

Please cite the Published Version

Grogan, Sarah (2018) Body Image and the Exercising Female. In: The Exercising Female: Science and Its Application, 1st Edition. Routledge. ISBN 9780815391982

Publisher: Routledge

Version: Accepted Version

Downloaded from: <https://e-space.mmu.ac.uk/621761/>

Usage rights: © In Copyright

Additional Information: Accepted manuscript of a book chapter published in The Exercising Female: Science and Its Application.

Enquiries:

If you have questions about this document, contact openresearch@mmu.ac.uk. Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

8 Body image and the exercising female

Sarah Grogan

Introduction

This chapter provides a summary of the current multidisciplinary evidence base for research on body image in the exercising female, including considering how to improve body image in women who engage in sport and exercise. The chapter summarises research on relevant cultural and subcultural pressures to be slender, provides a critical review of relevant literature on body image in the exercising female, and makes recommendations for promoting positive body image in women engaged in sport and exercise.

Although there is some evidence that women who exercise for recreation or competition tend to have more positive body image than other women, cultural pressures to be slim, plus additional sport-related pressures to conform to particular body types, may lead to body dissatisfaction in exercising females. In this chapter, the effects of subcultural and societal pressures on body image among exercising females are analysed, and the impacts of sport and exercise environments are considered. Reducing internalisation of thin ideals and social comparison with unrealistic targets, raising self-esteem, encouraging a focus on body function and performance, and improving body appreciation and acceptance are evaluated as possible interventions for reducing body dissatisfaction. The importance of social support for a range of body shapes from within sport and exercise communities are also discussed.

Both of the key themes of this book are addressed in this chapter on body image in the exercising female. Body-related cultural pressures, and resulting body dissatisfaction, are issues that exercising females are likely to encounter, either personally or in teammates, friends, and colleagues, and such issues are explored. Recommendations are also provided for how to optimise body image so that athletic success is not affected negatively by body dissatisfaction, which addresses the second key theme of the book.

Aims of the chapter

The aims of the chapter are as follows:

- 1 To provide a review of relevant literature on body image with a specific focus on body image in the exercising female.
- 2 To make recommendations for promoting positive body image in women engaged in sport and exercise.

A consideration of the current evidence base

Defining body image

The definition of body image that will be taken in this chapter is adapted from Grogan (2016) and is: ‘A woman’s perceptions, thoughts, and feelings about her body’. This definition can be taken to include psychological concepts, such as perception and attitudes towards the body, as well as experiences of embodiment. It can also be taken to encompass both positive and negative aspects of body image. Body dissatisfaction relates to negative evaluations of body size, shape, muscularity/muscle tone, and weight, and it usually involves a perceived discrepancy between a woman’s evaluation of her body and her ideal body.

Cultural pressures

Body image is a psychological phenomenon that is significantly affected by social factors. Body image pressures for exercising females come from mainstream expectations of slenderness and body tone, as well as specific sport and exercise-related pressures. In terms of mainstream pressures, media imagery may be particularly important in producing changes in the ways that the body is experienced and evaluated, depending on women’s perception of the importance of those cues (Levine, 2012). For instance, it has been suggested that adolescent girls are especially vulnerable because body image is particularly salient while they undergo the significant physical and psychological changes of puberty (Ricciardelli & Yager, 2015). Pressure also comes from family, friends, and partners (Ordaz et al., 2018). Ideals for women’s bodies tend to be a slender-but-curvy shape, which includes slenderness (associated with self-control, elegance, and youth; Bordo, 2003; Murray, 2016), a small waist (Grogan, Gill, Brownbridge, Kilgariff, & Whalley, 2013), and moderately large breasts (Reardon & Grogan, 2011; Swami, 2015). Muscle tone is also important, and the 21st century ideal is a firm-looking, toned body (Lupton, 2013), though high degrees of muscularity are generally not seen as culturally acceptable for women and may be seen as ‘unfeminine’ (Grogan, 2016; Krane, Choi, Baird, Aimar, & Kauer, 2004). In certain types of sport, there are additional pressures. For instance, in sports with an aesthetic, antigravitational, or weight-category component, there is often pressure to be as lean as possible rather than slender-but-curvy (Petrie & Greenleaf, 2012). In other sports, such as body building, there is pressure to be muscular (Grogan, Evans, Wright, & Hunter, 2004). This puts exercising females under complex sets of social pressures: to be slender-but-curvy to conform to societal expectations, and also to conform to the performance-related body size requirements of their sport.

