

Evaluation of Behavioral Control aimed at Improving Students' Behavior Concerning Substance abuse

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Abstracts: Background: substance use disorder, as disorders including physiological, behavioral and cognitive elements, involve including alcohol, drug and tobacco.

Material and method: The purpose of the research is to determine the extent to which, between July 5, 2024, and January 5, 2024, an intervention based on the health beliefs model can affect students' attitudes toward addiction. It accomplishes this by combining a true experimental design with a randomized controlled trial methodology.

Results: The study's conclusions show that there were statistically significant variations in Using the Behavioral Control aimed at Improving Students' Behavior Concerning Substance abuse.

Conclusions: The findings of this study indicate that health education based on a health belief model highlights the significance of preventing substance use and positively influences student behavior control through use of behavior stopping interventions in the prevention of addiction and reduction of various health hazards.

Keywords: Evaluation, Behavioral Control, Improving, Substance abuse.

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Introduction:

The most commonly used substances include adolescents "alcohol, tobacco, and illicit drugs" Commencement of alcohol use and marijuana experimentation in adolescence, and consumption habits typically rise dramatically during this developmental stage. Alcohol is the drug which is most widely used (1), found that more than 47 percent of students are addicted to marijuana, and 4 percent are heavy users. Overall, the prevalence of substance use disorders among young people is about 10 percent, and the prevalence rate increases by about 20 percent between 17 and 18 years of age (2). The most commonly involved substances are alcohol and marijuana. Adolescents with extreme SUD involving different drugs, which are uncommon in community studies, are increasingly common in adolescent addiction medicine

clinics. These disorders also account for major use of health care and prescription expenses. Drug use disorder treatment includes detoxification and relapse prevention. When treating people with drug use disorders, the main concern is relapse. A chronic illness that needs long-term care is addiction. Antic raving agents play a crucial role in relapse prevention. In general, these drugs decrease drug craving and decrease the risk of relapse to compulsive drug use (3). Substance use puts young people at risk health and social consequences impacting their families, adolescence is a critical phase of developmental stage with the greatest risk for the initiation of illicit alcohol and other substance use (4). Important environmental risk factors for both SUD include easy access to cheap alcohol, heavy promotion of these items, particularly for young people, poor parental supervision and high rates of family conflict. Environmental protective factors include availability of healthy recreational and regular supportive monitoring by parents. Other risk factors include a family history of substance use, low involvement in school, health troubles and a history of abuse (5). Risk for substance use due to psychosocial stressors such as wars, homelessness, poverty, unemployment, and trauma exposure (6). The aim of the study to evaluation of behavioral control aimed at improving students' behavior concerning substance abuse.

Methods and Materials:

The purpose of this study is to determine whether students' perceptions of addiction can be successfully changed between July 5, 2024, and January 5, 2024, through the use of an intervention based on the health beliefs model. It uses a randomized controlled trial methodology in conjunction with a true experimental design to achieve this. The study sample consisted of eighty students who participated in a behavior modification training program. The study sample will consist of four colleges: one each for engineering, science, medicine, and education. For every behavior, participants were randomized to the experimental or control groups. The experimental group received a health education lecture about substance use as an intervention. I ran chi-square, t-test, and descriptive and inferential statistics (Means, SD, Number, and Percent) on the data using SPSS, Version 23. A mixed design analysis of variance is used to measure participant beliefs, motivation, control, and intentions three times (pre-test, post-test1, and post-test 2) (ANOVA). A Pearson's correlation coefficient is also used to determine the relationship between the ideas of the Health Belief Model, behavioral motivation, behavioral control, and intentions to change beliefs about substance use. (7-88).

Results:

Table 1: Repeated Measures ANOVA Tests the health beliefs model in changing the belief related to substance use among university students (Behavioral Control)

Behavioral Control	“Repeated Measures ANOVA Tests”			
	F	P	(η^2)	O.P.
Main time effect	8.225	0.001	0.176	0.955
Between groups effect	13.893	0.000	0.151	0.957
Groups Interaction overtime	3.858	0.025	0.091	0.683

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

The findings of Table 1 show that the important interaction indicates that the Health Beliefs Models between the research participants (research and control) shift over time and change in different ways, i.e., the lines of the two groups are not parallel in the figure (1).

