PHYSICAL SELF-DESCRIPTION: A CROSS-CULTURAL EXAMINATION OF COLLEGE STUDENTS IN AMERICA AND THAILAND

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Abstract - The purpose of this study was to examine cross-cultural differences of physical self-description between Thai and American college students. Participants were 575 college students randomly selected from Bangkok, Thailand and Southern California (267 Thai kinesiology/PE majors, 101 American Kinesiology/PE majors, and 207 American non-Kinesiology/PE majors). The Physical Self-Description Questionnaire (PSDQ, Marsh, 1996) and a Thai-version of the PSDQ developed and validated for this study were used, using a 6-point true-false scale (i.e., 1-6 in ascending order of assessment as true) and consisting of 70 items; 8 items each for health and global esteem, and 6 items each for coordination, action, body fat, sport, global physical, appearance, strength, flexibility, and endurance were completed by American and Thai students, *respectively*. Non-Kinesiology American majors were included in this study to further examine the effects of physical activity on physical self-concept, compared to Kinesiology majors in America and Thailand. Results found that there were significant group differences (i.e., American Kinesiology/PE and non-kinesiology majors, and Thai kinesiology majors) on all variables, *except* flexibility. American Kinesiology/PE majors showed a higher physical self-concept than each other group on health, coordination, action, body fat, sport, global physical, appearance, strength, endurance, and global esteem. Among American students, majors showed higher scores on all variables than non-majors. This result may reflect Kinesiology/PE majors usually spend more time on physical activity and sports training and tend to have better fitness and skill-oriented self-concept than non-Kinesiology/PE majors. *Post Hoc tests* indicated that the non-Kinesiology American group showed a higher score of physical self-concept on health, coordination, sport, appearance, and global esteem, compared to the Thai Kinesiology group. As Marsh (2002) proposed, self-concept is influenced substantially by the ability levels of others in the immediate context in addition to one's own ability level. The results of the study may be partially explained in socio-cultural terms, with pressure to be thin more extreme in Thailand than in America. In addition, as McFarland and Buehler (1995) found, students from collectivists countries tend to value and experience significantly smaller self-concept than students from individualistic countries.

I. INTRODUCTION

For almost three decades, perceptions of physical competence and appearance, known as "physical self-concept", have been regarded as contributing to self-esteem. More recently, physical self-concept has become somewhat of an important construct (Marsh, 2002) that has been shown to make a difference. Essentially, those who think positively about themselves are more likely to be healthier and happier. In this way, physical self-concept is a key construct in efforts to enhance physical and mental health. Physical self-concept is positioned as a mediating variable that facilitates the attainment of a myriad of related outcomes, including physical activity levels. This is due to physical self-concept being shown to influence key factors involved in activity levels, such as task choice, sustained effort, persistence, and motivation (Marsh, 2002).

A critical part of an individual's personality can often be inferred from how that person behaves toward oneself. How people perceive, evaluate, and behave toward themselves is related to self-concept. The self-concept has been defined and interpreted in many ways. It has been defined as the "totality of the individual's thoughts and feelings with reference to himself as object" (Rosenberg, 1979, p. 7).

The field of sports and physical activity has become a major topic of interest to the extent that it affects the quality of health, contributes to physical and psychological well-being, helps enhance physical competence, and is a potential facilitator of people's socialization. Cognitive and affective physical self-perceptions have consistently been identified as significant predictors of motor learning, involvement, and adherence, and the lack thereof, in sports and physical activity (Guerin, Marsh, & Famose, 2004). They are constructed through people's experience to constitute a specific self-knowledge called physical self-concept.

Historically, research on physical self-concept has been based on instruments that have treated physical self-concept as a relatively unidimensional domain (Wylie, 1989). These early self-concept instruments have often incorporated characteristics as diverse as fitness, health, appearance, grooming, sporting competence, body image, sexuality, and physical activity into a single score. However, researchers have shifted the focus from physical self-concept as a unidimensional construct to a multi-faceted, hierarchical construct (Marsh & Redmayne, 1994). With the development of the Physical Self Description Questionnaire (PSDQ; Marsh, Richards, Johnson, Roche, & Tremayne, 1994) it has been

possible to examine people's physical self-concept in a more specific manner.

