

BODY IMAGE PERCEPTIONS UPON LEAVING SPORT

1 **Changes in Body Image Perceptions Upon Leaving Elite Sport:**

2 **The Retired Female Athlete Paradox**

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Changes in Body Image Perceptions Upon Leaving Elite Sport:**The Retired Female Athlete Paradox****Abstract**

Little is known about the evolution of female athlete body image into retirement. In this study, 218 retired athletes from aesthetic sports answered a series of closed and open ended questions regarding bodily changes since retirement. Years since retirement was unrelated to current weight status (e.g., underweight, normal weight), what they were doing about current weight (e.g., lose weight), and satisfaction with current weight (all p 's > .69). Overall, 74.3% thought they were normal weight, yet 55% were dissatisfied with their weight and 59.6% were trying to lose weight. A rigorous thematic analysis of the qualitative data yielded 4 core themes that characterized participants' experiences: 1) A move towards the feminine ideal; 2) Feeling fat, flabby and ashamed; 3) A continued commitment to a former self; and 4) Conflicting ideals: The retired female athlete paradox. Perceived muscle loss was considered indicative of either increased fat (dissatisfaction) or increased femininity (satisfaction). For some retired athletes, the satisfaction brought on by newfound femininity was complicated by a coinciding and conflicting commitment to a muscular athletic physique. Practical applications include strategies for sport psychologists to better support athletes in coping with the body changes that occur on retirement from elite sport.

Keywords: Feminine ideal; athletic ideal; transitions; identity

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Changes in Body Image Perceptions Upon Leaving Elite Sport:**The Retired Female Athlete Paradox****Introduction**

Competitive sport, with its emphasis on normative comparisons, physical prowess, and body modifying training regimens, is a culture that is synonymous with the promotion of body consciousness (see McMahon & DinanThompson, 2011). Athletes' bodies are considered a performance tool on display for judgment and critique (Greenleaf & Petrie, 2013). Athletes commonly experience a range of performance-related weight pressures (Reel, SooHoo, Petrie, Greenleaf, & Carter, 2010), including coaches openly criticizing their athletes' body shape and size (e.g. Muscat and Long, 2008, Papathomas & Lavalley, 2010, Coppola, Ward, & Freysinger, 2014). This culture of "body surveillance" can put athletes at risk of body image disturbance and its associated maladaptive consequences (Cosh, Crabb, Kettler, LeCouteur, & Tully, 2015), including social physique anxiety (Haase, 2011), low self-esteem (de Bruin, Woertman, Bakker, & Oudejans, 2009) and disordered eating (Kong & Harris, 2015).

The sport-body image relationship is complex and it is increasingly clear that whether or not athletes develop body image concerns is dependent on an array of inter- and intra-personal factors (Karr, Davidson, Bryant, Balague, & Bohnert, 2013). According to a recent systematic review, two of the most salient factors are competition level and sport type; high level athletes in lean/aesthetic sports are most likely to experience a negative body image (Varnes, Stollefson, Janelle, Dorman, Dodd, & Miller, 2015). In terms of competitive level, elite performers may experience heightened weight pressures due to the higher rewards at stake and greater immersion in a weight-conscious culture and thus less competitive/recreational athletes may be more body satisfied. With regards to sport type, in lean (e.g., distance running) and aesthetic (e.g., gymnastics) sports, the influence of low

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1 weight on achieving performance success may intensify pressures to be thin. As a result, such
2 weight-sensitive sports typically are populated by hyper-lean bodies which perpetuate the
3 overt focus on thinness (Martinsen & Sundgot-Borgen, 2013).

4 As well as performance related weight concerns, athletes' body image may also be
5 affected by general and sport-specific cultural expectations of physical beauty. The
6 Westernized feminine ideal – whereby slenderness is considered maximally attractive
7 (Swami, 2015) – has become increasingly relevant for athletes due to the rise of athlete
8 objectification in the media (Kim & Sagas, 2014). Some sporting organisations may even
9 court such objectification by insisting on female participants wearing more revealing attire
10 than their male counterparts (Steinfeldt, Zakrajsek, Bodey, Middendorf, & Martin, 2013). A
11 commitment to the Western feminine ideal however – characterized by an absence of
12 musculature (Grogan, Evans, Wright, & Hunter, 2004) – conflicts with a commitment to the
13 physique required for success in most sports. Female athletes may therefore also perceive a
14 “functional” or “athletic” ideal (see Abbott & Barber, 2011) that concerns the body's
15 perceived capacity to achieve athletic goals. Even for weight-sensitive sports, the athletic
16 ideal is likely to involve greater muscle mass than the traditional feminine ideal. In power
17 sports, such as field athletics or rugby, the athletic ideal can be overtly muscular. In effect,
18 some athletes are situated in an untenable position of attempting to serve two masters --
19 cultural prescriptions of feminine beauty (i.e., thinness) and the functional demands of
20 athletic performance (i.e., strength and musculature). Complicating matters, some argue that
21 there is a third “lean but toned” option, characterized by musculature on a slender frame. The
22 “fitspiration ideal” is an emergent cultural trend for hyper-fit bodies that are built for
23 aesthetic merit rather than for athletic prowess (Tiggermann & Zaccardo, 2015). Although
24 propagated as a body positive movement, critical examinations of the fitspiration ideal argue
25 that it is an equally extreme variant of the thin-ideal (Boepple, & Thompson, 2016).

