

Spring 2015

Impact of a novel after school program: Smart Fit Girls

Kellie Walters
Clemson University

Denise M. Anderson
Clemson University

Christine A. Chard
Clemson University

Follow this and additional works at: https://tigerprints.clemson.edu/hehd_awards

Recommended Citation

Walters, K. A., Chard, C. A., & Anderson, D. M. (2015, April). Impact of a novel after school program: Smart Fit Girls. Poster session presented at the Annual HEHD Research Symposium, Clemson, SC.

This Poster is brought to you for free and open access by the Research and Innovation Month at TigerPrints. It has been accepted for inclusion in Health, Education and Human Development Awards by an authorized administrator of TigerPrints. For more information, please contact kokeefe@clemson.edu.

Impact of a Novel After School Program: smartfitgirls™

Kellie A. Walters¹, Dr. Denise M. Anderson¹, and Dr. Christine A. Chard²

1. Department of Parks, Recreation, and Tourism Management, Clemson University, Clemson, SC 29634

2. Department of Health and Exercise Science, Colorado State University, Fort Collins, CO 80523

BACKGROUND

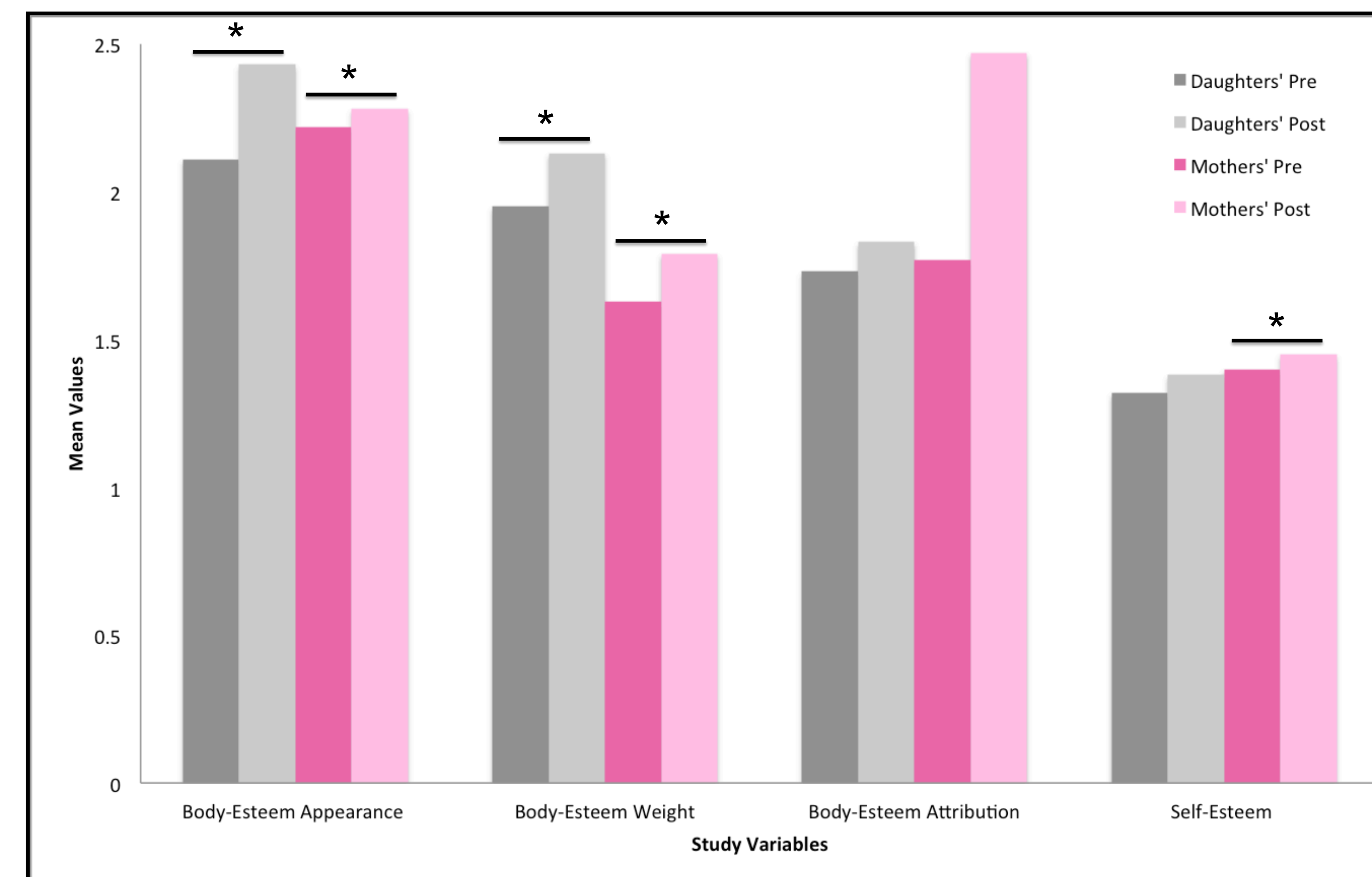
- Less than 10% of adolescents meet the recommended levels of physical activity¹
- Individuals who are highly physically active are more likely to have a greater self-esteem, better body image, and increased physical activity self-efficacy^{2,3,4,5}
- Having a high self-esteem has been shown to lead to many positive outcomes, including improved social relationships, occupational success, and academic achievement^{6,7}
- Self-esteem levels drop substantially during adolescent years⁸
- Similarly, Body dissatisfaction increases throughout adolescent years, which may be attributed to weight gain seen as a result of puberty⁹
- Mothers are the primary agent by which young girls learn about their body and body image¹⁰, therefore more research is needed to better understand the relationship between mental and physical health in mothers and daughters

