

## **Behavioral Intention to Avoid Drug Abuse Works as Protective Factor among Adolescent**

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### **Abstract**

**Background:** Young people engage in risky behaviors unintentionally and these behaviors might be reduced or inhibited by preventative behaviors. Although adolescents' risky behaviors are known as unplanned or unintentional, preventative behaviors are intentional. The aim of the present study was to assess students' behavior intentions to avoid drug abuse.

**Methods:** This study was a cross sectional design that male high school students (n= 176) in Tehran, Iran completed a questionnaire assessing behavior intentions to avoid drug abuse, self-control, self-efficacy, perceived susceptibility, and negative attitudes toward drug abuse, peer resistance skills and substance abuse related behaviors.

**Results:** Peer resistance skills, negative attitude toward drugs, perceived self- efficacy, and high self-control were four predictors on intention against drug abuse. Moreover, students' educational status, interested in school and truancy and spending with friends were other predictors for intention against drug abuse.

**Conclusion:** Healthy behaviors are intentional. As a result improving behavior intentions to avoid drug abuse would act as a protective factor for preventing drug abuse among adolescents as well as preventing high-risk behaviors.

**Keywords:** *Intention, Substance abuse, Adolescents health, Iran*

### **Introduction**

Adolescents' risky behaviors were known as unplanned or unintentional. When young people drink alcohol or take drugs, drive recklessly, or even smoke cigarettes, it is unplanned behavior and usually in the presence of friends or peers (1). The relation between intention and behavior is lower among young people, and it increases over time, up to about 19 or 20 (2-4). Gibbons et al. (5) state that adolescents' decision-making "strategies" often do not follow the playful and deliberative sequence outlined by reasoned action or planned behavior.

In other words, adolescents' risky behaviors were not planned or intentional; instead, it was a reaction to a social situation they encountered, in which there was an opportunity to do something risky. However, it would be more effective at predicting intentions than behavior, especially when the behavior involves substance use (6), such as smoking (7) and excessive drinking (8). In spite of involving in risky behaviors, there are many behaviors among adolescents that they do intentionally which are known protective behaviors or planned behaviors that need former intention such as having sexual activity just using condom or safe sex, having physical activity, and abstain drugs.

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Recognizing and improvement of behavioral intention especially for performing healthy or protective behaviors would be effective for keeping and promoting adolescents' health. Students' protective behaviors for doing healthy behaviors are under their former beliefs and intention that motivate them to take healthy behaviors. In other words, we should consider protective behaviors as a planned and intentional behavior versus risky behaviors, which could be known as unplanned behaviors. One issue in exploring adolescents' behaviors is what kinds of behaviors people pay attention. The adolescents' behavior could be classified based on behavioral events that result from crossing the intentional-unintentional distinction. If it is accepted that relation between intention and behavior is lower among young people, how we can describe behavior intention as determinant factor for performing preventive and healthy behaviors among adolescence?

In accordance with the abovementioned background, the purpose of the present study was to assess students' behavior intentions to Avoid Drug Abuse (ADA) and its relation to factors that act as protective factors against drug abuse.

## **Materials and Methods**

This cross sectional study was a part of large project that conducted on high school male students. All subjects were selected from Tehran's 10<sup>th</sup> district area where there were six state high schools. Two high schools were chosen based on randomized sampling allocation. Next, all of the students who were studying in the 10<sup>th</sup> grade were selected in each school. All subjects in this study included 176 male students known as a non-experience of drugs. Participants completed the written questionnaire in each class and students who were not present were given the opportunity to complete the questionnaire a few days later.

### **Demographics**

Background variables studied in this research were as follows: age, educational course (mathe-

matics natural sciences, and humanity sciences), having friends who had experience of substance abuse (never-occasionally-always), having smoker friends (never-occasionally-always), peer pressure to smoke (yes/no), persuasion from friends to use drugs (yes/no), seeing drugs (yes/no), history of failing in school (yes/no). In order to assess the participants' history of smoking, students were asked, "have you ever smoked cigarettes"? The responses were "never, sometimes and often".

### **Low self-control**

Self-control status was measured by a modified and developed scale, based on Rhode's self-control scale and Grasmick's self-control scale (9-11). Self-control was measured with 12 items (e.g., excitement and adventure are more important than security) with response categories coded from 1 to 7 (strongly disagree, disagree, slightly disagree, neutral, slightly agree, agree, strongly agree). Reliability coefficients were calculated for the self-control scale ( $\alpha=0.80$ ).