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1 The term *female athlete paradox* was coined to reflect the contrast between a
2 feminine ideal body and demeanor and an athletic ideal body and demeanor (Krane, Choi,
3 Baird, Aimar, & Kauer, 2004). In a seminal study, these authors argued that “successful
4 athletes must be powerful and strong, yet obvious signs of this power are construed
5 negatively, as contradicting hegemonic femininity” (p. 317). During a series of focus groups,
6 21 NCAA Division I female athletes described an experience of “dual and duelling identities”
7 (p. 326), whereby the muscular athletic-self was deemed incompatible with the feminine-self.
8 Athletes used a number of strategies to manage this identity conflict, including accentuating
9 femininity in social situations and embracing the functional and empowering qualities of their
10 athletic physiques. Despite these coping strategies, athletes consistently walked a tightrope
11 between “being muscular but not too muscular.” Further, the pride expressed in their athletic
12 bodies often co-existed with a conflicting desire to “look different” and “normal.” Other
13 studies have shown that athletes experience body satisfaction within sporting environments,
14 but body dissatisfaction within social settings (de Bruin, Oudejans, Bakker, & Woertman,
15 2011). The notion of body image as context specific is therefore of particular relevance to
16 athletes who inhabit both a distinct athletic subculture as well as the wider cultural milieu.

17 Researchers have focused almost exclusively on the body image concerns of currently
18 competing athletes at the expense of studying how body image evolves once competitive
19 sport ceases. This oversight is problematic and limiting for a number of reasons. First,
20 athletic retirement represents an inevitable transition out of an immersive sporting culture that
21 can have both protective and deleterious effects on body satisfaction. As such, retired athletes
22 are likely to experience alterations in their body image in some way, be it positively or
23 negatively. It is well established that athletic retirement can be a psychologically disruptive
24 experience (see Cosh, Crabb, & LeCouteur, 2013) but the impact on body image remains
25 seldom addressed and poorly understood. In a systematic review of 126 athlete retirement

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1 studies, just 5 of these made reference to body image related concepts (Park, Lavalley, & Tod,
2 2013). How athletic retirement impacts body image therefore remains very much a question
3 to be answered. We know little of how athletes understand their bodies on retiring from sport
4 and how this understanding might evolve through retirement.

5 Second, only an incomplete understanding of athlete body image can be achieved if
6 changes over time and context are not studied. Increasing knowledge of how body image
7 concerns manifest at different points in athletes' lives, particularly during and after retirement
8 from sport, is imperative. Body image across the life-course represents a topic of concern
9 within general psychology (Liechty & Yarnal, 2010), yet sport psychology has almost
10 exclusively focused on young competing athletes. Outside of the discipline, studies have
11 addressed how body image is affected by life transitions such as pregnancy (Fuller-
12 Tyszkiewicz, Skouteris, Watson, & Hill, 2013), marriage (Bove & Sobal, 2011) and college
13 attendance (Smith-Jackson, Reel, & Thackeray, 2011) amongst others but the transition out
14 of sport remains effectually ignored.

15 Third, many athletes tolerate weight concerns and body dissatisfaction under the
16 premise that these will dissipate when competition stops (see Papatomas, Smith & Lavalley,
17 2015), yet there is little evidence to support this belief. Evidence that illuminates how weight
18 and body image concerns evolve into retirement may support efforts to properly prepare
19 athletes for when the transition out of sport occurs. Although numerous athlete career
20 transitions programs and models exist in the literature (e.g. McArdle, Moore, & Lyons, 2014;
21 Stambulova, & Wylleman, 2014; Lavalley, 2005) none explicitly address management of
22 body image concerns. As such, knowledge development in this area is necessary to inform
23 these programs and facilitate support for athletes with regards to body image concerns.

24 Only a small number of studies have examined retired athletes' body image concerns
25 (Greenleaf, 2002; Kerr, Berman & De Souza, 2006; Kerr & Dacyshyn, 2000; Stirling, Cruz &

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1 Kerr, 2012). Kerr and Dacyshyn (2000), in a qualitative study exploring the retirement
2 experiences of elite gymnasts, identified a long lasting preoccupation with weight and body
3 size as a major theme. Although not the focus of this study, of the 7 former gymnasts
4 interviewed, 5 described persistent feelings of body dissatisfaction into their post-competitive
5 lives. The authors made no reference as to whether gymnasts' persistent body dissatisfaction
6 intensified with time. In a related study (Kerr et al., 2006), an open-ended survey was used to
7 garner the views on eating and weight control practices of current artistic gymnasts and those
8 who had been retired for up to 5 years. Again, several of the 15 gymnasts described continued
9 body dissatisfaction as well as disordered eating behaviors, which generally were more
10 negative accounts than from the athletes who were still competing. These two studies suggest
11 that athlete body image concerns that develop while competing may worsen and persist into
12 retirement. Post-retirement bodily changes may be especially impactful for gymnasts as they
13 often retire at young age when body image issues are pertinent (see Markey, 2010).

14 Greenleaf (2002) conducted interviews with 6 retired athletes across a range of sports.
15 She found that participants judged their current bodies against their previous athletic bodies
16 and that the resulting discrepancy contributed to their body dissatisfaction. Greenleaf
17 primarily focused on participants' past experiences as athletes and therefore retirement-
18 specific accounts of body image were limited. In an interview study with 8 retired female
19 rhythmic gymnasts, Stirling, Cruz and Kerr (2012) found that all participants perceived post-
20 retirement weight gain, muscle loss and body dissatisfaction; some athletes also reported
21 disordered eating and pathogenic weight control behaviors. The several athletes who had
22 disclosed pre-retirement disordered eating may have been especially vulnerable to a
23 worsening of body image concerns once retired. Further, the sport of rhythmic gymnastics is
24 extreme in its focus on aesthetics and competitors are typically slender and hyper-feminized.
25 As such, the study offered little insight into the impact of retirement from sport on the female

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1 athlete paradox. Across these studies, the perspectives of just 36 retired athletes have been
2 described. To build on this nascent body of evidence, researchers should explore the
3 perspectives of larger cohorts of retired athletes in order to capture experiential breadth and
4 nuance and to examine if years since retirement may be related to their current experiences of
5 body image. In turn, descriptive quantitative data (e.g. BMI, years since retirement) can
6 complement qualitative insights by providing contextual information to guide interpretation.

