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A six-country study of coaches' perspectives of girls' body image concerns in sport and intervention preferences: Template analysis of survey and focus group data



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ABSTRACT

Coaches are a key influence of athletes' body image, but often feel ill-equipped to address body image concerns and can perpetuate harmful body ideals. Limited research has investigated coaches' attitudes and beliefs and few effective resources are available. The current study explored coaches' perspectives of body image among girls in sport, as well as their preferences for body image interventions. Thirty-four coaches (41% women; M_{age} =31.6 yrs; *SD*=10.5) from France, India, Japan, Mexico, the United Kingdom, and the United States took part in semi-structured focus groups and completed an online survey. Template analysis of survey and focus group data resulted in eight first-order themes grouped under three categories: (1) perspectives of body image among girls in sport (objectification and surveillance, impact of puberty, the role of the coach); (2) preferences for intervention design (content of the intervention, accessibility of the intervention, incentives for taking part); and (3) cross-cultural considerations (acknowledging your privilege, cultural and societal norms). Two integrative themes were defined: (1) girls' disengagement from sport and (2) the role of community. Coaches perceived body image to be a significant barrier for girls in sport and a need to address this in a formal and accessible intervention.

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1. Introduction

Despite the numerous physical and psychological benefits of taking part in sport, studies consistently show that globally, only 15% of adolescent girls meet the recommended daily exercise guidelines (Guthold et al., 2018). Body image, or how we think, feel, and perceive our body (Cash & Smolak, 2011), has been identified as a critical factor in both girls' participation in, and enjoyment of, physical activity and sport. Research indicates girls disengage from sport because of body image concerns, uncomfortable and objectifying uniforms, appearance-related teasing from peers and coaches,

negative team cultures, and normalised disordered eating behaviours (Murray et al., 2021; Vani et al., 2021). On the other hand, through sport participation, girls can accrue numerous assets including developmental, psychological, social, academic, health, and well-being benefits (LaVoi, 2018). Similarly, sport can have a positive influence on girls' body image when it is embedded in a supportive and positive culture, and one that focuses on body functionality (i.e., what the body can *do*; Alleva & Tylka, 2021) over appearance (Sabiston et al., 2019). However, assets do not automatically accrue. Based on the existing data, participation in typical sport environments can lead to deleterious outcomes, often created inadvertently by coaches, that result in girls' dropout from sport (LaVoi, 2018).

Few body image interventions have been developed specifically for the sports environment, and existing interventions have primarily targeted individual athletes (Voelker et al., 2019), rather than societal and interpersonal body image influences, such as coaches. Due to the various influences on girls' body image in sport settings, it is crucial to target individual athletes as well as their coaches and wider sports organisations to ensure significant and sustainable

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change (Koulanova et al., 2021; Voelker et al., 2022). In particular, coaches play a key role in athletes' development and well-being (Langan et al., 2013; LaVoi, 2018), but limited research has explored their perspectives on body image in sport settings and what they require from intervention efforts to better support their athletes. The current study therefore explores coaches' perspectives and intervention preferences, with the insights being applied to develop an intervention to upskill coaches in addressing girls' body image concerns in sport.

1.1. The role of coaches in athletes' body image

Coaches are influential role models for athletes and can have a positive or negative influence on athletes' perceptions of themselves, enjoyment of sport, and their mental and physical health (Langan et al., 2013; LaVoi, 2018). As such, coaches can influence how girls perceive and feel in their bodies during sport, for example by encouraging a focus on body functionality over appearance, modelling positive body image behaviours, and reinforcing zero-tolerance policies towards body talk and body shaming (Koulanova et al., 2021; Sabiston et al., 2020). Unfortunately, coaches often believe in, and promote, harmful appearance ideals (Muscat & Long, 2008; Willson & Kerr, 2021), which may lead to lasting negative effects on their athletes, including poor body image, burnout, anxiety, stress, and quitting sport altogether (LaVoi, 2018, Vani et al., 2021). Studies conducted with female athletes highlight that appearance comments and teasing by coaches is a common occurrence, particularly towards athletes who are perceived to be of higher weight (Brown et al., 2022; Vani et al., 2021). Coaches also often compare athletes' appearance to others (Coppola et al., 2014) or fail to intervene when body talk occurs within teams (Vani et al., 2021). Most coaches are well-intentioned, but nonetheless, inadvertently create a negative sports climate for girls. Improving coach awareness and education on how to create an inclusive and body positive climate is therefore both needed and warranted.