PURPOSE

To explore the efficacy of Smart Fit Girls (SFG) and to examine how physical activity and mother/daughter relationships affects young girls' physical and emotional health.

METHODS

- Eight mother/daughter pairs participated in this study; girls were 10-13 years old, in good academic standing, and were not involved in school athletics at the time
- Girls participated in SFG: A 10 week after school program that taught participants about weight training and ways to improve their body image and self-esteem
- Both cohorts completed the Rosenberg Self-Esteem Scale and Body-Esteem Scale for Adolescents and Adults at the beginning and end of the program
- General linear models and paired t-tests were used to assess statistical significance



PRELIMINARY RESULTS AND DISCUSSION

- The improvements in mothers' Body Image and Self-Esteem were surprising and will be further assessed during the follow up qualitative component (i.e. focus groups with the mothers)
- For mothers, post Self-Esteem (SE) was significantly greater than pre SE ($p = 0.00$). Two possible explanations include a possible domino effect (i.e. girls report back to their mothers what they learn at SFG) or response shift-bias; this unique finding needs to be further studied
- In both cohorts, no significant differences existed for Body-Esteem Attribution, however it was approaching significance ($p = 0.82$) and may change with increased sample size
- There was a significant increase in Body-Esteem (BE) Appearance ($p = 0.001$ and $p = 0.006$) and BE Weight ($p = 0.000$ and $p = 0.003$) for both the daughters and mothers, respectively
- Significant increases in body esteem suggest that Smart Fit Girls is successfully providing the participants with the tools and knowledge to improve the way they view their bodies. Implications include healthier young girls who are more likely to be successful in life as an adult

1. Troiano, R. P., Berrigan, D., Dodd, K. W., Masse, L. C., Tilert, T., & McDowell, M. (2008). Physical activity in the United States measured by accelerometer. *Med Sci Sports Exerc*, 40(1), 181-188.

2. Campbell, A., & Hausenblas, H. A. (2009). Effects of exercise interventions on body image: a meta-analysis. *J Health Psychol*, 14(6), 780-793.

3. McAuley, E., Katula, J., Mihalko, S. L., Blissmer, B., Duncan, T. E., Pena, M., & Dunn, E. (1999). Mode of physical activity and self-efficacy in older adults: A latent growth curve analysis. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 54(5), P283-P292.

4. Robbins, L. B., Pis, M. B., Pender, N. J., & Kazanis, A. S. (2004). Exercise self-efficacy, enjoyment, and feeling states among adolescents. *Western Journal of Nursing Research*, 26(7), 699-715. doi: 10.1177/0193945904267300

5. Schmalz, D. L., Deane, G. D., Birch, L. L., & Davison, K. K. (2007). A longitudinal assessment of the links between physical activity and self-esteem in early adolescent non-Hispanic females. *J Adolesc Health*, 41(5), 559-565. doi: 10.1016/j.jadohealth.2007.07.001

6. Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem and its effects on important life outcomes. *J Pers Soc Psychol*, 102(6), 1271-1288. doi: 10.1037/a0025558

7. Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2003). Stability of self-esteem across the life span. *J Pers Soc Psychol*, 84(1), 205-220.

8. Brown, K. M., McMahon, R. P., Biro, F. M., Crawford, P., Schreiber, G. B., Similo, S. L., . . . Striegel-Moore, R. (1998). Changes in self-esteem in black and white girls between the ages of 9 and 14 years. The NHLBI Growth and Health Study. *J Adolesc Health*, 23(1), 7-19.

9. Byely, L., Archibald, A. B., Graber, J., & Brooks-Gunn, J. (2000). A prospective study of familial and social influences on girls' body image and dieting. *Int J Eat Disord*, 28(2), 155-164.

10. Clarke, L. H., & Griffin, M. (2007). Becoming and being gendered through the body: Older women, their mothers and body image. *Ageing and Society*, 27(5), 701-718.