

Perceived Health Status, Psychological Well-Being and Health Promotion Behavior of College Students

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Abstract

Background/Objectives: This study is descriptive research aimed at determining the association with perceived health status and psychological well-being affecting health promotion behavior and at providing basic data that could help develop programs for health care and healthy lifestyle of college students in early adulthood.

Method/Statistical Analysis: The data were collected from 194 students at colleges in B City from March 5 to 22, 2019. The collected data were analyzed through t-test, ANOVA, Pearson's correlation analysis using an SPSS/WIN 23.0 program.

Findings: The respondents scored an average of 2.38 out of 5 for perceived health status. They scored an average of 2.27 out of 5 for psychological well-being and 2.57 out of 5 for health promotion behavior. Perceived health status was significantly positively correlated with psychological well-being ($r=.617$, $p<.001$) and health promotion behavior ($r=.516$, $p<.001$). Psychological well-being was significantly positively correlated with health promotion behavior ($r=.667$, $p<.001$). Perceived grade, household financial status and smoking and alcohol intake status made significant differences and psychological well-being differed significantly by religion, grade, major satisfaction and residence type. Health promotion behavior differed significantly by major, gender, household financial status and academic achievement.

Improvements/Applications: It is necessary to develop customized programs that can help college students feel and improve psychological well-being with the objective of promoting health promotion behavior in pursuit of health care and healthy lifestyle.

Keywords: College student, early adulthood, perceived health status, health promotion behavior, psychological well-being.

Introduction

As greater attention is paid to health in the rapidly changing and developing society and emphasis is placed on its importance, there is a shift from the concept of

quantitative treatment to the qualitative concept of health maintenance and promotion. In modern society based on the development of medical technology, in particular, conventional infectious, poisonous and acute diseases are almost controlled, whereas chronic diseases, such as cancer or circulatory diseases, which occur due to long-term lifestyle become major health problems. Such a change leads to the efforts to protect and promote health through public health education, disease prevention, nutritional improvement and healthy life practice rather than to treat disease as before [1]. Health promotion behavior is determined by psychological and subject factors, such as personal beliefs, values and motives

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and it is more reliable to determine the level of health promotion behavior by using self-rated perceived health status rather than clinical conditions [2,3]. College students are in the healthiest period in their whole life, as measured by the conventional health index; however, many of them live away from their parents and family and may choose health-threatening acts, such as smoking, alcohol intake and irregular eating habits, in making the primary decision as to their own health. However, college students are in the critical period to form health-related habits for adulthood and health care in this period is important, affecting health in remaining life [4]. The factors affecting health promotion behavior included health perception, self-esteem, self-efficacy and social support [5,6] and body image, emotional status, stress and peer relationship satisfaction [7]. However, college students have relatively low mortality or morbidity and are in a favorable position to have better health status by correcting wrong lifestyle and by controlling stress and the efforts to help make their health promotion behavior habitual on the basis of good knowledge about health are very important to prevent chronic diseases expected in adulthood [8]. Psychological well-being is a concept of how positively individuals function against challenges and is a very important variable for college students with a developmental task of forming and establishing identity [9]. To confirm that psychological well-being is an important factor for health promotion behavior, research has been conducted in nurses, nursing students and shift workers, but little research has been conducted in general college students [10,11]. This study aimed to determine the level of association among perceived health status, psychological well-being and health promotion behavior in college students and provide basic data that could help develop health care and healthy lifestyle practice programs for college students.

Method

This study is descriptive research aimed at determining the association among perceived health status, psychological well-being and health promotion behavior in college students.

Convenience sampling was performed from March 5 to 22, 2019 among those students at two colleges in B City who understood the purpose of this study and consented to participation. For data collection, self-administered questionnaires were distributed and collected immediately after they were completed. It took 10 to 15 minutes to complete the questionnaire.

The minimum sample size was found to be 120 persons when a G Power 3.1.0 program based on Cohen's (1988) statistical method was used with significance level .05, effect size .30 and testability .95. Taking the insufficient number of responses into account, data were collected from 200 persons; 194 questionnaires were finally analyzed, with the exception of 7 copies having poor or no responses

The collected data were statistically processed by using an SPSS/WIN 23.0 Program in following specific way: For the respondents' general characteristics, perceived health status, psychological well-being and health promotion behavior, the real number, percentage and the mean and standard deviation were estimated. For perceived health status, psychological well-being and health promotion behavior by the respondents' general characteristics, t-test and ANOVA were performed, along with Scheffe's method as post-hoc test. Person correlation coefficient was estimated to determine correlation between perceived health status, psychological well-being and health promotion behavior.

