

**ADOLESCENTS' PERCEIVED HEALTH RISK AND HEALTH LOCUS OF CONTROL****YoungHo Kim**<sup>\*1</sup>

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**DOI: 10.5281/zenodo.59118****KEYWORDS:** Health risk, Perception, Health locus of control, Adolescents.**ABSTRACT**

The purpose of the study was to investigate the prevalence of health risk behaviors among a random sample of Korean adolescents and the relationship of psychological variables with health risk behaviors. 885 students ranged from 7<sup>th</sup> to 9<sup>th</sup> grade were randomly selected from 3 junior high schools in Dobong-gu district, Seoul. Four Korean-version measures were used to assess the health risk behavior and psychological variables of adolescents. Korean adolescents showed high prevalence of physical inactivity (n = 67%), smoking (n = 54%), drinking alcohol (n = 69%), eating problem (n = 49%), mental health problem (n = 57%), and viewing pornography (n = 47%). In addition to this, this study revealed that the three sub variables of health locus of control were significantly correlated with health risk behaviors, and had significant effect to account for health risk behaviors. This study has the potential to influence the development of better health education and promotion programs for adolescents.

**INTRODUCTION**

It has been well documented that many health risk behaviors are often initiated during the adolescent years and the initiation of risk behaviors is occurring at progressively younger age. A large volume of study indicated that the rates of smoking, drinking alcohol and drug use during adolescence have remarkably increased since 1980's, and many adolescents experienced health risk behaviors at markedly earlier ages<sup>[1]</sup>. Traditionally, in many areas of public health a number of studies aimed at understanding why the majority of adolescents initiate health risk behaviors have focused on providing information, education and counseling programs without fully considering the psychological factors associated with adolescents' risk behaviors<sup>[2]</sup>.

In this regard many studies across a wide range of populations and settings have demonstrated the existence of a relationship between health risk behaviors and psychological variables<sup>[3,4]</sup>. However, most of previous studies have been conducted in Western countries. The same level of research has not been focused on the Korean adolescent populations. The study attempted to identify the prevalence of health risk behaviors among a random sample of Korean adolescents. Specifically, the study investigated the relationship between psychological variables and health risk behaviors.

**METHODS****Participants**

A total of 885 students ranged from 7<sup>th</sup> to 9<sup>th</sup> grade were randomly selected from 3 junior high schools in Dobong-gu district, Seoul. All participants in the age cohort were 14-16 years old (M = 15.1 years).

**Measures**

Korean Health Survey Kit was applied to evaluate adolescents' health risk behaviors. Coefficient alpha was .92, indicating high internal consistency and test-retest *r* was .83, indicating stability. The Multidimensional Health Locus of Control Scale (MHLC) was translated into Korean, and used in the study<sup>[5]</sup>. Test-retest Cronbach's  $\alpha$  reliability coefficients of each sub-scale were as below: .87 for internal health locus of control (IHLC); .84 for powerful other health locus of control (PHLC); .81 for chance health locus of control (CHLC). The Self-efficacy Scale was also revised for the Korean version, and adopted in the study<sup>[6]</sup>. A Cronbach alpha coefficient of .90



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was found for the questionnaire. The Korean version of the Self-esteem Scale was applied in the study <sup>[7]</sup>. A two week test-retest was performed and obtained a reliability of .87.

### RESULTS

Prevalence of adolescents' health risk behaviors Table 1 shows the result of frequency analysis concerning adolescents' negative health behavior. 19% of adolescents responded that they "never exercised". Considering the fact that about 39% of adolescents participated in physical activity once per month, a lack of exercise in the adolescents is a crucial factor which might adversely affect their health. Importantly, 59% of the adolescents who participated in regular exercise, are doing so less than 1 hour. 51% have experienced smoking (33% currently) and approximately 62% use alcohol.

