



Original Research

Apply the Health Beliefs Model among students to Enhancing Intentions: Randomized Control Trail

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Abstract:

Background: Intentions are characterized as the amount of people intending to conduct action in the future, and intentions are considered the most direct and proximate predictor of action participation

Material and method: The study aims to ascertain the degree to which an intervention grounded in the health beliefs model can influence students' attitudes toward addiction between July 10, 2024, and January 10, 2024. It does this by using a randomized controlled trial methodology in conjunction with a true experimental design.

Results: The study's conclusions show that there were statistically significant variations in Apply the Health Beliefs Model among students to Enhancing Intentions.

Conclusions: This study concluded that the Health education through a health belief model demonstrates the importance of drug use prevention and has a positive impact on student behavior intension use stopping interventions in the prevention of addiction and reduction of different health hazards.

Keywords: Health Beliefs Model, students , Intentions.

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Introduction:

Intentions are characterized as the amount of people intending to conduct action in the future, and intentions are considered the most direct and proximate predictor of action participation⁽¹⁾. The rest of this chapter tries to demonstrate evidence about how health belief model constructs applied to substance use disorders, and it involves an overview of substance use (Smoking, Hookah, Alcohol, Drug

abuse) as well as the previous studies related to this dissertation problem statement. The HBM has expanded over time reach to six constructs that predict the readiness of an individual to change: "perceived susceptibility, perceived severity, perceived benefits, perceived barriers, indications of action, and self-efficacy". Firstly, a person must assume that the health issue or the associated

negative result is at risk (perceived susceptibility). Secondly, the degree of perceived severity must be high for a person to seek care or take the recommended action. Tandem, the levels of susceptibility and severity perceived by the individual are conceived as the perceived overall threat ⁽²⁾. At this point a patient is likely to be provided with various preventive or intervention options or recommendations. To adhere to the recommendations a person must believe it would be advantageous to do so. In a cost-benefit study, he or she always considers potential obstacles, weighing up the pros and cons. Another important element within the HBM is the "readiness to alter" (cues to action) of a person. Despite everything, the patient decides whether to participate in behavior, such as associating with treatment or adhering to it. A person also makes an evaluation of how capable he/she of implementing recommendations despite the obstacles is of "self-efficacy" ⁽³⁾. The aim of the study to assess the Behavioral Intention to Improvement Behavior of Students related to drug use.

Methods and Materials:

The present study aims to ascertain whether an intervention based on the health beliefs model can successfully alter students' perspectives on addiction between July 10, 2024, and January 10, 2024. To do this, it combines a true experimental design with a randomized controlled trial methodology. Eighty students who took part in a behavior modification training program made up the study sample. Four colleges—one each for engineering, science, medicine, and education—will make up the study sample. Participants were randomized to either the experimental or control groups for each behavior. As an intervention, a health education lecture regarding drug use was given to the experimental group. Using SPSS, Version 23, I performed chi-square, t-test, and descriptive and inferential statistics (Means, SD, Number, and Percent) on the data. The three times (pre-test, post-test1, and post-test2) that participant beliefs, motivation, control, and intentions are measured using a mixed design analysis of variance (ANOVA). The relationship between the concepts of the Health Belief Model, behavioral motivation, behavioral control, and intentions to change beliefs about substance use is also ascertained using a Pearson's correlation coefficient. ⁽⁴⁻⁸⁶⁾.

Results:

Table 1: Repeated Measures ANOVA Tests the health beliefs model in changing the belief related to drug use among university students (Intensions).

Intensions	“Repeated Measures ANOVA Tests”			
	F	P	(η ²)	O.P.
Main time effect	19.220	0.000	0.333	1.000
Between groups effect	10.722	0.002	0.121	0.899
Groups Interaction overtime	11.442	0.000	0.229	0.992

η²: Partial Eta Squared (size effect). O.P. Observed Power.

The results of Table 1 show that (F= 19.220, p= 0.000) the major effect of time is important. The important interaction shows that the HBM varies over time among the participants under the research (research and control), the lines of the two groups are not parallel in figure (1). It is noticeable in the figure (1) that the study group rises in beliefs over time, compared to the declining control group. About the size of the effect, (Table 1) shows that about 33 percent of the time is responsible.