7 The present study

8 The principal objective of the present study was to provide the first focused analysis
9 of body image perceptions in a large sample of former competitive athletes from weight-
10 sensitive sports. Building on previous research (e.g., Greenleaf, 2002; Kerr & Dacyshyn,
11 2000; Kerr et al., 2006; Stirling et al., 2012), we assessed female athletes' attitudes toward
12 their bodies after having been retired for two to six years from their sports. This approach
13 allowed us to move beyond mere in-career understandings towards knowledge of athletes'
14 body image perceptions over the years following retirement. To this end, we posed the
15 following research questions. From a quantitative standpoint we asked: Does satisfaction with
16 perceived body weight and composition differ according to number of years since retirement?
17 From a qualitative perspective we asked: How do former athletes describe and make sense of
18 perceived bodily changes? How do former athletes cope with perceived bodily changes?

19 Our research questions point to a *multi-method approach* whereby we collected both
20 qualitative and quantitative data within an interpretivist framework. A multi-method
21 approach is different to a mixed-methods approach as it is merely the data collection
22 techniques that are mixed not the underpinning paradigm (Sparkes, 2015). So although we
23 quantitatively explored body satisfaction as a function of years since retirement, we remained
24 wholly faithful to interpretivism by framing results as patterns to explore not Truths to abide
25 by. In so doing, we guard against the much more contentious and problematic mixing of

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1 philosophies; such as a contradictory commitment to both realism and relativism or
2 objectivism and constructionism (Papathomas & Petrie, 2014). All this said we are mindful
3 that although philosophically coherent, our approach is not immune to critique.
4 Methodologists have warned that mixing of methods can result in a prioritizing of post-
5 positivism and an exalting of numerical data above qualitative insights (see McGannon &
6 Schweinbenz, 2011). To protect against post-positivist subordinating of the qualitative, we
7 place deliberate emphasis on the diversity of participant meanings and understandings.

8 **Methods**

9 Participants

10 Retired collegiate female athletes from the United States ($n = 218$), who represented
11 the sports of gymnastics (66%) and swimming (34%) participated. At the time of the study,
12 athletes had been retired from their sports for 2-3 years ($n = 53$), 4 years ($n = 52$), 5 years ($n =$
13 61), and 6 years ($n = 51$); one athlete did not report time since retirement. Most of the women
14 (76.6%) had retired due to having completed their athletic eligibility in college. The majority
15 of the athletes were White/NonHispanic (88.3%); their mean age and body mass index (BMI)
16 were 25.72 years ($SD = 1.19$) and 22.31 Kg/m^2 ($SD = 2.72$), respectively. Although some
17 retired athletes committed to athletic activities (e.g. fitness running/biking), none were
18 involved in formally organized competitive sport at the time of the research.

19 Procedure

20 Once institutional ethical approval was granted, 325 athletes from Anderson, Petrie,
21 & Neumann (2012) were initially recruited to participate in a larger follow-up study on the
22 physical and psychological health and well-being of retired female collegiate athletes. To
23 make contact, we used email addresses and phone numbers obtained from the athletes'
24 former universities as well as social media sites. We sent standardized instructions and the

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1 link to the web-based questionnaire to the athletes who agreed to participate. Athlete
2 responses were anonymous and identified only by a unique code. Researchers answered
3 athletes' questions throughout the data collection, which took place throughout 2015. A \$25
4 gift-card was awarded to each participant who completed the survey.

5 As part of this larger study, participants provided current demographic information
6 (e.g., age, weight) and answered three quantitative questions regarding their weight. First, the
7 athletes indicated whether they thought they were underweight, normal weight, or overweight.
8 Second, they reported (YES or NO) whether they were satisfied with their current (retirement)
9 weight. Third, they selected from three options regarding their weight-related motivations
10 (i.e., trying to lose weight, trying to gain weight, not trying to do anything specific about
11 weight in any way). They also responded to the question "Has your body weight and/or
12 composition (e.g., leanness, muscularity) changed since you retired from your sport and
13 stopped competing/training as a collegiate athlete? (YES or NO)." The 218 athletes who
14 responded "YES" provided information for two additional, open-ended questions: (a) "Please
15 describe the changes that have occurred with your body weight and/or composition AND
16 how you have felt about these changes;" and (b) "Please describe how you have coped with
17 these changes in your body weight and/or composition." Height and weight were used to
18 determine the athletes' BMI (kg/m²) in retirement, which was then compared to their BMI
19 when they were active collegiate athletes (see Anderson et al., 2011). A weight difference
20 scores was calculated to determine if, on average, the athletes' BMI had changed since they
21 were active collegiate athletes ([BMI in retirement] – [BMI when active collegiate athlete]).

22 Although ubiquitous within qualitative psychology research, scholars have argued that
23 the interview represents an overused strategy that is often uncritically defaulted to within this
24 paradigm (Potter & Hepburn, 2005). Thus, our use of open-ended questions represents a
25 viable and appropriate alternative to interviews. Open-ended questions, as incorporated in

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1 this study, have previously been used to gather important qualitative insights on eating
2 disorders (e.g., Kerr et al., 2006) and they are characterized by a number of distinct features
3 that support the collection of high quality data. First, participants are afforded indefinite time
4 to engage in the deep reflection necessary to make sense of the experiences on which they are
5 reporting. Interviews on the other hand can often be permeated with a pressure to “keep
6 talking,” which can interfere with such deep reflection (Poland & Pederson, 1998). Second,
7 the process of writing a response rather than speaking one is an important and unique
8 commodity of completing open-ended questions. Qualitative researchers have been quick to
9 espouse the role of writing in both developing analytical interpretations and prompting
10 participants towards their own insights (Richardson, 2000). Writing attends to the well-being
11 of research participants, as well as providing researchers with access to rich qualitative data
12 (Elizabeth, 2008). We imposed no word limit on the questions, so participants could be
13 reflective and detailed in their responses. Although not all participants offered extensive
14 responses, no responses were formally excluded from the analysis. In total, written responses
15 amounted to 8819 words. The longest responses were in excess of 100 words.

