



## ADOLESCENTS' MENTAL HEALTH AND HEALTH LOCUS OF CONTROL

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**KEYWORDS:** Adolescent, mental health, health locus of control.

### ABSTRACT

The purposes of the study were to explore the gender and age differences in negative mental health of Korean adolescents, to identify the relationship between negative mental health and health locus of control. 2,124 adolescents randomly selected from junior high and high schools in Seoul were surveyed. Two Korean-version instruments were used to identify negative mental health and health locus of control of adolescents. Results indicated that there were significant differences in adolescents' negative mental health across gender and ages. Furthermore, results revealed that the adolescents' negative mental health were statistically correlated with the sub-domains of health locus of control. For Korea, this study has the potential to influence the development of better mental health education programs for adolescents.

### INTRODUCTION

It has been widely witnessed that a surprising number of adolescents suffer emotional and mental dysfunction. Of added importance is the fact that such turmoil is very often carried over into adulthood with serious implications for adjustment during the post-adolescent years. Mental health problems presenting during the adolescent years may represent persistence of problems which arose in childhood or the onset of new illness. These mental health problems generally include interpersonal sensitivity, loneliness, stress, depression, anxiety, hostility, attention deficiency, and are sometimes associated with suicide<sup>1</sup>2).

Raphael reported that anxiety, depression and adjustment problems were the major examples of negative mental health which frequently occurred during adolescence. Within adolescent health, mental health is an issue and the behavioral outcomes of this issue are reflected in the mortality and morbidity statistics<sup>3</sup>). Nancarrow in an Australian community sample, indicated that a large number of students were concerned with general mental health problems. The results pointed out that an estimated 53 percent of students were concerned about feeling depressed; 50 percent were concerned about emotional upsets; and, 48 percent had negative feeling about themselves or aspects of their life. Such mental health problems are universal, caused by lack of social competence, uncertainty of future and life goal, low self-actualization and bad peer relationships<sup>4</sup>). In the latest study, McCauley et al. investigated gender differences in adolescents' mental health. Authors, in this study, indicated that female adolescents reported significantly lower level of self-confidence and substantially higher level of depression and anxiety than did males<sup>5</sup>).

Concerning the age differences of adolescents' mental health, Neto and Barros noted that the students in early adolescence reported higher scores for loneliness and anxiety in social anxiety scale than did those in late adolescence<sup>6</sup>). Factors that impinge upon and effect mental health of adolescents can be related to issues from the emotional, social, psychological and behavioral domains. Available studies regarding adolescents' mental health and their psychological attributes have indicated the significant relationships between those factors. Nada-Raja, McGee and Williams examined health beliefs of adolescents regarding mental health. In this study, male students had stronger and simultaneous beliefs in internal, chance and powerful others locus of control than females. Females differed significantly from males in that they believed good mental health was associated with external locus of control. Although there were statistically significant sex differences in locus of control about mental health, these differences were not enough to be considered meaningful<sup>7</sup>). In the latest study, argued that health locus of control construct was substantially correlated with adolescents' mental health problems. Among three sub-domains of health locus of control, in special, internal health locus of control was strongly correlated with depression and anxiety, meanwhile powerful health locus of control had also significant correlation with anxiety and interpersonal sensitivity<sup>2</sup>).

In this regard, health locus of control that influence mental health of the adolescents in the different cultures have frequently been identified. However, the same level of research has not been focused on the Korean adolescent populations. The purposes of the study were to explore the gender and age differences in negative mental health of Korean adolescents and to identify the relationship between negative mental health and health locus of control.

## METHODS

### Participants

To assess adolescents' negative mental health and locus of control, 2,124 Korean students (male:1,092, female:1,032) who attended junior high and high schools in Seoul, Korea were participated in the study. The subjects were selected by a random sampling from six schools located in Seoul. All students in the age cohort were 14-19 yrs (M=15.4yrs).

### Measures

For the mental health of Korean adolescents, the instrument applied in the study was Korean Symptom Checklist8) consisted of 9 sub-dimensions, 90 items. From the 9 sub-dimensions and 90 items of the instrument, 4 sub-dimensions and 38 items were selected and used in the study (9 items for interpersonal sensitivity, 13 items for depression, 10 items for anxiety, 6 items for hostility). In a pilot test, the modified instrument was given to a sample of 156 secondary school students to evaluate item clarity. Students' comments revealed a lack of clarity in the wording of a few items. This process obtained test-retest r for the four sub dimensions: .80 for interpersonal sensitivity, .90 for depression, .91 for anxiety and .84 for hostility 8).

To assess Korean adolescents' beliefs and ability to control health, the original Multidimensional Health Locus of Control Scale9) was translated into Korean and used in the study. The revised questionnaire consisted of the three sub-scales, 18 items and alpha reliabilities of each sub-scale were as below: .83 for internal health locus of control; .79 for powerful other health locus of control; .81 for chance health locus of control9).

## RESULTS

### Differences in mental health by gender and age

To examine differences in mental health problems according to gender and age, this study conducted t-test and analysis of variances and reported out in Table 1 and 2. According to Table 1, there were significant mean differences between male and female adolescents in all sub dimensions of negative mental health. Female adolescents reported that they have higher scores on 'interpersonal sensitivity' (t=16.62), 'depression' (t=14.15), 'anxiety' (t=8.31) than males, meanwhile, males have more frequently experienced 'hostility' (t=9.82), compared with their counterparts (all p<.001).

