



Subjective Health Cognition, Well-being, and Smoking and Drinking Behaviors among adolescents

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ABSTRACT

This study aimed to examine the relationship between subjective health cognition, well-being, and smoking and drinking behaviors among adolescents in one region of South Korea. The data used in this study were collected from adolescents in one region and analyzed using secondary analysis. The present study found that smokers had lower subjective health cognition scores than nonsmokers ($t=10.200$, $p<0.001$) and that drinkers had lower subjective health cognition scores than nonsmokers ($t=5.422$, $p=0.001$). In terms of subjective well-being, smokers scored lower than nonsmokers ($t=12.234$, $p<0.001$), and drinkers had lower subjective well-being scores than nonsmokers ($t=10.582$, $p<0.001$). Therefore, it is necessary to promote the health status and well-being of adolescents through smoking and drinking prevention education.

Keywords: adolescent, health, cognition, happiness, smoking, drinking

INTRODUCTION

Smoking and alcohol use in adolescents are associated with a 67.5% chance of conversion to dependence for nicotine users and 22.7% for alcohol users in adulthood [1]. To prevent adolescents from smoking and drinking, youth smoking and drinking prevention education has been implemented as a part of school health education in South Korea. Although education on the negative effects of smoking and drinking on adolescents' physical and mental health has continued since infancy [2, 3], there are insufficient studies on how adolescents who smoke and drink perceive their health. In addition, there is a lack of consideration for the happiness status of adolescents who have been exposed to smoking and drinking. By conducting a survey on the self-reported health and happiness status of adolescents who smoke and drink, it is possible to contribute to the promotion of physical and mental health by restoring their physical health and improving their sense of well-being through a smoking and drinking prevention program. In this study, we attempted to provide basic data for establishing youth health policies in a local city. The specific research objectives were as follows:

1. To identify subjective health cognition, well-being, and smoking and drinking behaviors
2. To identify the difference between subjective health awareness, and smoking and drinking behaviors
3. To identify the difference between subjective well-being and smoking and drinking behaviors

METHODS

Study Design

This descriptive study aimed to identify the subjective health cognition, subjective well-being, and smoking and drinking behaviors of adolescents in one region of South Korea.

Participants and Data

This data used public data from the 2020 Drinking Survey Study [4] conducted on adolescents in City A. A total of 26,844 students aged 11–18 years participated for the analysis. Data collection was conducted using a self-reported online survey, and only students who voluntarily participated were surveyed.

Study Instruments

1. Subjective health perception was evaluated on a 5-point scale (1 to 5 points), with a higher score indicating a higher degree of subjective health perception.
2. Subjective well-being was evaluated on a 5-point scale (1 to 5), with a higher score indicating a higher degree of subjective well-being.

RESULT

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The average subjective health cognition score of the participants was 3.89 (out of 5 points), and the subjective well-being score of the participants who drank was 3.83 (out of 5 points). Of the 26,844 subjects, 782 (2.9%) smoked, and 1,406 (5.2%) consumed alcohol (Table 1).

Table 1. Subject health recognition, well-being, smoking and drinking behaviors

Variables		N(%)	Mean (Min 1–Max 5)
Subjective health recognition			3.89
Subjective well-being			3.83
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 subjective health cognition score was 3.99, and the average academic performance of smokers was 3.64, indicating a statistically significant difference ($t=10.200$, $p<0.001$).

The average academic performance of students who did not drink was 3.99, and that of students who drank was 3.85, showing a statistically significant difference ($t=5.422$, $p=0.001$) (Table 2).

Table 2. Subject health recognition and smoking and drinking behaviors

Variables		Subjective health recognition		
		Mean (SD) (min 1–max 5)	t	p
Smoking	No smoking (n=26,062)	3.99 (0.926)	10.200	<0.001
	Smoking (n=782)	3.64 (1.066)		
Drinking	No drinking (n=25,438)	3.99 (0.926)	5.422	0.001
	Drinking (n=1,406)	3.85 (1.030)		

Subjective Well-being and Smoking and Drinking Behaviors

There was a statistically significant difference ($t=12.234$, $p<0.001$) between the mean score of students who did not currently smoke (Mean=4.01) and that of students who currently smoked (Mean =3.57). Furthermore, there was a statistically significant difference ($t=10.582$, $p<0.001$) between the mean score of students who do not currently drink (Mean =4.02) and that of students who currently drink (Mean =3.72) (Table 3).

Table 3. Subject well-being and smoking and drinking behaviors

Variables		Subjective well-being		
		Mean (SD) (min 1–max 5)	t	p
Smoking	No smoking (n=26,062)	4.01 (1.138)	12.234	<0.001
	Smoking (n=782)	3.57 (1.313)		
Drinking	No drinking (n=25,438)	4.02 (0.984)	10.582	<0.001
	Drinking (n=1,406)	3.72 (1.158)		

DISCUSSION

This study found that students who smoked and those who drank had lower subjective health recognition and well-being scores. These results are consistent with those of higher subjective

well-being with less smoking experience [5], and similar results have shown that excessive smoking affects subjective health recognition [6]. In addition, adolescents with alcohol abuse were more likely to have episodes of changes in appetite, weight loss, eczema, headache, and loss of consciousness than the control group [7], and adolescents with frequent or heavy alcohol and tobacco use had a higher subjective overall health status than the control group. The effects were worse with more hospitalizations [8], which was similar to the results suggesting that it might increase the incidence of mental health problems [9]. Therefore, it is necessary to improve the health and well-being of adolescents through smoking and drinking prevention education.

References

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