

Experiences and Perceptions of Women Strength and Conditioning Coaches: A Scoping Review

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2 Review

Abstract

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- 4 Women continue to be under-represented and underserved in the field of Strength and
- 5 Conditioning (S&C), yet scholarly work examining the experiences and perceptions of women
- 6 S&C coaches (SCCs) is limited. Thus, the purpose of this study was to conduct a scoping review
- of the existing literature on women SCCs to identify current trends as well as knowledge gaps.
- 8 Four electronic databases (SportDISCUS, PsycINFO, MEDLINE and Academic Search Complete)
- 9 were searched up to 30th July, 2021. The initial search yielded 164 unique English-language
- papers, reviews, and book chapters. All in all, 7 peer-reviewed articles were included, and
- data from these studies were charted. Generally, studies recommend SCCs to participate in
- 12 coach education programmes and more women to be involved in the hiring of S&C staff.
- 13 While such findings are relevant, they have not fully explored the complexity of gender
- dynamics in S&C. Moreover, these recommendations will have limited long-term, sector-wide
- impact unless necessary policies are also implemented to help eradicate structure-level
- 16 gender bias within the culture of S&C.
- 17 **Keywords:** Women coaches, gender performance, marginalisation, hegemony, male
- 18 domination.

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23 Introduction

Strength and Conditioning (S&C) is viewed as the cornerstone of athletic preparation to
improve physical ability and help prevent injuries. Regardless of gender, gaining a job in S&C
is highly competitive (Vernau et al., 2021). However, the consensus is that S&C has long been,
and continues to be, a male dominated occupation. For example, in the United Kingdom (UK),
women constitute only 7% of S&C coaches (SCCs) (Medlin-Silver et al., 2017). Within Division
I of the United States' (US) National Collegiate Athletic Association (NCAA), which represent
the highest level of intercollegiate athletics in the US, only 15.7% of all SSCs employed are
women (Lapchick et al., 2021). Of 2,325 SCCs from North America taking part in the National
Strength and Conditioning Association's 2018 coaches survey, only 372 (16%) identified as
women (Employers Council, 2018). Similarly, in a 2021 survey to map the demographics of
SCCs working in professional football in the UK, out of 138 respondents only four (3%) were
women (Pacey Performance, 2021). Therefore, based on the above statistics, women appear
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by men (Anderson, 2009), the constructed gender order has been resistant to change and permeates across all levels of sport, including S&C (Lord & Kavaliauskas, 2022). S&C, therefore, exist as a microcosm of society's values, stereotypes and prejudices around gender and related attributes to be successful as coaches, such as physicality, assertiveness, aggressiveness and dominance (Schull & Kihl, 2017). Consequently, men tend to be privileged when decisions are made to fulfil coaching roles (Norman et al., 2018).

The relatively low representation of women across coaching positions is often rooted in organizational culture, whereby male directors and board members in positions of power appoint male coaches (Knoppers et al., 2022). Women coaches are commonly relegated to positions which hold relatively little power. On the other hand, able bodied, white men often serve as 'power holders' (Fasting et al., 2019, p. 456). Gender-informed organizational practices have been identified as a barrier to women entering S&C as well as gaining career advancement (Thomas et al., 2021). Due to S&C being a male dominated profession, it has a gendered organizational culture that emphasizes values, ideas and practices associated with the dominant form of masculinity and related identity.

63 In64 value

In a recent interview, SCC, Dr Torres-Ronda, discussed the gendered practices, norms, and values entrenched within S&C (McLaren, 2021, p.25). When asked about the challenges women face as SCCs, Dr Torres-Ronda stated:

I don't know if it's perceived as more "normal" to see a female doctor, physiotherapist, massage therapist or in any role with a clinical background, and less "normal" to see a female S&C coach. If you are a strength coach you have to have big muscles and yell during the sessions! Of course, you don't, but what I'm saying is, this is the expected

norm. We have idealistic profiles for these kinds of staff members and that's why
being a female S&C coach is tough, because you might not fit the stereotype.
The quote encapsulates the gendered nature of the S&C industry, which is continuously
reinforced by dominant, masculine standards. Gender stereotyping is often cited as a barrier
for women in the industry, as women SCCs have felt they are often viewed as being too soft
to be in a leadership position (Laskowski & Ebben, 2016). Dr Torres-Ronda further stated:
You can be seen as, "She knows what she's talking about" on a piece of paper, but
the moment you have to go to a weight room it's like, "Erm really? Is she gonna know
what to do with the weights?" (McLaren, 2021, p. 24)
Gender stereotypes, such as the one noted above, are constantly reproduced in everyday
language and can be communicated in indirect ways, which, in turn, influence the behaviour
and role expectations of people (Schlesinger et al. 2021). As a result of this gender association
with the job role, the SCCs interviewed in Thomas et al. (2021) felt they had to behave in a
masculine manner to garner respect and fit-into the organisational culture. An individual who
is viewed as physically fit in S&C therefore displays these behaviours and shares the cultural
norms (Norman, 2020). To achieve an organizational fit many women sports coaches and SCCs

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science attention so far. Thus, there is a need for further insight to existing gender issues around sport leadership, as it relates to this traditionally and presently male dominated field of S&C.

Consequently, the aim of this article is to offer a review-based synopsis of the emerging research around women SCCs with the view to highlighting trends as well as limitations to aid future work in this area. Specifically, by recognising the cultural complexity of women sports coaches and SCCs, the article begins by discussing and introducing the latest ecological model with intersectionality at its core (see next section). Subsequently, the aims of the scoping review are rationalised and the review method is presented, followed by an exploration of the key findings. To help organise the interpretation of existing women S&C research, The Ecological-Intersectional Model is deployed as a guiding framework. Finally, both the research and practical implications of existing S&C research is discussed and recommendations for addressing gender concerns in S&C are offered. As this review is informed by gender, which is viewed as a social construct, and refers to the cultural roles, norms and expectations attributed to men and women (Cislaghi and Heise, 2020); the term 'women' is adopted throughout. This is consistent with the recent work of LaVoi et al. (2019) and Lord and Kavaliauskas (2022).

Intersectionality

Intersectionality, originally coined by Kimberlé Crenshaw (1989), refers to the overlapping nature of multiple, socially constructed identities and experiences that individuals hold and the resultant privilege and/or oppression derived from those traversing identities and experiences (McCall, 2005; Shields, 2008). Intersectionality is not just a concept that solely

applies to marginalized groups but is an integral aspect of social constructs that shape everyone. It is particularly well articulated in socialist feminism, which perceives different interest groups as "overlapping parts of a system of privilege and disadvantage" (Lorber, 2010, p. 71). It is, therefore, important to recognise that groups may be simultaneously advantaged and/or disadvantaged by structures of oppression or privilege in certain situations, i.e., they may experience complex inequality or complex privilege or a combination (Weldon, 2008). In recognising the equal importance of gender, class and "race", McCall (2001) developed the theory of complex inequality. McCall (2001) noted that while the consideration of all social groups is pertinent, a gender analysis can explain the consequences of those groups (their privileges and disadvantages) in relation to women and men in a given society. More specifically:

the presence of configurations of inequality, empirically, mean that the politics of any single dimension of inequality must be informed by the broader context of inequality (McCall, 2001, p. 192)

Intersectionality as a concept became popular and widely used across multiple disciplines in the 1990s. Consequently, warnings have been voiced around the potential deflation of intersectionality as a concept when applying it outside critical race theory (Carastathis, 2013). In fact, Adams and Gruen (2014) cautioned that the term has become a "buzz word" amongst feminist scholars which has the potential to dull the combative power of the concept. Perhaps due to such observations, the field of sport research has had a relatively moderate engagement with intersectionality. Despite the measured uptake, there are now multiple examples of active and effective use of the concept (e.g., Abdel-Shehid & Kalman-Lamb, 2017; Engh et al., 2017). Whilst recognising the potential danger of overuse, we argue and explain

below, that intersectionality is an effective way to unfold the multitude and complex experiences of women SSCs.