### **Attitude toward drug abuse**

A 16 item (e.g., I believe that recreational drug use will not lead to addiction) rating scale gauged student attitudes on drug abuse. Each of these items was measured on an ordinal 5-point Likert-type-scale (9 items, 1= certainly agree, 5= certainly disagree and 7 items, 5= strongly agree, 1= strongly disagree) and reliability coefficients were calculated for the attitude scale ( $\alpha=0.83$ ). Attitudes on drug abuse were found by taking the mean scores from the scale. Higher scores on the scale indicated more negative attitudes (11).

### **Behavior intentions to avoid drug abuse**

Behavior intention to avoid drug abuse was measured with a 15 item rating scale (e.g., "I intend to avoid places where I know that my friends are abusing drugs, for at least 6 mo"), with response categories coded from 1 to 7 (strongly disagree, disagree, slightly disagree, neutral, slightly agree, agree, strongly agree). An estimated reliability coefficient ( $\alpha=0.82$ ) indicated that the measure of behavior inten-

tion was internally consistent. Higher scores on the scale indicated strong intention against drug abuse (11).

### ***Self-efficacy***

Self-efficacy was measured with a 7 item rating scale (e.g., "I believe that I can resist pressure from my friends"), with response categories coded from 1 to 7 (strongly disagree, disagree, slightly disagree, neutral, slightly agree, agree, strongly agree), which measured self-efficacy. In terms of its estimated reliability coefficient, perceived self-efficacy ( $\alpha=0.77$ ) was internally consistent. The self-efficacy scale was based on Witte's EPPM scales (11, 12).

### ***Perceived susceptibility***

Six item rating scale measured perceived susceptibility (e.g. "I feel that I am at risk to use drugs"). Each of these items was measured on an ordinal 7-point likert-type scale with 1= strongly disagree, 7= strongly agree (at opposite ends of the continuum), and 4= neutral (in the middle). In terms of their estimated reliability coefficient, perceived susceptibility ( $\alpha=0.66$ ) was internally consistent. Perceived susceptibility developed based on Witte's EPPM scales (11, 12).

### ***Peer Resistance Skills (PRS)***

Students responded to four hypothetical situations in which either their best friend or an acquaintance offered them either cigarettes or drugs (11, 13). They then rated their ability to "say no" on a four-point scale ranging from "not sure at all" to "very sure." The four items were summed, with a higher score indicating greater confidence in ones ability to resist peer pressure to use substances. An estimated reliability coefficient ( $\alpha=0.62$ ) indicated that the measure of PRS was internally consistent.

Analyses were conducted using SPSS 11 and an alpha level of .05 was estimated for all statistical tests.

## **Result**

The age range of students was between 15 and 18 yr, including 15(14.3%), 16(61.4%), 17(19.6%) and 18(4.8%). Regarding the do-

main of educational courses, 35.4% of students were studying mathematics, 31.2% natural sciences and 33.3% human sciences. 15.9% of the students had failed in previous school years. In addition, 31.2% of students reported smoking either once or more. Students also reported that 24.3% of their friends had used or were using narcotics and 49.7% had used or were using tobacco. Friends offered substances to 16.9% of the students and 13.8% were put under pressure from friends. About 34.9% of students were offered tobacco. An analysis of the self-control scale revealed that 29.6% of students had poor self-control and 70.4% had a high level of self-control.

Multiple regression analysis was calculated for predictability of self-efficacy, attitude toward drugs, PRS, self-control and perceived susceptibility on intention ADA. Table 1 displays the results for attitude. PRS, negative attitude toward drugs, perceived self-efficacy, and self-control were four predictors on behavior intentions to avoid drug abuse that the regression analysis accounts for 42% of variance and was statistically significant ( $P<0.000$ ).

Assessing educational status, violence and spending with friends as predictors for intention ADA indicates that educational status and having more friends are predictors for intention ADA (Table 2). The regression analysis accounts for 12% of variance and was statistically significant ( $P<0.000$ ).

Assessing Interested in school and truancy as predictors for intention ADA indicates that interested in school and truancy is predictors for intention ADA (Table 3). The regression analysis accounts for 17% of variance and was statistically significant ( $P<0.000$ ).

Furthermore assessing seeing drugs and peer pressure for using drugs as predictors for intention ADA indicates that seeing drugs and peer pressure for using drugs are predictors for intention ADA (Table 3). The regression analysis accounts for 13% of variance and was statistically significant ( $P<0.000$ ).