16 Data Analysis

17 Data from the three quantitative questions, as well as the weight difference score,
18 were examined in relation to the athletes’ years since retirement. We used chi-square analyses
19 via cross tabulation. For this analysis, athletes were grouped according to their years since
20 retirement. Thus, data are reported in percentages. For the weight difference variable, we
21 used an ANOVA with years since retirement as the IV; data are reported as the mean weight
22 difference score.

23 For the qualitative data, the first author initially scrutinized the participants’ written
24 responses for patterns of meaning relevant to each question and the overall focus of the study.
25 This process was guided by the rigorous procedures proposed by Braun, Clarke and Weate

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1 (2016) for conducting thematic analysis in sport psychology. This established approach
2 provides six clear but flexible steps toward making sense of qualitative data. Braun et al.
3 (2016) provide a guide to analysis rather than an instructional manual and they emphasize
4 that researchers should adapt this guide according to 3 methodological choices. These choices
5 consist of 1) Is data interpreted at the semantic (explicit) or latent (implicit) level or a mixture
6 of the two? 2) Is coding theory-driven (deductive) or data-driven (inductive) or a mixture of
7 the two? 3) What epistemological and ontological perspectives do you choose to subscribe to?
8 In terms of the latter point, Smith and McGannon (2017) have emphasized that establishing a
9 clear and coherent philosophical position is integral to a rigorously executed analysis.

10 Having described the broad considerations informing our analysis, we now describe
11 how we interpreted and conducted the 6 analytical steps; a) we made loose annotations during
12 repeated readings of the data, with the objective of summarizing content and noting initial
13 points of interest; b) on achieving an intimate knowledge of the data, we inductively
14 constructed concrete conceptual codes. We prioritized semantic coding – which sensitizes
15 towards participants *explicit* descriptions – because it aligned with our focus on the *content* of
16 experience above the *construction* of experience; c) we next grouped codes according to
17 shared meaning to form nascent themes. For example, we grouped together quotes that in
18 some way addressed the *Western feminine ideal*; d) we then reviewed these themes in terms
19 of their faithfulness to participants' original responses. Here, we posed the following question:
20 do themes give a fair and authentic representation of what participants wrote? Further, we
21 examined the conceptual basis of themes to ensure each theme held intuitive appeal and each
22 was sufficiently different from the other. During this process the second and third authors
23 acted as “critical friends” to challenge/confirm the first authors' interpretations (see Smith &
24 Sparkes, 2013). The critical friend process is not a form of triangulation designed to achieve
25 *interpretive consensus*, but rather to ensure that the interpretations offered were properly

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1 deliberated and sufficiently layered (see Smith & McGannon, 2017, for a review of problems
2 with triangulation); e) with themes organized, we attributed to each a formal title that defined
3 its conceptual contribution; f) we continued our analysis up to and including the writing of
4 the actual report. Overarching all this, we assumed a position of ontological relativism and
5 epistemological constructionism. That is, we considered participants' perspectives as mind-
6 dependent, socially constructed and indicative of a personal truth rather than "The Truth".

Results & Discussion

8 All chi-square tests regarding the relationships between years since retirement and
9 current weight status (e.g., underweight, normal weight), what they were doing about current
10 weight (e.g., lose weight), and satisfaction with current weight, were nonsignificant (all
11 p 's > .69). Further, analysis of athletes' weight difference during the years since retirement
12 also was nonsignificant, $F(3, 213) = 1.61, p = .188$. These findings suggest that neither the
13 athletes' actual weight differences nor their perceptions varied based on how long they had
14 been retired. Thus, we present the data from these three questions for the entire sample.

15 Overall, most retired athletes described themselves as being normal weight ($n = 162,$
16 74.3%), followed by overweight ($n = 48, 22.0%$) and underweight ($n = 7, 3.2%$). Despite this
17 perception of being a normal weight, over half of the athletes indicated they were dissatisfied
18 with their current weight ($n = 120, 55.0%$); only 97 (44.5%) were satisfied. Further, 130
19 (59.6%) reported that they were trying to lose weight; 79 (36.2%) were not trying to do
20 anything about their weight in any way and eight (3.7%) were trying to gain weight. In terms
21 of their weight difference, the athletes' BMI in retirement was slightly lower than when they
22 were actively competing in college ($M = -.25, SD = 2.33$); this difference, however, was
23 nonsignificant, $t(217) = 1.59, p = .11$. In addition, there was a nonsignificant trend across
24 the four retirement timeframes (Retired 2-3 years, $M = .22 [SD = 2.16]$; retired 4 years, $M = -$
25 $.29 [SD = 2.94]$; retired 5 years, $M = -.18 [SD = 2.16]$; retired 6 years, $M = -.78 [SD = 1.91]$),

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1 which speaks to a decrease in weight over time but does not provide specific information
2 about changes in body composition (e.g., becoming less toned, muscular).

3 From the qualitative data, four higher order themes were constructed to represent
4 retired athletes' experiences of their bodies: a) A move towards the feminine ideal, b) Feeling
5 fat, flabby and ashamed, c) A continued commitment to a former self, and d) Conflicting
6 ideals: The retired female athlete paradox. We describe each of these themes, along with
7 conceptual subthemes where relevant, before theorising their contribution to existing
8 understandings of athlete body image. Pseudonyms have been ascribed to athletes' quotes.