As men tend to be privileged when decisions are made to fulfil coaching roles (Norman et al., 2018), there have been calls within the sports coaching and S&C literature for deploying frameworks that centralise women's intersectional identities and their coaching career trajectories (Lord & Kavaliauskas, 2022; La Voi et al., 2019). One such framework is the Ecological-Intersectional Model (EIM) which is discussed below.

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Ecological-Intersectional Model (EIM)

Building on the concept of intersectionality and complex inequality, we now turn our attention to a coaching-oriented model that has intersectionality at its core. Integral to the Ecological-Intersectional Model (EIM) is the acknowledgment of overlapping identities and positions such as gender, age, "race", and sexual orientation. The inclusion of intersectionality, via the EIM, therefore, provides researchers with a blueprint to further delve into "the experiences of women coaches along differential identity axes, and how women may experience – in similar and different ways – ageism, racism, misogyny, homophobia, and sexism among other forms of oppression, over the trajectories of their coaching career and life course" (LaVoi, 2016, p.16). The EIM, revised by LaVoi (2016) from their earlier work (LaVoi & Dutove, 2012), provides a useful framework to understand the multi-layered social processes women SCCs experience (e.g., with head coaches, other SCCs, and athletes). The EIM consists of four levels, moving from a micro perspective of the individual and intrapersonal issues to macro level issues which include organizational and sociocultural contexts. The EIM assists in understanding the complex relationship between SCCs and the environment they operate in and how the two interact to influence the behaviour of women

SCCs. Furthermore, positioning intersectionality at the heart of the EIM demonstrates the importance of investigating the experiences of women SCCs beyond a single identity axis (gender) by recognising in what ways women SCCs with multiple marginalized identities experience societal and organizational forms of oppression in their workplace. The four levels of the EIM are used as a guiding framework to structure our scoping review's findings. Specifically, we examine women-focused S&C research in relation to each level and highlight the general circumstances experienced by women SCCs

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173 Methodology

Scoping reviews have gained popularity in response to a growing demand for summaries of the breadth and depth of research around a particular topic (Goertzen et al., 2015). Mullin and Bergan (2018, p.19) state that "expanded efforts need to be directed at both conducting and publishing quality sociological research in journals for the S&C professional". Such sociologically-informed, critical work may be supported by systematic-type reviews of existing research. While scoping reviews have been and can be used for summarising areas that are wide and broad (Arksey & O'Malley, 2005), they are particularly useful when there is emergent academic literature on a topic that is in its infancy (Munn et al., 2018). Scoping reviews enable researchers to examine central issues surrounding a research area and discover the key sources and types of evidence available (Tricco et al., 2018) without being restricted by a potentially narrow range of quality-defined studies and by different methodological approaches used. Therefore, adopting a scoping review approach can help clarify key concepts and research approaches that can go beyond quality-defined studies and identify gaps within a broad scope of the existing literature. This is particularly relevant to S&C research where there have been calls for identifying why gender inequalities and

discrimination still exist, as well as improving women's experiences and opportunities to combat representational issues within the industry (O'Malley & Greenwood, 2018). Consequently, the purpose of the current study was to conduct a scoping review of the limited but growing S&C literature to offer a comprehensive account of existing empirical research and information about women coaches' experience in the field. In addition to providing a summary of existing knowledge, this review sought to identify current scientific lacunae in gender focused S&C research.

As we have focused on contextualizing a broad range of knowledge in terms of identifying the current state of understanding, this scoping review followed the framework outlined by Arksey and O'Malley (2005). The framework is comprised of five stages: (1) identifying the research question(s), (2) identifying relevant studies, (3) study selection, (4) charting data and (5) collating, summarising, and reporting the results (Arksey & O'Malley, 2005).

Identifying the research question

- In accordance with scoping review recommendations (Peters et al., 2015), we used broad research questions combined with clear definitions of the concepts relevant to the study's scope:
- (a) What empirical research has been conducted that has examined the perception andexperiences of women SCCs?
 - (b) What are the main methodological and theoretical approaches in women-focused S&C research?
- 210 (c) What are the gaps and potential future trends in research centred on women SCCs?

Through the guiding research questions, we identified overarching themes in the literature concerning women SCCs. In line with other sport coaching scholars (e.g., Norman et al., 2018), we made the perceptions and experiences of women SCCs visible to expose the impact of the gender challenges they face. Since the Arksey and O'Malley (2005) methodological framework requires the identification of all the relevant literature regardless of the study design, we did not limit this review to any specific theoretical or methodological approach.

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Identifying relevant studies

After identifying the research questions and clarifying the key terms, we searched for relevant studies in four different electronic databases. One sport specific (SPORTDiscus - the leading sports and sport medicine research database) and one interdisciplinary social science focused (PsycINFO - the largest resource of peer-reviewed behavioural and social science research) databases were chosen, along with MEDLINE (a bibliographic database of life sciences and biomedical information) and Academic Search Complete (a multi-disciplinary scholarly database) to ensure wide coverage. In addition, a Google search was carried out using the same search string. Since the results of this were extensive, screening of the results was limited to the first thirty links retrieved (see Molnár & Whigham, 2021). None of them proved to meet our criteria (outlined below) and none were included in the final review. To ensure a comprehensive approach, the search term syntax used in the selected databases included: "woman or women or female or females AND strength and conditioning coach or SCC or S&C". It is pertinent to note at this juncture that while we exclusively use 'woman/women' throughout this work, in the broader literature 'woman' and 'female' are often used interchangeably. The search term syntax was designed in light of this recognition to achieve a broad scope of results. Since the experiences of women S&C coaches or athletes'

perceptions of women S&C coaches across the profession is under-researched, the search was restricted to English academic journals, with no date limiters applied. The literature search cut off point was 30th July, 2021. This yielded results from 1988 to 2021 in SportDISCUS, 2012 to 2021 in PsycINFO, 2001 to 2021 in MEDLINE, and 2007 to 2021 in Academic Search Complete. With regard to categorising a source as appropriately S&C focused, coaches had to be directly referred to as S&C or athletes had to be studied in relation to S&C by the authors of the original publications.

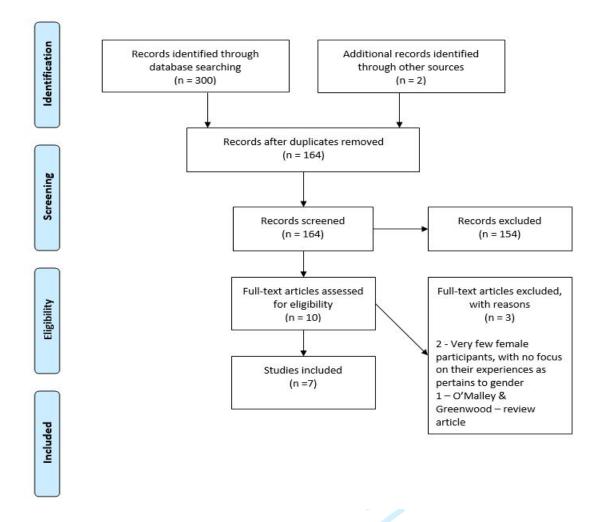
Study selection

The selection process is shown in Figure 1 using a PRISMA flowchart. Across the four databases 300 results were returned, of which 138 were duplicate records. Additionally to the database search, two records (Medlin-Silver et al., 2017; Thomas et al., 2021). When the literature search was conducted, Thomas et al. (2021) was only published in an online first format and was not picked up by the database search but was known to the authors. The literature search also involved an examination of relevant grey literature that was included in the reference list material within the identified studies (Tjønndall & Wågan 2021). This was to include other studies published in English that may not have been identified through the database searches. Based on this search strategy Medlin-Silver et al. (2017) was included as being relevant to this study's aims.

