

Gender and Physical Self-Concept Differences among College Students

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Abstract

The individual Physical Self-Concept has a significant impact on individual involvement in physical activities. Gender, as one of individual identity, becomes one of key moderators between physical activity and physical self-concept. Therefore, this study was aimed at investigating gender differences in Physical Self-Concept, especially among College Students. The study was conducted under comparative method. The instrument of the study was short version of Physical Self-Description Questionnaire (PSDQ-S) consisting forty items divided into eleven categories related to Physical Self-Concept. The questionnaire was distributed to 322 college students, 92 female students and 230 male students, coming from different study backgrounds. The questionnaire was analyzed through independent t-test. The findings showed that male students gained higher scores in ten of eleven categories. Female students gained higher score only on global physical category. Significant differences between male and female students' physical self-concept were found in seven categories including coordination, physically active, sport competence, appearance, strength, flexibility, and endurance. Male students were found to have significant higher physical self-concept scores in the seven categories. The data conclude that male students had higher physical self-concept than female students. It is highly suggested that the ways of increasing students' physical self-concept are implemented.

Keywords: gender, physical activities, physical self-concept.

Introduction

Physical self-concept has become an important part of many aspects of mental and physical health. How a person perceives their physical state correlates to their motor abilities (Jekauc et al., 2016), physical fitness (Carraro, Scarpa, & Ventura, 2010), physical activity (Ivanović, Milosavljević, & Ivanović, 2017; Planinsec & Fosnarić, 2005), exercise behavior (Marsh, Papaioannou, & Theodorakis, 2006), and other psychological aspects such as perceived health state and psychological wellbeing (Roh, 2018). According to Feizabadi, Abdolvahabi, Abdolbaghi, & Najafi (2015), physical self-concept becomes one of the factors that influences mental health. It is in line with the study of Roh (2018) who found that physical self-concept has a causal relationship with perceived health state and psychological well-being. Hence, it seems obvious that physical self-concept had a crucial role in one's psychological state.

Physical self-concept also takes part in a person's physical health, directly and indirectly. According to Carraro et al., (2010), physical self-concept is related to physical fitness indicator. It indicates that the higher the physical self-concepts owned by a person, the higher the physical fitness indicator they have. This might be because physical self-concept mediates motor abilities and physical activity (Jekauc, Wagner, Herrmann, Hegazy, & Woll, 2017). Besides that, perception of self-concept correlates to the volume and intensity of physical activity on preadolescents (Ivanović et al., 2017). It implies that the improvement in physical self-concept will lead to the improvement in exercise behavior (Marsh et al., 2006) that would have a positive outcome on one's physical fitness.

Studies show that physical self-concept has a role in physical fitness, physical activity, and exercise behavior. However, studies also show that physical self-concept also correlates to physical fitness (García et al., 2014), physical activity (Balsalobre, Sánchez, & Suárez, 2014; Olmedilla, Toro, & Abenza, 2016; Schneider, Dunton, & Cooper, 2008), and exercise behavior (Marsh et al., 2006; Olmedilla et al., 2016). Schneider *et. al.*, (2008) argue that sedentary adolescence involved in physical activity intervention enhanced global physical self-concept. In line with Schneider *et.al.*, (2008), Balsalobre *et. al.*, (2014) state that the adolescents achieving better scores on physical activity have a better physical self-concept. Regarding to exercise behavior, Olmedilla *et. al.*, (2016) found that college students who exercise or practice sport have better physical and emotional self-concept than those who do not. Meanwhile, García *et. al.*, (2014) state that students with a higher total fitness level show higher levels of general self-concept on schoolchildren. Those studies imply that physical self-concept has a reciprocal relationship with physical fitness, physical activity, and exercise behavior.

The reciprocal relationship between physical self-concept and physical activity, exercise behavior, and physical fitness demands physical education teachers, trainer, and health care professional to not only focus on the physical self-concept, but also the factors influencing physical self-perception. Physical education teachers and health care professionals should strive to improve both physical self-concept and exercise behaviors simultaneously (Marsh et al., 2006). Gaining in self-concept is likely to be smaller and less long lasting without improving exercise behavior, while without also fostering students' self-beliefs, gaining the exercise is also likely to be smaller and less long lasting (Marsh et al., 2006). Therefore, fostering physical self-concept beliefs should be hand in hand with other factors.

The innovation to improve physical self-concept is developing by the time. According to Schmidt, Valkanover, Roebers, & Conzelmann (2013), it is important to selectively include cognitive methods in Physical Education lessons to achieve the goal of developing functional self-concept embedded in both the curriculum and educational policy effectively. In addition, Moreno-Murcia, Hernández, Vaillo, & Camacho (2012) suggest that for students with low self-concept, it is important to create classroom participation that favors task-involving motivational environments to provide more inclusive teaching. Meanwhile, for sedentary adolescence, a physical activity intervention is recommended to enhance global physical self-concept since a subset of intervention, for participants who manifested positive changes in fitness, is beneficial (Schneider et al., 2008).

