level among male smokers and nonsmokers in Kermanshah. To do so, case-control method is used. Statistical population includes smokers and nonsmokers in Kermanshah of whom 105 male smokers and 105 male nonsmokers are randomly selected. General self- efficacy questionnaire (GSE-10) is used to evaluate self- efficacy and the obtained data is calculated through SPSS-18 statistical software. Data analysis shows that there is a meaningful difference between male smokers and nonsmokers in terms of use of problem-oriented coping strategies (t- 4.276 and p-0.000). Moreover, a meaningful difference is observed between male smokers and nonsmokers in terms of stopping negative thoughts and emotions (t-4.950, p-0.000), support from family and friends (t-4.025 and p- 0.000) and level of general self-efficacy (t-2.376, p-0.018). Given the above- mentioned results, one can conclude that there is a meaningful difference between male smokers' self-efficacy level and smokers' self-efficacy is less than that of nonsmokers. So, therapists should take into account the smokers' psychological problems and particularly low level of their self-efficacy during their therapy courses.

KEYWORDS: Smoking, Self-efficacy, General Self-efficacy, problem-oriented coping.

## 1- INTRODUCTION

Today, Smoking is considered as one of the problems threaten human health severely. More than 4 million persons lose their lives due to smoking each year all over the world [1]. One out of every 3 adults smoke cigar originally in the developing countries [2]. Smoking is the fourth important risk factor for global burden of diseases and the second main risk factor for mortality in the world [3]. It is estimated that this number will grow to 8.4 million in 2020 [4].

Cigar is the major cause of cardiovascular disease, respiratory disease and different types of cancers as well as the most common preventable cause of deaths in the world [5]. Although cigar is seemingly less important than other drugs, but its ease of public access as well as its insignificant social indecency leads to high desire for smoking. Smoking is the result of machine-made life and technology during the 20<sup>th</sup> century. Smoking causes various diseases and imposes the irreparable damages such as deaths due to smoking, the decreased lifetime, and medical costs to the society. Smoking doubles probability of smokers' mortality each year [6].

Smoking and addiction to drugs are the current social problems especially in such countries as Iran. They put individual, family and society health at risk [7]. In relation to cigar, a main point that should be taken into account more is that only a few number of people smoke only cigar in the long term without getting used to other drugs and in fact cigar is considered to be gateway to addiction world and high dependence on other drugs [8]. A study indicates that the most important cause of tendency to smoking is lack of recreational facilities (33%) and other factors in order of importance include entertainment, curiosity, disappointment, social problems and family dispute [9].

Smoking is not merely a health and physical problem. Given its effects on society and individual mental health, it is considered a psychosocial problem too. Smokers have lower levels of mental health and show less flexibility in dealing with problems. Aggression and depression is more common among them [10]. Today, nicotine is known as an addictive substance. Persons get dependent on cigar and nicotine very quickly but they can hardly quit it. Drugs including cigar cause disruption of internal mental status (mood) and external activities (behavior) and they also have a mutual relationship with many of mental disorders such as depression [11].

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According to the undertaken studies, smokers are more likely to suffer from psychological disorders and the probability of smoking among people with psychological disorders is also twice more than people without psychological disorders [12]. Another study shows that there is a relationship between daily smoking and low level of mental health and psychological disorders including depression and anxiety [13]. In fact, dependence on nicotine is more common among the people with low level of self-efficacy and psychological disorders [14].

The concept of self-efficacy adopted from social cognitive theory proposed by Bandura. It is defined as the individual confidence in his own capabilities to perform a certain behavior successfully [15]. Attitudes towards cigar and self-efficacy are considered as predictors of adolescents' desire for smoking. The researches show that positive attitude towards smoking, low self-efficacy regarding resistance to cigar offer, and attention to others' smoking leads to smoking behavior [16]. In smoking behavior, self-efficacy is indicative of the individual confidence in his own capabilities to overcome strong temptation to smoke [15].

Self-efficacy effects in various fields including smoking and drugs have been frequently reported [17]. Adolescents who have been consistently avoided the addictive substances show better and more effective coping strategies. Weak self-efficacy results in substance abuse [18]. Self-efficacy is low among smokers. In fact, such persons suffer from weak self-efficacy and sense of helplessness. They are also under the influence of people, events and circumstances which affect them. As a result, in their view any effort is useless. No wonder, they look sad and worried and they will submit quickly whenever their efforts in dealing with problems are failed [19].