Following Kavoura and Kokkonen (2020), we used a two-step screening process. First, each abstract, title, and authors' names of all articles identified were reviewed. During this phase we independently read 164 abstracts and met weekly to discuss and refine our decisions regarding the inclusion criteria. Studies were eligible for inclusion if they were published in English and had a clear design focused on the experiences of women SCCs or athletes'

perceptions of women SCCs across the profession. Of the 164 records that were screened by title and abstract 154 were excluded. The exclusions were due to a high number of the studies screened focusing on the gender of the athlete as opposed to the SCC or on training or nutritional practices in which a coach might be involved. The second level of the screening consisted of obtaining and reviewing the full texts of the articles to confirm that they met the full inclusion criteria. Ten full-text articles were assessed for eligibility. Three were excluded at this point. One focused on internships within S&C (113 men and six women) (Read et al., 2017) and another focused on the career experiences of Australian SCCs (five men and one woman) (Dawson et al., 2013); in both cases there were very few women participants, and gender was not directly considered. The third article excluded did not include any primary data as it was a review article (O'Malley & Greenwood, 2018).

Figure 1. PRISMA flow chart outlining records collected and final records eligible after screening process.



Charting data

According to PRISMA's extension for Scoping Reviews Checklist, scoping reviews should utilize a data extraction process, which is commonly referred to as data charting process (Peters et al., 2015; Tricco et al., 2018). All sources identified as relevant for inclusion were listed in a Microsoft Excel spreadsheet. These articles were then read in full, and data were charted on the Excel spreadsheet with the following categories: author(s), year of publication, study design, purpose, data collection, participants, key findings and theoretical framework (Table 1). In the results section, we outline the number of studies identified,

screened and assessed for eligibility, then we present an overview of the participants' characteristics, study design and theoretical perspectives used in the studies included.

285 Results

Seven published studies that satisfied our inclusion criteria are analysed in the results section. The final number of studies included is small, but this is neither unprecedented (see Harlow et al., 2020), nor unexpected in scoping reviews, given the under-researched nature of this area.

Participants' Characteristics and Study Design

Two studies examined NCAA Division I athletes' gender preference towards their SCC. Magnusen & Rhea (2009), from a quantitative perspective, used a modified version of the Attitudes of Athletes toward Male Versus Female Coaches Questionnaire which was completed by 476 (male = 275, female = 201) student athletes. Whereas, Shuman & Appleby (2016), from a qualitative perspective, conducted 10 semi-structured interviews with ten student athletes (Men = 3, Women = 7). The focus of the interviews was to help explain and understand the preferences and attitudes toward the gender of their SCC Five studies focused on the experiences of women working as SCCs. Three studies employed a qualitative approach; two used semi-structured interviews (Medlin-Silver et al., 2017; Thomas et al., 2021) while one implemented a qualitative e-mail-based survey design (Laskowski & Ebben, 2016). The remaining two studies adopted a mixed methods approach using a combination of questionnaires and semi-structured interviews (Massey & Vincent 2013; Sartore-Baldwin, 2013). Massey and Vincent (2013) used a self-developed

questionnaire to determine participants' demographic characteristics, feelings, perceptions, and likes and dislikes of working as an SCC. While Sartore-Baldwin (2013) asked SCC to complete a range of questionnaires [Perceptions of organizational support (Eisenberger et al., 1986), Job satisfaction (Cammann et al., 1983), Satisfaction with Life Scale (Diener et al., 1985) and Organization Commitment Questionnaire (Mowday et al., 1979)]. With a sub-sample of the participants (n=8) semi-structured telephone interviews were conducted to ask questions pertaining to their work duties and gender related experiences within S&C. Sample sizes for the studies that focused on the experiences of women SCCs ranged from 6 to 43. A detailed breakdown of the sample demographics and study design can be found in Table 1.

Theoretical Perspectives

The studies examining athletes' gender preference towards their SCC did not specify a theoretical framework (Magnusen & Rhea, 2009; Shuman & Appleby, 2016). Neither did Laskowski and Ebben (2016), however, other studies examining the experiences of women SCCs adopted varied theoretical lenses. Experiences of women SCCs were explored in relation to Connell's (1987) account of hegemonic masculinity (Medlin-Silver et al., 2017; Thomas et al., 2021); Goffman's (1959) concept of impression management (Thomas et al., 2021); Social Exchange Theory, Organizational Support and Social identity (Sartore-Baldwin, 2013). Lastly, Massey & Vincent (2013) cited organisational theory from the individual perspective as their conceptual framework.

325 Discussion

This scoping review was undertaken to investigate: (a) What empirical research has been conducted that has examined the perception and experiences of women SCCs? (b) What are the main methodological and theoretical approaches in women-focused S&C research? (c)

What are the gaps and potential future trends in research centred on women SCCs? Seven articles were identified and evaluated. The findings from the studies are discussed in relation to the four levels of the EIM — Individual, interpersonal, organisational and societal, specifically focusing on women SCCs experiences and related power dynamics present at each level.

Individual level

Gender–related negative perceptions contribute to low self-confidence and are a barrier often identified by women sports coaches (Norman, 2014). The women SCCs sampled in the studies reviewed acknowledged that, similar to men, women SCCs must provide an impression of confidence to meet role expectations (Massey & Vincent, 2013; Thomas et al., 2021). In fact, elite athletes, alongside trust, relatedness and respect, perceive self-confidence as a key characteristic required to be an effective SCC regardless of gender (Szedlak et al., 2015). To help establish respect and credibility, demonstrating skills and knowledge were found to support women SCCs achieve athlete buy-in. While proving technical proficiency and subject-specific knowledge is not exclusive to women in professional setting, they also have to combat the prevalence of hegemonic masculinity within S&C. Out of the 5 studies reviewed that investigated the experiences of women in S&C in relation to connecting with other coaches and athletes, 4 studies acknowledged that women had more to prove and had to work harder for acceptance in comparison to male SCCs (Laskowski & Ebben, 2016; Massey & Vincent, 2013; Medlin-Silver et al., 2017; Thomas et al., 2021).

Generally, women SCCs expressed they must compensate for being women and the need to showcase their expertise to a greater extent than their male colleagues (Medlin-Silver et al.,

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2017). This was not only to prove their competency as an SCC, but also to 'fit-in' with the extensively male saturated working environment (Thomas et al., 2021). Such experiences of undergoing greater scrutiny to prove credibility as SCCs are also symptomatic of a lack of trust towards women in the field (Laskowski & Ebben, 2016). Consequently, women SCCs often portray a masculine front, feel forced to prove their worth, must work harder to garner the same level of respect as a male SCC (Thomas et al., 2021) and go the 'extra mile' to prove competency (Massey & Vincent, 2013). In a recent interview (McLaren, 2021), SCC Dr Lorena Torres-Ronda discussed the social and cultural challenges she faced during her journey to making it to the 'top' of the profession. Similar to the reviewed research, Torres-Ronda noted that she often overcompensated to establish credibility and felt she had more to prove than her male counterparts and the need to demonstrate that her gender was not an issue. Theberge (1993), however, cautions women that working harder to outperform male colleagues or to prove themselves can ultimately become counterproductive. This is because it places the problem on the individual women, which does not change the male dominant, heteronormative socio-cultural milieu of coaching, and fails to challenge or erode the belief in the 'natural' superiority and abilities of men. Lorde (2003, p. 27) highlighted the limitation of women adopting and using masculine traits (confidence, assertiveness, muscularity, aggression, and rationality) to fit in and prove themselves: "Master's tools—they may allow us temporarily to beat him at his own game, but they never enable us to bring about genuine change." Given that women are often associated with being socially competent, fragile and empathic, they may feel the need to adopt masculine behaviour traits - masters' tools - to fit into a traditionally men-centred work environment. Even if:

Such stigmatisation is often not meant to be explicitly degrading, but is usually phrased in a hidden, positive way: female coaches are assigned a high degree of team

or social skills and characterised as supportive, cooperative, and striving for harmony (Schlesinger et al., 2021, p.38).