Age and gender are two key moderator variables of physical activity and physical self-concept (Babic et al., 2014). Regarding to the stage of age, physical self-concept plays a central role in adolescence (Carraro et al., 2010). This period underlines a substantial impact on the academic and social domains of perceived competence and global self-esteem (Fenzel, 2000 in Maïano, Ninot, & Bilard, 2004). Also, in this phase of life, individuals experience physical, emotional, and mental changes (Carraro et al., 2010). This period is also a period in which many youth are struggling to maintain a positive self-image (Schneider et al., 2008). In this period, physical self-concept seems to be a crucial determinant of physical activity of adolescents (Jekauc et al., 2017; Olmedilla et al., 2016). For that reason, in the transition period between adolescence and young adulthood, interventions aimed at increasing positive self-concept are promising (Jekauc et al., 2017).

Gender as one of the key moderators between physical activity and physical self-concept would have an impact on adolescence. Maïano, Ninot, & Bilard (2004) argue that the gender effect was found on all physical self-perception scales and global self-esteem in adolescents. Moreover, Moreno-Murcia et al. (2012) found that gender differences, except for task orientation, were also identified for all variables in their study. Other studies show that males are indicated to have higher level of physical self-perception than female on college students (Hagger, Biddle, & Wang, 2005; Hayes, Crocker, & Kowalski, 2008). In addition, non-physical education and female physical self-concept is lower than that male physical education students that may reflect that male and physical major education students, who usually spend

more time on sport training and physical activity, are better in fitness and skill oriented self-concept than their counterparts (Arazi & Hosseini, 2013).

Previous studies underline that the adolescence stage is a distinctive stage in which physical self-concept becomes determinant factors of physical activity. College students (aged 17-18) are in the adolescence stage of life that have just had a transition from school life to college life. It would probably have an impact on their physical self-concept. Moreover, the studies also indicate that gender tends to have an effect on individuals' physical self-perception in adolescence. Therefore, the purpose of this study was to find out gender and physical self-concept differences among college students. This study is expected to give contributive information under the area of study. It is hopefully beneficial for giving insight for the development of innovation to increase individual's physical self-concept in the future.

Method

The present study was a comparative study. A comparative study is a common method used to explore parallels and differences by contrasting of two or more cases (Azarian, 2011). This method is suitable to be used in the study as the study was comparing Physical Self-Concept Profile between male and female college students. The study involved 322 college students consisting of 92 female students and 230 male students as the sample in a University in Bandung, Indonesia. The students were non Physical Education students coming from different majors.

The instrument used in the study was the short version of Physical Self-Description Questionnaire (PSDQ-S) from Marsh, Martin, & Jackson (2010). The questionnaire contains forty items divided into eleven categories. The categories include health, coordination, physically active, body fat, sport competence, appearance, strength, global physical, flexibility, endurance, and global self-esteem.

The data from the questionnaire were grouped into their category and scored. Female and male student scores in each category were compared. The independent t-test was conducted to find out the significance of mean differences of female and male student scores in the eleven categories.

Results and Discussion

The result of the data analysis showed that male college students obtained higher total scores of Physical Self-Concept. Male students are found out to have higher mean on ten of eleven Physical Self-Concept categories. The mean of each category is presented in the following figure.

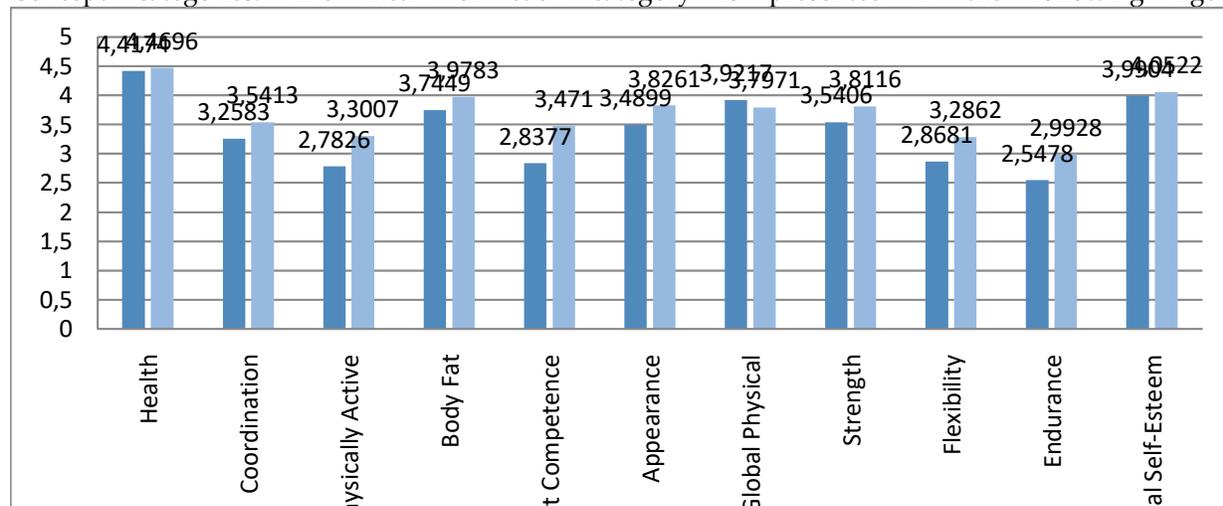


Figure 1. Mean Comparison per Category

Figure 1 shows that male students gained higher means in health (4.47), coordination (3.54), physically active (3.3), body fat (3.98), sport competence (3.47), appearance (3.83), strength (3.81), flexibility (3.28), endurance (2.99), and global self-esteem (4.05). Meanwhile, female students obtained higher mean only on global physical category.