9 Theme 1: A move towards the feminine ideal

10 This theme addresses the experiences of those athletes whose perceived weight
11 changes moved them closer to a desired feminine ideal. Across the entire sample, the most
12 commonly perceived body change was a loss in muscle size and tone as a result of decreased
13 training volume, which was consistent with most athletes stating that they were normal
14 weight. Some participants described losing weight and actually becoming leaner due to this
15 muscle reduction. For example, former gymnast Isobelle stated that: "*I have a slightly thinner,*
16 *leaner look now and I prefer the way I look now compared to how I looked during my college*
17 *career.*" Similarly, former swimmer Kelsey stated: "*muscles have decreased, I am a lot*
18 *thinner with lean muscles now. I have been happy with the changes.*" Providing a detailed
19 account of her perceived bodily changes, retired gymnast Lorna emphasized her satisfaction:

20 I have lost muscle in my traps, thighs, and rib area. I am very happy to not have as
21 much muscle and be more lean. I still like muscle but not as big as before. I have also
22 lost weight due to not being as hungry. (Lorna, 24, retired gymnast)

23 Echoing Lorna's sentiments, former swimmer Chelsea elaborated on positively
24 perceived post-retirement body changes:

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1 Lost most of the heavier muscle I gained while training in college about six months
2 after I stopped lifting weights/swimming. Due to the loss, I dropped about 15-20
3 pounds despite maintaining a normal eating pattern. I was surprized at how baggy my
4 clothes felt and was pleasantly surprized that I could fit in smaller sizes. I didn't feel
5 as bulky or broad-shouldered. (*Chelsea, 26, retired swimmer*)

6 In becoming thinner as a natural consequence of ceasing involvement in sport, both Lorna
7 and Chelsea described a welcome move towards the Western feminine ideal. Our study is the
8 first to identify a perceived *improvement* in body satisfaction post-retirement from sport. This
9 unique finding contrasts with previous research that has typically associated retirement body
10 changes with predominately negative consequences (e.g., Kerr et al., 2006; Stirling et al.,
11 2012; Stephan, Torregrosa, & Sanchez, 2007). Lorna expresses delight at no longer having
12 muscle in her “traps, thighs and rib area”. Equally, Chelsea’s post-retirement body is absent
13 of “bulky or broad-shouldered” masculinity, she fits into smaller clothes, and she interpreted
14 these changes as positive. Although female athletes often express pride in their musculature
15 (see Krane, 2001, Ross & Shinenew, 2008, Steinfeldt, Carter, Benton & Steinfeldt, 2011), the
16 power of feminine beauty conventions may be difficult to resist once sporting pursuits end.
17 Lorna’s and Chelsea’s experiences, as well as others in the sample, suggests that despite a
18 prolonged commitment to an athletic body some retired athletes may embrace the Western
19 feminine ideal and ultimately use it to evaluate their post-retirement bodies. This perspective
20 aligns well with the view that cultural prescriptions of femininity are dominant, ubiquitous
21 and inescapable (Busanich, McGannon, & Schinke, 2012).

22 Theme 2: Feeling fat, flabby and ashamed

23 In contrast to the experiences described in Theme 1, some retired athletes perceived
24 their decrease in muscle mass as indicative of increased body fat and an undesired move
25 away from both the feminine and athletic ideals. Although net weight gain was uncommon,

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1 athletes reported negative emotional well-being when it did occur. For example, a retired
2 gymnast wrote: “*Lost muscle and gained fat. Overall physique has definitely changed.*
3 *Gained weight. I have felt sad, upset, and ashamed about these changes.*” In a similar vein,
4 former swimmer Natalie described the difficulties caused by her own weight gain:

5 I have had a really hard time coping with these changes. I lost most of my muscle tone
6 and became kind of soft at first, then started gaining weight. It's been a really big
7 struggle for me...Although I weigh 200 pounds other people say I don't look like it
8 because it is so spread out. I am nervous to be in a bikini around others and I don't
9 like to wear shorts because of the cellulite that has developed on my legs.

10 (*Natalie, 24, retired swimmer*)

11 Such perceived changes in weight and body composition may be the reason why over half of
12 all athletes were dissatisfied with their current weight and stated that they were trying to lose
13 weight. The deleterious impact of weight gain on affect and psychological health is a
14 common finding (e.g., Davis et al., 2012; Kawachi, 1999; Singh, 2014). Retired athletes may
15 be especially vulnerable to such negative emotional consequences because any weight that is
16 gained represents a substantial discrepancy from their former bodies. Further, after several
17 years' of the extensive body monitoring that is synonymous with sporting cultures (Carrigan,
18 Petrie, & Anderson, 2015), former athletes may develop a heightened sensitivity to even
19 small body-related changes (see Kerr, Berman & De Souza, 2006; McMahon & Penney,
20 2013). The data provide support for this interpretation because most of the athletes'
21 perceptions concerned changes in body composition (e.g., increased fat) not changes to their
22 net weight. For example, Rebecca, a 25 year old gymnast, wrote: “*I have lost most of my*
23 *muscle but I have remained about the same weight. Therefore, I am just more flabby and feel*
24 *fat and gross.*” Experiencing body dissatisfaction even when actual weight has not changed is
25 indicative of a particularly refined level of body consciousness. Words such as “soft,” “saggy,”

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1 and “flabby” frequently occurred throughout many of the retired athletes’ descriptions of
2 their current bodies. In contrast to the wider female population, where the primary concern is
3 being slender (Swami, 2015), thinness alone may be insufficient for retired athletes to feel
4 satisfied with their weight and bodies.

5 Not all participants allowed themselves to be emotionally impacted by unwanted
6 changes in body composition. Many discussed accepting it as a natural part of the retirement
7 process, with some stating they would rather possess increased fat than continue to train at
8 the intensity they did when competing in sport. Some athletes, such as retired swimmer Lara,
9 discussed perceived increased fat levels in terms of acceptance rather than disruption:

10 Some of the muscle was replaced with fat/cellulite. I have become softer in my abs
11 and buttocks. I have also noticed my hips have widened and I now have more of a
12 waist/curve/womanly figure with my wider hips. I have talked about it with my
13 spouse and parents. I have also tried to focus on being healthy and not skinny. I have
14 had to realize that I don't have the same body that I used to. I have basically had to
15 accept it (*Lara, 24, retired swimmer*).

16 Similarly, Katrina, another retired swimmer, also referenced “realization” and acceptance:

17 Lost muscle mass and gained fat. Sad that I have lost muscle definition and gained
18 weight. Levelled off until I was comfortable enough with the weight that I had gained.
19 Realization that I will never be as fit as I was when I was competing in college
20 athletics. Occasionally work out and watch my weight, learned to accept the way I
21 look (*Katrina, 24, retired swimmer*).