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

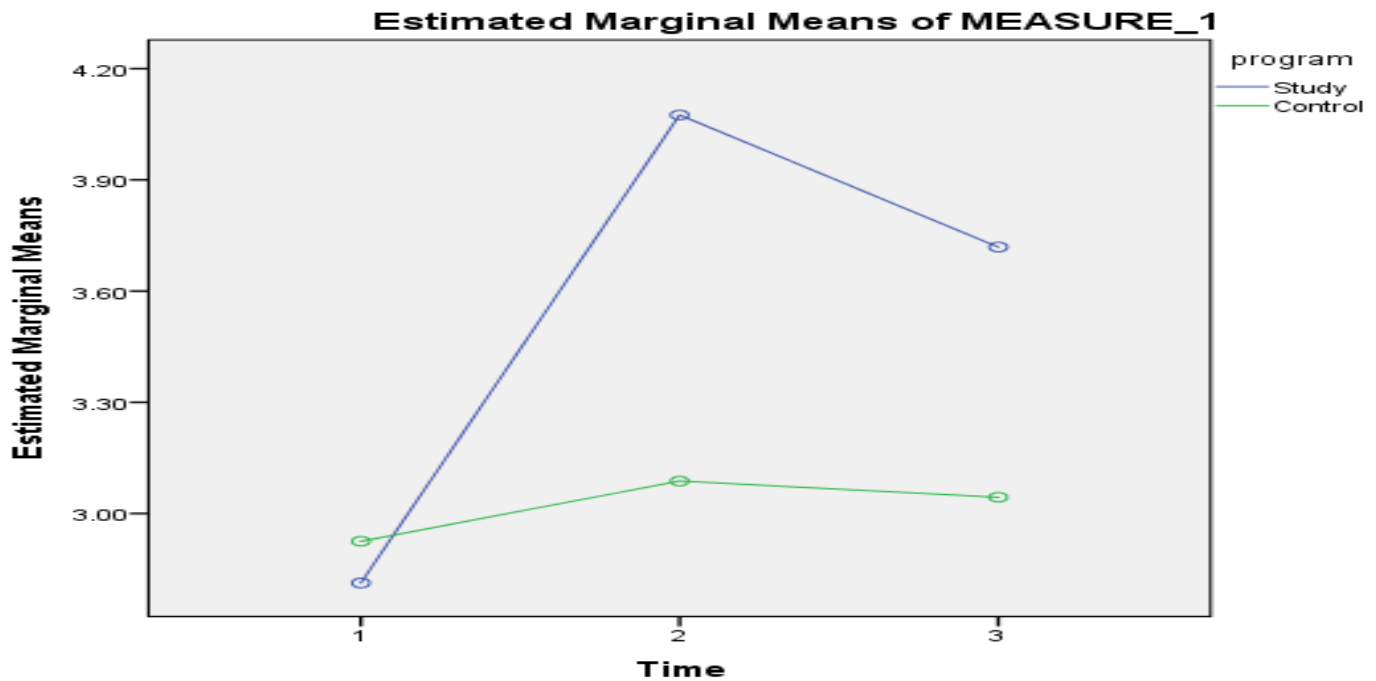


Table 2: Post-hoc Test Using Bonferroni Corrections Procedure for Changing in the Students' Beliefs about Health beliefs Model (Intensions) among Study and Control Group Over Times

HBM	Groups	Post hoc Using Bonferroni		
		(pretest) vs (post 1)	(pretest) vs (post 2)	(Post1) vs (post 2)
Intensions	Exp	0.000	0.000	0.178
	Con	0.716	0.836	0.976

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

The table 2 shows that the score of Health Beliefs Model (Intension) among study group participants differed significantly from pre-test to posttest-1 (sig=0.000) and from pre-test to posttest-2 (sig=0.000). However, there is no statistically significant differences in the score of beliefs from posttest-1 to post-test-2. Concerning the control group, the post-hoc procedures signaled the fluctuation of the beliefs mean score over times. However, no exact improvement or stable continuous significant changes in the score of variables were observed (Table 2). Finally, we can

conclude that health education sessions on substance use produce statistically meaningful gains for participants in modifying beliefs and attitudes related to drug use over time.

Discussion:

The overall students showed changes in their beliefs levels concerning Behavioral Intension. There was a major increase in Belief levels for study group participants at posttest-1 and then a slight decrease at posttest-2 in spite of the continuity of the educational program which hoped to retain their Belief levels as much as possible. This result was certainly due to that students have benefited from the information

that was learned from the program (Table 1); Figure 1). These findings consistent with⁽⁸⁷⁾, who stated the repeated measures ANOVA showed significant differences in the study group in Health Belief Model constructs and also behavioral intention toward substance abuse preventive behavior ($P < 0.001$). It was clear that the study group was increasing in Beliefs regarding (Behavioral intention) over time and the control group is fluctuating in Beliefs (Behavioral intention) over time (Figure 1). Table(2), indicated that the Bonferroni corrections test revealed that the score of the changed Beliefs differed significantly among study group participants over times ($p < 0.05$). 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 concepts of health belief model (Intentions) ($p < 0.000$). The transitions period from (post-test1) to (post-test 2) revealed that there was a continuous stable enhancement upon students' beliefs after three months (Table 2). Concerning the control group, the post-hoc procedures signaled the fluctuation of the Beliefs mean score over times. However, no exact improvement or stable continuous significant changes in the score of beliefs were observed (Table 2). Similar findings were obtained by⁽⁸⁸⁻¹⁰⁵⁾ who found the after intervention, the mean scores for all the constructs of the HBM increased except perceived barriers. Finally, according to the results, the mean scores of information increased significantly in the study group since taking the education program, compared with the control group. The first phase in the adoption of safe behavior, to avoid addiction, for example, is to have adequate information and understanding of effect of addiction. So, the mindfulness of the student's improvements should be made about the essence of drug abuse. However as knowledge and preventive action are far from each other, the person does not avoid substance abuse. To remove this gap and take into account the basic knowledge and behaviors of individuals, continuous health improvement programs are required.

Conclusion:

This study concluded that the Health education through a health belief model demonstrates the importance of drug use prevention and has a positive impact on student behavior intention use stopping interventions in the prevention of addiction and reduction of different health hazards.

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