Body dissatisfaction

Researchers have concluded that the majority of women in Western cultures are dissatisfied with some aspect of their body weight and shape (Cash, 2012a; Grogan, 2016; Vartanian, 2012), and many are taking behavioural steps to try to change the look of their bodies such as using dieting and weight loss drugs, such as stimulants and laxatives, to lose weight (O’Dea & Cinelli, 2016; Petrie & Greenleaf, 2012). Interview studies tend to report that stomach, thighs, buttocks, and hips present most concern (e.g., Grogan, Gill, Brownbridge, Kilgariff, & Whalley, 2013; Grogan et al., 2017). These are areas of the body where women store fat, and also areas which are often the focus of media attention in advertisements for slimming products (Murray, 2016). Studies on body size estimation find that women tend to overestimate the size of their bodies (e.g., McCabe, Ricciardelli, Sitaram, & Mikhail, 2006), and showing women realistic images of their bodies, derived from three-dimensional, whole-body scans, has been shown to improve body satisfaction, possibly by reducing body size overestimation (Grogan et al., 2013).

Researchers have tended to find more positive body image in exercising females than those women who do not exercise. Hausenblas and Fallon (2007) reviewed 121 published and unpublished studies that examined the impact of exercise on body image. They concluded that exercising females had more positive body image than did non-exercisers, and that exercise intervention participants reported more positive body image post intervention compared to the non-exercising controls, concluding that exercise was associated with improved body image. Petrie and Greenleaf (2012) suggest that this clear link may be due to: (a) relatively greater focus on body performance rather than aesthetics in exercising females; (b) the fact that exercised bodies tend to be closer to the mainstream cultural ideal in terms of body fat levels and muscle tone, leading to fewer discrepancies with cultural ideals; and (c) the psychosocial benefits of sport, such as autonomy and competence that have been linked to more positive body image.

Although exercise has been linked with positive body image, this does not mean that exercising females do not have body image concerns. Mott and Griffiths (2014), summarising results from a survey by BT Sport, which included responses from 110 female athletes from 20 different sports, report that 80 per cent of respondents felt under pressure to look a certain way, with 66 per cent perceiving pressure from media, and 61 per cent from fellow athletes. Respondents reported social pressure from coaches and from sports’ regulatory bodies. In response to body image pressures, 87 per cent had dieted, and 67 per cent of respondents thought the public and media valued how female athletes looked over what they achieved in

sport. These data suggest that body image pressures impact negatively on large numbers of female athletes from a wide range of sports. Some women prioritised being thin over sport performance when choosing what to eat, suggesting that these body image pressures can affect sport performance as well as general well-being, with one woman saying, ‘Sometimes it has meant my diet no longer is optimum for performance but becomes optimum for looking slimmer/thinner’.

In sports where low body weight may provide a competitive advantage, there is significant pressure to be as lean as possible. Women who exercise and engage in sport often spend time in environments that are highly regulated, especially at club and elite levels. Teammates and coaches may exert subtle, and not so subtle, messages about the importance of being slender (Mott & Griffiths, 2014). Weigh-ins and focus on diet and weight loss, requirements to wear revealing uniforms, and sport and exercise environments where body appearance is a key focus, can lead to significant pressures to be lean, which can lead to body dissatisfaction, disordered eating, and over-exercise to reduce weight (Mott & Griffiths, 2014; Petrie & Greenleaf, 2007, 2012).

