



Perceived Susceptibility toward Smoking among Students

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Abstract:

Background:. Perceived susceptibility of an individual's understanding of the risk of getting a certain condition; i.e., substance users should believe they susceptible to suffer from diseased effects of substance use (tobacco, alcohol and drug abuse).The aim of the study to assess of Perceived Benefits Related to Drug Abuse among Students

Material and method: The current study employs a true experimental design with a randomized controlled trial approach to investigate the effectiveness of a health beliefs model-based intervention in altering the beliefs of university students in Mosul City regarding substance use during the period of 5-January 2023 to 1-February 2024. Eighty students who took part in a behavior modification training program made up the study sample.

Results: Findings of this study depict that there were statistically significant differences among Perceived Susceptibility toward smoking among Students.

Conclusions: The results of this study suggested that the way an HBM-based study is designed may have an impact on students' knowledge and smoking-related behaviors. Taking into account the construct of perceived susceptibility and its positive correlation.

Keywords: Perceived Susceptibility, smoking, Students

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Introduction:

Smoking use is the single most block able cause of death in the United States. Although the 2014 Surgeon General's statement the Health successive of Smoking (50 Years) of Progress, demonstrated that the spread of stream smoking is on the refuse the report confirms the need to further monitor types of use for all tobacco products, particularly as disparity in use persevere and alternative forms of smoking use are rising in publicity among

young (1). Mousawi,2014, Found in Iraqi studies on secondary school and university students reported smoking use rates spreading from (3.2-21%). However, to the World Health Organization (WHO), record (3.3 million) deaths in the world are attributable to alcoholism in 2012 (2), statement specified that unintentional injuries comprised the second largest part of alcohol concerning deaths after cardiovascular diseases

and that a large plurality of alcohol concerning deaths and injuries in the world are way traffic concerning and happen in developing countries. The most common age ambit of narcotic abusers in the world is (18 -25) years. Some of students are at these ages and narcotic abuse increase has been showed in them, among illegal drugs with consuming of (3.8%) is the most common abused narcotic in the world (3). Substance use "alcohol, hookah, smoking, and illegal drugs" are the main anxiety of contemporary world and considers the popular cause of people death and alcoholism worldwide (4). The campus setting is a typical place for initiation into the substance use. The student is away from the wakeful eyes of father and mother. They are youth and wanted to try out any modern thing. They are under force from friends to be like rest of the student. Perceived susceptibility of an individual's understanding of the risk of getting a certain condition; i.e., substance users should believe they susceptible to suffer from diseased effects of substance use (tobacco, alcohol and drug abuse). In fact, people sharply differ in their view about their vulnerability to the specific health problem. For instance, the family history of substance use disorders may make family members feel that they are at a higher risk for addiction than the rest of people in the same community (5). In reality when people are not exposed to it or may not have a clear understanding of the effects and risks of a disease or health condition, disease, they take no measures to prevent and treat the disease (Wang et al., 2016). Perceived susceptibility in this study was concept substance use beliefs among university students in Mosul city. That they are vulnerable (at risk) to substance use disorder for instance, University students who don't think they're at risk are unlikely to stop substance user e.g. (smoking, hookah, alcohol, drug abuse) (Figure 2.2). The best way to clarify the impact of health education on substance use is by HBM. The major strength of this model is the different features of those individuals who have to choose their health interests (6).

This model assumes that it depends on whether a person believes in the vulnerability of such a disease that may have severe implications if he/she takes measures to protect his/her health. Under the main components of this HBM, individual health assumes that substance addiction behaviors are well tested (7). The aim of the study to assess of Perceived Susceptibility toward smoking among Students

Methods and Materials:

The current study employs a true experimental design with a randomized controlled trial approach to investigate the effectiveness of a health beliefs model-based intervention in altering the beliefs of university students in Mosul City regarding substance use during the period of 5-January 2023 to 1-February 2024. Eighty students who took part in a behavior modification training program made up the study sample. The engineering, science, medicine, and education colleges at the University of Mosul will provide four colleges from which the study sample will be drawn. Each behavior's participants were divided into two groups at random: the experimental group and the control group. A health education lecture regarding substance use was the intervention provided to the experimental group. Using SPSS, Version 23, I conducted an analysis of the data using chi-square and the t-test as well as descriptive and inferential statistics (Means, SD, Number, and Percent). In addition to a Pearson's correlation coefficient used to determine the relationship between Health Belief Model concepts, behavioral motivation, behavioral control, and intentions to changing beliefs related to substance use, a mixed design analysis of variance (ANOVA) is used to measure changes among participant's beliefs, motivation, control, and intentions over three times (pre-test, post-test1, and post-test2). (8-77).

Results:

Table 1: Repeated Measures ANOVA Tests the health beliefs model in changing the belief related to Smoking among students (Perceived Susceptibility)

Perceived Susceptibility	"Repeated Measures ANOVA Tests"			
	F	P	(η^2)	O. P.
Main time effect	22.541	0.000	0.369	1.000
Between groups effect	25.416	0.000	0.246	0.999
Groups Interaction overtime	14.750	0.000	0.277	0.999

η^2 : Partial Eta Squared (size effect). O.P. Observed Power.

The findings of Table 1 show that the test within the main effect of time is significant ($F = 22.541$, $p = 0.000$). The significant interaction shows that the Health Belief Models among the research participants (research and control) shift over time and change.

In this specific case, it is apparent in Figure (1) that the research group increases in beliefs over time, as opposed to the control group, which decreases in beliefs over time. Concerning the size of the effect, (Table 1) shows that about (36 percent) of variance from modified beliefs (Perceived Susceptibility) is responsible for the period.