22 For both Lara and Katrina, the acceptance of increased fat is a reluctant one but it is
23 nevertheless an acceptance. Lara references the support of significant others and Katrina cites
24 a process of having “learned to accept” suggesting this is a process that takes time. The

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1 impact for both these former swimmers is that neither described the difficult struggles
2 expressed by Natalie at the start of this theme.

3 For Amanda, also a former swimmer, situating her body image concerns within the
4 broader context of life helped her minimize the impact of negatively perceived changes.

5 Of course I am less confident in my body, however, I am really happy. I have a great
6 job, great relationship, and a close relationship with family and friends. I no longer
7 only find self-validation through my athletic success and athletic shape. I have figured
8 out how to be happy with myself outside of my sport. (*Amanda, 26, retired swimmer*)

9 Amanda describes a process of broadening her identity beyond sport and towards other life
10 domains, such as work, family and friends. For her, as the role of sport diminished, so too did
11 the importance of the athletic ideal. In contrast to other former athletes featured within this
12 theme, Amanda described reaching a point of happiness (as opposed to continued struggle or
13 acceptance). In previous qualitative research, athletes have described the importance of
14 broadening identity in order to reduce sporting pressures and facilitate healthy transition out
15 of sport (Papathomas & Lavalley, 2010).

16 Theme 3: A continued commitment to a former self

17 Whereas the first two themes addressed how retired athletes' interpreted body
18 changes with reference to a Western feminine ideal, this theme concerned those who
19 maintained an unabated commitment to the athletic ideal they once fulfilled. The following
20 two subthemes illustrate the ways in which a continued commitment to a former athletic self
21 might shape how retired athletes experienced their bodies.

22 *Constructing a new athletic body*

23 A small number of participants actually described experiencing increased muscularity
24 post-retirement as they embarked on a process of building a new athletic body:

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1 I have become more muscular. It was difficult at first because my pants were fitting
2 tighter, but now I feel good about the changes and feel stronger. I am proud of myself
3 for being stronger and lifting the weights that I do at CrossFit. (*Rebecca, 25, retired*
4 *swimmer*)

5 First I lost all my muscle but now since I have been doing CrossFit I have built up a
6 lot more muscle than I have had. I know that my body is physically fit, it is just a
7 different kind of fit from the shape I was in during gymnastics. (*Rachel, 26, retired*
8 *gymnast*)

9 Rebecca and Rachel both described participation in CrossFit – a fitness trend characterized
10 by high-intensity functional movements – as leading to an increase in musculature. Although
11 Rebecca acknowledged some connection to the thin ideal (“it was difficult at first because my
12 pants were tighter”), both these former athletes were robust in their commitment to a more
13 muscular physique. Heywood (2015, p. 17) has argued that CrossFit represents an “emergent
14 cultural site that creates an alternative reality where body expectations and ideals tend to be
15 non-normative, and ‘real,’ functional bodies are idealized.” As such, CrossFit may serve as
16 an empowering subculture for those individuals who have retired from sport but who
17 continue to resist dominant constructions of femininity in favor of an internalized athletic
18 ideal. In contrast, although CrossFit can expand possibilities for the female body, it may also
19 continue to reproduce hegemonic notions of female attractiveness (Washington &
20 Economides, 2016). Portrayed as overtly lean, with perfect hair and skimpy outfits, women in
21 CrossFit can be as feminized and sexualized as they are muscularized. It is uncertain then
22 whether CrossFit does offer retired athletes a sanctuary from homogeneous conceptions of
23 the ideal female body or merely adapts, reinforces and intensifies them. Its impact may be
24 better construed in terms of managing identity change during the transition into athletic
25 retirement. For example, Dawson (2012) identified CrossFit as a “reinventive institution”

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1 whereby devotees seek to produce a new social identity through self-improvement and
2 transformation. For retired athletes, whose previous bodies and identities may be severed
3 (Lavalley & Robinson, 2007), such reinvention may support a successful transition out of
4 sport. CrossFit remains a new and marginal exercise trend and further research is needed into
5 its potential role in how retired athletes manage their new lives and new bodies.

6 *Non-normalized body image ideal*

7 Without a CrossFit-like replacement activity, ongoing subscription to an athletic ideal
8 proved problematic as reduced training loads widened the gap between former athletes'
9 actual and ideal bodies. Some athletes acknowledged their perceived athletic ideal as
10 unrealistic and burdensome, yet remained committed to it. Across our sample, participants
11 referenced a variety of strategies designed to support a return to an athletic physique such as
12 stringent diets and bouts of extreme exercise. Few such strategies proved successful and this
13 was often associated with emotional disturbance. Lina described some of the perceived
14 consequences associated with her inability to fulfil the athletic ideal in retirement:

15 It was a rough transition. You spend years mentally thinking about the perfect body
16 for your sport. And when the sport is over, it's hard re-adjusting that image back to
17 "normal" standards and being ok with that. I've been out of the sport for 5 years now.
18 The first two years were really rough. I expected to still have that body type. When I
19 didn't, I would get sad and binge eat and then vomit to counteract it...It took time to
20 get back in to a healthy cycle and establishing normal expectations. (*Lina, 27, retired*
21 *swimmer*)

22 Similarly, Abbey described how a persistent allegiance to the athletic ideal impacted her
23 current body image:

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1 It took me a long time to realize that my body would never be what it was when I was
2 an athlete. I was in denial for probably a year after I was out. I still think back and use
3 that image as a gauge to how I COULD (capitals in original) look, but also know that
4 my life does not revolve around working out 20 plus hours a week or needing to be in
5 top shape to be successful. I still WANT (capitals in original) to be as lean and as
6 strong as I used to be, I've continued to work out, struggling slightly with consistency
7 due to typical adult life timeframes...I guess the body image issues just make me a
8 judgmental person, causing my "ideal" to always be athletic in some way. (*Abbey, 26,*
9 *retired gymnast*)