Psychological factors predicting body image

As well as cultural factors, several psychological factors have been shown to predict body image in women such as: internalisation of the thin ideal, self-esteem, performance and body function, and body appreciation and acceptance.

Internalisation of the thin ideal

Women who internalise thin ideals may be particularly vulnerable to body dissatisfaction caused by self-ideal - discrepancies (e.g., Ahern & Hetherington, 2006), and tendency to make comparisons to thin ideal imagery has been shown to increase body dissatisfaction in women (e.g., Slevic & Tiggemann, 2011). Yamamiya and colleagues (2005) showed that body dissatisfaction can be increased by as little as 5 min of exposure to thin and beautiful images in women high in thin- ideal internalisation, showing body dissatisfaction can be increased by as little as 5 min of exposure to thin - and beautiful images in women high in – thin ideal - internalisation, showing that social comparison with thin body ideals can produce particular risks for women who have internalised societal thin ideals. For exercising females, this may also lead to unhelpful body comparisons with other exercising females, resulting in reduced performance and avoidance of training (Pridgeon & Grogan, 2012; Wasilenko, Kulik, & Wanic, 2007).

Self-esteem

Women high in self-esteem tend to be most satisfied with their bodies (O’Dea, 2012), which has led to suggestions that raising women’s self-esteem is key in improving body image (e.g., O’Dea & Cinelli, 2016). Although finding that the two variables are linked does not necessarily demonstrate that self-esteem is the primary causal factor in determining body image, intervention studies have shown that raising self-esteem does tend to lead to an improvement in body image (e.g., O’Dea, 2012; Seekis, Bradley, & Duffy, 2017), suggesting that self-esteem may be the causal factor.

Performance and body function

Work on body function (performance rather than aesthetics) has shown that focusing on fitness and performance can promote body appreciation and reduce body dissatisfaction (Alleva Martijn, Van Breukelen, Jansen, & Karos, 2015). Many studies have shown that adult women who exercise for functional, health, and enjoyment reasons, rather than to improve appearance, tend to report higher body appreciation (e.g., Homan & Tylka, 2014), that activities such as yoga, which tend to promote awareness of body function rather than aesthetics, promote positive body image (Neumark-Sztainer, MacLehose, Watts, Pacanowski, & Eisenberg, 2018), and that women who focus on body function and fitness have more positive body image than those who focus on appearance (e.g., Frisen & Holmqvist, 2010).

Body appreciation and acceptance

Although body image research has a history of prioritising negative aspects of body image, a strong new focus within body image research is the move towards focusing on body appreciation and acceptance rather than body dissatisfaction. This approach is proving helpful in understanding how some women maintain body satisfaction in societies where the ideal is slender-but-curvy and their bodies do not correspond to this ideal. Tylka and Wood-Barcalow (2015) argue that if body image interventions reduce symptoms of negative body image without enhancing positive body image, they may merely enable people to tolerate their bodies, whereas enabling people to appreciate and accept their bodies may make interventions more effective and may enable maintenance of those gains.

Practical recommendations based on research

Various authors have suggested ways in which exercise cultures can be made more body-healthy, to promote positive body image in women. Petrie and Greenleaf (2012) suggest that it

is important to create body-healthy sport and exercise environments so that women can be proud of what their bodies can do, satisfied with their appearance, and develop positive self-worth. A key factor identified by these authors is disconnecting the link between weight loss and improved performance. They argue that a positive way forward is to focus on health rather than weight. Arguing that weight loss can involve loss of fat-free muscle mass, and that dieting may reduce energy levels and reduce performance, they note that this cultural link between weight loss and performance is problematic and needs to be challenged. Normalising healthy eating, and focusing on attunement to nutritional needs, plus educating coaches about the possible damaging impacts of negative body image on health and well-being, as well as on performance, is also important. In addition, the research evidence noted in the previous section leads to suggestions for interventions based on psychological factors that may be helpful in promoting positive body image in women who exercise.