To combat such gender stereotypes, women may adopt masculine behaviours as a strategy which can, initially, be advantageous to secure a job in S&C, however this tactic has its limitations as S&C remains a predominantly male profession, preventing women's career progression (Laskowski & Ebben, 2016).

Interpersonal level

The interpersonal level involves the relationships and interactions the S&C coach has with others such as other SCCs, sport coaches and athletes. To determine if athletes had a gender preference for SCCs, Magnusen and Rhea (2009) had athletes (275 male and 201 female) read a scenario of two SCCs, one male and one female, with matching qualities (i.e., education, job experience, coaching style, behaviours) before completing a modified Attitudes of Athletes toward Male Versus Female Coaches Questionnaire (AAMFC-Q). Statistical analysis of the Likert scale results revealed that the male athletes were less comfortable with a women SCC and preferred to have a male SCC, whereas women athletes did not have a gender preference, but a neutral attitude to an SCCs gender. It is worth noting that all the male athletes were American football players, and it was not clear if the participants sampled in the study had had previous exposure to both women and male SCCs, which could have resulted in an unconscious bias regarding gender preference. To overcome this limitation, Shuman and Appley (2016) interviewed 10 athletes (three men and seven women) who had been coached by both men and women SCCs. Inductively analysing data revealed athletes did not have a

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gender specific preference for their SCC. Instead, SCC leadership style characterised by ability, professionalism, trust and respect, support and dependability were of great importance. Two of the studies reviewed acknowledge the "old boys' club" as a barrier to women SCCs progression in the industry (Laskowski & Ebben, 2016; Thomas et al., 2021). As a result of male-dominated-networks and male dominance in the industry, some women SCCs reported bullying and harassment from male coaches in the form of sexism in the studies reviewed. This typically involved sexist banter, innuendos, or jokes related to a woman's physical appearance (Laskowski & Ebben, 2016; Medlin-Silver et al., 2017; Thomas et al., 2021). One of the SCCs, from Thomas et al. (2021), recalled being regularly dragged into the showers when initially working with male rugby players. This type of inappropriate behaviour was rationalised and accepted as part of the culture. Interestingly, none of the 6 coaches interviewed by Massey & Vincent (2013) had revealed any experience of disrespectful, condescending, or sexist behaviour from any of the male SCCs they had worked with. However, the majority of existing research (Laskowski & Ebben, 2016; Medlin-Silver et al., 2017; McLaren, 2021; Thomas et al., 2021) in S&C observe different experiences of women coaches to those Massey & Vincent's (2013) participants expressed. This inconsistency in the existing literature prompts further research to further and more extensively prove the gendered cultural aspects of S&C. Regardless of gender, the profession of S&C requires extensive commitment, including long hours, weekend practices, or competition attendances and out of town travel during the season. However, traditional gender ideology perceives woman as domestic caretakers for whom working roles are secondary to childrearing (Dixon & Bruening, 2007). Due to the demanding nature of being an SCC, a barrier often identified for a lack of women coaches, is the work-family conflict that can arise (Kilty, 2006), especially in heteronormative

relationships. Preliminary research also indicates the time challenges women face in trying to juggle home life and professional commitments, which was viewed as a barrier to progressing towards higher leadership positions or securing S&C employment (Thomas et al., 2021). However, out of the studies reviewed, Laskowski & Ebben (2016, p. 3487) specifically identified that the long days required as an S&C "makes it very hard to start a family and maintain family life" and that having to take time off to start a family might negatively affect women SCC's job role. One of the SCCs interviewed by Massey &Vincent (2013) had recently been divorced and noted that:

Being a single parent with sole responsibility for the home makes the long hours I work problematic at times. Not working a normal 8–5 schedule and having to be at work early to conduct training makes me have to be flexible as it relates to my children. (p. 2004)

It is important to acknowledge that family responsibilities can also affect men's careers. However, in heteronormative relationships it is women who often shoulder most of the domestic roles due to the traditional gender ideology, which attributes woman most of the responsibility for parenting, leading to difficulties managing their roles of working and motherhood, and an extensive sense of guilt when away from home (Bruening et al., 2016). Consequently, Sartore-Baldwin (2013) recommends that future studies concerning women in SCCs should explore the concept of work-family conflict further.

Organisation level

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Three studies included in our review support the notion that those responsible for hiring SCCs (mostly men) are likely to select their own gender in the process known as homologous reproduction (Laskowski & Ebben, 2016; Medlin-Silver et al., 2017; Thomas et al., 2021). The presence of homologous reproduction within sports coaching ensures that those in power maintain their influence by allowing only those who have similar social and physical characteristics to gain access to positions of power (Darvin & Lubke, 2021). Driven by homologous reproduction, women SCCs reported the following reasons for not being selected for S&C jobs: 1) the club was afraid women would be a "distraction in a male environment" and 2) the club was concerned about the risk of women having relationships with the other male staff and players (Thomas et al., 2021: p.6). Many of the women SSCs also highlighted the oppressive impact that these discriminatory practices had upon the organisational culture and climate of their club. For example, SCCs in Laskowski and Ebben's (2016, p. 3488) study noted: "the head football coach largely determines the head strength and conditioning coach, so the chance of it being a woman is unlikely". Another participant stated that there was "limited opportunity to progress beyond an assistant position" (Laskowski & Ebben, 2016, p. 3488). Within academic literature this has been referred to as the 'glass ceiling' which represents an invisible barrier that often prevents women from progressing through the ranks within an organisation, often based on sexism or racism (Babic & Hansez, 2021). All six women SCCs in Massey and Vincent's (2013) study reported the existence of such glass ceiling preventing them from reaching upper echelon jobs within the industry.

Despite the presence of homologous reproduction and the glass ceiling, one SCC from Massey and Vincent (2013, pp. 2009-2010) acknowledged the benefits of being a woman: "it

was easier for a woman to get into the profession and stay in the profession than it was for a man" and was "particularly difficult for white males to break into the profession as many colleges and universities are looking for more blacks (sic) and minorities to work with their athletes". While this observation may be construed as a sign of an emerging trend, it is worth noting again that women hold fewer than 16% of all the S&C positions in NCAA Division 1 with the majority being held by white males (64.7%) (Lapchick et al., 2021). Furthermore, we argue that the view expressed by that participant regarding the advantage of being a (white) woman does not appear to reflect the complexity of working in, or trying to attain, SCCs positions for most women. It should be recognised that the women from Massey & Vincent's (2013) study expressed a white woman's vantage point which has the tendency to neglect the intersecting struggles people experience from other ethnic and/or 'racial' backgrounds. As such, this view may lead us to a somewhat misleading conclusion "that the furniture merely needs a polish rather than the whole house being a perilous place" (Phipps & Mcdonnell, 2021, p.8).

The studies reviewed attributed increased job opportunity for women to fulfilling quotas to help achieve more diversity within S&C staff to better reflect the athletic populations they serve. Women SCCs from Laskowski & Ebben's (2016, p. 3488) study highlighted increased job opportunities due to growing gender equity. A participant expressed: "I fill department quotas, so that provides some job security" with another commenting that "gender can hold you back from promotions, [but] it can get your foot in the door". Despite being one of the most common solutions to increasing gender diversity, these remarks demonstrate the double-edged nature of quotas, whereby quotas help to increase the presence of women in sport, but potentially undermine the principle of obtaining the position based on merit (Adriaanse & Schofield, 2014). As women SCCs are a minority group, these quotations reflect

the omnipresence of tokenism. Participants were aware of this at the organizational level and realised that being a women can initially help them to enter the industry however career progression will likely stall (Laskowski & Ebben, 2016; Massey & Vincent 2013) as "a female can only go so high" in SCC (Sartore-Baldwin, 2013, p. 836). Contrary to such findings, participants in Thomas et al. (2021) storied their personal, gender-related challenges to secure jobs and how they managed that in a male dominant environment. One of their participants noted that shortening her name on job applications so the name appeared gender-neutral was a successful strategy resulting in more responses and job interviews from different organisations. The inconsistency in findings from the studies reviewed supports the need for further research.

