

Perception of Physical Self-efficacy and Body Image among Omani Basic School Children

Abdulqawi Salim Alzubaidi¹, Ali Mahdi Kazem²

¹ Department of Psychology, College of Education

Sultan Qaboos University, Oman

² Department of Psychology, College of Education

Sultan Qaboos University, Oman

Email: zubaidi@squ.edu.om, amkazem@squ.edu.om

Received: 20 Oct. 2012; Revised: 13 Nov. 2012; Accepted: 16 Dec. 2012

Abstract: The purpose of the present study was to examine the perception of physical self-efficacy and body image amongst children in basic schools in Oman. Gender and grade level differences in perceptions of these two variables were also investigated. The sample comprised 359, children in the age range 12-18 years, $M=15.01$, $SD=1.77$, drawn randomly from two basic schools in Muscat Educational District in Muscat. The number of boys being 169 and the number of girls 190. Two questionnaires were administered: one on body image and the other on the perceived self-efficacy. These questionnaires have adequate reliability and validity. The results indicate significant correlation between perceived physical self-efficacy and body image for the whole sample and for boys and girls separately. No gender differences in the body image were found, but there was a difference in the perceived physical efficacy favoring boys. The results also indicate that for boys, age is positively correlated with body image and perceived physical self-efficacy; while for girls there was no significant correlation. The significance of the results was discussed in terms of objective of the study. Recommendation for future research was put forward.

Keywords: Perception, Physical self-efficacy, Body image, Basic school children, Gender, grade level differences

Introduction

It is theorized that self-efficacy has a powerful effect in shaping individual behavior, motivation, and the successful achievement of goals. In Bandura theory (1997, 2001) Self-efficacy is defined as "beliefs in one's capabilities to organize and execute the course of action required to manage prospective situations" (Bandura, 1995).

In the research based on Bandura theory Self-efficacy beliefs have been shown to play a significant role (McAuley & Blissmer, 2000) in contributing to motivation in both affect and behavior. Attempts were made to investigate the relationship between self-efficacy and performance in sport and physical activities, and the findings suggest the importance of self-efficacy in contributing to the success in these activities (Weiss & Ferrer-Caja, 2002). In children,

for example, the amount of physical activity has been shown to correlate with physical self-efficacy scores (McAuley & Blissmer, 2000, Strauss, Rodzilsky, Burack & Colin, 2001).

Therefore, understanding of the factors influencing physical activity is of great importance for the promotion of active life style and the prevention of diseases such as diabetes and hypertension. A lack of physical activity is hypothesized to be an influential contributor to the development, lack and maintenance of childhood overweight and obesity (Alzubaidi & Mansy, 2007, Mansy, Alzubaidi, & Al-Jamali, 2006).

Self-efficacy beliefs have also been strongly linked between body image, physical activity and participation in sports has been reported to improve body image and increase self-esteem. Ikeda & Naworski (1992) argue that "body image and self-esteem" are woven together to form the fabric of how we feel about ourselves. Therefore, improving self-esteem is likely to improve body image and vice versa. Similarly, McCabe & Ricciardelli (2003) used 507 adolescents to investigate the role of gender, age, and body mass index in the development of self-esteem, body image concerns and weight loss. It was found that children with low self-esteem were more dissatisfied with their bodies. The researchers concluded that self-esteem is more likely to influence body image among girls than boys. In similar Vain, Steese, et al. (2006) surveyed 63 girls ranging in age from 10 to 17 years to investigate the positive impact on self-efficacy, self-esteem, perceived body image, locus of control and perceived social support among girls who participated in Girls' Circle Program. The findings showed significant increases in perceived social support, self-efficacy, and perceived body image, supporting the hypothesis that the Girl's Circle model is effective as gender specific intervention.

Body image refers to self-evaluations of one's body appearance and has been conceptualized as a global construct (Mendelson, Mendelson & White, 2001). Nonetheless, some researchers have suggested that body image is a much more multi-dimensional concept comprised of separate evaluations in specific domains (e.g. health and physical fitness, face and overall appearance, and physiques and muscular strength) as well as evaluations of global health (Cash & Pruzinsky, 2004). Also Cusack (2000) defined body image as a multidimensional self-attitude toward one's body; particularly its size, shape, and aesthetics.

Research on body image during the last few years has become an extremely important as a result of the increase in emphasizing physical attractiveness, preoccupation with one's body image. While there has been significant advances in our understanding both health beliefs and body image and factors that influence them such as gender, media, exercise and athletic participation; there is a small, emerging literature currently available regarding the relationship between the two of them. According to Woodrow-Keys (2006) the two concepts, though not interchangeable, are both central to success, striving, and are associated with a variety of correct health practices. Beller (2007) suggests that people who are stressed about their physical health may have certain types of erroneous beliefs, which exacerbated their distress levels. For example, a person may believe he is powerless to do anything about it.