10 Echoing the work of Greenleaf (2002), these quotes illustrate how comparing one's post-
11 retirement body with the body that was achieved as an athlete can be a source of body
12 dissatisfaction. In line with self-discrepancy theory (Higgins, 1987), each athlete's actual self
13 is discrepant with their ideal self and this is associated with negative emotions, including
14 body dissatisfaction. According to Lina and Abbey, it may take a number of years to
15 recalibrate an internalized ideal body towards something more compatible with a life outside
16 of sport. This lengthy process may also be psychologically challenging given both these
17 former athletes articulated a "rough transition." This idea is consistent with previous research
18 that has identified bodily changes post-retirement from sport as negatively related to
19 constructs such as global self-esteem, physical self-worth, and perceived bodily attractiveness
20 (Stephan, Torregrosa, & Sanchez, 2007). The degree to which expectations become
21 normalized and body image improves, as well as the time needed to reach this point, will
22 likely differ from athlete to athlete. As proclaimed by Abbey, her ideal will "*always be*
23 *athletic in some way*" suggesting she may be prone to a lingering dissatisfaction with how she
24 looks. Further, in the case of Lina, post-retirement body dissatisfaction extended to negative

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1 affect and bulimic behaviors. Identifying the prevalence of disordered eating and eating
2 disorders in retired athlete populations should be a primary goal of future research.

3 Theme 4: Conflicting ideals: The retired female athlete paradox

4 Whereas the first two themes reflect athletes with a commitment to the feminine ideal
5 and theme 3 concerns those with a commitment to the athletic ideal; the fourth and final
6 theme reflects the experiences of those athletes who continued to wrestle with a dual and
7 conflicting commitment to both the athletic and the feminine ideals:

8 My weight is pretty much the same as when I was swimming, but I am
9 SIGNIFICANTLY (capitals in original) less muscular. I'm glad I am not as muscular
10 as I was when I was swimming and that my shoulders shrunk to a size that would fit
11 into clothes, but I would like to be a little more muscular/toned than I am now.
12 (*Simone, 26, retired swimmer*)

13 I am less muscular and my butt has gotten a little saggy. I feel ok because I am still
14 thin and feel energetic, but I would like to be more toned but not as bulky (muscular)
15 as I was when I was competing in my sport. (*Carrie, 25, retired gymnast*)

16 Simone and Carrie expressed mixed feelings regarding the bodily changes they had
17 experienced. Both were pleased at their reduction in muscle mass yet at the same time
18 concerned at their lack of muscle tone. As way of explanation for this duality, we propose *the*
19 *retired female athlete paradox*, which represents an interesting twist on Krane et al.'s (2004)
20 original female athlete paradox. Whereas Krane et al.'s work addressed the inner-conflict
21 associated with maintaining an athletic physique for performance while simultaneously
22 subscribing to a thin feminine ideal; *the retired female athlete paradox* is defined as feeling
23 satisfied that the post-retirement body better resembles the feminine ideal, yet feeling
24 dissatisfied that this represents a move away from a still desired athletic ideal. This paradox

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1 muscle tone (and mass for some) and increases in body fat percentage (though for most actual
2 weight did not change), which is consistent with previous research that it is changes in body
3 composition, and not weight per se, which is particularly distressing (e.g. Kerr et al., 2006;
4 Stirling et al., 2013). When athletes reported gaining weight in retirement, they felt neither
5 athletic nor feminine, which was described as damaging to their identity and self-worth. The
6 retired athletes who still predominately identified with their former athletic physiques also
7 typically reported experiencing negative emotions because their daily lives did not allow the
8 training time necessary to achieve these body ideals. Athletes who subscribed to both an
9 athletic ideal and a feminine thin ideal represented particularly complex cases, as fulfilment
10 of one ideal would result in nonfulfillment of the other. Commitment to two incompatible
11 body ideals may render a retired athlete at risk of prolonged body dissatisfaction. In
12 extension of Krane et al. (2003), we have coined the phrase *retired female athlete paradox* to
13 address how these coinciding and conflicting commitments evolve on leaving sport.

14 Our results also provide insights into the different strategies former athletes used to
15 cope with the bodily changes they experience during retirement. Participants who described
16 more positive adaptations to their post-retirement body discussed coping strategies such as
17 utilizing social support, broadening, or even constructing a new, identity, and changing their
18 focus from being thin to pursuing health more generally. Our findings corroborate studies
19 into coping with negative body image perceptions that suggest approaches based on “positive
20 rational acceptance” – refocusing on personal assets (Cash, Santos, & Williams, 2005) and
21 “positive reframing” (Pinkasavage, Arigo, & Schumacher, 2015) are the most effective.
22 Participants who wrote of more challenging experiences – such as prolonged body
23 dissatisfaction and persistent negative affect – described stringent diets, extreme exercise
24 regimes or hiding disliked parts of the body as their means of coping. For Cash et al. (2005),
25 these strategies constitute “appearance fixing coping” – a maladaptive approach associated

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1 with high levels of body dissatisfaction and poor psychosocial functioning. Given that our
2 study identified several adaptive and maladaptive strategies for coping with bodily changes
3 during retirement from sport, future research should investigate the complexities of these
4 strategies. For example, it is important to explore which coping strategies are effective under
5 which circumstances, what factors lead some athletes to cope effectively and other athletes
6 less so, and how does coping evolve across the retirement process?

7 Not all athletes in this study appraised their body changes as negative to warrant a
8 coping response. In contrast to existing literature (e.g. Greenleaf, 2002; Kerr & Dacyshyn,
9 2000; Kerr et al., 2006; Stirling et al., 2013), the wide range of experiences reported our
10 sample provides some much needed nuance to the overly simplistic suggestion that retirement
11 from sport always results in body dissatisfaction. This study is the first to report that a
12 minority of former female athletes became *even more satisfied* with their bodies post-
13 retirement, as reductions in muscularity brought them closer to the feminine thin ideal.
14 Equally, for some of the retired athletes who continued to internalize an athletic ideal, new
15 fitness cultures, such as CrossFit, helped them reach it. The degree to which perceived body
16 changes align with whichever ideal has been internalized is likely a product of individual
17 differences and so both body satisfaction and dissatisfaction are possibilities on retirement
18 from sport. Even where there is a misalignment between perceived body image and the
19 internalized ideal, the broadening of identity into domains outside of sport (e.g., career,
20 romantic relationship) helped to minimize the centrality of the body in determining worth.

