Associating Fitness Position and Way of life in College Students

❑ Dr. Shyam Prasad Sedai
M.Ed., M.P.Ed., M.Phil, Ph.D., D.Phil.
Lecturer, BalkumariCollege
Faculty of Education

Abstract

The study aimed to compare health status and lifestyle in university students. The participants were college students from health and physical Ed. majors (N = 195, Mean = 20.9, SD = 1.87) and population Ed. majors (N = 195, Mean = 21.73, SD = 0.93) in Chitwan. The Diagnostic Inventory of Health and Life habit (DIHAL.2) scale (Tokunaga, 2003) was administered to all participants. A one-way sample t-test was used to analyze the difference in both interdepartmental and gender effects. Results of t-test indicated that there were significantly difference in physical health, social health and life habit. Moreover, students majoring in health and physical education were scored lower on the mental health domain compared to the physical and social health domains. The practical implication of this study focused on finding the difference between the students who regularly exercised and those who did not, and considered the characteristics of gender.

Keywords: **Health Status, Lifestyle, Physical Education, College Students**

Introduction

The students have little time to exercise. Although students' awareness regarding the benefits to exercise increased, they reported poor health and not getting enough exercise. Recent research at university showed that over 60% of university students though they did not exercise enough and nearly 20% of them were dissatisfied with their health. The WHO (2009) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". In Nepal, there has recently been an increase focus on the health status of university students. Traditional Nepalese health beliefs and the health education policy of the Nepalese government have been reviewed. The current health status and lifestyle of university students in Nepal was discussed, and the necessity for implementing physical education programs in universities to improve university students' health and lifestyle was emphasized .On the other hand, researchers in the field of sports psychology reached an agreement that engaging in sports could improve physical health. However they paid little attention to social health and mental health, which also contributes to health status. In Nepal, there is no scale that evaluates health status and lifestyle. However, in Japan, Tokunaga & Hashimoto (2001) developed an evaluation scale called Diagnostic Inventory of Health and Life Habit (DIHAL.2), which included the health level and life habit of individuals.

Physical education lesson was widely-regarded as a way to improve health and adjust smoothly to social situations (Wang, 2001). Previous studies show that university students who are physically active have better health status and lifestyle compared to those who are not active (Kiuchi, Arai, Urai, & Nakamura, 2009). If exercise becomes a habit, it may improve dietary habit, rest habit and health status (Tokunaga & Hashimoto, 2002).

I used DIHAL.2 in my study to compare the university students from physical education course to those from other majors. I hypothesize that students who are physically active will have a better health status and lifestylethan students who are physically inactive. I hope that my study results will contribute to the field of physical education.

Method

Participants and Procedure

One hundred ninety-five students (95 male and 100 female) from Health and physical education program (HPE), and one hundred ninety-five students (81 male and 114 female) from Population Education. (POE) participated in the study. All of participants were college students.

Measurements

I used Diagnostic Inventory of Health and Life habit (DIHAL.2) scale (Tokunaga, 2003). I translated it to a Nepalese version. The technique of back-translation was employed. Wang &Sugiyama, 2014 tested the validity and reliability of scale for Chinese students. This scale has 47 items under four categories (health status, exercise habits, dietary habits and rest habits). Furthermore, health status is divided into three subcategories (physical health, mental health and social health) and scores range from 12 to 60 points. There are 8 items on exercise habits (scores range from 8 to 40), 13 items on dietary habits (scores range from13 to 65 points), and 14 items on rest habits (scores range from 14 to 70). All items answered on a 5-point Likert-type scale.

Date Analysis

One-way sample t-test was used to compare difference in health status and lifestyle between male and female students with the same major. We tested the difference between two majors by one-way sample t-test. The date analysis was performed using SPSS Version 12.0 for Windows.

Results

The Comparison for Gender in the Same Major

A t-test was performed to assess the difference in health status and lifestyle for gender in the same major (Table 1). The results indicated that men with a HPE major had significantly higher scores than women with a HPE major on physical health, social health, exercise habit, Dietary habit and rest habit. On other hand, women were significantly lower than men were in mental health. When a POE major, women were significantly higher than men were in mental health. Men were significantly higher than women in exercise habit. There were no significantly differences in physical health, social health, dietary habit and rest habit for students in POE major.