This finding has been validated in other research as well. Geller, Johnston & Madsen (1997) reported that the influence of shape and weight on self-esteem was unrelated to actual body weight; however, it was related to perception of being overweight. Similarly, Koff, Rierden & Stubbs (1990) concluded that higher levels of self-esteem were related to higher levels of body image satisfaction. Forst (2004) examined the relationship between self-esteem and body satisfaction in three age groups of females. They found significant relationship between self-esteem and body satisfaction in three age groups of females. There were significant positive correlations between self-esteem, body image, and weight satisfaction, suggesting that as body satisfaction increases, so does self-esteem. This study sought to explore the relationship between perceived physical self-efficacy and body image among Omani children in basic schools. As stated earlier, the research on the relationship is fairly limited. In addition most of the studies in body image and health beliefs have been done in western cultures. It can be argued that the reported findings regarding these variables are specific to the western cultures. According to Woodrow-Keys (2006) research into body image would not be complete without considering the cultural framework that influence people's perception about their body. A study on a non-western population not only has the benefit of adding more to universal understanding of people's beliefs about their body image and health. It has the virtue of being conducted on a population that is more "homogenous" in terms of culture, family, values and ethnicity.

Methodology

Sample

Participants were 359 students (169 boys, and 190 girls), selected randomly from basic school in Muscat. They age ranged from 12-18, and their average age was ($M=15.01$, $SD=1.77$). They would be expected to represent a cross section of socioeconomic grouping of the city although this was not address. The distribution of the sample according gender and age is shown in table (1).

Table .1 Distribution of the Sample by Gender and Age

Age	Boys	Girls	Total
12	17	14	31
13	22	29	51
14	30	41	71
15	32	23	55
16	29	38	67
17	17	34	51
18	22	11	33
Total	169	190	359

Materials

Participant completed two questionnaires assessing demographic variables, physical self-efficacy, and body image. Each of these is describe below:

Physical Self-Efficacy Scale for Children (PSESC).

The physical self-efficacy is a 6 items scale based on the physical self-efficacy scale to assess children perception of personal strength, speed, and coordinative developed by Colella, Morano, Bortoli, & Robazza (2008). Response options ranged from (1) to (4) point format, for example the fourth item, (1) I move very slowly, and (4) I move very rapidly. Children were asked to think of themselves when playing or when involved in physical and sporting activities. Items 1, 3, and 5 are scored 1-4; whereas scores of items 2, 4, and 6 are reversed. Making the total score to be ranged from 6-24. Higher scores indicate greater self-perception of physical ability. This scale has shown good measurement characteristics in previous studies (e g: Bortoli & Robazza, 1997; Colella, et al., 2008). In Colella, et al., (2008) study Conbach's alpha 0.72, while in the current study yielded a Cronbach of 0.64.

Body Image Scale (BIS).

Body esteem (BE) refers to self-evaluations of one's body or appearance. This article outlines a BE questionnaire for adolescents and adults that has 3 subscales: BE-Appearance (general feelings about appearance), BE-Weight (weight satisfaction), and BE-Attribution (evaluations attributed to others about one's body and appearance). The subscales have high internal consistency and 3-month test-retest reliability. Females scored lower than males on BE-Weight and BE-Appearance. BE-Weight was the only subscale uniquely related to weight, especially in females, with heavy individuals tending to be dissatisfied with their weight. BE-Appearance was the only subscale that consistently predicted self-esteem. BE-Appearance and BE-Weight covaried more with Neeman & Harter's (1986) Appearance subscale than with other self-esteem subscales; BE-Attribution covaried more with social self-esteem subscales than did BE-Appearance and BE-Weight. In Mendelson, et al., (2001) study Conbach's alpha 0.89, while in the current study yielded a Cronbach 0.87.

Results

Perceived Physical Self-efficacy and Body Image:

Concerning the relationship between perceived physical self-efficacy and body image Pearson's product-moment coefficient was calculated for all participants and separately for boys and girls. As shown in table (2) there is a positive correlation between perceived physical self-efficacy and body image for the whole sample, and for boys and girls separately.

Table .2 Pearson's Correlation between Physical Self-efficacy and Body Image

Sample	N	Pearson's correlation	P
Boys	169	0.436	0.001
Girls	190	0.289	0.001
Both	359	0.338	0.001

Gender Differences:

Using independent samples t-test, the results as shown in table (3) indicate non statistically significant difference in the body image that could be due to gender; however, a statistically significant difference in the perceived physical self efficacy due to gender was found in favor of boys.

Table .3 Mean, standard deviation, and student t ratio by total score on the Body Image and Physical Self-efficacy for boys and girls

Variables	Gender	N	Mean	SD	<i>t</i>	<i>P</i>
Body Image	Boys	169	58.58	13.59	0.091	0.927
	Girls	190	58.43	17.09		
Physical Self-efficacy	Boys	169	18.74	2.24	5.371	0.001
	Girls	190	17.27	2.45		

Perceived Physical Self-efficacy, Body Image and Age:

Pearson's product-moment coefficient was executed for finding the relationship between age and each of perceived physical self-efficacy and body image. The results are presented in table (4), which reveals positively significant correlation between these variables for both the whole sample, and for boys. However, such correlations were not statistically significant in the case of girls.