According to Marsh (1996, 2002), the PSDQ is based on a hierarchical, multidimensional theoretical model of self-concept, and it measures nine specific components and one global components of physical self-concept: *Appearance* (being attractive), *Strength* (being strong, having powerful body with lots of muscles), *Endurance* (being able to run a long way without stopping), *Health* (not getting sick very often), *Coordination* (being good at coordinated movements), *Physical Activity* (doing lots of physical activities regularly), *Body Fat* (not being overweight), *Sport* (being good at sports, having good sports skills), *Flexibility* (being able to bend and turn one's body easily in different directions), and *Global Physical* (feeling positive about one's physical self). In addition, *Global Self-Esteem* (the overall positive or negative feeling about one's self) is also measured.

The PSDQ was originally developed for adolescents. However, research across a wide variety of Australian samples confirms and allows its appropriateness for wider application. For instance, the PSDQ has been demonstrated as appropriate for adolescent elite and non-elite athletes (Marsh, 2002), and in cross-cultural settings with adult subjects (Marsh, Apci, & Marco, 2002). In addition, the PSDQ has been demonstrated to have good reliability, a well defined and replicable factor structure (Guerin, Marsh, & Famose, 2004; Marsh, Marco, & Apcy, 2001).

Researchers have consistently argued for both universal and culture-specific aspects of variation in personality and contended that self-described personality traits seemed to vary across cultures (Triandis & Suh, 2002). Limited studies were found to compare the cross-cultural aspects of physical self-concept. Therefore, the purpose of this study was to examine cross-cultural differences of physical self-concept between Thai and American college students.

II. METHOD

Participants

A total of 575 college students conventionally selected from the state/government and comprehensive universities in Thailand and America (267 Thai kinesiology/PE majors, *M* age = 23.01 years, *SD* = 5.34; 101 American kinesiology/PE majors, *M* age = 24.82, *SD* = 5.56; and 207 American non-kinesiology/PE majors, *M* age = 22.37, *SD* = 5.64) participated in this study. Not all of them completed all of the demographic or psychometric questions on the instrument. Thus, the total number of participants varied slightly for different aspects of the study.

Instrumentation

The original English-version of the Physical Self-Description Questionnaire (PSDQ, Marsh, 1996) and a Thai-version of the PSDQ were completed by American and Thai college students, respectively. Both English- and Thai-version of PSDQ are a 70-item test designed to measure nine specific components of physical self-concept (i.e., appearance, strength, condition/endurance, flexibility, health, coordination, activity, body fat, sport) and two global components (global physical and global self-esteem), using a 6-point true-false scale (i.e., 1-6 in ascending order of assessment as true) and 8 items each for health and global esteem, and 6 items each for coordination, action, body fat, sport, global physical, appearance, strength, flexibility, and endurance.

Procedure and Data Analysis

Research packages including the informed consent forms and the survey were distributed to each participant. Participation was voluntary, and informed consent was obtained from each participant and permission was granted from Institutional Review Board (IRB) from all participating American and Thai universities. Participants were assured that their responses would be completely confidential, and that they were free not to complete the survey. Trained graduate research members assisted researchers during test administration to intact classes. The return rate was 100%, but the usable return rate was 97% because some did not complete the entire survey.

Reverse coding was used for negative items on the instrument. Thus, a high score indicates a positive self-perception. The means and standard deviations for the PSDQ variables were calculated. Descriptive statistics were used to calculate the demographic variables, such as age, gender, and major. Oneway ANOVAs were used to investigate differences in self-concept among groups (Thai PE/Kinesiology-major, American PE/Kinesiology-major, and American non-PE/Kinesiology major). Non-kinesiology American majors were included in this study to further examine the effects of physical activity on physical self-concept, compared to kinesiology/PE majors in both America and Thailand. Multiple regression analysis was separately conducted by group to examine which physical self-concept variable predicts global esteem that could explain cross-cultural differences.

III. RESULTS

Table 1 shows the means and standard deviations of age for each group. As seen in Table 1, American PE/kinesiology majors were older than American non-PE/kinesiology and Thai PE/kinesiology majors. A Post-Hoc test revealed no age difference between American non-PE/kinesiology and Thai PE/kinesiology majors.