Moreover, for the mental health problems Table 1 shows that adolescents have frequently experienced worry, anxiety, depression and sleep disorders (78%, 55%, 42% and 39%, respectively) owing to a variety of daily stresses including school. With regard to eating behaviors 47% reported that they have eating problems such as skipping meals and frequently eating animal fat. More seriously, 22% have taken medicine for weight control.

*Table 1. Adolescents' Health risk Behaviors*

Variable		Case (N)	Percent (%)
Physical activity	Never	142	16
	Once/month	239	27
	Once/week	212	24
	2-3/week	150	17
	Everyday	142	16
Smoking	Yes	478	54
	No	407	46
Drinking alcohol	Yes	610	69
	No	275	31
Mental health problem	Yes	504	57
	No	381	43
Illegal drug use	Yes	71	8
	No	814	92
Eating problem	Yes	434	49
	No	451	51
Viewing pornography	Yes	416	47
	No	469	53
Sexual intercourse	Yes	7	0.8
	No	878	99.2
Total		885	100.0

Association of adolescents' health risk behaviors with health locus of control Table 2 illustrates the results of correlation analysis to identify the relationships of psychological variables with the sub-dimensions of adolescents' negative health behavior. The 'internal health locus of control' variable was significantly correlated with lack of physical activity, illegal drug use, alcohol use and smoking ( $r=-.25$ ,  $-.20$ ,  $-.18$  and  $-.14$ , respectively).

The 'powerful other health locus control' construct was also substantially correlated with eating problems( $r=-.26$ ), illegal drug use( $r=-.24$ ), lack of exercise( $r=-.22$ ), viewing pornography( $r=-.18$ ) and mental health problems( $r=.18$ ). Furthermore, the results indicated that some negative health behaviors such as lack of exercise, mental health problems, alcohol use, were statistically correlated with 'chance health locus of control' construct ( $r=-.33$ ,  $.21$  and  $-.21$ , respectively).



*Table 2. Correlation between Health locus of Control and Health Risk Behaviors*

Variable	IHLC	PHLC	CHLC	PI	MHP	S	IDU	DA	EP	VP
IHLC	1.00	.17**	.12**	-.23**	.03	-.16**	-.21**	-.20**	.13**	.04
PHLC		1.00	.77**	.24**	.16**	.04	-.22**	.16**	-.19**	-.27**
CHLC			1.00	-.40**	.24**	.10**	-.10**	.16**	-.23**	-.10**
PI				1.00	.32**	.09*	.13**	-.11**	.15**	.10*
MHP					1.00	-.09**	.17**	.04	-.13**	.08**
S						1.00	.16**	.21**	.11**	.24**
IDU							1.00	.21**	-.23**	.16**
DA								1.00	-.21**	.18**
EP									1.00	.03
VP										1.00
M	3.66	2.88	8.51	3.67	1.45	1.51	1.00	1.41	1.67	179
SD	.59	.52	1.00	1.01	.44	.48	.37	.50	.50	.55

\*p<.05; \*\*p<.001

IHLC: Internal health locus of control; PHLC: Powerful other health locus of control; CHLC: Chance health locus of control; PI: Physical inactivity; MHP: Mental health problem; S: Smoking; IDU: Illegal drug use; DA: Drinking alcohol; EP: Eating problem; VP: Viewing pornography

## DISCUSSION

On the basis of these findings, this study provides significant information, specifically information not previously obtained for psychological factors related to adolescents' negative health risk perception and behavior. In Korea, the field of adolescent health is just beginning to develop, and there is a lack of research, which describes the adolescents' risk behavior and health psychology. This study has the potential to influence the development of better health education and promotion programs for adolescents. More importantly, the findings of this study will be useful in designing risk-reduction interventions congruent with the values and perceptions of Korean adolescents.

In addition, if further studies were to be undertaken to look at relationships between other psychological variables and other specific dimensions of adolescent health, then such findings of the existence of significant relationships could increase the understanding.

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