Interventions based on psychological factors

Reducing internalisation of the thin ideal

Psychologists have suggested that women can be made resistant to the negative effects of media imagery by changing the ways that they interpret incoming social information. A popular approach to resisting internalisation of the thin ideal is to use media-literacy programmes to teach women to reject media images as appropriate targets for comparison (e.g., Halliwell, Harcourt, & Easun, 2011). However, although successful in training women to be sceptical about media images, these kinds of interventions have not been very successful in reducing resulting body dissatisfaction in adults (e.g., Tiggemann, Slater, & Smyth, 2014). One alternative is to use feminist approaches to enable women to challenge the validity of the thin ideal (Murnen & Seabrook, 2012), and exposure to feminist theories may promote positive body image through raising perceived empowerment (Peterson, Grippo, & Tantleff-Dunn, 2010). Another approach that has enabled women to challenge the thin ideal and to rethink unrealistic body standards is cognitive behavioural therapy (Cash, 2012b). Cognitive restructuring and self-monitoring to change body-related thoughts such as internalisation of the thin ideal, have been extremely effective in promoting positive body image (Jarry & Ip, 2005).

Raising self-esteem

Research has shown that programmes designed to raise self-esteem in adolescents (O'Dea, 2012; Steese et al., 2006) and adults (Seekis et al., 2017) can be effective in improving body image. More work is needed to determine the effectiveness of programmes that aim to build

self-esteem and resilience as a way of improving body image in adult exercising females, although existing work with more general groups of women is producing positive results.

Focusing on performance and body function

Women who engage in sport and exercise will necessarily have a focus on body performance and function, but coaches and others should be aware that conflicting pressures to focus on appearance may lead to unhelpful body critique. This may be reduced through acknowledging these pressures and encouraging refocusing on performance and body function rather than appearance (Homan & Tylka, 2014). In one study (Grogan et al., 2014), a dance movement, psychotherapy session, with a key focus on body function and appreciation, was effective in promoting body acceptance and reduced the importance that the 17-year-old participants placed on other people's opinions and attitudes towards their bodies. This finding shows that encouraging a focus on performance rather than appearance has promise as a means of promoting positive body image for young women.

Improving body appreciation and acceptance

Self-compassion has been defined in various ways, but broadly entails treating oneself in a caring and empathic way. Albertson, Neff, and Dill-Shackleford (2015) have shown that a 3-week period of self-compassion focusing on body appreciation and acceptance significantly reduced body dissatisfaction and body shame in a multigenerational group of American women relative to wait-list controls. The authors suggest that self-compassion may be an effective way to improve body image in adult women. Most impressive, perhaps, is the fact that these improvements were maintained when the same women were assessed 3 months later, so benefits do not seem to be limited to the time period shortly after the intervention. This study did not specifically recruit exercising females, so results need to be replicated in samples of women targeted because they exercise, though results look promising.

Real-world examples

Two groups who tend to have generally positive views of their bodies are competition swimmers and bodybuilders. Given that mainstream Western cultures expect women's bodies not to take up space (e.g., Murray, 2016), women who swim competitively and those who body build are engaging in behaviours that place them outside mainstream norms of how much muscle is appropriate for women. Howells and Grogan (2012) wondered how they experienced the reactions of those outside, and also inside the confines of their sports, and what sources of

social support these women used to enable them to maintain positive views of how their bodies looked. To investigate these factors, interviews were conducted with adult women (over 18 years) and adolescent girls (under 18 years) who swam competitively (Howells & Grogan, 2012), and with adult women bodybuilders (Grogan et al., 2004). From these interviews, all these factors were found to be relevant in understanding how these women maintained positive body image.

