THE MEDIATING ROLE OF SELF-COMPASSION ON SELF-ESTEEM AND BODY SATISFACTION IN FEMALES WHO PARTICIPATE IN PHYSIQUE COMPETITIONS

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Abstract

There is research indicating that self-compassion can mediate one's level of body-image-dependent self-esteem. This study aimed to answer the question of whether self-esteem and body satisfaction are positively correlated for women who participate in bodybuilding and competition, and if self-compassion is a mediating factor in the relationship between self-esteem and body

satisfaction. The goal of this exploratory study was to increase the understanding of factors that lead to fluctuations in self-esteem and body satisfaction in female physique athletes. The resulting data can assist health and training professionals in their work with individuals involved in bodybuilding to better navigate the pressures and consequences of intensive body focus and training.

Keywords: self-compassion, self-esteem, body satisfaction, women, physique competition



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Introduction

There is a plethora of research on self-esteem and body image in relation to women's self-worth residing in their physical appearance (Barker & Galambos, 2003; Breines et al., 2008; Clay et al., 2005; John & Ebbeck, 2008; Overstreet & Quinn, 2012; Paxton et al., 2006; Rothblum et al., 1988). Typically, the ideal for women is to be particularly thin. This is not only seen as the preferred body shape connected to attractiveness and self-worth in Western cultures, it is viewed as a reflection of a woman's youth and self-control (Bordo, 1993; Grogan, 2017). Body dissatisfaction is prevalent among sports that require the athletes to maintain a low body weight and/or low body fat percentages in order to be successful. Competitive physique competitions require the athletes to obtain an excessive degree of leanness, consequently increasing the susceptibility for these athletes to develop unhealthy habits for weight control and supplement usage. (Goldhead, 2009; Whitehead et al., 2020). Thus, as one's body image improves, self-esteem would increase as well. The literature reflects this connection, indicating that body satisfaction and self-esteem are positively correlated (Dorak, 2011; Lobera & Ríos, 2011; Mäkinen et al., 2012).

One cultural phenomenon that has grown in recognition during the last few decades is the rise of women's physique competition, which focuses on the degree of muscularity, percentages of body fat and muscularity shape and symmetry of women's bodies. There are several categories for women in physique competitions; each category has different guidelines regarding muscularity and conditioning for athletes. The duration of training for such competitions ranges 8 - 20 weeks. Competitors are judged by a subjective rating scale and are ranked in order of preference according to judging criteria related to physical appearance. In contrast to men's bodybuilding, the judging criteria for female physique competitors requires a certain degree of muscularity and low body fat while still maintaining a feminine appearance including skin tone, hair, makeup etc. (Boyle, 2005).

With this hyper focus on changing and manipulating their appearance, it would follow that, for women participating

in physique competitions, perceptions and attitudes about their bodies, especially their appearance, would be affected by their training results. (Krane et al., 2001; Stapleton et al., 2017; Suffolk, 2014). It would also follow that they would be particularly susceptible to self-esteem fluctuation dependent on body image given a preoccupation with their appearance and constant body surveillance.

There is research indicating that self-compassion can mediate one's level of body-image-dependent self-esteem (Ferreira et al., 2013; Stapleton et al., 2017). Neff (2003), one of the premier researchers on self-compassion, notes that self-compassion is more than the absence of self-judgment. It incorporates self-kindness (the offering to oneself a gentleness and acceptance), a sense of humanity (the belief that no one is perfect and that everyone makes mistakes) and mindfulness (the ability to recognize but not exaggerate one's painful thoughts and emotions). In their 2016 article, Warren, Smeets and Neff found that "self-compassion seems to buffer against body-image concerns. It is associated with less body dissatisfaction, body preoccupation, and weight worries, (and) greater body appreciation" (p.21). Thus, this study aims to answer the question of whether self-esteem and body satisfaction are positively correlated for women who participate in bodybuilding training and competition, and if self-compassion is a mediating factor in the relationship between self-esteem and body satisfaction.

Hypothesis

- **1.** There will be a positive correlation between self-esteem and body satisfaction in women who participate in physique competitions.
- Self-esteem will rise at the end of training (post₁) and drop at the time of post₂.
- 3. Self-compassion will be a mediating factor in the relationship between self-esteem and body satisfaction in women who participate in physique competitions.



Participants

The participants were females between 18 and 60 years of age, of diverse ethnic backgrounds who actively compete in fitness, figure, and bikini categories of physique competitions, and who volunteered to participate in the study. Requests for participation were distributed through personal contact and word of mouth. All participants were training with the same trainer (in person and remotely) in the US and internationally. The participants needed to be able to access a computer to complete the surveys online, be able to read and speak English as a first language and volunteer without incentive.