Table 1. One-way sample *t*-test on health status and lifestyle in the same department.

	HPE		*t*	POE		*t*
	M ± SD			M ± SD		
	male (95)	female (100)		male (81)	female (114)	
Physical Health ①	16.65 ± 2.78	15.27 ± 2.91	3.39**	14.47 ± 2.90	14.49 ± 2.54	0.06
Mental Health ②	8.32 ± 3.38	10.65 ± 3.61	4.65**	10.95 ± 3.09	13.20 ± 2.67	5.44**
Social Health ③	17.06 ± 2.71	15.90 ± 2.93	2.87**	14.62 ± 3.04	14.10 ± 2.56	1.30
Health Status ① - ③	42.03 ± 4.49	41.82 ± 5.31	3.30**	40.04 ± 4.60	41.79 ± 4.89	2.53*
Exercise Habit ④	34.29 ± 4.41	32.95 ± 4.34	2.15*	29.73 ± 4.85	28.13 ± 5.25	2.16*
Dietary Habit ⑤	52.26 ± 6.57	49.88 ± 8.67	2.16*	47.77 ± 6.32	49.07 ± 6.08	1.45
Rest Habit ⑥	55.64 ± 7.95	52.06 ± 8.29	3.08**	50.37 ± 6.89	49.54 ± 6.77	0.84
Life Habit ④ - ⑥	142.20 ± 17.68	134.89 ± 18.17	2.85**	127.86 ± 16.01	126.74 ± 15.67	0.49

*$P< 0.05$, **$P< 0.01$.

The Comparison between HPE Major and POE Major

Table 2. One-way sample *t*-test on health status and lifestyle according to department.

	Male		*t*	Female		*t*
	M ± SD			M ± SD		
	HPE (95)	POE (81)		HPE (100)	POE (114)	
Physical Health ①	16.65 ± 2.78	14.47 ± 2.90	5.09**	15.27 ± 2.91	14.49 ± 2.54	2.09*
Mental Health ②	8.32 ± 3.38	10.95 ± 3.09	5.36**	10.65 ± 3.61	13.20 ± 2.67	5.93**
Social Health ③	17.06 ± 2.71	14.62 ± 3.04	5.64**	15.90 ± 2.93	14.10 ± 2.56	4.81**
Health Status ① - ③	42.03 ± 4.49	40.04 ± 4.60	2.91**	41.82 ± 5.31	41.79 ± 4.89	0.04
Exercise Habit ④	34.29 ± 4.41	29.73 ± 4.85	6.54**	32.95 ± 4.34	28.13 ± 5.25	7.26**
Dietary Habit ⑤	52.26 ± 6.57	47.77 ± 6.32	4.61**	49.88 ± 8.67	49.07 ± 6.08	0.80
Rest Habit ⑥	55.64 ± 7.95	50.37 ± 6.89	4.67**	52.06 ± 8.29	49.54 ± 6.77	2.45*
Life Habit ④ - ⑥	142.20 ± 17.68	127.86 ± 16.01	5.60**	134.89 ± 18.17	126.74 ± 15.67	3.53**

*$P< 0.05$, **$P< 0.01$.

Table 2 summarizes the difference between two majors. The results of a t-test showed that men with a HPE major had significantly higher scores than POE major in physical and social health. However, men in a POE major were significantly higher than the men who come from HPE major in mental health. Men in a HPE major scored significantly higher than POE major in exercise habit, dietary habit and rest habit. When we compared date for women, we noted the results were same as men on health status and lifestyle but not for dietary habit, which had no significantly difference.