Health perception was measured by using the tool which had been developed and adapted by Ware (1976) and translated by Lee^[12] This tool had a total of 12 items--6 positive ones and 6 negative ones--which covered concerns about present, past and future health; the positive items were scored 5 totally agree and 1 totally disagree and the negative ones were scored backward. The total scores ranged from 12 to 60, with a higher score meaning a higher level of perceived health status; Cronbach's $\alpha=.92$ in this study.

Psychological well-being was measured by using the tool applied by Jeong^[13]. This tool had a total of 16 items in two areas--8 concerning the changes of the self and the world and 8 concerning the changes in the view of life and in the interpersonal relationships--in the five-point likert scale whose scores ranged from 1 totally disagree to 5 totally agree, with a higher score meaning a higher level of psychological well-being. For its reliability, Chronbach's $\alpha=.91$ in this study

Health promotion behavior was measured by using the health-related behavior inventory developed by Lee^[14], which was composed of 57 items: 33 concerning behavior and 24 concerning awareness. It had a five-point likert scale whose scores ranged from 1 not at all to 5 all the time and whose total scores ranged from 27 to 135, with a higher score meaning a higher likelihood to do

health-related behavior. For its reliability, Chronbach’s α was .79 at the time of its development and .89 in this study

Result and Discussion

Differences in perceived health status, psychological well-being and health promotion behavior by respondents’ general characteristics:

The variation in perceived health status, psychological well-being and health promotion behavior by the general characteristics is as presented in Table 1. Perceived health status differed significantly by grade, household financial status and smoking and alcohol intake status. For perceived health status, freshmen and sophomores scored higher than seniors; non-smokers and non-drinkers scored higher; and students whose household financial status was at high levels scored higher than those whose household financial status was at low levels. This result was similar to the findings from the research in college students [15]. Because higher graders feel poorer health status due to the increased

burden of employment and graduation, it is necessary to develop differentiated education concerning this issue. Psychological well-being differed significantly by religion, grade, academic satisfaction and residence type. Those having no religion, higher graders, those less satisfied with their major and self-boarding students had lower levels of psychological well-being. This result demonstrates that young adults may rely on their family and need assistance from supporters, such as religion. Health promotion behavior differed significantly by major, gender, household financial status and academic achievement. For health promotion behavior, nursing students scored lowest and the male students scored higher than the female ones. The merchants’ group scored high for health promotion behavior in terms of household financial status and academic achievement. This result is consistent with the findings that nursing students had a heavier burden of academic work and practice than the students at other departments [16] and that the higher academic achievement, the higher score for health promotion behavior [17].

Table 1. Differences in perceived health status, psychological well-being and health related behavior by respondents’ general characteristics

Characteristics		n(%)	Perveived health status		Psychological well-being		Health related behavior	
			M±SD	t or F(p)	M±SD	t or F(p)	M±SD	t or F(p)
Age	18~20	19(9.8)	3.53±0.41	0.47 (.755)	2.84±0.27	0.22 (.926)	2.43±0.34	0.36 (.839)
	21~25	170(87.6)	3.38±0.31		2.86±0.26		2.32±0.33	
	≥26	5(2.6)	3.43±0.31		2.74±0.40		2.26±0.37	
Grade	1 st year ^a	45(23.1)	3.38±0.32	0.981 (.001)	2.82±0.26	3.62(.023) c<a	2.82±0.28	1.75 (.177)
	2 nd year ^b	98(50.6)	3.46±0.29		2.82±0.31		2.34±0.33	
	3 rd year ^c	30(15.5)	3.40±0.34		2.82±0.29		2.28±0.36	
	Grade 4 ^d	21(10.8)	3.35±0.33		2.85±0.26		2.27±0.39	
Sex	Male	60(30.9)	3.48±0.36	1.13 (.343)	2.82±0.28	0.57 (.568)	2.43±0.28	2.20(.029)
	Female	134(69)	3.38±0.34		2.80±0.33		2.27±0.31	
Religion	None	62(32.0)	3.39±0.37	0.28 (.597)	2.89±0.33	4.39(.005) A<b,c	2.24±0.36	1.48 (.222)
	Buddhist	33(17.0)	3.41±0.34		2.82±0.21		2.26±0.40	
	Catholic	19(9.8)	3.42±0.34		2.82±0.28		2.30±0.34	
	Christian	80(41.2)	3.38±0.34		2.81±0.31		2.57±0.16	
Household financial status	High ^a	64(33)	3.69±0.03	3.45 (.034) a, c>b	2.87±0.23	1.12 (.347)	2.41±0.31	5.97 (.003) a>b=c
	Middle ^b	98(50.5)	3.45±0.34		2.89±0.25		2.33±0.35	
	Low ^c	32(16.49)	3.38±0.34		2.76±0.20		2.23±0.36	
Type of residence	With family ^a	107(55.1)	3.69±0.03	0.84 (.474)	2.82±0.26	10.15 (<.001) b=c<a	2.32±0.32	0.47 (.755)
	Dormitory ^b	23(11.9)	3.45±0.34		2.82±0.29		2.32±0.35	
	Alone or other ^c	64(33.0)	3.34±0.36		2.82±0.28		2.21±0.32	
Smoking	Yes	30(15.46)	2.79±0.25	11.74 (.001)	2.92±0.28	0.01 (.946)	2.34±0.29	0.20 (.946)
	No	164(84.54)	2.83±0.25		2.69±0.26		2.32±0.31	