Societal level

As indicated by the statistics presented at the outset of this article, women continue to occupy considerably less S&C positions than men. The few that do hold these positions are reminded that they are guests in the white, male-dominated, able-bodied, heteronormative world of S&C. This is because the prevailing ideology still defines many sports as a heteronormative male domain where practices associated with heterosexual masculinities, traditions and ideals are celebrated. Therefore, masculine models of SCC leadership triumph and set the standards by which women SCC's are measured. That is, to be viewed as a successful SCC means that, to a certain extent, women must understand the gendered cultural landscape surrounding them and their precarious positions within. Therefore, how women SCCs (are expected to) act and behave is a result of dominant norms of gender, sexuality, and, arguably, "race". To thrive or merely survive in such social settings, women coaches must embrace values that are often not in line with their own. Furthermore, women SCCs often find

themselves in a double bind because of the conflict between societal gender assumptions and the qualities expected in leaders. In this regard, Eagly (2007, p. 7) notes:

They [women] often experience disapproval for their more masculine behaviors, such as asserting clear-cut authority over others, as well as for their more feminine behaviors, such as being especially supportive of others.

This finding was consistent with the other studies reviewed. Women SCCs in Laskowski and Ebben's (2016, p. 3488) study highlighted that: "If I use abrasive language..." and "if females are hard on people, they are considered bitchy instead of having high standards". This demonstrates the double bind women SCCs encounter, further supporting the notion that using the "masters' tools cannot dismantle the master's house" (Phipps & McDonnell, 2021, p.13).

One of the roles of an SCC is to enhance performance of their athletes through various combinations of strength, power, and speed training. A consequence of this type of training is the adaptation of the body to tolerate the demands associated with a specific sport. This has resulted in cultural biases towards certain corporeal architypes in SCC. In other words, a muscular physique in S&C is often privileged as it is socially perceived to indicate training expertise (Lord and Kavaliauskas, 2022). SCCs in possession of such physique are likely to be hired based solely on their corporeal appearance (Edmonds, 2018). As muscles symbolize strength and power which are collectively associated with masculine traits (Roth and Knapp, 2017), men's bodies that epitomize hegemonic masculinity and match the cultural ideal (i.e., lean and muscular) have the physical capital highly valued in the field of S&C (Edmonds, 2018).

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Using the language of theatre, Goffman (1959) explained individual social action as form of performance and viewed society as a 'stage on which individuals perform behaviours deemed suitable and appropriate by the expectations of the setting – 'front stage'. On the other hand, when individuals are alone in private areas – 'backstage' – they are preparing for their performances by engaging in 'face work' or 'impression management' - the conscious act of maintaining the credibility of one's role. According to gender stereotypes, women have traditionally been viewed as inferior to men in all aspects of sport (Norman, 2021), including SCC coaching (Thomas et al. 2021). As such women entering S&C transgress gender norms due to the masculine association with the profession (Lord and Kavaliauskas, 2022; Medlin-Silver et al., 2017). Consequently, the findings of the review reveal that participants were aware of the importance of presenting the "right (masculine) front" to athletes and coaches they worked with (Medlin-Silver et al., 2017; Sartore-Baldwin, 2013; Thomas et al. 2021). Such fronts include displaying authority, adopting, and using masculine traits and expressing themselves in a confident manner so that both coaches and athletes believe their skills and expertise. In relation to sports coaches, Jones et al. (2010) acknowledge such behaviour is not motivated by cynicism, but often from a fear that their audience would question not just their ability to perform but their right to perform. To explore the full utility of Goffman's work in relation to understanding and interpreting women SCCs behaviour is beyond the scope of this paper, but it is pertinent to note that future research exploring the subculture of women SCC would benefit from deploying Goffman's concept of impression management to help understand and explain social interactions involved in the profession (Lord and Kavaliauskas, 2022).

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560 Recommendations

This article has critically reviewed existing research pertaining to the perception and experiences of women SCCs. The conclusion that we have derived from the existing literature indicates that despite an increased demand for SCCs, women remain largely underrepresented in the field. The papers reviewed reveal the presence of an extensively gendered system which privileges men and functions to keep male domination firmly in place. It is, therefore, clear that career entry and trajectory for women in S&C has been curbed by historically entrenched gender order spanning across organizational practices. Academic work reviewed here demonstrated that male hegemony had been expressed through the excessive scrutinizing and limiting of women SCCs across the sector. Based on the findings, we propose two recommendations to advance research and S&C's gender dynamics.

1. Theoretical frameworks

Given the existing literature's treatment of women as a homogeneous social group, future research focused on women SCCs should explore intersecting socio-cultural identities to unfold the complexities of systemic marginalization and related experiences. Thus far, SCC research has not utilised intersectionality as an underpinning conceptual framework (Lord and Kavaliauskas, 2022), despite the growing recognition of complex issues around gender, "race", disability, and sexuality in sport, physical activity (Molnár and Bullingham, 2022) and sport coaching (LaVoi et al. 2019). Accordingly, the EIM, as outlined by LaVoi (2016), is an effective way to systematically "peel away" and explore the multiple experiences of women participating in S&C in various capacities. Adopting an EIM-informed approach will help move

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away from viewing women (and men) as a monolithic social group with similar socio-cultural experiences.

By being sensitive to both micro and macro levels of social interactions, EIM offers a realitycongruent framework for studying women SCCs, which can be complemented by other social theories to help explain the cultural subtleties of SCC. One such conceptual addition can be Erving Goffman's (1959;1983) work on self- and social identity management. Specifically, the concept of dramaturgy might be particularly useful as it explains why and how individuals perform various social roles or identities. Goffman observed that, in their day-to-day interactions with others, individuals present themselves in ways what they perceive to be appropriate at the given time and place – like an actor acting out their role to an audience. The process of establishing and presenting of the self is based on culturally prescribed patterns (Goffman, 1959). Successful self-presentation requires competent performances by a competent performer to prove to an audience that they are 'acting out' their role in an authentic manner. This performance is also connected to the concept of impression management where individuals display an idealised version of themselves to manage public expectations. For example, SCCs often provide an impression of confidence and train their body to produce a mesomorphic facade based on what they think an SCC should look and behave, i.e., what they perceive the social expectations are associated with this role. While arguably an easily applicable and relatable conceptual framework, Goffman's theoretical insight is only one way to sociologically contextualise SCC. Lord and Kavaliauskas (2022) have proposed a range of social theories that might be relevant to interpreting people's experiences in S&C research.

2. Policy Development

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How sport organizations ideologically frame the issue of underrepresentation of women in S&C, and what they then understand to be the core of the "problem" of a lack of representation remains pertinent to producing a more diverse profession (O'Malley & Greenwood 2018; Norman, 2020). Creating diverse organizational cultures is essential for the advancement of women in S&C. This will involve substantial changes to traditional organizational practices. While it is vital that more S&C focused research is carried out, it is equally important that the findings of academic research is heeded by policy makers and informs policy development to initiate a meaningful, long-term change to remedy gender inequalities. An initial step would be to have greater representation of women in policy making decisions to enrich the experiences for everyone (Bhatt, 2017). Furthermore, Krahn (2019) informs us that the lack of consistency between research and policy has contributed to a situation where the underrepresentation of women in sport coaching has been framed as a women's issue rather than a systemic one. Marsh (2014) acknowledged that women most likely continue to struggle working as SCCs, particularly with male athletes in traditional male sports, until significant changes begin to take place at the structural level. Therefore, a meaningful way to initiate a systemic change across the sector is through actively connecting existing and future research and national governing bodies to making the industry more diverse and equitable (LaVoi et al. 2019).