Example 1: female swimmers

Although swimming has been categorised as a ‘lean’ sport as it requires lighter than normal weight (Robinson & Ferraro, 2004), it also enables the development of muscular bodies, and requires body exposure when in training and competition, which might be expected to lead to increased body awareness. In our interviews, both younger and older women reported that swimming had made them more muscular and that they were proud of their muscled shoulders and thighs when performing and training.

Responses when in non-sport and exercise contexts varied by age, and adolescent girls (who may be particularly sensitive to mainstream cultural pressures; O’Dea & Cinelli, 2016) were uncomfortable and wished to be thinner in non-sport contexts. This finding supports Krane and colleagues (2004) suggestions of a clash of body ideals in sport- and non-sport-related contexts. For instance, one interviewee said, when comparing how she felt in sport and non-sport settings:

If we’re all really competitive, like competitive athlete swimmers, we are all, we’re all kind of the same because we all have the huge shoulders and huge thighs and are all flat chested, so we can walk round, but when I am with my friends I am really self-conscious cos like I’m built huge and they’re like skinny and perfectly shaped.

Older women were comfortable and satisfied with their toned and muscular bodies both in and out of sport-related contexts, with one woman reporting, ‘I really like swimming has given me a rather, a slightly more toned top part of my body’ and another noting that, ‘I quite like the fact that I’ve got big shoulders cos it evens me out’. These adult women linked increased muscularity with body function/strength, and had shifted their ideals to other women swimmers, with one woman noting, ‘My idols, Carlin Pipes-Nelson, Dara Torres, all these swimmers, are fit and they have muscles’. The adult women noted that their muscular and toned bodies made them feel generally more confident, and that this confidence transferred into the

rest of their lives outside swimming. Adult women swimmers showed high levels of focus on body function, had switched from idealising the bodies of thin models to elite women swimmers, appreciated their muscular bodies, and had high levels of self-esteem and confidence, which transferred outside the swimming context. Their stories showed how being muscular can lead to body satisfaction within this social and psychological context.

Example 2: female bodybuilders

Interviews were carried out with adult women bodybuilders who competed (or had competed in the past) in Physique (highly muscled) bodybuilding (see Grogan et al., 2004). In interviews, women said they were proud of their muscular bodies, and felt better about their bodies and about themselves generally than in their pre-bodybuilding days. For instance: 'Physically, I feel more sexy and sensual and umm better about myself trained'. One of the key factors was that they now felt in control of their bodies as they decided exactly how they wanted to look and worked towards that goal using nutrition and weight training. These women had also shifted their body ideals to more muscular figures, giving examples of elite competition bodybuilders as their ideals (rather than, for instance, magazine models). For instance: 'They're beautiful, and this is what people are looking for now. That athletic shape of the female'. The only people whose reactions concerned them were other bodybuilders and competition judges, and they trained in gyms where their trained bodies were appreciated and praised by other bodybuilders. They were unconcerned about the views of people from outside the bodybuilding community who may not find a hard and muscular body appealing. Focusing on body function/strength, they appreciated their muscular bodies and the muscular bodies of other women and made social comparisons to the bodies of other women bodybuilders, which were seen as aspirational rather than as a threat. All these factors enabled these women to feel physically and mentally strong, and raised their self-esteem, self-confidence, and body satisfaction. They presented accounts suggesting that resistance to internalising mainstream slender ideals, replacing with a sport-specific muscular ideal, and the significant support they received from within the bodybuilding community, enabled them to appreciate and be proud of their muscular bodies.

Summary

This chapter has provided a review of relevant literature on women's body image, with a specific focus on body image in exercising females. Key factors in promoting positive body image are creating body-healthy sport and exercise environments, reducing internalisation of

thin ideals and social comparison with unrealistic targets, raising self-esteem, encouraging a focus on body function and performance, and improving body appreciation and acceptance. Having a strong and supportive sport and exercise community has been shown to enable positive body image in women swimmers and bodybuilders. Exercising females are under complex body-related pressures, and these may be particularly challenging for adolescents; however, social support from within sport and exercise communities, and a focus on body function/performance, appreciation, and acceptance, may promote positive body image in adult women who engage in sport and exercise.