Characteristics		n(%)	Perceived health status		Psychological well-being		Health related behavior	
			M±SD	t or F(p)	M±SD	t or F(p)	M±SD	t or F(p)
Alcohol	Yes	74(38)	2.74±0.40	0.00	2.79±0.28	0.28	2.82±0.28	1.13
	No	120(61.86)	2.83±0.30	(.000)	2.77±0.22	(.597)	2.36±0.33	(.326)
Major	Nursing ^a	98(50.51)	2.72±0.26	0.45 (.715)	2.84±0.31	1.09 (.356)	2.37±0.33	2.96 (.034) d<a, c<b
	Mechanical ^b	48(24.74)	2.80±0.26		2.79±0.25		2.34±0.29	
	Chemical ^c	39(20.10)	2.83±0.25		2.83±0.25		2.29±0.34	
	Etc. ^d	9(4.6)	2.91±0.04		2.84±0.30		2.30±0.34	
Major satisfaction	High ^a	68(35.05)	3.71±0.342.88 (.059)	1.15 (.320)	3.71±0.34	6.69 (.002) a>b=c	2.26±0.38	0.31 (.872)
	Middle ^b	89(45.88)	3.68±0.39		3.50±0.32		2.31±0.32	
	Low ^c	37(19.07)	3.48±0.32		3.39±0.37		2.31±0.34	
Academic achievement	High ^a	56(28.87)	2.83±0.30	0.38 (.767)	3.59±0.30	2.67 (.072)	2.27±0.31	5.97 (.003) a>b=c
	Middle ^b	85(43.81)	2.79±0.34		3.44±0.32		2.36±0.33	
	Low ^c	53(27.31)	2.74±0.40		3.43±0.31		2.28±0.37	

Table 2. Degree of perceived health status, psychological well-being and health promoting behavior

	M±SD
Perceived Health Status	42.8±0.52
Psychological Well-being	2.27±0.28
Health Promoting Behavior	2.57±0.41

Respondents’ perceived health status, psychological well-being and health promotion behavior: The respondents’ perceived health status, psychological well-being and health promotion behavior are as presented in Table 2. The respondents scored an average of 42.8 out of 60 for perceived health status. This is lower than an average of 3.37 out of 5 in nursing students [18] and 4.42 in general students [19] and implies that college students have recently had poor perception of their health status due to various types of stress. They scored an average of 2.27 out of 5 for psychological well-being, which was similar to the findings from the research in college students; college students in early adulthood commonly scored lower for psychological well-being than the middle aged or other occupation groups, demonstrating instability characteristic of early

adulthood. They scored an average of 2.57 out of 5 for health promotion behavior. This result is also consistent with the findings from other studies [20]: college students are passive about health promotion behavior practice, fail to be psychologically stable and fail to be well aware of the importance of practice for health.

Correlation among perceived health status, psychological well-being and health promotion behavior: The correlation among psychological well-being, perceived health status and health promotion behavior is as presented in Table 3. Psychological well-being was significantly positively correlated with perceived health status ($r=.617, p<.000$) and health promotion behavior ($r=.516, p<.000$), significant positive correlation was found between perceived health status and health promotion behavior ($r=.667, p<.001$). As this study and Min [21] found that perceived health status was more strongly correlated with health promotion behavior, it has been confirmed that psychological well-being promotion is an important factor in improving health promotion behavior among college students. It is necessary to develop programs focusing on psychological well-being promotion for college students.