Table 2 shows the mean differences in the sub dimensions of negative mental health by age. As illustrated in Table 2, there were statistically significant mean differences in 'interpersonal sensitivity' and 'depression' by age (F=14.19, 6.62, all p<.001, respectively). Especially, adolescents aged 18-19 years reported that they have most frequently experienced all sub dimensions of negative mental health, although there were no statistical differences in 'anxiety' and 'hostility' by age.

*Table 1. The Mean and SD of Mental Health Problems by Gender*

Variable	Male		Female		T
	M	SD	M	SD	
Interpersonal Sensitivity	2.08	.48	2.36	.27	16.62*
Depression	2.30	.49	2.59	.46	14.15*
Anxiety	2.49	.47	2.66	.50	8.31*
Hostility	2.71	.50	2.51	.45	9.82*

\*p<.001

**Table 2. The Mean and SD of Mental Health Problems by Age**

Variable	14-15(yr)		16-17(yr)		18-19(yr)		F
	M	SD	M	SD	M	SD	
Interpersonal sensitivity	2.18	.40	2.20	.39	2.30	.46	14.19*
Depression	2.40	.50	2.43	.49	2.50	.50	6.62*
Anxiety	2.55	.49	2.61	.50	2.58	.49	2.14
Hostility	2.60	.49	2.63	.48	2.61	.49	.91

\*p&lt;.001

**Correlation between mental health and health locus of control**

Table 3 illustrates the results of correlation analysis to identify the relationships of psychological variables with the sub dimensions of adolescents' negative mental health behaviors. All sub domains of psychological variables were significantly correlated with all sub dimensions of negative mental health. Among them, IHLC was strongly correlated with 'depression' ( $r=-.17$ ) and 'anxiety' ( $r=.14$ ). PHLC also had substantial correlations with 'hostility', 'anxiety' and 'interpersonal sensitivity' ( $r=.15$ ,  $-.14$  and  $.13$ , respectively), meanwhile CHLC was significantly correlated with 'hostility' and 'anxiety' ( $r=.17$  and  $-.11$ ).

**Table 3. Correlation among all variables**

Variable	IS	D	An	H	IHLC	PHLC	CHLC
IS	1.00						
D	.40**	1.00					
An	.21**	.30**	1.00				
H	.30**	.56**	.14**	1.00			
IHLC	-.08*	-.17**	.14**	.07*	1.00		
PHLC	.13**	.09**	-.14**	.15**	.05	1.00	
CHLC	-.04	.06	-.11**	.17**	.09*	.36**	1.00
M	2.23	2.45	2.58	2.61	4.50	3.36	3.31
SD	.42	.50	.49	.49	.88	.67	.62

\*p&lt;.05; \*\*p&lt;.001

IS: Interpersonal Sensitivity; D: Depression; An: Anxiety; H: Hostility;  
IHLC: Internal Health Locus of Control; PHLC: Powerful other Health Locus of Control; CHLC: Chance Health Locus of Control

**DISCUSSION**

This study makes a unique contribution to the existing knowledge about Korean adolescents. Adolescent mental health in Korea is not a prime focus for educators, health workers, government bureaucrats or politicians. Indeed, mental health care as an aspect of primary health promotion is in its infancy, and only just emerging as a social educational issue. Along with such socially undervalued context, there has been very limited research into adolescent mental health and psychology in Korea.

The study explored the significant differences between male and female Korean adolescents in all dimensions of negative mental health. Female adolescents scored highly in interpersonal sensitivity, depression and anxiety, compared with did their counterparts. It is generally recognized that female adolescents in or over puberty tend to have emotional disposition and hence are likely to be sensitive to the common events in everyday life. This result was supported by the findings of indicating that female adolescents were more anxious and depressed than males4).

In addition, adolescent' mental health was in part different between the three age groups. Of the three groups adolescents aged 18-19 years reported that they have most frequently experienced interpersonal sensitivity and depression. It is not unexpected that older adolescents have a higher possibility of mental health problems than younger adolescents.

Mental health itself is a complex concept, and especially the specific components of mental health are elusive and intangible elements. In addition, these mental health constructs depend on people' mental maturity, perception



and behaviors through their interactions in and with their environment. In this regard, the result about age difference can be explained that in a developmental viewpoint, older adolescents, in general, have a higher mental maturity and have more experienced a variety of negative and uncomfortable events through their lifetime than other adolescents in early and middle adolescence.

The health locus of control construct adopted in this study are based on social cognitive theory (SCT). SCT is a broad theoretical approach to explaining human behavior and now applied in health psychology research both to predict health-related behavior and to provide a basis for behavior change interventions. From a large number of previous studies it has been concluded that health locus of control is significantly related to negative mental health of adolescents and identifying such a relationship was a key focus of this study<sup>1) 6).</sup>

Given the strong involvement of psychological variables in determining negative mental health, it was not unexpected that the health locus of control correlated highly and significantly with it or the sub domains embedded in it. The results were supported by evidence presented in the previous research<sup>9)</sup> and in practical terms reinforced the argument for consideration of psychological aspects in the development of mental health education programs.

On the basis of these findings, this study provides significant information, specifically information not previously obtained for health locus of control related to adolescents' mental health problems. For Korea, this study has the potential to influence the development of better mental health care and promotion programs for adolescents.

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