Table 1. Means and Standard Deviations for Each Group on Age

	Age		
Group	*Mean (Year)*	*SD*	*F*
American PE/KINE majors (*n* = 101)	24.82	5.56	6.86**
American non-majors (*n* = 207)	22.37	5.64	
Thai PE/KINE majors (*n* = 267)	23.01	5.34	
Total (N = 575)	23.10	5.54	

**** *p* < .01.**

Table 2 represents the means, standard deviations, and *F* values for 11 variables of the PSDQ. Results indicated that there were significant differences among groups (i.e., American kinesiology/PE and non-kinesiology majors, and Thai kinesiology/PE majors) on all variables, *except* flexibility. American kinesiology/PE majors showed a higher physical self-concept than each other group on health ($F_{(2,569)}$ = 34.62), coordination ($F_{(2,568)}$ = 17.87), action ($F_{(2,570)}$ = 10.01), body fat ($F_{(2,569)}$ = 34.62), sport ($F_{(2,566)}$ = 36.23), global physical ($F_{(2,567)}$ = 11.47), appearance ($F_{(2,566)}$ = 27.81), strength ($F_{(2,562)}$ = 10.19), endurance ($F_{(2,568)}$ = 9.79), and global esteem ($F_{(2,569)}$ = 148.79), $p < .001$. However, there was no statistical difference found on flexibility, ($F_{(2,568)}$ = 34.62, p = .253).

Among American students, majors showed higher scores on all variables than non-majors. This result may reflect kinesiology/PE majors who usually spend more time on physical activity and sports training tend to have better fitness and skill-oriented self-concept than non-kinesiology/PE majors. Interestingly, results from *Post Hoc tests* indicated that the non-kinesiology/PE American group showed a higher score of physical self-concept on health, coordination, sport, appearance, and global esteem, compared to the Thai kinesiology/PE group.

Multiple regression analysis using enter method were separately conducted by group to investigate culturally-oriented significant factors that might affect global esteem. Table 3 represents summary of multiple regression analysis for physical self-concept variables predicting global esteem for each group.

As seen in Table 3, body fat, global physical, and appearance were found as significant factors that affect global esteem for American majors; global physical and appearance for American non-majors; and health, appearance, and flexibility for Thai majors. Interestingly, "appearance" was found as a common factor across groups and nations that significantly predict global esteem.

Table 2. Means, Standard Deviations, and *F* values for 11 Variables of the PSDQ

PSDQ Variable	Group (*n*)/Post Hoc Test*	Mean ± SD	*F*
Health	American major (*n* = 100) [3]	40.32 ± 6.25	34.61***
	American non-major (*n* = 205) [2]	38.05 ± 7.00	
	Thai major (*n* = 267) [1]	34.36 ± 6.71	
Coordination	American major (*n* = 100) [2]	29.27 ± 5.22	17.86***
	American non-major (n = 204) [1]	26.75 ± 5.38	
	Thai major (n = 267) [1]	25.65 ± 4.96	
Action	American major (n = 100) [2]	27.30 ± 7.38	10.01***
	American non-major (n = 206) [1]	23.94 ± 7.57	
	Thai major (n = 267) [1]	23.84 ± 6.19	
Body Fat	American major (99) [2]	26.82 ± 9.40	3.95*
	American non-major (206) [1]	23.57 ± 9.80	
	Thai major (267) [1]	24.56 ± 9.23	
Sport	American major (100) [3]	28.95 ± 6.28	36.23***
	American non-major (202) [2]	24.67 ± 7.63	
	Thai major (267) [1]	21.84 ± 7.22	
Global Physical	American major (100) [2]	27.60 ± 6.44	11.47***
	American non-major (203) [1]	24.38 ± 7.26	
	Thai major (267) [2]	26.62 ± 5.22	
Appearance	American major (98) [2]	29.35 ± 4.63	27.80***
	American non-major (204) [2]	28.07 ± 5.78	
	Thai major (267) [1]	25.26 ± 5.22	

Strength	American major (98) [2] American non-major (200) [1] Thai major (267) [1]	27.44 ± 5.92 24.53 ± 5.89 24.74 ± 5.22	10.19***
Flexibility	American major (100) American non-major (204) Thai major (267)	25.73 ± 7.12 24.47 ± 6.70 24.91 ± 5.34	1.37 (*ns*)
Endurance	American major (100) [2] American non-major (204) [1] Thai major (267) [1]	24.42 ± 8.49 20.48 ± 7.86 22.03 ± 6.33	9.79***
Global Esteem	American major (99) [2] American non-major (206) [2] Thai major (267) [1]	43.10 ± 4.98 42.14 ± 5.51 34.29 ± 5.99	148.78***

