

Subjective Academic Achievement, Economic Status, and Smoking and Drinking Behaviors among Adolescents

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ABSTRACT

This study aimed to examine the relationship between subjective academic achievement, economic status, and smoking and drinking behaviors among adolescents in one region of South Korea. In this study, a secondary analysis was performed on data of adolescents in 2020. The present study found that smokers had lower subjective academic scores than nonsmokers ($t=15.343$, $p<0.001$), and drinkers had lower subjective academic scores than nonsmokers ($t=8.821$, $p<0.001$). In terms of subjective economic status, smokers had lower subjective economic status scores than nonsmokers ($t=7.378$, $p=0.003$), and drinkers had lower subjective economic status scores than nonsmokers ($t=6.080$, $p=0.001$). Efforts should be made to increase academic achievement by preventing smoking and drinking behaviors in adolescents. Therefore, it is necessary to prevent an increase in exposure to smoking and drinking owing to socioeconomic status.

Keywords: adolescents, academic achievement, economic status, smoking, drinking

INTRODUCTION

Smoking and drinking in adolescents are major predictors of nicotine and alcohol use disorders in adults. Smoking and drinking among adolescents are associated with low academic achievement, making it difficult for them to adjust to school life and increasing the likelihood of developing into crisis adolescents [1]. In addition, in the case of adults, smoking and drinking behaviors because of low economic status have been identified as major indicators of health inequality; however, in the case of adolescents, related studies are limited [2]. Therefore, it is necessary to investigate academic achievement and economic status of adolescents according to whether they smoke or drink, prevent smoking and drinking among adolescents, and supplement the results of academic achievement owing to smoking and drinking [3].

This study attempted to provide basic data for the establishment of youth smoking and drinking prevention policies in a local city. The specific objectives of the study are as follows: (1) to investigate the degree of smoking and drinking, subjective academic achievement, and economic status; (2) to identify the difference between smoking and drinking behaviors and subjective academic achievement, and (3) to identify the differences between smoking and drinking behaviors and subjective economic status.

METHODS

Study Design

This descriptive study aimed to identify the relationships between subjective academic achievement, subjective economic status, and smoking and drinking behaviors among adolescents in one region of South Korea.

Participants and Data

This study used data from the 2020 Alcohol Research Survey [4], which was conducted and published for adolescents in City A. A total of 26,844 students from 12 elementary, 171 middle, and 144 general high schools participated in the alcohol consumption survey in City A. Data collection was conducted using a self-reported online survey, and only students who voluntarily participated were surveyed.

Study Instruments

1. Subjective academic achievement was evaluated on a 5-point scale (1 to 5), with a higher score indicating a higher subjective academic achievement.
2. Subjective economic status was evaluated on a 5-point scale (1 to 5), with a higher score indicating a higher the subjective economic status.

RESULT

Participants' Subjective Academic Achievement, Economic Status, and Smoking and Drinking Behaviors

The participants' subjective academic score was 2.96 (out of 5 points), and the participants' subjective economic score was 3.14 (out of 5). Of the 26,844 participants, 782 (2.9%) smoked, and 1,406 (5.2%) consumed alcohol (Table 1) at the time of the survey.

Table 1. Subjective academic achievement, economic status, and smoking and drinking behaviors

Variables		N(%)	Mean Min 1–Max 5
Subjective academic achievement			2.96
Subjective economic status			3.14
Smoking	No smoking	26,062 (97.1)	
	Smoking	782 (2.9)	
Drinking	No drinking	25,438 (94.8)	
	Drinking	1,406 (5.2)	

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The average score of the students who did not smoke was 3.28, and that of the students who smoked was 2.64, showing a statistically significant difference ($t=15.343$, $p<0.001$). The average academic score of students who did not drink was 3.27, and that of students who did drink was 3.00, showing a statistically significant difference ($t=8.821$, $p<0.001$) (Table 2).

Table 2. Subjective academic achievement and smoking and drinking behaviors

Variables		Subjective academic achievement		
		Mean (SD) (min 1–max 5)	T	p
Smoking	No smoking (n=26,062)	3.28 (1.138)	15.343	0.001
	Smoking (n=782)	2.64 (1.313)		
Drinking	No drinking (n=25,438)	3.27 (1.141)	8.821	0.001
	Drinking (n=1,406)	3.00 (1.245)		

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There was a statistically significant difference ($t=7.378$, $p=0.003$) between the mean score of students who did not smoke ($SD=3.53$) and that of students who did smoke ($SD=3.27$). Furthermore, there was a statistically significant difference ($t=6.080$, $p=0.001$) between the mean score of students who did not drink ($SD=3.53$) and that of students who did drink ($SD=3.37$) (Table 3).

Table 3. Subjective economic status and smoking and drinking behaviors

Variables		Subjective economic status		
		Mean (SD) (min 1–max 5)	t	p
Smoking	No smoking (n=26,062)	3.53 (0.938)	7.378	0.003
	Smoking (n=782)	3.27 (1.065)		
Drinking	No drinking (n=25,438)	3.53 (1.024)	6.080	0.001
	Drinking (n=1,406)	3.37 (0.926)		

DISCUSSION

This study found that smokers and drinkers had lower subjective academic achievement and economic status scores. This is consistent with the finding that low academic achievement and poverty are associated with adolescent tobacco, alcohol, and drug use [5]. Students who started using alcohol or marijuana were also less likely to attend class regularly, complete homework, achieve high scores, and value good grades than their peers who did not use alcohol or

marijuana [6]. This is also consistent with the finding that students' tobacco and alcohol use were negatively associated with their academic achievement [7]. Tobacco and alcohol use are consistent with results that tobacco and alcohol use increase with decreasing socioeconomic status [8].

Therefore, it is necessary to make an effort to improve academic achievement by preventing smoking and drinking behavior of adolescents and apply a smoking and drinking prevention program with greater attention to prevent the increase in exposure to smoking and drinking owing to economic status.

Reference

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