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627	References
628	Abdel-Shehid, G., & Kalman-Lamb, N. (2017). Complicating gender, sport, and social
629	inclusion: The case for intersectionality. Social Inclusion, 5(2), 159–162.
630	https://doi.org/10.17645/si.v5i2.887
631	Adams, C.J., & Gruen, L. (2014). Groundwork. In C.J. Adams & L. Gruen, (Eds.), <i>Ecofeminism</i>
632	(pp: 7-36). Bloomsbury.
633	Adriaanse, J., & Schofield, T. (2014). The impact of gender quotas on gender equality in
634	sport governance. Journal of Sport Management, 28(5), 485–497.
635	https://doi.org/10.1123/jsm.2013-0108
636	Anderson, E. (2008). 'I used to think women were weak': Orthodox masculinity, gender
637	segregation, and sport. Sociological Forum, 23(2), 257–280.
638	https://doi.org/10.1111/j.1573-7861.2008.00058.x
639	Anderson, E. D. (2009). The maintenance of masculinity among the stakeholders of
640	sport. <i>Sport Management Review, 12</i> (1), 3–14.
641	https://doi.org/10.1016/j.smr.2008.09.003
642	Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological
643	framework. International Journal of Social Research Methodology, 8(1), 19-32.
644	https://doi.org/10.1080/1364557032000119616
645	Babic, A., & Hansez, I. (2021). The glass ceiling for women managers: Antecedents and
646	consequences for work-family interface and well-being at work. Frontiers in Psychology, 12
647	Article 618250. https://doi.org/10.3389/fpsyg.2021.618250

648	Bhatt, A. (2017, March 29) Global gender parity insights from the World Economic Forum's
649	gender gap report. Chicago Policy Review.
650	https://chicagopolicyreview.org/2017/03/29/global-gender-parity-insights-from-the
651	world-economic-forums-gender-gap-report/
652	Bruening, J.E., Dixon, M.A., &Eason, C.M. (2016) Coaching and motherhood. In N. M. LaVoi
653	(Ed.) Women in sports coaching (pp. 95–110). Routledge.
654	Carastathis, A., (2013). Basements and intersections. <i>Hypatia</i> , 28(4), 698-715.
655	https://doi.org/10.1111/hypa.12044
656	Connell, R. (1987). Gender and power: Society, the person and sexual politics. Stanford
657	University Press.
658	Connell, R.W. & Messerschmidt, J.W. (2005) Hegemonic masculinity: Rethinking the
659	concept. Gender & society, 19 (6), 829-859.
660	https://doi.org/10.1177/0891243205278639
661	Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist
662	critique of antidiscrimination doctrine, feminist theory and antiracist politics.
663	University of Chicago Legal Forum, 1, 138–167.
664	Darvin, L., & Lubke, L. (2021). Assistant coach hiring trends: An updated investigation of
665	homologous reproduction in intercollegiate women's sport. Sports Coaching
666	Review, 10(1), 38-60. https://doi.org/10.1080/21640629.2020.1760001
667	Dawson, A.J., Leonard, Z.M., Wehner, K.A., & Gastin, P.B. (2013). Building without a plan:
668	The career experiences of Australian strength and conditioning coaches. The Journal
669	of Strength & Conditioning Research, 27(5), 1423-1434.
670	https://doi.org/10.1519/JSC.0b013e318267a214

671	de Haan, D., & Norman, L. (2020). Mind the gap: the presence of capital and power in the
672	female athlete-male-coach relationship within elite rowing. Sports Coaching
673	Review, 9(1), 95-118. https://doi.org/10.1080/21640629.2019.1567160
674	Dixon, M. A., & Bruening, J. E. (2007). Work–family conflict in coaching I: A top-down
675	perspective. Journal of Sport Management, 21(3), 377–406.
676	https://doi.org/10.1123/jsm.21.3.377
677	Eagly, A. H. (2007). Female leadership advantage and disadvantage: Resolving the
678	contradictions. Psychology of Women Quarterly, 31(1), 1–12.
679	https://doi.org/10.1111/j.1471-6402.2007.00326.x
680	Edmonds, S. (2018). Bodily capital and the strength and conditioning professional. Strength
681	& Conditioning Journal, 40(6), 9–14.
682	https://doi.org/10.1519/SSC.000000000000356
683	Employers Council (2018). National Strength & Conditioning Association's coaches survey.
684	https://www.nsca.com/contentassets/d101681d8bfa4f8d8c33b04e99ad9529/2018-
685	nsca-coaches-salary-surveycomplete-report.pdf
686	Engh, M. H., Settler, F., & Agergaard, S. (2017). 'The ball and the rhythm in her blood':
687	Racialised imaginaries and football migration from Nigeria to
688	Scandinavia. Ethnicities, 17(1), 66–84. https://doi.org/10.1177/1468796816636084
689	Fasting, K., Sand, T. S., & Nordstrand, H. R. (2017). One of the few: The experiences of
690	female elite-level coaches in Norwegian football. Soccer & Society, 20(3), 454–470.
691	https://doi.org/10.1080/14660970.2017.1331163
692	Goertzen, L., Halas, G., Rothney, J., Schultz, A.S., Wener, P., Enns, J.E., & Katz, A. (2015).
693	Mapping a decade of physical activity interventions for primary prevention: A

694	protocol for a scoping review of reviews. JMIR Research Protocols, 4(3), Article e93
695	https://doi.org/10.2196/resprot.4240
696	Goffman, E. (1959). The presentation of self in everyday life. The Overlook Press.
697	Goffman, E. (1983). The interaction order: American Sociological Association, 1982
698	presidential address. American Sociological Review, 48(1), 1–17.
699	https://doi.org/10.2307/2095141
700	Harlow, M., Wolman, L., & Fraser-Thomas, J. (2020). Should toddlers and preschoolers
701	participate in organized sport? A scoping review of developmental outcomes
702	associated with young children's sport participation. International Review of Sport
703	and Exercise Psychology, 13(1), 40–64.
704	https://doi.org/10.1080/1750984X.2018.1550796
705	Jones, R. L., Potrac, P., Cushion, C. J., & Ronglan, L. T. (2010). Erving Goffman: Interaction
706	and impression management. In R. L. Jones, P. Potrac, C. J. Cushion & L. T. Ronglar
707	(Eds.), The sociology of sports coaching (pp. 15–26). Routledge.
708	Kavoura, A., & Kokkonen, M. (2021). What do we know about the sporting experiences of
709	gender and sexual minority athletes and coaches? A scoping review. International
710	Review of Sport and Exercise Psychology, 14(1), 1–27.
711	https://doi.org/10.1080/1750984X.2020.1723123
712	Kilty, K. (2006). Women in coaching. The Sport Psychologist, 20(2), 222–234.
713	https://doi.org/10.1123/tsp.20.2.222

714 Knoppers, A., de Haan, D., Norman, L., & LaVoi, N., (2022). Elite women coaches negotiating and resisting power in football. Gender, Work & Organization, 29(3), 880-896. 715 https://doi.org/10.1111/gwao.12790 716 717 Krahn, A.N. (2019). Sport policy praxis: Examining how Canadian sport policy practically 718 advances the careers of nascent female coaches. Women in Sport and Physical Activity 719 Journal, 27(2), 118-127. https://doi.org/10.1123/wspaj.2018-0064 720 Lapchick, R., Ahmed, N., Bernardo, R., Etienne, J., Kruger, C., Maguire, M., Martin, C., 721 Moberly, H., Nelson, H., O'Halloran, M., Owens, A., Patton, B., & Theriot, D. (2021). The 2021 racial and gender report card: College sport. 722 https://www.tidesport.org/ files/ugd/403016 14f7be7c35154a668addb71b75b7e1 723 4f.pdf 724 LaVoi, N.M. (2016). A framework to understand experiences of women coaches around the 725 globe: The ecological-intersectional model. In N. M. LaVoi (ed.) Women in sports 726 727 coaching (pp. 16-34). Routledge. LaVoi, N. M., & Dutove, J. K. (2012). Barriers and supports for female coaches: An ecological 728 model. Sports Coaching Review, 1(1), 17-37. 729 730 https://doi.org/10.1080/21640629.2012.695891 LaVoi, N.M., McGarry, J.E., & Fisher, L.A. (2019). Final thoughts on women in sport coaching: 731 Fighting the war. Women in Sport and Physical Activity Journal, 27(2), 136-140. 732 https://doi.org/10.1123/wspaj.2019-0030 733