Design

This study had a non-experimental design that consisted of different independent variables and criterion variables per hypothesis. The self-compassion, self-esteem and body satisfaction variables were scored on the Self-Compassion Scale, Rosenberg Self-Esteem Scale and the MBSRQ-AS Body Image Scale, respectively.

This observational study used a one-way, repeated-measures observation of self-esteem, self-compassion and body satisfaction at the beginning of the training process, at the end of the training process and shortly after the training process using Cash's MBSRQ. This is a within-groups study, as the data were taken from the same participants over three different time points.

In observing the first hypothesis—that there will be a positive correlation between self-esteem and body satisfaction in women who participate in physique competitions—self-esteem was used as the independent variable, while body satisfaction was assumed to be a dependent variable. In the second hypothesis—that self-esteem will rise at post_(competition week) and drop at the time of post_2 (14 days post-competition)—the stage of the training/competition process is the independent variable, predicting self-esteem. In the final hypothesis—that self-compassion will be a mediating factor in the relationship between self-esteem and body satisfaction in women who participate in physique competitions—self-esteem was the independent variable, body satisfaction was the dependent variable and self-com-

passion was used as a mediating variable between these two.

Materials

Self-Compassion Scale—Short Form. The 12-item self-report Self-Compassion Scale—Short Form (SCS-F) is a reliable equivalent version of the full SCS (Neff, 2003a). The questionnaire measures six components of self-compassion (two items each).

Rosenberg Self-Esteem Scale. The Rosenberg Self-Esteem Scale (RSES), a widely used 10-item self-report questionnaire that measures global self-esteem (Rosenberg, 1965).

MBSRQ-AS Body Image Scale. The 34-item, validated, self-report inventory for the assessment of body image (Cash, 1990).

Procedure

An informed-consent release was given to all participants in an electronic format, and they completed the question-naire online. The participants completed the question-naire three separate times using a Pre , Post_1 and Post_2 analysis. The Pre was completed during the first week of training for competition. The Post_1 was completed the week of the competition, and the Post_2 was be completed 14 days after competition. There was one additional question on the Post_2 regarding the results and placement in the competition.

In order to minimize the risks, instructions for the survey and the information letter both included the option for participants to discontinue taking the survey at any time. Participants were asked to create a codename at the beginning of the questionnaire in order to preserve anonymity. Participants were instructed to answer this anonymous survey on their own computer and not their employer's, to maintain confidentiality. In addition, these measurements did not involve questions of any significantly embarrassing nature.

Results

The first observation sought to observe a potential correlation between self-esteem and body satisfaction in



women who participate in physique competitions, where it was hypothesized that there would be a positive correlation between the two. Using simple linear regression, body satisfaction ratings (averaged across the three assessments for each participant) were regressed on self-esteem scores (averaged across the three assessments for each participant). This regression was not found to be statistically significant at the 95% confidence level. We did not find evidence to support the claim that self-esteem can predict body satisfaction for women in physique competitions.

The second observation sought to observe a trend where self-esteem rises as the end of training (post₁) and drops at the time of post₂. A one-way, repeated-measures ANOVA was conducted to assess the impact of body composition and appearance through the training process on participants' self-esteem relation to the training and competition process (measured at weeks pre-competition, immediately pre-competition and a few weeks post-competition) on participants' self-esteem statistics. Post-hoc tests revealed no evidence that self-esteem scores were any different between tests.

The final observation sought to identify self-compassion as a mediating factor in the relationship between self-esteem and body satisfaction in women who participate in physique competitions. In order to identify a mediating variable, there must first be a significant relationship between the independent and dependent variables—in this case self-esteem and body satisfaction. As in the first observation, a significant relationship was not found between self-esteem and body satisfaction in our sample, therefore we are unable to identify a mediating variable between these two variables.

Discussion

The goal of this exploratory study was to increase the understanding of factors that lead to fluctuations in self-esteem and body satisfaction in women who compete in

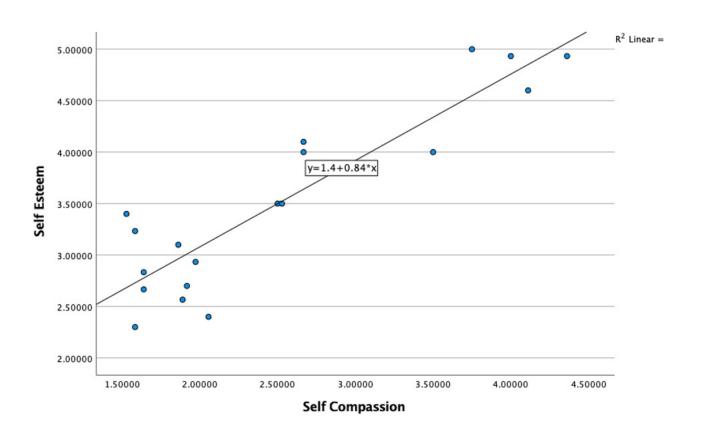
physique competitions and explore whether the findings supported by the work of both Wasylkiw et al. (2012) and Stapleton et al. (2017) would be replicated: that self-compassion could be a partial mediating factor in body image and self-esteem issues in women who compete in physique competitions.