Although most research to date has focused on athletes' perceptions of coaches' behaviours and the overall sport environment (Vani et al., 2021), recent research has begun to investigate coaches' perceptions of body image in sport (Koulanova et al., 2021; Sabiston et al., 2020). Findings indicate that many coaches feel ill-equipped to identify and tackle body image concerns among girls in sport and are apprehensive to explicitly address these issues for fear of making the concerns worse (Sabiston et al., 2020). Additionally, while coaches recognise their responsibility in reducing negative body image practices, promoting positive body image practices, and normalising conversations about body image with and among their athletes, coaches also identify important external influences of body image concerns, including peers, parents, and the media (e.g., through promoting a specific appearance ideal). As such, systemic strategies are required within sport settings that upskill coaches to address body image concerns among girls in sport (Koulanova et al., 2021). To this end, additional research from the perspective of coaches is urgently needed (Voelker et al., 2022).

1.2. Considerations for intervention development

1.2.1. Cross-cultural considerations

Notably, the majority of research on body image in sport has been conducted predominantly in Western countries and little is currently known about body image influences in diverse sport settings (Sabiston et al., 2019). Despite the wide-spread prevalence of Western media and the Western influenced appearance ideal (Holmqvist & Frisén, 2010), body image concerns among adolescent girls are likely to be associated with race and cultural background (Maezono et al., 2019; Tinoco, Schneider, Haywood, & Matheson, 2023). Additionally, specific cultural and individual factors may influence body

image, such as skin shade ideals (Craddock et al., 2018), hair (Patton, 2006), and gender norms (Steinfeldt et al., 2011). These cultural nuances have largely been ignored in the existing literature on body image in sport, and cross-cultural research is required to develop interventions that are relevant beyond the Western context. Such approaches also go beyond a weight- and body shape-focused view of body image to include other cultural components of positive and negative body image (Gramaglia et al., 2018; Sotiriou, 2021). In the current study, we therefore include coaches from multiple cultural backgrounds to capture distinct perspectives on issues related to body image concerns beyond weight and shape (e.g., skin shade, hair colour, ability, gender identity) will aid the scalability of the intervention in the future.

1.2.2. Adopting a protective approach

Traditionally, a risk-reduction approach (i.e., reducing negative body image) has been at the focus of body image interventions, due to negative body image being considered a primary risk factor for the development of disordered eating and eating disorders (Smolak & Cash, 2011). However, recent research from the sport context has suggested the importance of targeting both negative and positive body image in interventions aimed at tackling eating disorders and body image concerns (Godoy-Izquierdo & Díaz, 2021). A paradigm shift in the broader body image literature to target both negative and positive body image as distinct constructs in interventions has occurred (Tylka & Wood-Barcalow, 2015; Webb et al., 2015). Positive body image may be particularly pertinent in sport and movementbased contexts, due to a focus on embodying experiences in sport, or how one connects with one's body during movement (Piran, 2019). Additionally, recent research has suggested that positive body image may contribute to increased sport participation (Sabiston et al., 2019) and enjoyment (Tylka, 2018). Therefore, body image interventions within sport and movement-based settings might usefully target both negative and positive body image to improve athletes' experiences and overall well-being. In this study, we therefore aimed to gain coaches' perspectives on both positive and negative body image practices that occur in their sport settings. Consequently, the novel intervention will incorporate content that both protects against, and reduces, body image concerns, as well as enhances positive body image among girls in sport.

1.2.3. Recommendations for designing coach development programmes

Coaches are often targeted in interventions aimed at improving athlete outcomes (e.g., performance, health, well-being), for example through Coach Development Programmes (CDPs). However, existing CDPs show limited effectiveness on coach attitudes and behaviours in the long term (Griffiths et al., 2018; Nelson et al., 2013). CDPs encompass all learning activities applied systematically and directly with coaches in order to explicitly change coach behaviour through education, social interaction, and/or personal reflection (Allan et al., 2018; Evans et al., 2015). It has been suggested that for effective learning to occur, professional development and education programmes should be content-rich, engaging, relevant, and sustained (Desimone, 2011; Little, 2012). As such, several recommendations for the development and evaluation of CDPs have been proposed (Langan et al., 2013). First, multiple studies have emphasised the benefit of including reflective practice and other practical tools within CDPs as a way for coaches to reflect on, and apply, knowledge gained from coach education to their own practice (Maclean & Lorimer, 2016; Silva et al., 2020). Reflective practice is particularly important in web-based interventions or interventions with limited interactive components (Maclean & Lorimer, 2016; Santos et al., 2019). Second, coaches should be directly involved in decisions regarding the content, modality, and delivery of CDPs (Nelson et al., 2013). Similarly, in order to engage coaches in CDPs, alignment between coaches' expectations and course content and form is crucial (Voldby & Klein-Døssing, 2020). Third, to ensure the intervention is accessible to coaches, important barriers of previous CDPs, such as cost and access (Maclean & Lorimer, 2016; Nelson et al., 2013), need to be overcome. Therefore, in line with these recommendations, we conducted focus groups with coaches to inform the intervention development process. Specifically, we considered coaches' preferences for the content of the intervention, as well as for intervention delivery and modality.