References

- Ahern, A. L., & Hetherington, M. M. (2006). The thin ideal and body image: An experimental study of implicit attitudes. *Psychology of Addictive Behaviours*, 20(3), 338–342. <https://doi.org/10.1037/0893-164X.20.3.338>
- Albertson, E. R., Neff, K. D., & Dill-Shackleford, K. E. (2015). Self-compassion and body dissatisfaction in women: A randomized controlled trial of a brief meditation intervention. *Mindfulness*, 6(3), 444–454. <https://doi.org/10.1007/s12671-014-0277-3>
- Alleva, J. M., Martijn, C., Van Breukelen, G. J. P., Jansen, A., & Karos, K. (2015). *Expand Your Horizon: A programme that improves body image and reduces self-objectification by training women to focus on body functionality*. *Body Image*, 15, 81–89. <https://doi.org/10.1016/j.bodyim.2015.07.001>
- Bordo, S. (2003). *Unbearable weight: Feminism, Western culture, and the body*. (10th Anniversary Ed.). Berkeley, CA: University of California Press.
- Cash, T. F. (Ed.). (2012a). *Encyclopedia of body image and human appearance*. London: Elsevier.
- Cash, T. F. (2012b). Cognitive-behavioral perspectives on body image. In T. F. Cash (Ed.), *Encyclopedia of body image and human appearance* (pp. 334–342). London: Elsevier. <https://doi.org/10.1016/B978-0-12-384925-0.00054-7>
- Frisen, A., & Holmqvist, K. (2010). What characterises early adolescents with a positive body image? A qualitative investigation of Swedish girls and boys. *Body Image*, 7(3), 205–212. <https://doi.org/10.1016/j.bodyim.2010.04.001>
- Grogan, S. (2016). *Body image: Understanding body dissatisfaction in men, women and children*. (3rd ed.). London: Routledge.

- Grogan, S., Evans, R., Wright, S., & Hunter, G. (2004). Femininity and muscularity: Accounts of seven women bodybuilders. *Journal of Gender Studies*, 13(1), 49–63. <https://doi.org/10.1080/0958923032000184970>
- Grogan, S., Gill, S., Brownbridge, K., Kilgariff, S., & Whalley, A. (2013). Dress fit and body image: A thematic analysis of women's accounts during and after trying on dresses. *Body Image*, 10(3), 380–388. <https://doi.org/10.1016/j.bodyim.2013.03.003>
- Grogan, S., Siddique, M. A., Gill, S., Brownbridge, K., Storey, E., & Armitage, C. J. (2017). 'I think a little bit of a kick is sometimes what you need': Women's accounts of whole-body scanning and likely impact on health-related behaviours. *Psychology and Health*, 32(9), 1037–1054. <https://doi.org/10.1080/08870446.2017.1329933>
- Grogan, S., Williams, A., Kilgariff, S., Bunce, J., Heyland, S. J., Padilla, T.,...Davies, W. (2014). Dance and body image: Young people's experiences of a dance movement psychotherapy session. *Qualitative Research in Sport, Exercise and Health*, 6(2), 261–277. <https://doi.org/10.1080/2159676X.2013.796492>
- Halliwell, E., & Dittmar, H. (2005). The role of self-improvement and self-evaluation motives in social comparisons with idealised female bodies in the media. *Body Image*, 2, 249–262. <https://doi.org/10.1016/j.bodyim.2005.05.001>
- Halliwell, E., Harcourt, D., & Easun, A. (2011). Body dissatisfaction: Can a short media literacy message reduce negative media exposure effects amongst adolescent girls? *British Journal of Health Psychology*, 16(2), 396–403. <https://doi.org/10.1348/135910710X515714>
- Hausenblas, H., & Fallon, E. (2006). Exercise and body image: a meta-analysis. *Psychology and Health*, 21(1), 33–47. <https://doi.org/10.1080/14768320500105270>
- Homan, K. J., & Tylka, T. L. (2014). Appearance-based exercise motivation moderates the relationship between exercise frequency and positive body image. *Body Image*, 11(2), 101–108. <https://doi.org/10.1016/j.bodyim.2014.01.003>
- Howells, K., & Grogan, S. (2012). Body image and the female swimmer: muscularity but in moderation, *Qualitative Research in Sport, Exercise and Health*, 4(1), 98–116. <https://doi.org/10.1080/2159676X.2011.653502>
- Jarry, J. L., & Ip, K. (2005). The effectiveness of standalone cognitive-behavioural therapy for body image: A meta-analysis. *Body Image*, 2(4), 317–333. <https://doi.org/10.1016/j.bodyim.2005.10.001>