**Table 1:** Summary of regression analysis for Self-Efficacy, Attitude toward drugs, PRS, Self-control and Perceived Susceptibility as predictors for Behavior intentions to avoid drug abuse (n=176)

Variable	B	SE B	$\beta$	t	P
Self- efficacy	0.43	0.12	0.22	3.45	0.001
Attitude	0.58	0.10	0.39	5.72	0.001
PRS	1.84	0.70	0.16	2.61	0.010
Self-control	0.15	0.07	0.13	2.18	.031
Perceived Susceptibility	-8.55	.12	-0.04	-0.18	.488

Note. Standard values used. Final statistics for five predictors: r squared: 0.42, F (5, 173) = 17.99, (P = .000)

**Table 2:** Summary of regression analysis for educational status, violence and walking in the streets as predictors for behavior intentions to avoid drug abuse (n=176)

Variable	B	Se B	$\beta$	t	P
Educational status	-3.97	1.15	-0.25	3.46	0.001
Violence	-2.46	3.10	-0.06	-0.76	0.43
Having more friends	-2.71	1.10	-0.18	-2.46	0.015

Note. Standard values used. Final statistics for five predictors: r squared: 0.12, F (3, 175) = 17.99, (P = .000).

**Table 3:** Summary of regression analysis for interest in school and truancy as predictors for Behavior intentions to avoid drug abuse (n=176).

Variable	B	Se B	$\beta$	t	P
Interested in school	-3.97	0.88	0.31	4.41	0.000
Truancy	-2.20	0.77	-0.20	-2.83	0.005

Note. Standard values used. Final statistics for two predictors: r squared: 0.17, F (2, 176) = 17.99, (P = .000).

**Table 4:** Summary of regression analysis for seeing drugs and peer pressure as predictors for Behavior intentions to avoid drug abuse (n=176)

Variable	B	Se B	$\beta$	t	P
Seeing Drugs	-0.46	0.13	-0.26	-3.62	0.001
Peer pressure for Using drugs	-0.52	0.18	-0.21	-2.87	0.004

Note. Standard values used. Final statistics for two predictors: r squared: 0.13, F (2, 176) = 13.42, (P = .000).

## Discussion

The purpose of this study was to examine the influence and relation of behavioral intention ADA in taking protective behaviors for having drug free life. In other words, distinction between behavior that is reasoned or planned and behavior that is reactive is the heart of this research. The findings of the current study suggest that the following four variables of

PRS, negative attitude toward drugs, perceived self- efficacy, and self-control are four predictors on intention ADA. Consistent with previous research (14, 15) our results showed that there were relation between PRS, negative attitude toward drugs, perceived self-efficacy, self-control and intention for refusing drugs but it was not significant relation for perceived susceptibility.

However, relation between risk perception and intention to engage healthy behaviors has been demonstrated repeatedly in adults. It seems optimistic bias is a main reason that causes low perception of risk or vulnerability to use drugs in the future. Moreover, Gibbons et al. (14) suggest that because adolescents risk behavior is often not intentional, the link between risk perception and behavior is not likely to be thoughtful, and thus, is not likely mediated by intentions.

Our findings also demonstrate that peer resistance skills and negative attitude toward drugs are significantly related to intention not to use drugs. Peer resistance skill is one of the important protective factors for prevention of drug abuse. Adolescents whose friends use substances are more likely to have favorable attitudes toward substances and substances use (16, 17). The findings of the current study suggest that self-control is a factor that could predict intention against drug abuse. By focusing on building self-control skills, drug abuse prevention programs might better promote drug resistance behaviors (11, 18). Adolescents with poor self-control are at a high risk of adapting to behaviors that could lead to drug abuse (19-24).

Moreover, our results showed that truancy, peer pressure, seeing illicit drug, and having more friends were the predictors for having low behavior intentions to avoid drug abuse. In other hands, adolescents who had a good educational status and interested in to school were intended to avoid drugs abuse.

Research in both marketing and psychology has examined the links between past behavior, intentions, and future behavior. Several studies that have examined a wide range of behaviors have reported varying results, with some results supporting the role of intentions in predicting future behavior, while other results support the role of past behavior in predicting intentions and future behavior.

Theoretical models such as the theory of reasoned action, the theory of planned behavior,

and the theory of trying have been applied to measure intentions in predicting future behavior. The observed relationship between intentions and behavior is generally positive and significant; however, the strength of the relationship varies from study to study (25- 28). Conclusively, behavior intention against drugs has a predictive and determinant role in adapting drug resistance behaviors. Thus, behavior intention against drugs helps adolescents for having planned behavior for avoiding substance abuse. Promoting intentional behaviors among adolescents as planed behaviors could be efficient for designing preventive high-risk behaviors programs, but this would require further empirical testing and theoretical elaboration.

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