1.3. The current study

At present, limited effective body image resources are available to coaches, despite coaches perceiving body image education as a personal and professional requirement for working with young people (Bolter et al., 2018; Koulanova et al., 2021; Maclean & Lorimer, 2016). Moreover, little research has been conducted from the perspective of coaches to gain their insights and preferences for such interventions. Therefore, the aim of the current study was to explore coaches' perspectives of girls' body image within sport contexts, as well as their preferences for body image interventions targeted at coaches.

2. Methods

2.1. Design

The current study is part of a larger research project that aims to develop novel, evidence-based interventions that upskill girls and coaches in creating safe, inclusive, and body positive sport environments (Matheson et al., 2023). We used a mixed method study design, comprising semi-structured focus groups and surveys with coaches of adolescent girls, and analysed the data using template analysis. To increase intervention scalability, this research used a multicultural lens and involved coaches from six countries, including France, India, Japan, Mexico, the United Kingdom, and the United States.

2.2. Participants

Participants were recruited through sports organisations that had an established relationship with our community partner. In total, 34 coaches of adolescent girls from six countries, including France (Lyon n = 3; La Courneuve n = 1), India (Delhi n = 4; Hinganghat n = 1; Nagpur n = 1), Japan (Tokyo n = 4), Mexico (Mexico City n = 5), the United Kingdom (London n = 6), and the United States (Los Angeles n = 6; New Orleans n = 3) were invited to take part. Notably, a wide definition of sport was adopted in order to develop an intervention that was suitable to various sport and movement-based settings, including sports clubs, fitness clubs, youth centres, and physical education classes. As such, our sampling strategy targeted a diverse sample of coaches from different types of sports (e.g., individual and team sports, aesthetic and non-aesthetic sports), competition level (e.g., recreational and professional, grassroots and elite), and coaching experience (e.g., novice and expert, volunteers and paid coaches). The represented sports included dance (n = 6), boxing (n = 3), netball (n = 6), rhythmic gymnastics (n = 2), rugby (n = 2), football (soccer; n = 10), surfing (n = 3), taekwondo (n = 1), and yoga (n = 1). Several coaches (n = 12) coached multiple other sports in addition to their main sport.

Coaches were on average 31.6 years old (18–66 years; SD = 10.5 years) and had 9.1 years of coaching experience (1–50 years; SD = 9.2 years). Of the participants who provided information regarding gender (n = 20), fourteen coaches identified as women, five identified as men, and one identified as non-binary or a third gender.

Coaches had a wide variety of experience and coached at different levels (n = 11 as paid coaches, n = 10 as volunteers, and n = 13 as both). The majority of coaches (n = 25) reported not having received training on body image in sport in the past, three coaches selected 'not sure', and six coaches reported having received previous body image training (e.g., information or education sessions).

2.3. Procedure

Following ethical approval from the local universities (University of the West of England, ref no. HAS.21.03.120; University of Minnesota, ref no. STUDY00012457) and written consent from coaches, semi-structured focus groups were conducted online in May 2021 with 4-6 coaches in each group. One focus group was conducted in each country, with two focus groups conducted in the United States, for a total of seven groups. Prior to the focus groups, a representative from the sports organisation completed a checklist to ensure appropriate safeguarding policies were established and implemented, and key logistical features were addressed (e.g., coaches had access to an individual computer, identified the preferred conference call platform). Focus groups took place virtually via Zoom due to COVID-19 restrictions in the specific countries. Each focus group was led by a local researcher (primary facilitator) who had experience conducting focus groups and a background in body image or sport together with a support facilitator, both of whom spoke the primary language of the respective country. The facilitators were previously known to members of the core research team and were invited as external collaborators on this project. Focus groups were audio-recorded and lasted approximately two hours and were transcribed verbatim. Immediately following the focus groups, coaches were invited to complete an online survey which addressed more in-depth questions pertaining to intervention preferences (e.g., number and length of sessions) and allowed coaches to provide any additional feedback. Coaches were asked to complete the survey within one week after taking part in the focus group. For participation in the focus group and follow-up survey, participants received an electronic gift card in their local currency, equivalent to £ 50.