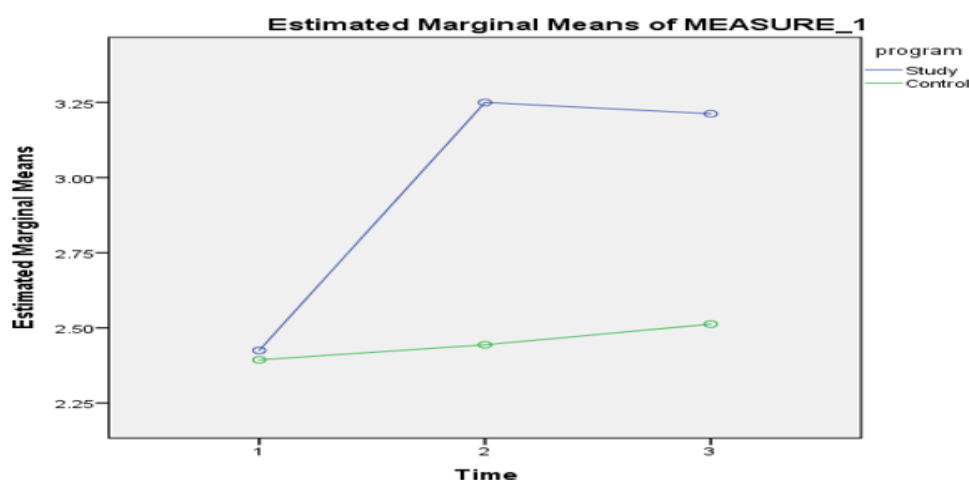


Figure 1: Changing in beliefs related to substance use among university students (Perceived Susceptibility) for the study and control groups throughout the three times.

Table 2: Post-hoc Test Using Bonferroni Corrections Procedure for Changing in the Students' Beliefs about Health beliefs Model (perceived Susceptibility) among Study and Control Group Over Times

HBM	Groups	Post hoc Using Bonferroni		
		(pretest) vs (post 1)	(pretest) vs (post 2)	(Post1) vs (post 2)
Perceived Susceptibility	Exp	0.000	0.000	1.000
	Con	0.929	0.663	0.871

Based on estimated marginal means. The mean difference is significant at the 0.05 level. Adjustment for multiple comparisons: Bonferroni. $p < 0.05$ indicated in bold.

On the basis of results from table 2, the post-hoc procedure by using Bonferroni corrections test was conducted to determine where the differences among changed beliefs and variables exactly lie. This test revealed that the score of the changed beliefs and variables differed significantly among experimental group participants over times ($p < 0.05$) (Table 2).

Specifically, the transitions from (pre-test) to (post-test 1) ($\text{sig}=0.000$) and from pre-test to posttest-2 ($\text{sig}=0.000$). indicated that there was a significant improvement in the experimental group participant's beliefs about susceptibility of substance use ($p < 0.000$). There are, however, no statistically relevant variations in the score between posttest-1 and post-test-2 beliefs (Table 2).

The post-hoc procedures demonstrated the fluctuation of the student's confidence over time with respect to the control group. However, no exact improvement or stable continuous significant changes in the score of Beliefs were observed (Table 2).

Discussion:

Perceived susceptibility plays the primary role in the comprehension of behavior. If a person is sensitive to health concerns and knows that symptoms can't be due solely to those diseases, then this awareness contributes to the prevention of high-risk behavior and addiction. High sensitivity is required to improve the rewards of participants for preventive health behaviors (78).perceived susceptibility it had the main role in changing students' behavior towards the substances use in a positive way because students believe in their acquisition of harmful habits as a result of engaging in a certain behavior and it is possible to change them by moving away from these bad habits.The study and control groups were changing over time but in different levels of their Beliefs about perceived susceptibility. There was a major increase in Beliefs levels for study group participants at posttest-1 and then a slight decrease at posttest-2 . This result was certainly due to that students have benefited from the information that was learned from the program (Table 1).

While there was a very little increase in Beliefs levels for control group participants at posttest-1 and then a slight decrease at posttest-2. This result was surely because the students of control group had not participated in the educational program (Table 1; Figure 1).It was clear that the study group was increasing in Beliefs regarding (perceived susceptibility) over time and the control group is fluctuating in Beliefs (perceived susceptibility) over time (figure 1).The results indicated that the changes in the students' Beliefs toward substance use was the result of time, not result of condition (group) or interaction between time and group. Specifically, there was a significant main effect of time on students' Beliefs (perceived susceptibility) (Table 1).On the other hand, the effect size associated with changed Beliefs (Perceived Susceptibility) was observable, with time accountable for about 33% of the variance from changed Beliefs (Table 1). This result could be because the students in control group had not received any health educational program. So the participants of the study group seemed to get benefit from joining in the program (Table 1; figure 1).This finding is supported by (79) who found after the intervention, mean score of perceived susceptibility increased 24% in the intervention group.These findings consistent with (80), who stated the repeated measures ANOVA showed significant differences in the study group in Health Belief Model constructs and also perceived susceptibility toward substance abuse ($P < 0.001$).Bonferroni corrections test revealed that the score of the changed Beliefs differed significantly among study group participants over times ($p < 0.05$) (table 2). Specifically, the transitions from (pre-test) to (post-test 1) and from (pre-test) to (post-test 2) indicated that there was a significant improvement in the study group participants' Beliefs about the construct of Health Belief Model(perceived susceptibility) ($p < 0.000$).The transitions period from (post-test1) to (post-test 2) revealed that there was a continuous stable enhancement upon students' Belief test scores after three months (Table 4.8). These findings agreement with (81-84)

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