21 Our findings present important implications for how sport psychologists within
22 sporting organisations might promote healthier body image in retiring athletes. First, prior to
23 retirement, athletes should be educated on the bodily changes that are likely to occur with
24 reduced training loads and changes in nutritional habits. Such discussions may help
25 normalize these anticipated bodily changes and assist athletes in adapting their future fitness

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1 and nutrition into their retirement. Proactive planning like this may help to reduce the anxiety
2 that our athletes reported experiencing as they negotiated their lives in retirement. Second,
3 retired athletes should be supported in critically reflecting on their internalized ideal and its
4 possible impact on long-term body image and affect. Being able to adopt a more realistic
5 ideal may help athletes when their bodies naturally change as a result of reductions in training.
6 Third, athletes should be encouraged to broaden their identity and role repertoire beyond
7 those connected to sporting pursuits (Lavallee, 2005). For example, athletes could be helped
8 to acknowledge their roles and responsibilities outside of sport such as those pertaining to
9 family or work, and discuss how such identities may be fulfilling and defining as they move
10 into retirement. These psychoeducational strategies could be integrated into existing
11 programs that support athletes in their transition out of sport (e.g. Lavallee, 2005), as well as
12 into more traditional therapeutic practices. Fourth, sport psychologists might seek to address
13 the broader culture of obsessive body monitoring and dangerous weight management
14 practices that exists within elite sport (e.g. McMahon & Dinan-Thompson, 2011). Athletes
15 cannot step outside of the culture they inhabit and it impacts how they think, feel, and behave
16 (McGannon & Smith, 2015). This said; central cultural agents, whether coaches, teammates
17 or the sport institutions that govern them, can be seen as complicit in reproducing unhealthy
18 norms and a strict, often inappropriate conception of what an ideal athletic body must look
19 like. Focusing on this athletic culture may help to minimize the onset of body dissatisfaction
20 in athletes and ensure that they are already in a psychologically healthier place on entering
21 retirement. This might include working to deemphasize the weight-performance relationship;
22 banishing public weigh-ins; educating organisations, coaches and athletes on appropriate
23 nutritional intake; establishing healthy eating norms amongst athlete groups; and ensuring
24 psychological support is readily available for athletes experiencing body dissatisfaction. Of
25 course, such cultural changes are ambitious, difficult and time consuming but this should not

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1 deter sport psychology researchers or practitioners from trying. The point has been made that
2 a sport psychology that ignores broader culture risks alienating and distressing potential
3 benefactors; namely the athletes we look to support (McGannon & Smith, 2015). The powers
4 that be, whether they are institutions (e.g. governing bodies) or individuals (e.g. coaches),
5 contribute significantly to the culture of elite sport. As such, finding ways to educate these
6 cultural agents regarding weight and body pressures may prove more fruitful than working at
7 the level of the individual athlete.

8 **Limitations and Conclusions**

9 Like all research studies, this work was not without limitations for the reader to consider. We
10 adopted a multi-method approach grounded in interpretivism, rather than mixed-method
11 approach that draws from two separate philosophies. Although this decision ensured we
12 maintained a coherent methodology, pragmatists might argue that the true benefits of mixing
13 may not have been realized (see Sparkes, 2015). For example, the emphasis here was overtly
14 on the qualitative data, with quantitative data serving as a supporting act. Mixed-
15 methodologists therefore, those who see mixed-methods as a tradition in its own right,
16 suggest such an approach cannot fully reap the benefits of truly exploring a topic through
17 alternative lenses (see McGannon & Schweinbenz, 2011).

18 We have argued for the benefits of using open-ended questions on a written survey to
19 collect qualitative data and we maintain it is a fruitful strategy to probe personal meanings.
20 Nevertheless, not everyone feels comfortable expressing themselves in writing and many
21 potentially interesting cases will choose to write short, one or two word answers. These
22 individuals cannot be probed further and their stories remain undocumented. Where detailed
23 responses are provided, relevant and unforeseen insights can be gleaned but the researcher
24 has no opportunity follow-up on these points of interest. In the current study, a small number
25 of participants made intriguing comments about the use of CrossFit as a replacement for sport

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1 and a means to maintain an athletic body image. An interview would have permitted further
2 exploration of this idea, whereas survey questions do not afford such an opportunity.

3 In conclusion, this primarily descriptive study is the first to explore body image
4 perceptions in a large sample of retired athletes. Through our analysis, we have identified
5 some key conceptual issues which contribute to understanding to the area of body image in
6 sport. We have demonstrated that the transition out of sport does not always lead to body
7 dissatisfaction but can sometimes result in an improved body image. Further, where increased
8 body dissatisfaction does occur, it is often a consequence of perceived changes in body
9 composition (i.e. increased fat) rather than perceived weight gain. Even though we were able
10 to track changes in BMI over the course of retirement, we recognize its limitation in truly
11 representing an individual's body composition. Thus to better understand, and track, how
12 body composition might change from active sport participation through retirement,
13 researchers might use more accepted measures of composition, such as percent body fat. For
14 some retired athletes, experience was characterized by longing, or striving, for a former
15 athletic body and the identity it encapsulated. Finally, our findings point to a potential
16 "retired female athlete paradox" whereby former athletes are torn between their feminine
17 ideal and the athletic ideal. Building the athletic retirement transition and the extended
18 retirement experience into body image in sport discussions is essential if we are to enhance
19 our understanding of the issue. Future research should now look to refine and extend the
20 concepts identified in this study.

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