- Krane, V., Choi, P. Y. L., Baird, S. M., Aimar, C. M., & Kauer, K. J. (2004). Living the paradox: Female athletes negotiate femininity and muscularity. *Sex Roles, 50*(5–6), 315–329. <https://doi.org/10.1023/B:SERS.0000018888.48437.4f>
- Levine, M. P. (2012). Media influences on female body image. In T. F. Cash (Ed.), *Encyclopedia of body image and human appearance* (pp. 540–546). London: Elsevier. <https://doi.org/10.1016/B978-0-12-384925-0.00085-7>.
- Lupton, D. (2013). *Fat*. London: Routledge.
- McCabe, M. P., Ricciardelli, L. A., Sitaram, G., & Mikhail, K. (2006). Accuracy of body size estimation: Role of biopsychosocial variables. *Body Image, 3*(2), 163–173. <https://doi.org/10.1016/j.bodyim.2006.01.004>
- Mott, S., & Griffiths, R. (2014). *BT Sport body image survey results*. Retrieved from <http://sport.bt.com>
- Murnen, S. K., & Seabrook, R. (2012). Feminist perspectives on body image and physical appearance. In T. F. Cash (Ed.), *Encyclopedia of body image and human appearance* (pp. 438–443). London: Elsevier. <https://doi.org/10.1016/B978-0-12-384925-0.00070-5>
- Murray, S. (2016). *The 'fat' female body*. London: Palgrave.
- Neumark-Sztainer, D., MacLehose, R. F., Watts, A. W., Pacanowski, C. R., & Eisenberg, M. E. (2018). Yoga and body image: Findings from a large population-based study of young adults. *Body Image, 24*, 69–75. <https://doi.org/10.1016/j.bodyim.2017.12.003>
- O'Dea, J. (2012). Body image and self-esteem. In T. F. Cash (Ed.), *Encyclopedia of body image and human appearance* (pp. 141–147). London: Elsevier. <https://doi.org/10.1016/B978-0-12-384925-0.00021-3>
- O'Dea, J., & Cinelli, R. L. (2016). Use of drugs to change appearance in girls and female adolescents. In M. Hall, S. Grogan, & B. Gough (Eds.), *Chemically modified bodies: The use of diverse substances for appearance enhancement* (pp. 51–76). London: Palgrave Macmillan. https://doi.org/10.1057/978-1-137-53535-1_4
- Ordaz, D. L., Schafer, L. M., Choquette, E., Scheler, J., Wallace, L., & Thompson, J. K. (2018). Thinness pressures in ethnically diverse college women in the United States. *Body Image, 24*, 1–4. <https://doi.org/10.1016/j.bodyim.2017.11.004>
- Peterson, R. D., Grippo, K. P., & Tantleff-Dunn, S. (2010). Empowerment and powerlessness: A closer look at the relationship between feminism, body image and eating disturbance. *Sex Roles, 58*(9), 639–648. <https://doi.org/10.1016/j.bodyim.2013.08.001>
- Petrie, T. A., & Greenleaf, C. (2007). Eating disorders in sport: from theory to research to intervention. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology*.