The male students are shown to have higher means in ten categories. However, the independent t-test showed that the significant differences are only found in seven categories. The t-test result can be seen in the following table.

Table 1. Independent T-test Summary Table per Category

Category	Assumptions	Sig. (2-tailed)	Conclusion
Health	Equal variances assumed	.638	Not significant
	Equal variances not assumed	.635	Not significant
Coordination	Equal variances assumed	.008	Significant
	Equal variances not assumed	.007	Significant
Physically Active	Equal variances assumed	.000	Significant
	Equal variances not assumed	.000	Significant
Body Fat	Equal variances assumed	.223	Not significant
	Equal variances not assumed	.232	Not significant
Sport Competence	Equal variances assumed	.000	Significant
	Equal variances not assumed	.000	Significant
Appearance	Equal variances assumed	.003	Significant
	Equal variances not assumed	.004	Significant
Global Physical	Equal variances assumed	.351	Not significant
	Equal variances not assumed	.343	Not significant
Strength	Equal variances assumed	.037	Significant
	Equal variances not assumed	.049	Significant
Flexibility	Equal variances assumed	.001	Significant
	Equal variances not assumed	.001	Significant
Endurance	Equal variances assumed	.001	Significant
	Equal variances not assumed	.001	Significant
Global Self-Esteem	Equal variances assumed	.523	Not significant
	Equal variances not assumed	.506	Not significant

The Table 1 presents that male and female college students Physical Self-Concept are significantly different in coordination, physically active, sport competence, appearance, strength, flexibility, and endurance ($p < .05$). Furthermore, the male college students achieved a higher mean in all the seven categories.

The result of the study concludes that male attained higher physical self-concept value than female participants in all of the physical self-concept subscales, except for global physical subscale. In addition, the significant differences between male and female participants were found in the seven subscales including coordination, physically active, sport competence, appearance, strength, flexibility, and endurance. This is in line with the findings of previous studies conducted by (Arazi & Hosseini, 2013; Hagger et al., 2005; Moreno-Murcia et al., 2012) who found that male participants tended to have higher physical self-concept than female participants. Arazi & Hosseini (2013) found that male students gained higher significant level of the health; coordination; physical activity; body fat; global physical; competence; sports; global physical self-concept and global esteem scales, while (Hagger et al., 2005) found that boys' scores on all subscales were significantly higher than girls. Despite the existence of

significant differences in the physical self-concept differences, the result of the previous studies depicted the similar findings that female participant gained less favorable physical self-concept than male.

The sport and physical activity of females can be influenced by gender stereotypes about various physical activities in sport (Arazi & Hosseini, 2013). Since self-concept scales tend to tap constructs qualities that are typically viewed as “masculine” characteristics, such as assertiveness and confidence, boys are to be expected to report higher levels of physical self-concept (Hagger et al., 2005). Furthermore, the physical self-concept level was associated with the goal orientation and how the participants perceived the class environment, such as the expectations created by teachers and group pressures, which could affect the image that boys and girls have (Moreno-Murcia et al., 2012). It made female participants underestimate their physical competence (Moreno-Murcia et al., 2012).

The lack of perceived competence can affect the involvement level of physical activity (Arazi & Hosseini, 2013). Therefore, it is important to improve students’ self-concept. To improve the female physical self-concept, providing task-oriented climates is encouraged. Because competence is based on self-reference and success is defined in terms of effort, mastery, and doing better than last time, a task-involving motivational climate is more likely to maintain or increase levels of self-esteem, especially in girls and in those that started off with low physical self-concept levels, (Moreno-Murcia et al., 2012). However, since physical self-concept has a reciprocal relationship with other factors, different solution might be needed for different cases.

Conclusions

The result of the study presents that non-physical education male college student gained higher physical self-concept than female students. It indicates that there might be gender stereotypes (Arazi & Hosseini, 2013), goal orientation, and environment expectation (Moreno-Murcia et al., 2012) that urge the image that male should be better in physical activity which had an impact on how different gender reflects their physical state differently. Hence, it is important for the physical education instructors to provide an environment that supports those who started with low physical self-perception, such as task-oriented climates instead of performance-oriented atmospheres (Moreno-Murcia et al., 2012). However, since physical self-perception has a reciprocal relationship with other factors, and this study did not specifically investigate the factors contributing to physical self-concept, different solutions might be needed. Hence, to obtain a suitable solution, it is highly suggested for conducting research related to the factors influencing male and female college students’ physical self-concept in the future.

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