Since dependence on cigar is a complex and multi-dimensional issue and it originates from various physical and mental factors such as those factors underlying smoking and its continuity, field researches should be performed in order to understand, control and eliminate such factors. So, studying the role of psychological factors particularly self-efficacy in tendency on smoking is of great importance. At last, this research aims to compare self-efficacy level among male smokers and nonsmokers.

#### **2- MAIN CONTENT**

## **1-2- MATERIAL AND METHODS**

Given the fact that the main aim of the current study is to compare self-efficacy level among male smokers and nonsmokers, case-control method is applied. Statistical population include male nonsmokers and male smokers who were trying to quit smoking in Kermanshah city addiction treatment clinics during 2012-2013. Research subjects include 210 persons. (105 male smokers and 105 male nonsmokers) who are mached in terms of demographic variables such as age, gender and social economic status. Having ability and interest to participate in the study and lack of severe physical disease are among the inclusion criteria. In this way, exclusion criteria include lack of willingness to continue cooperation and serious physical disease which may disrupt participation. To perform this study, after making coordination and presenting the required explanation and getting the subjects' consent to participate in the survey, the researcher will implement the self-efficacy questionnaire.

## General self- efficacy scale (GSE- 10)

Schwartz and Jerusalem general self-efficacy scale was first used in order to evaluate general and social self-efficacy in 1979. Then, Schwartz and Jerusalem reviewed this test and reduced its terms to 10 in 1981. So, the current questionnaire includes 10 terms, all of which evaluate general self-efficacy level. This test is a self-reporting tools for adults (above 12 years old) and the participants should define the extent of their agreement or disagreement with any of its terms based on the 4 point Likert scale format (ranging from not at all true to completely true). In this scale which contains 26 terms, the participants are asked to define to what extent they can do any of the mentioned works when dealing with problems in a 11 point Likert scale format (ranging from 0 = i can never do it to 10 = I am sure i can do it myself).

Self-efficacy scale contains 3 sub-scale including using problem-oriented coping strategies (12 terms), stopping negative thoughts and emotions (9 terms) and support from family and friends (5 terms). Rajabi [20] calculated Cronbach's Alpha coefficient for all university students (0.82), students of Shahid Chmran University (0.84) and Azad University of Marvdasht (0.80). In the current study, reliability of general self-efficacy questionnaire is calculated based on Cronbach's Alpha Coefficient (0.85) indicating the acceptable reliability of the mentioned questionnaire [20]. After collecting data using SPSS-18, descriptive statistic indices such as mean and standard deviation are calculated. At last, the research hypothesis is analyzed based on independent samples T-test.

#### 2-2- RESULTS

As you see, the research subjects include 210 persons (105 male smokers and 105 male nonsmokers) who have been mached in terms of demographic variables including age, gender, and social and economic statues. Smokers' average age is 37 years and that of nonsmokers is almost 32 years. In both groups a socioeconomic middle class and high school diploma are the one with the highest frequency. Data is analyzed based on SPSS-18

for two levels. Table 1 presents mean and standard deviation of the research variable. In order to analyze data and test the research hypothesis, independent samples t-test is analyzed. The results for independent samples t-test is presented in Table 2. The results obtained from data analysis (table 2) show that there is a meaningful difference (t = 2.376 and p = 0.018) between male smokers and nonsmokers in terms of self-efficacy level. In fact, male smokers' self-efficacy level is lower than that of male nonsmokers. In addition, a meaningful difference is observed between male smokers and nonsmokers in terms of the rate of using problem oriented coping strategies (t = 4.276 and p = 0.001), the rate of stopping negative thoughts and emotions (t = 4.950 and p = 0.001), and the rate of support from family and friends (t= 4.025 and p= 0.001).