734	Laskowski, K. D., & Ebben, W. P. (2016). Profile of women collegiate strength and
735	conditioning coaches. Journal of Strength and Conditioning Research, 30(12), 3481–
736	3493. https://doi.org/10.1519/JSC.00000000001471
737	Lorber, J. (2010). <i>Gender inequality</i> . Oxford University Press.
738	Lord, R., & Kavaliauskas, M. (2022). Sociological tools for improving women's representation
739	and experiences in strength and conditioning coaching. Strength & Conditioning
740	Journal. Advance online publication.
741	https://doi.org/10.1519/SSC.00000000000000000000000000000000000
742	Lorde, A. (2003). The master's tools will never dismantle the master's house. In R. Lewis & S.
743	Mills (Eds.). Feminist postcolonial theory (pp. 25–28). Edinburgh University Press.
744	McCall, L. (2005). The complexity of intersectionality. Signs: Journal of Women in Culture
745	and Society, 30(3), 1771–1800. https://doi.org/10.1086/426800
746	Magnusen, M. J., & Rhea, D. J. (2009). Division I athletes' attitudes toward and preferences
747	for male and female strength and conditioning coaches. Journal of Strength and
748	Conditioning Research, 23(4), 1084–1090.
749	https://doi.org/10.1519/JSC.0b013e318199d8c4
750	Marsh, K.G. (2016). How to succeed as a female S&C coach. <i>Professional Strength</i> &
751	Conditioning, 35, 7-12
752	Massey, C.D., & Vincent, J. (2013). A job analysis of major college female strength and
753	conditioning coaches. The Journal of Strength & Conditioning Research, 27(7), 2000-
754	2012. https://doi.org/10.1519/JSC.0b013e31827361a9

755	McCall, L. (2001). Complex inequality: Gender, class and race in the new economy.
756	Routledge.
757	McLaren, S. (2021). Thriving as a female in professional sport. The Sport and Exercise
758	Scientist, 67, 24-25.
759	Medlin-Silver, N., Lampard, P., & Bunsell, T. (2017). Strength in numbers: An explorative
760	study into the experiences of female strength and conditioning coaches in the UK. Ir
761	A. Milner & J. Braddock (Eds.). Women in sports: Breaking barriers, facing obstacles.
762	ABC-CLIO.
763	Molnár, G. and Bullingham, R. (2022). The Routledge handbook of gender politics in sport
764	and physical activity. Routledge
765	Molnár, G. and Whigham, S., (2021) Radical right populist politics in Hungary: Reinventing
766	the Magyars through sport. International Review for the Sociology of Sport, 56 (1), 133
767	148. https://doi.org/10.1177%2F1012690219891656
768	Mullin, E.M., & Bergan, M.E. (2018). Cultural and occupational barriers facing women
769	professionals in the field of strength and conditioning. Strength & Conditioning
770	Journal, 40(6), 15-20. https://doi.org/10.1519/SSC.00000000000000379
771	Munn, Z., Peters, M.D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018).
772	Systematic review or scoping review? Guidance for authors when choosing between a
773	systematic or scoping review approach. BMC Medical Research Methodology, 18(1),
774	Article 143. https://doi.org/10.1186/s12874-018-0611-x

775	Murray, P., Lord, R., & Lorimer, R. (2022). It's just a case of chipping away': A postfeminist
776	analysis of female coaches' gendered experiences in grassroots sport. Sport, Education
777	and Society, 27(4), 475-488. https://doi.org/10.1080/13573322.2020.1867527
778	Norman, L. (2014). A crisis of confidence: women coaches' responses to their engagement in
779	resistance. Sport, Education and Society, 19(5), 532-551.
780	https://doi.org/10.1080/13573322.2012.689975
781	Norman, L. (2020). "I don't really know what the magic wand is to get yourself in there":
782	Women's sense of organizational fit as coach developers. Women in Sport and Physical
783	Activity Journal, 28(2), 119-130. https://doi.org/10.1123/wspaj.2019-0020
784	Norman, L. (2021). Improving gender equity in sports coaching. Routledge.
785	Norman, L., Rankin-Wright, A. J., & Allison, W. (2018). "It's a concrete ceiling; it's not even
786	glass": Understanding tenets of organizational culture that supports the progression
787	of women as coaches and coach developers. Journal of Sport and Social Issues, 42(5),
788	393-414. https://doi.org/10.1177/0193723518790086
789	O'Malley, L. M., & Greenwood, S. (2018). Female coaches in strength and conditioning -Why
790	so few? Strength and Conditioning Journal, 40(6), 40-48
791	https://doi.org/10.1519/SSC.00000000000000000000000000000000000
792	Pacey Performance. (2021). British football performance staff survey
793	https://www.sportsmith.co/reports/british-football-performance-staff-survey/
794	Peters, M. D. J., Godfrey, C. M., Khalil, H., McInerney, P., Parker, D., & Soares, C. B. (2015).
795	Guidance for conducting systematic scoping reviews. International Journal of

796	Evidence-Based Healthcare, 13(3), 141–146.
797	https://doi.org/10.1097/XEB.000000000000000000000000000000000000
798	Phipps, A., & McDonnell, L. (2021). On (not) being the master's tools: Five years of 'Changing
799	University Cultures'. Gender and Education. Advance online publication.
800	https://doi.org/10.1080/09540253.2021.1963420
801	Read, P., Hughes, J.D., Blagrove, R., Jeffreys, I., Edwards, M., & Turner, A.N. (2017).
802	Characteristics and experiences of interns in strength and conditioning. Journal of
803	Sports Sciences, 35(3), 269-276. https://doi.org/10.1080/02640414.2016.1161220
804	PRISMA. (2021). Preferred reporting items for systematic reviews and meta-analyses.
805	http://www.prisma-statement.org/
806	Roth, R. I., & Knapp, B. A. (2017). Gender negotiations of female collegiate athletes in the
807	strength and conditioning environment. Women in Sport and Physical Activity
808	Journal, 25(1), 50-59. https://doi.org/10.1123/wspaj.2015-0049
809	Sartore-Baldwin, M. L. (2013). The professional experiences and work-related outcomes of
810	male and female division I strength and conditioning coaches. Journal of Strength and
811	Conditioning Research, 27(3), 831–838.
812	https://doi.org/10.1519/JSC.0b013e31825c2fd3
813	Schlesinger, T., Ingwersen, F., & Weigelt-Schlesinger, Y. (2021). Gender stereotypes as
814	mechanisms of social exclusion of women as football coaches. In L. Norman, (ed.)
815	Improving gender equity in sports coaching (pp.33-45). Routledge