Table .4 Pearson's Correlation between Physical Self-efficacy, Body Image and Age

Sample	Variables	Pearson's correlation	P
Boys (n=169)	Body image and Age	0.340	0.001
	Physical efficacy and Age	0.255	0.001
Girls (n=190)	Body image and Age	0.069	0.344
	Physical efficacy and Age	-0.026	0.719
Total (n=358)	Body image and Age	0.187	0.001
	Physical efficacy and Age	0.113	0.034

Discussion

In this study, a significant positive relationship was found between perceived self-efficacy and body image. This finding supports previous study as shown previously. Koff, et. al. (1990) for example, concluded that higher levels of self-esteem were related to higher levels of body image satisfaction. Forst (2004) examined the relationship between self-esteem and body satisfaction in three age groups of females. They found significant relationship between self-esteem and body satisfaction in three age groups of females. There were significant positive correlations between self-esteem, body image, and weight satisfaction, suggesting that as body satisfaction increases, so does self-esteem.

Concerning, boys appear more to have high sense perceived physical self-efficacy than girls, but there were no differences between boys and girls in body image. This is consistent with previous studies (e.g. Woodrow-Keys, 2006). Such a result might be a reflection of general perception that considered in Omani society, boys are more concerned with physical activities. Another reason for these differences might be due to the differences in motivation for participation in physical activities. Koinvula (1999) found that individual who participate in sports have a more high perceived physical self-efficacy.

References

- Alzubaidi, A.S., & Mansy, M.A. (2007). Relationship between health beliefs and body image as perceived by secondary school students in Oman. *Paper to be presented at the national conference on applied cognitive psychology*, 29-30th November.
- Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In: A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 1-45). New York: Cambridge University Press.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26.
- Beller, S. (2007). *Beliefs and Physical Health*, Available at [beliefs.html](#). (accessed 22 of Mar.
- Bortoli, L., & Robazza, C. (1997). Italian version of the Perceived Physical Ability Scale. *Perceptual and Motor Skills*, 85, 187-192.
- Cash, T., & Pruzinsky, T. (2004). *Body Image: A handbook of Theory, Research and Clinical Practice*. New York: Guilford Press.
- Colella, D., Morano, M., Bortoli, L., & Robazza, C. (2008). A physical self-efficacy scale for children. *Social Behavior and Personality*, 36 (6), 841-848.
- Cusack, L. (2000). Perception of body image: Implications for the workplace. *Employee Assistance Quarterly*, 15, 23-38.
- Forst, J. (2004). Self-esteem and body satisfaction in male and female elementary school, high school and university students. *Sex roles*, 51, 45-54.
- Geller, J., Johnston, C. & Madsen, K. (1997). The role of shape and weight in self-concept. The shape and weight based self-esteem inventory. *Cognitive Therapy and Research*, 21, 5-24.
- Ikeda, J., & Naworski, P. (1992). *Am I fat? Helping young children accept differences in body size*. Santa Cruz, CA: ETR Associates.
- Koff, E., Rierdan, J., & Stubbs, M. (1990). Gender, body image, and self-concept in early adolescence. *Journal of Early Adolescence*, 10, 56-68.
- Mansy, M. A., Alzubaidi, A., & Al-Jamali, F.A. (2006). Health beliefs and its relationship with quality of life for Sultan Qaboos University Students. *Psychology and Quality of Life, SQU, Muscat, Oman*, 17-19 December.

- McAuley, E., & Blissmer, B. (2000). Self-efficacy and attributional processes in physical activity in: T. S. Horn (Ed.), *Advances in sport psychology* (2nd ed., pp. 185-205). Champaign, IL: Human Kinetics.
- McCabe, M.P., & Ricciardelli, L.A. (2003). Body image and strategies to lose weight and increase muscle among boys and girls. *Health Psychology, 22*, 39-46.
- Mendelson, B., Mendelson, M., & White, D. (2001). Body-esteem scale for adolescents and adults. *Journal of Personality Assessment, 76*, 90-106.
- Neuman, J., & Harter, S. (1986). *Manual for the self-perception profile for college students*. Denver, CO: University of Denver Press.
- Steese, S., Dollette, M., Phillips, W., Hossfield, E., Matthews, G., & Taormina, G. (2006). Understanding girls' circle as an intervention on perceived social support, body image, self-efficacy, locus of control, and self-esteem. *Adolescence, 41* (161), 55-74.
- Strauss, R.S., Rodzilsky, D., Burack, G., and Colin, M. (2001). Psychological correlates of physical activity in healthy children. *Archives of Pediatrics and Adolescent Medicine, 155*, 807-902.
- Weiss, M.R., & Ferrer-Caja, E. (2002). Motivational orientations and sport behavior. In: T. S. Horn (Ed.), *Advances in sport psychology* (2nd ed., pp. 101-183). Champaign, IL: Human Kinetics.
- Woodrow-Keys, E. (2006). The effect of body image on career decision-making self-efficacy and assertiveness in female athletes and non-athletes. Unpublished Master thesis, Marshal University, US.