***Note. ns* = non-significant; [3] > [2] > [1] = results of significant *Post-Hoc* mean comparison tests.**
*** *p* < .05. *** *p* < .001.**

Table 3. Summary of Multiple Regression Analysis for Variables Predicting Global Esteem by Group

	American Majors (*n = 101*)			**American Non-Majors** (*n = 207*)			**Thai Majors** (*n = 267*)		
	B	***SE B***	**β**	***B***	***SE B***	**β**	***B***	***SE B***	**β**
Health	-	-	-	-	-	-	.107	.043	.120*
Coordination	-	-	-	-	-	-	-	-	-
Action	-	-	-	-	-	-	-	-	-
Body Fat	-.228	.059	-.439***	-	-	-	-	-	-
Sport	-	-	-	-	-	-	-	-	-
Global Physical	.336	.116	.438**	.220	.074	.277**	-	-	-
Appearance	**.427**	**.115**	**.401*** **	**.542**	**.057**	**.546*** **	**.375**	**.063**	**.327*** **
Strength	-	-	-	-	-	-	-	-	-
Flexibility	-	-	-	-	-	-	.267	.073	.238***
Endurance	-	-	-	-	-	-	-	-	-

***Note.* R^2 = .58, Δ R^2 = .53, *p* < .001 for American Majors; R^2 = .57, Δ R^2 = .55, *p* < .001 for American Non-Majors; R^2 = .53, Δ R^2 = .51, *p* < .001 for Thai Majors.**
*** *p* < .05. ** *p* < .01. *** *p* < .001.**

DISCUSSION

It is commonly believed that changes in the body as a result of physical fitness training can alter one's body image and thus enhance self-concept and self-esteem. Self-concept studies in sports and physical education fields have extensively tried to investigate how self-concepts in specific areas are related to global measures of self. This result may reflect kinesiology/PE majors who usually spend more time on physical activity and sports training tend to have better fitness and skill-oriented self-concept than non-kinesiology/PE majors. Interestingly, results from *Post Hoc tests* indicated that the non-kinesiology/PE American group showed a higher score of physical self-concept on health, coordination, sport, appearance, and global esteem, compared to the Thai kinesiology/PE group. The purpose of this study was to examine cross-cultural differences of physical self-concept between Thai and American college students. Additionally, Non-kinesiology American majors were included in this study to further examine the effects of physical activity on physical self-concept, compared to kinesiology/PE majors in both America and Thailand. It was hypothesized that sports participation and physical activity experiences would have an indirect relationship with general self-esteem, this effect being mediated by physical self-esteem. In addition, cultural values were also considered to display a different profile of global esteem and physical self. The present study was composed primarily of participants from Bangkok and California, and results are generalizable to only that group. As Fletcher and Hattie (2005) proposed, research addressing gender differences in the structure of self-esteem in diverse ethnic groups is clearly needed as it is important to identify the specific domains of self-concept that are related to male and female self-esteem As Marsh (2002) proposed, self-concept is influenced substantially by the ability levels of others in the immediate context in addition to one's own ability level. The results of the study may be partially explained in socio-cultural terms, with pressure to be thin more extreme in

Thailand than in America. In addition, as McFarland and Buehler (1995) found, students from collectivists countries tend to value and experience significantly smaller self-concept than students from individualistic countries. However, as reported in Wastlund and Morlander, and Archer's (2001) study, there might be difficult to explain the difference solely with the concepts of individualism and collectivism. The concept of *optimism* should be incorporated to further examine and understand cross-cultural differences in self-concept. In general, American culture has historically valued traditionally masculine traits more highly than traditionally feminine traits. Markus and Kitayama (1994) suggested that the independent, achievement-oriented self, a highly masculine orientation, is the ideal of American culture, whereas a more traditionally feminine orientation is less valued by American culture, which possibly can explain why flexibility was found as a predicting physical self variable for global esteem among Thai students.

In conclusion, as Lynch and Hanson (1998) suggested, culture, language, ethnicity, and race are not the only determinants of one's values, beliefs, and behaviors. Socio-economic status, educational level, personal experience, and personality all exert a powerful influence over how individuals view themselves (i.e., global esteem, self-esteem, and self-worth). In describing any culture or cultural difference, within-group differences are as great as across-group differences, meaning that no cultural, ethnic, or racial group is monolithic. There are wide variations in attitudes, beliefs, and behaviors that mold people's global self-concept as well as physical self-concept.

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