816	Schull, V. D., & Kihl, L. A. (2019). Gendered leadership expectations in sport: Constructing
817	differences in coaches. Women in Sport and Physical Activity Journal, 27(1), 1–11.
818	https://doi.org/10.1123/wspaj.2018-0011
819	Shields, S. A. (2008). Gender: An intersectionality perspective. Sex Roles, 59(5–6), 301–311.
820	https://doi.org/10.1007/s11199-008-9501-8
821	Shuman, K. M., & Appleby, K. M. (2016). Gender preference? National Collegiate Athletic
822	Association division I student-athletes and strength and conditioning coaches. Journal
823	of Strength and Conditioning Research, 30(10), 2924–2933.
824	https://doi.org/10.1519/JSC.00000000001384
825	Szedlak, C., Smith, M. J., Day, M. C., & Greenlees, I. A. (2015). Effective behaviours of
826	strength and conditioning coaches as perceived by athletes. International Journal of
827	Sports Science & Coaching, 10(5), 967–984. https://doi.org/10.1260/1747-
828	9541.10.5.967
829	Theberge, N. (1993). The construction of gender in sport: Women, coaching, and the
830	naturalization of difference. Social Problems, 40(3), 301–313.
831	https://doi.org/10.2307/3096881
832	Thomas, G., Guinan, J., & Molnár, G. (2021). "It's not particularly PC, you know": Women
833	coaches' performing gender in strength and conditioning. Women in Sport and
834	Physical Activity Journal, 29(2), 106-116. https://doi.org/10.1123/wspaj.2020-0049
835	Tjønndal, A. & Austmo Wågan, F. (2021). Athletes' and coaches' attitudes toward protective
836	headgear as concussion and head injury prevention: a scoping review. Frontiers in
837	sports and active living, 3, 1-13. https://doi.org/10.3389/fspor.2021.680773

838	Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters,
839	M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart
840	L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., Straus, S. E. (2018). Prisma
841	extension for scoping reviews (Prisma-ScR): Checklist and explanation. Annals of
842	Internal Medicine, 169(7), 467–473. https://doi.org/10.7326/M18-0850
843	Vernau, J., Bishop, C., Chavda, S., Weldon, A., Maloney, S., Pacey. R., & Turner, A. (2021). An
844	analysis of the minimal qualifications, experience and skill sets required for S&C
845	employment. https://www.uksca.org.uk/uksca-iq/article/5076/coach-insights/an-
846	analysis-of-the-minimal-qualifications-experience-and-skill-sets-required-for-sc-
847	<u>employment</u>
848	Weldon, S.L. (2008). Intersectionality. In G. Goertz and A.G. Mazur (Eds.) <i>Politics, Gender</i>
849	and Concepts: Theory and Methodology (pp.193-218). Cambridge University Press.
850	https://doi.org/10.1017/CBO9780511755910

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Author (year)	Study Design	Purpose	Data collection	Participants	Key findings	Theoretica Framework
Magnusen & Rhea (2009)	A quantitative survey research design	To examine male and female Division I team sport athletes gender preference towards their S&C coach	A modified version of the Attitudes of Athletes toward Male versus Female Coaches Questionnaire (AAMFC-Q) was completed.	201 female and 275 male NCAA Division 1 athletes. made up the study sample.	Male athletes (all football players) were less comfortable with a female S&C coach in all regards and preferred to have a male S&C coach. Female athletes did not have a gender preference, nor did they have any negative attitudes toward a strength coach.	None state
Shuman & Appleby (2016)	Qualitative approach	To examine male and female Division I athletes gender preference towards their S&C coach	Semi-structured interviews were conducted with 10 NCAA DI junior or senior class student-athletes who had been exposed to and coached by both a male and a female SCC.	10 NCAA DI junior or senior class student- athletes who had been exposed to and coached by both a male and a female SCC	None of the participants said that gender affected their relationship with their S&C Coach. When asked if the gender of the S&C coach impacted their preference, 2 female participants said yes, one preferred a female the other a male. Personality rather than gender was seen as more influential on preference.	None state
Sartore- Baldwin (2013)	Consisted of 2 parts. Part 1: was a Quantitative online survey. Part 2 was Follow- up telephone interview	To investigate the professional experiences and work-related outcomes of male and female NCAA Division I S&C coaches	Part 1 consisted of 4 sections: a. Perceptions of organizational support (POS)	Part 1: 125 NCAA Division 1 S&C coaches completed the survey (17% were female). Part 2: 9 male and 8 female S&C coaches completed the interview	In relation to Gender 3 themes emerged from the qualitative analysis as follows: (1) increased presence of women within the field, (2) knowledge and ability, and (3) mentorship Female S&C coaches expressed having no room to move up in the field. Despite this, mentorship was identified as a key success of female S&C coaches.	Social Exchange Theory and Organization
	Mixed		Part 2 involved a semi-structured telephone interview with a sub sample of the participants (17 participants). The participants were asked a series of questions pertaining to their work duties and experiences, and asked to discuss gender within S&C.			Social Iden

Massey &	Mixed	To ascertain from	Questionnaire followed up by	6 female S&C coaches	All participants reported high or very high job	Viewing
Vincent		females working as	a semi-structured interview. Each of the semi-	from major college athletic	satisfaction, along with the existence of a "glass	
(2013)		S&C coaches what it	structured interviews were recorded and	programs within the NCAA	ceiling" impeding women in their progress to the	occupation
, ,		is like for them to	lasted approximately 2–2½ hours.	competing within the	top S&C jobs. 5 of the 6 coaches were happy with	'
		work in	,	Football Bowl Subdivision.	their relationships with fellow strength coaches,	life
		the field of S&C			most of whom were males. Two participants felt	
		focusing on what			that they had to prove themselves and work	from the
		they			harder for acceptance because of working in a	
		think about			male dominated profession. Another stated that it	perspective
		themselves and			was crucial a female not to behave in a "frivolous"	' '
		their situations.			and "provocative" fashion. The importance of	the person
					proper dress and demeanour and of not sending	
					out "the wrong signals to the athletes or coaches	the situation
					at your institution" was underlined by another	
					participant (p.2006).	
Laskowski	A qualitative	To examine the	The survey was divided into 5 sections,	43 NCAA	Coaches identified a variety of advantages and	None state
& Ebben	e-mail–based	careers of women	including university profile, position profile,	affiliated	disadvantages associated with S&C. Gender	
(2016)	survey	collegiate S&C	personal	Division I	advantages, included; Increased job opportunities	
	research	coaches, including	profile, job satisfaction, and comments.	Female S&C	because of gender equity needs, Ability to connect	
	design	specifics of the	· Ob	coaches.	with women athletes and department desires to	
		universities			handle specific issues. Gender disadvantages,	
		and athletic			included: Glass ceiling, Lack of respect, Not allowed	
		departments they			to work with men's teams, forced to prove oneself,	
		work for,			pay inequity, Undervalued, and Subject to sexism.	
		responsibilities		Chieh		
		and demands of				
		their jobs,		· (~)		
		compensation and				
		benefits,				
		preparation and				
		qualifications, likes				
		and dislikes				
		about their work, and the role that				
		gender plays in				
		their experience as a				
		S&C coach.				

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Medlin- Silver et al. (2017)	A qualitative research design		Semi-structured interviews. The interviews were subjected to content analysis in order to establish emerging themes.	8 White-British females, aged between 19-26. All participants had completed a UK university S&C degree course. The females were either engaged in academic study or working as an S&C coach as an intern or in a paid position.	3 themes emerged from the qualitative analysis as follows: (1) Negotiation of Normalized Cultural Codes, (2) Banter and (3) Channels of Reproduction and Resistance.	Hegemonic masculinity
Thomas et al. (2021)	Constructivist research paradigm	Exploration into how female S&C coaches live through and negotiate the social dynamics of a male dominated sport setting.	Semi-structured interviews took place. Follow-up interviews with 4 participants, specifically focusing on the presence of humour in S&C were carried out.	Fifteen accredited female S&C coaches (Mean age = 30.9; SD = 6.0). All participant had a minimum of 2 years' experience of coaching men and women	3 themes emerged from the qualitative analysis as follows: (1) organisational politics, (2) impression management, and (3) humour. In summary Women S&C coaches are often in subservient positions and have to adopt some of the traditional, male-generated sub-cultural practices to fit in. Women S&C coaches carefully manage their coaching front stage to generate an impression that is expected and accepted in the given milieu.	Hegemonic masculinity and impression managemen
				erien	10	