(3rd ed.) (pp. 352–378). New Jersey: Wiley.
<https://doi.org/10.1002/9781118270011.ch16>

- Petrie, T. A., & Greenleaf, C. (2012). Body image and sports/athletics. In T. F. Cash (Ed.), *Encyclopedia of body image and human appearance* (pp. 160–165). London: Elsevier.
<https://doi.org/10.1016/B978-0-12-384925-0.00018-3>
- Petrie, T. A., Greenleaf, C., Reel, J. J., & Carter, J. E. (2009). An examination of psychosocial correlates of eating disorders among female collegiate athletes. *Research Quarterly for Exercise and Sport*, *80*, 621–632. <https://doi.org/10.1080/02701367.2009.10599601>
- Pridgeon, L., & Grogan, S. (2012). Understanding exercise adherence and dropout: An interpretative phenomenological analysis of men and women's accounts of gym attendance and non-attendance, *Qualitative Research in Sport, Exercise and Health*, *4*(3), 382–399. <https://doi.org/10.1080/2159676X.2012.712984>
- Reardon, R., & Grogan, S. (2011). Women's reasons for seeking breast reduction: A qualitative investigation, *Journal of Health Psychology*, *16*(1), 31–41.
<https://doi.org/10.1177/1359105310367531>
- Ricciardelli, L. A., & Yager, Z. (2015). *Adolescence and body image: From development to preventing dissatisfaction*. London: Routledge. <https://doi.org/10.4324/9781315849379>
- Robinson, K., & Ferraro, F. (2004). The relationship between types of female athletic participation and female body type. *Journal of Psychology*, *138*(2), 115–128.
<https://doi.org/10.3200/JRLP.138.2.115-128>
- Seekis, V., Bradley, G. L., & Duffy, A. (2017). The effectiveness of self-compassion and self-esteem writing tasks in reducing body image concerns. *Body Image*, *23*, 206–213.
<https://doi.org/10.1016/j.bodyim.2017.09.003>
- Slevec, J., & Tiggemann, M. (2011). Media exposure, body dissatisfaction, and disordered eating in middle-aged women. A test of the sociocultural model of disordered eating. *Psychology of Women Quarterly*, *35*(4), 617–627.
<https://doi.org/10.1177/0361684311420249>
- Steese, S., Dollette, M., Phillips, W., Hossfeld, 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), 55–64.
- Swami, V. (2015). Cultural influences on body size ideals: Unpacking the impact of Westernization and modernization. *European Psychologist*, *20*(1), 44–51.
<https://doi.org/10.1027/1016-9040/a000150>

- Tiggemann, M., Slater, A., & Smyth, V. (2014). 'Retouch free': The effect of labelling media images as not digitally altered on women's body dissatisfaction. *Body Image, 11*(1), 85–88. <https://doi.org/10.1016/j.bodyim.2013.08.005>
- Tylka, T., & Wood-Barcalow, N. (2015). A positive complement. *Body Image, 14*, 115–117. <https://doi.org/10.1016/j.bodyim.2015.04.002>
- Vartanian, L. R. (2012). Self-discrepancy theory and body image in T. F. Cash (Ed.), *Encyclopedia of body image and human appearance* (pp. 711–717). London: Elsevier. <https://doi.org/10.1016/B978-0-12-384925-0.00112-7>
- Wasilenko, K. A., Kulik, J. A., & Wanic, R. A. (2007). Effects of social comparisons with peers on women's body satisfaction and exercise behaviour. *International Journal of Eating Disorders, 40*(8), 740–745. <https://doi.org/10.1002/eat.20433>
- Yamamiya, Y., Cash, T. F., Melnyk, S. E., Posavak, H. D., & Posavac, S. S. (2005). Women's exposure to thin-and-beautiful media images: Body image effects of media-ideal internalisation and impact-reduction interventions. *Body Image, 2*(1), 74–80. <https://doi.org/10.1016/j.bodyim.2004.11.001>