Table 3. Correlation among perceived health status, psychological well-being and health promotion behavior

	Perceived health status	Psychological well-being	Health promotion behavior
Perceived health status	1		
Psychological well-being	.617(.000)	1	
Health promotion behavior	.516(.000)	.667(.000)	1

Conclusion

This study is descriptive research aimed at determining the level of association among perceived health status, psychological well-being and health promotion behavior in college students and at providing basic data that could help improve health promotion behavior for college students in early adulthood. This study found that psychological well-being was correlated with perceived health status and health promotion behavior. This is an unstable period during which people can be very passive about the act of health care, have poor awareness of disease and unhealthiness and show a lower level of psychological well-being. It is therefore necessary to provide college students in early adulthood with opportunities to participate continuously in health promotion practice education, taking their characteristics into account and to develop customized programs so that they can have a will to participate in the education.

Ethical Clearance: Not required

Source of Funding: Self

Conflict of Interest: Nil

References

1. Chon MY, Kim MH, Cho CM. Predictors of health promoting lifestyles in Korean undergraduate students. *J of Korean Society for Health Education & Promotion*. 2000 19(2): 1-13.
2. Joe . SY, Lee IS, Ham LY, Kim JH, Factors leading to health promotion behavior among the students in a nursing school of a university - based on the SAT. *Journal of Korean Academic Society of Nursing Education*. 2006 12(1):78-85.
3. Choi . Y J, Sung YH. Psychological well-being, perceived health status, and health promoting behavior of clinical nurses. *Journal of Korean Academy of Nursing Administration*.. 2013 19(5):589-598.
4. Kim HM, BangHJ, So YK, Kim EK, Effect of self-construal on psychological well-being in Korean university students. *The Korean Journal of Woman Psychology*. 2006 11(4).
5. Kang SJ, A Study on the Effects of Economic Stress on the Psychological Well-being of the College Students, Unpublished doctoral dissertation, Baekseok University, Cheonan, Korea: 2012.
6. Kim NS, Health promoting behaviors and influencing factors of university students : Optimism and coping skills. *The Journal of Korean Academic Society of Adult Nursing*. 2007 19(5): 37-46.
7. Kim . SJ, Jung EY, A relevance on health perception, health knowledge and health promotion behavior of the university students. *Journal of The Korea Academia Industrial Cooperation Society*. 2015 16(8),:5394-5403.
8. Chung YH, Seo NS, Moon SH, Related Factors in Health Promotion Behavior by Gender among College Student. *The Journal of Korean Society for School Health Education*, 2011 12(2): 29-42.
9. Barr W, Kirkcaldy A, Robinson J, Poustie VJ, Capewell S, A survey of psychological wellbeing in an adult population. *British Journal of Community Nursing*, 2005 10: 260- 265.
10. Yang NH, Moon SY, The Impact of Health status, Health Promoting Behaviors, and Social Problem Ability on College Adjustment among Nursing Students. *Journal of Korean Academic Society of Nursing Education*. 2013 19(1): 33-24
11. Healy D, Mc P, Sherry, Promoting self awareness in undergraduate nursing students in relation to their health status and personal behaviors. *Nurse Education in Practice*, 2011 .11: 228-223.
12. Lee HY, A study of the effects of health contracting on compliance with health behaviors in clients with hypertension, Unpublished doctoral dissertation, Yonsei University, Korea:1985.
13. Jeong AR, The validation of Korean version of the Psychological Well Being-Post Traumatic changes questionnaire and its related variables, Unpublished doctoral dissertation, Seoul National University, Korea;2015
14. Lee CG, Development and evaluation of the scale for University Student's health behaviors, Unpublished doctoral dissertation, Kongju National University, Korea:2017
15. Altun I, Effect of a health promotion course on health promoting behaviors of university students. *Eastern Mediterrameam. Health Journal* 2008 14: 880-887.
16. Tucker P, Irwin J D, University students' satisfaction with, interest in improving, and receptivity to attending programs aimed at health and well-Being. *Health Promotion Practice* 2011 12: 388-395.

17. UllaDiez S M, Perez-Fortis A, Socio-demographic predictors of health behaviors in Mexican college students. *Health Promotion International*. 2010 25: 85-93.
18. Junger M, van Kampen M. Cognitive ability and self-control in relation to dietary habits, physical activity and bodyweight in adolescents. *Int J Behav Nutr Phys Act* 2010;7:22
19. Fleary SA, Joseph P, Pappagianopoulos JE. Adolescent health literacy and health behaviors: a systematic review. *J Adolesc* 2018;62:116–27
20. Tyc VL, Nuttbrock-Allen D, Klosky JL, et al. An exploratory study to investigate cognitive-motivational variable as predictors of health behaviours in adolescents. *Health Educ J* 2004;63:293–306.
21. Min MO, Minnes S, Kim JY, et al. Individual assets and problem behaviors in at-risk adolescents: a longitudinal cross-lagged analysis. *J Adolesc* 2018;64:52–61.