Discussion

In this study, I aim to observe the difference in health status and lifestyle between a person who is physically active and physically inactive. Therefore, I chose subjects From a HPE major who regularly exercise and a POE major who are usually sedentary. According to the results, it should be noted that women had significantly higher scores than men on mental health regardless of the major. It indicated than men got nervous easier, and women adapt successfully to group life. This is in agreement with Li & Wang (2007). However, in Japan, Tokunaga & Hashimoto (2001) performed research on health status and lifestyle. They reported that there was insignificantly difference in gender. In HPE major, men scored significantly better than women did in physical health status, social health and lifestyle. I found that men were likely to do sports than women; women were shorter on physical strength than men were, and men participate more eagerly in community activities and events than women did. In their personal life, men have better regular fitness habits, pay more attention to nutritional balance, and have much more sleeping time than women do. On the other hand, in POE majors, just mental health and exercise habit showed significantly difference by gender. Results demonstrated that men had greater awareness regarding the benefits of exercise compared to women.

In the interdepartmental comparison, both men and women that were HPE majors had better physical health, social health and life habit than POE majors. Thus, I propose a hypothesis that regular exercise habits are critically useful for health status. Tokunaga & Hashimoto (2002) reported that physical activity, eating habit, relaxation and sleeping were all related to health.

While I found an interesting result that POE majors were better than HPE majors in both sexes on mental health. It was clear that the students in the POE major adjusted easier to being group. The result was different from the research of Sato, Saito, & Kamioka (1996). The students with a HPE major were also quickly to impatience. I cannot explain it clearly, thus it is an issue for future research in Nepalese students.

Conclusion

In this study, I compared people who regularly exercised and those who did not. It is useful to provide information for developing HPE program. Therefore, I can attempt to increase health status and improve life habit in HPE lessons. I hope our researcher can contribute to the work of physical education in Nepal. Finally, the limitations of the study—the present study showed the small sample size, therefore, I should do examination for additional sample in future.

References

Kiuchi, A., Arai, H., Urai, R., & Nakamura, T. (2009) Effects of Behavioral Science-Based Physical Education Program on the Physical Activity-Related Variable of College Freshmen: Project FYPE. *Japanese Society of Physical Education, 54,* 145-159. http://dx.doi.org/10.5432/jjpehss.a540115

Li, P., & Wang, Y. (2007). A Study on Relationship between Lifestyle and Mental Health of College Students. *The* 12*th East Asia Sports Exercise Science Society Annual Conference Proceedings*, Shanghai, August 2007, 12-22.

Mao, Z (2009). *View for Physical Education and Health Education*. Beijing: The Publish of Beijing Physical Education University.

Ma, H. X., Yang, H. L., & Wang, M. (2009). *Physical Education and Health Status in University*. China: Aero Industry Publication Company.

Sato, Y., Saito, S., & Kamioka, H. (1996) *The Relationship between Mental Health Status and Lifestyle in the Varsity Students*. The Centre for Health and Sports Science, Gakushuin University, 9-30.

Tokunaga, K., & Hashimoto, K. (2001). Development of Health and Life Habit Inventory for Students. *Journal of Health Science, Kyushu University, 23,* 53-63.

Tokunaga, K., & Hashimoto, K. (2002). Effects of Life Habits of Young People on Their Health Levels Assessed. *Journal of Health Science, Kyushu University, 24,* 39-46.

Tokunaga, K. (2003). *Diagnostic Inventory of Health and Life Habit (DIHAL.2) Scale*. Fukuoka: Toyo Physical Corporation.

Wang, X. L. (2009). *Research for Health Status /Lifestyle and the Expectation through the HPE Lessons of College Students in China*. Master Thesis, Japan: Graduate School of Human Environment Studies, Kyushu University.
WHO (World Health Organization) (2009). *Basic Documents* (47th ed.).

http://apps.who.int/gb/bd/PDF/bd47/EN/basic-documents-47-en.pdf

Wang, X. L., & Sugiyama, Y. (2011) Current Situation and Issues of University Physical Education in China. *Journal of Health Science, Kyushu University, 33,* 13-19.

Wang, X. L., & Sugiyama, Y. (2014) Relationship between the Change in Health Status and Satisfaction with Physical Education in Chinese college students. *Advance in Physical Education*.