In this case, it is evident in figure (1) that, relative to the control group, the study group increases in beliefs over time, which decreases in beliefs over time. About the size of the effect, (Table 1) shows that the time is responsible for about 17 percent of the variance from changed attitudes (Behavioral Control).

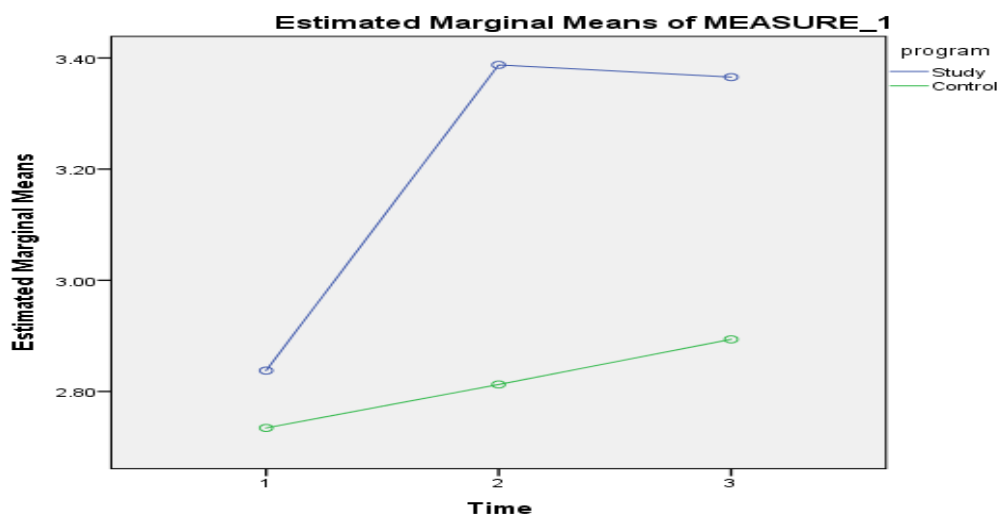


Figure (1): Changing in beliefs related to substance use among university students (Behavioral Control) for the study and control groups throughout the three times.

Table 2: Post-hoc Test Using Bonferroni Corrections Procedure for Changing in the Students' Beliefs about Health beliefs Model (Behavioral Control) 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)
Behavioral Control	Exp	0.001	0.001	1.000
	Con	0.804	0.603	0.790

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.

This test showed that the mean score of the altered Health Belief Model (Behavioral Control) varied significantly among participants in the study group. Table 2 confirms that there is no drastic improvement in the mean score of beliefs over time in relation to the control group.

Discussion:

Table (1) demonstrated that the study and control groups were changing over time but in different levels of their Beliefs regarding Behavioral Control . There was a dramatic increase in beliefs levels for study group participants at posttest-1 and then the participants showed a slight increase at posttest-2. This was a good indicator that students were acquired an adequate knowledge and retained their information which they learned over the period of the educational program. This result was surely due to that students have benefited from the information that was learned from the

program. This finding is supported by (89-91) who found there a significant differences in Health Belief Model and behavioral control between tobacco user in Yap, Micronesia. While there was a little decrease in Beliefs levels of control group participants at posttest-1 and then a slight decrease at posttest-2 too. This result was surely because the students of control group had not participated in the educational program (Table 1; Figure 1). For this constructs (Behavioral Control), it is clear that the control group is decreasing in beliefs over time and the study group is increasing in beliefs over time. In other words, the lines of the two groups were not parallel (Figure 1). The post-hoc procedure by using Bonferroni corrections test revealed that the score of the changed Health Belief Model (Behavioral Control) differed significantly among study group participants over times ($p < 0.05$) (Table 2). Specifically, the transitions from (pre-test) to (post-test1) and from (pre-test) to (post-test 2) indicated that there was a significant improvement in the study group participants' Beliefs about the changing the belief related to substance use among university students ($p < 0.000$). The transitions period from (posttest-1) to (posttest-2) revealed that there was a continuous stable enhancement upon student Beliefs after three months (Table 2). These findings supported by (90-93) who found were significant inter- and intra-group differences, as well as the group-time interaction in behavioral control toward substance abuse ($P < 0.001$). Concerning the control group, no statistically significant changing the belief related to substance use among university students is observable (Table 2).

Conclusion:

The findings of this study indicate that health education based on a health belief model highlights the significance of preventing substance use and positively influences student behavior control through use of behavior stopping interventions in the prevention of addiction and reduction of various health hazards.

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