## **3 - CONCLUSION**

The current study tries to compare self-efficacy level between male smokers and nonsmokers in Kermanshah. Results obtained from data analysis show that self-efficacy level of male smokers and nonsmokers is different and smokers' self-efficacy is less than that of nonsmokers. Also, a meaningful difference is observed between male smokers and nonsmokers in terms of the rate of using problem oriented coping strategies. A research indicates that nonsmokers' score in self-efficacy scale as well as their life quality, social relations, physical, psychological, and environmental status is meaningfully higher than those of smokers. Low level of self-efficacy among smokers show that their social relations, physical, psychological, and environmental conditions are unfavorable [21]. which is in agreement with the present study. In another research it is observed that nonsmokers' score is meaningfully higher than that of smokers. Increased self-efficacy among adolescents and students is a suitable tool to help them prevent smoking successfully [22].

The results obtained from an investigation about the effect of education intervention on enabling students to prevent smoking shows that smoking prevention behavior, the mean scores for self-esteem, self- control, self-efficacy and problem- solving skills were at the middle level among students in two groups and no meaningful difference in terms of mean scores for self-esteem, self- control, self-efficacy and problem- solving skills. In fact, education intervention enables the under study students to prevent smoking by improving their self-esteem, self-control, self-efficacy and problem- solving skills [23]. Another study shows that there is a meaningful relationship between the perceived self-efficacy and the increased smoking amongst adolescents with Asthma [3].

The results for statistical analysis in this research show that there is a meaningful difference between male smokers and nonsmokers in terms of the rate of stopping negative thoughts and emotions and support from family and friends. In general, these variables are lower among male smokers. In a research, it is found that there is a meaningful difference between smoking and nonsmoking students in terms of average positive and negative stress. It means that smoking students show higher average perceived negative stress while nonsmoking students display higher average perceived positive stress. Moreover, a meaningful difference is observed between these two groups of students in terms of mean self-efficacy. It confirms higher level of mean self-efficacy among nonsmoking students [24] which is in conformity with the present study.

A research was performed on 428 adolescents with average age of 13.3 in relation to the effect of change of self- efficacy level on their smoking initiation. The results show that gradual decrease in self-efficacy level is associated with adolescents' smoking initiation. Also, a number of experimental cross-sectional researches show that high level of self- efficacy is associated with the decreased tendency to smoking [25]. A meaningful difference was also observed between drug users and normal persons in terms of their self-efficacy level. In fact, self- efficacy level was higher among the latter group. Choosing inappropriate coping patterns, unrealistic and excessive expectations in relation to capabilities and low level of self-efficacy are among the factors result in tendency towards drug abuse and addiction [12]. Cognitive- behavioral therapy is an effective way to increase self-efficacy and improve physical and mental health of those patients dependent on drugs as well as smokers [26]. Since the current study is of case- control type, a cause and effect relationship could not be deduced based on its results. Also, in relation to generalizing the results, the fact that sampling is limited to men should be taken into account. Another important point is that other effective variables on smoking are not taken into consideration in this research and so it is recommended that other complementary studies be done in the field of the effective factors on this variable.

Psychological factors play a significant role in tendency to smoking and self-efficacy level is of the most important factors. The results obtained from the current study shows that self-efficacy level between male smokers and nonsmokers is different and smokers' self-efficacy is lower than that of nonsmokers. Therefore, Training persons to increase their self-efficacy level and self-care behavior help them to decrease their tendency to smoking and if persons are used to smoking, it help such persons to quit smoking.

# TABLES AND FIGURES

	Problem- Oriented Coping Strategies		Stopping Negative Thoughts and Emotions		Support from Family and Friends		General Self- efficacy	
	Smokers	nonsmokers	Smokers	nonsmokers	Smokers	nonsmokers	Smokers	nonsmokers
Mean	71.84	81.20	47.31	56.62	27.1	31.88	27.18	28.71
Standard Deviation	14.909	16.763	11.799	15.225	8.395	9.114	4.467	4.867
Variance	222.291	281.008	139.218	231.815	70.471	83.071	19.957	23.687
Minimum Score	33	21	20	18	9	5	11	15
Maximum Score	103	115	78	97	46	64	39	38

 Table 2. T and Meaningful Level, A Comparison between Male Smokers and Non-smokers in terms of Self

efficacy level						
Index	Т	P value				
Problem- Oriented Coping Strategies	4.276	0.001				
Stopping Negative Thoughts and Emotions	4.950	0.001				
Support from Family and Friends	4.025	0.001				
General Self- efficacy	2.376	0.018				

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