We suggest that our results for hypotheses 1 and 2 may be a function of our participants' requirement to be hyper-focused on their appearance. The fact that these women were training for and were going to be judged in a physique competition requires them to perform constant body surveillance. This preoccupation with their fat-to-muscle ratio, strength, definition, etc., requires that they consistently look for areas of improvement and may disallow their ability to feel good about themselves at any point during their training or afterward.

In addition to the above observations, linear regression was also tested to observe a correlation between self-compassion and self-esteem, and once again between self-compassion and body satisfaction. A significant correlation was found between self-compassion and self-esteem at 99% confidence; we have evidence to believe that there is a relationship between self-compassion and self-esteem for women in physique competitions. This correlation can be seen in Figure 1. However, we did not find any evidence to corroborate a relationship between self-compassion and body satisfaction. The highly competitive women in this study seem to be much harder on themselves and critical of their body shape, thus they did not reflect the research on non-competitive women where self-compassion positively affected body satisfaction. It is possible that although self-compassion can still bolster these women's self-esteem, it may be that the hyper-critical requirement of this sport, and the need to constantly find and fix bodily imperfections, is not affected by self-compassion.



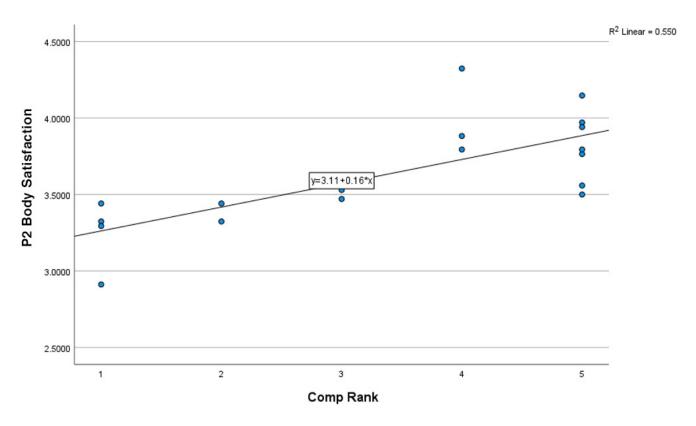
Figure 1Self-Esteem Regressed on Self-Compassion



Finally, a linear regression fit was tested on the relationship between competition placement and body satisfaction. A significant correlation was found on competition placement and body satisfaction at $post_2$ (just a few weeks after the competition). This correlation can be seen in Figure 2. This evidence leads us to believe that competition placement can predict post-competition body satisfaction in these women. The implications of this could suggest that women who compete in this sport place such emphasis on their performance and the resulting external feedback that it can change how they view themselves, and that self-compassion has less impact than does other's views and appraisals.



Figure 2Body Satisfaction at Post₂ Regressed on Competition Placement



Given the dearth of information on women who participate in physique competition, there is a need to understand more about women investing in this sport, how their participation affects their sense of self, and their experience of how they see themselves as women and athletes. More data would assist health and training professionals in their work with individuals involved in bodybuilding to better navigate the pressures and consequences of intensive body focus and training by working to increase self-compassion.

About the Authors

Dr. Tracey Greenwood has been at Eastern University for 15 years where she is an Associate Professor as well as the Department Chair of Kinesiology and the Program Director for Exercise Science. She earned her M.S. From St. Joseph's University and her Ph.D. from Temple University. She is also actively working in the clinical field of exercise science.

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REFERENCES

- Barker E. T., & Galambos N. L. (2003). Body dissatisfaction of adolescent girls and boys: Risk and resource factors. The Journal of Early Adolescence, 23, 141–165.
- Bordo, S. (1993) Unbearable weight: feminism, western culture, and the body. University of California Press.
- Boyle, L. (2005). Flexing the tensions of female muscularity: How female bodybuilders negotiate normative femininity in competitive bodybuilding. *Women's Studies Quarterly*, 33(1/2), 134.
- Breines J. G., Crocker J., & Garcia J. A. (2008). Self-objectification and well being in women's daily lives. Personality and Social Psychology Bulletin, 34, 583–598
- Cash, T. F. (1990). *The Multidimensional Body-Self Relations Questionnaire*. Unpublished test manual, Old Dominion University, Norfolk. VA.
- Clay, D., Vignoles, V., & Dittmar, H. (2005) Body image and self-esteem among adolescent girls:

 Testing the influence of sociocultural factors. *Journal of Research on Adolescence*, 15, 451–477. http://dx.doi.org/10.1111/ji.1532-7795.2005.00107.x
- Dorak, F. (2011). Self-esteem and body image of Turkish adolescent girls. *Social Behavior and Personality:* An International Journal, 39(4), 553-561. https://doi.org/10.2224/sbp.2011.39.4.553
- Ferreira, C., Pinto-Gouveia, J., & Duarte, C. (2013). Self-compassion in the face of shame and body image dissatisfaction: Implications for eating disorders. *Eating Behaviors*, 14, 207–210. http://dx.doi.org/10.1016/j.eatbeh.2013.01.005
- Goldfield, Gary S. (2009) Body Image, Disordered Eating and Anabolic Steroid Use in Female Bodybuilders, *Eating Disorders*, 17(3), 200-210, DOI: 10.1080/10640260902848485
- Grogan, S. (2017). Body image: understanding body dissatisfaction in men, women and children, Routledge.
- John, D. H., & Ebbeck, V. (2008). Gender-differentiated associations among objectified body consciousness, self-conceptions and physical activity. *Sex Roles*, *59*, 623–632. http://dx.doi.org/10.1007/s11199-008-9473-8
- Krane, V., Waldron, J., Michalenok, J. & Stiles-Shipley, J. (2001). Body image concerns in female exercisers and athletes: a feminist cultural studies perspective. *Women in Sport and Physical Activity Journal*, 10(1), 17-37.
- Lobera, I. J., & Ríos, P. B. (2011). Spanish version of the Body Appreciation Scale (BAS) for adolescents. The Spanish Journal of Psychology, 14(1), 411-420. https://doi.org/10.5209/rev_SJOP.2011.v14.n1.37
- Mäkinen, M., Puukko-Viertomies, L. R., Lindberg, N., Siimes, M. A., & Aalberg, V. (2012). Body dissatisfaction and body mass in girls and boys transitioning from early to mid-adolescence: additional role of self-esteem and eating habits. *BMC Psychiatry*, 12(35), 1-8. https://doi.org/10.1186/1471-244X-12-35



- Neff, K. D. (2003). Development and validation of a scale to measure self-compassion. Self and Identity, 2, 223–250. 10.1080/15298860309027
- Overstreet, N. M., & Quinn, D. M. (2012). Contingencies of self-worth and appearance concerns: Do domains of self-worth matter? *Psychology of Women Quarterly*, *36*, 314–325. http://dx.doi.org/10.1177/0361684311435221
- Paxton, S. J., Neumark-Sztainer, D., Hannan, P. J., & Eisenberg, M. E. (2006). Body dissatisfaction prospectively predicts depressive mood and low self-esteem in adolescent girls and boys. *Journal of Clinical Child and Adolescent Psychology*, 35, 539–549. http://dx.doi.org/10.1207/s15374424jccp3504_5
- Rosenberg, M. (1965). Society and the adolescent self-image. University Press.

 Rothblum, E. D., Miller, C. T., & Garbutt, B. (1988). Stereotypes of obese female job applicants.

 International Journal of Eating Disorders, 7, 277–283. https://psycnet.apa.org/doi/10.1002/1098-108X(198803)7:2%3C277::AID-EAT2260070213%3E3.0.CO;2-2
- Stapleton, P., Crighton, G., Carter, B. & Pidgeon, A. (2017). Self-esteem and body image in females: the mediating role of self-compassion and appearance contingent in women. *The Human Psychologist*, 45(3), 238-257.
- Suffolk, M. (2014). Competitive bodybuilding: positive deviance, body image pathology, or modern day competitive sport? *Journal of Clinical Sport Psychology*, 8(1), 339-356.
- Warren, R., Smeets, E., & Neff, K. (2016). Self-criticism and self-compassion: risk and resilience: being compassionate to oneself is associated with emotional resilience and psychological well-being.

 Current Psychiatry, 15(12), 18-32.
- Wasylkiw, L., MacKinnon, A. L., & MacLellan, A. M. (2012). Exploring the link between self-compassion and body image in university women. *Body Image*, *9*, 236–245. 10.5860/CHOICE.33-4223
- Whitehead, Jacqui, Slater, G., Wright, H., Martin, L., O'Connor, H., and Mitchell, L. Disordered eating behaviors in female physique athletes, *European Journal of Sport Science*, 20(9), 1206-1214, DOI: 10.1080/17461391.2019.1698659