2.3.1. Facilitator guide

The focus group facilitator guide was co-developed by the research team authoring this paper, a local researcher from each country, and a representative from industry and community stakeholder groups who are partners in the broader programme of research. The guides were translated for use within specific countries (i.e., into French in France, Hindi in India, Japanese in Japan, and Spanish in Mexico), and contained an overview of the research rationale and aims, instructions for delivering the focus group discussion and activities, and guidance on conducting focus groups (e.g., active listening skills, using prompts, encouraging less active participants to take part; Carey & Asbury, 2016; Stewart & Shamdasani, 2014). The facilitator guide also contained semi-structured questions to guide the discussions (see Table 1). The facilitators reviewed the guides for cultural and linguistic accuracy, as well as attended a 60-minute training session led by the first and second authors on how to deliver the focus groups. During this training session, the first and second authors went through the facilitator guide, defined key concepts, and provided facilitators with the opportunity to ask any questions.

2.3.2. Information pack

One week prior to the focus groups, coaches were presented with an information pack, which provided an overview of the focus group aims and objectives, key definitions (e.g., body image), a participant consent form, and an activity to be completed ahead of the session. The activity was a writing task that asked coaches to reflect on the

Table 1

Focus Group Facilitator Guide.

Time	Activity	Questions & Prompts
INTRODU	CTION (10 min)	
45 min	 Reflection on body image concerns among girls in sport Discussion of coaches' knowledge, skills, and experiences of dealing with body image concerns among girls in sport 	 Do you feel body image concerns are relevant in sport? Why or why not? Are there specific concerns for adolescent girls? Have you experienced body image concerns in sport? As an athlete? As a coach? What body image concerns have you noticed among your athletes? Conversations? Behaviours? Impact on performance? Impact on mood? What do you think your role is as a coach in tackling body image concerns among your athletes? What do you think your role is as a coach in tackling body image concerns among your athletes? What do you think your thoughts about your own body influence how you address body image concerns among your athletes? Do they have an impact? Why or why not? How have you responded to body image concerns among your athletes? What has been helpful? What has not been helpful?
BREAK (10 45 min	• Coaches' intervention development: Brainstorming content	• What would help you identify and tackle body image concerns in the future
		o Tools? Resources? Support?
		 What needs to be included in a body image training tool to make it effective coaches? o What do you want to learn more about? Are there any other things you feel we should know about or consider before the should know about the should kn
		developing this tool?
CLOSING	(10 min)	

following questions: 1) What body image concerns occur in your current sport context among your athletes? and 2) How have you tackled body image concerns among your athletes in the past?.

2.3.3. Focus group activities

At the start of the session, the facilitators reminded coaches of the aims of the focus group and the purpose of the wider research, as well as allowed time for introductions and questions (10 min). Following introductions, participants took part in the first of two activities, which asked coaches to reflect on body image concerns among girls in sport and the role of the coach in addressing these (45 min). Specifically, the facilitators asked coaches to think back to the writing task in the information pack and share their experiences of what body image concerns, if any, they have encountered among their athletes and how they have attempted to tackle these concerns in the past. Following this, participants had a short break (10 min) and then started the second activity, which asked coaches to brainstorm content for the body image intervention (45 min). For the brainstorming activity, coaches were split into two groups (in Zoom breakout rooms) and asked to come up with some ideas for what should be included in such an intervention and how it should be delivered to coaches. At the end of the activity, participants were brought together to share what they had come up with in their groups. Finally, the facilitators thanked coaches for their time, reminded them of the next steps (i.e., follow-up survey, compensation procedure), and closed the focus group (10 min).

2.3.4. Follow-up survey

A mixed method survey was administered to coaches immediately after their participation in the focus groups. They survey comprised demographic questions (e.g., age, gender, ethnicity, geographical location, coaching experience, sports coached); qualitative questions pertaining to coaches' ability to address girls' body image concerns in sport that were not explicitly covered in the focus groups (e.g., *What are the main factors that hinder you from addressing body image concerns among your athletes?*, *What are the main factors that help you address body image concerns among your athletes?*, *What would help you better address body image concerns among your athletes?*), and quantitative questions pertaining to intervention preferences, including content, format, and preferred completion time.

2.3.5. Compensation and debrief

After completing the follow-up survey, coaches were provided with the incentive and a debrief sheet containing country-specific resources for support on body image and eating disorders.

2.4. Data analysis

Analysis of the focus groups and follow-up surveys was conducted by the first author, who identifies as a White European woman, and is an early career researcher with expertise in applied body image research and sport and exercise psychology. The first author led the analysis and incrementally sought input from the research team, specifically through discussions with the second, third, and last authors. The second author identifies as a White Australian woman and is an early career researcher with expertise in clinical psychology and applied body image research. The first and second authors facilitated the focus groups conducted in the United Kingdom and the United States, with the support of the fourth author. The third author identifies as a Hispanic Latina woman and is a research associate with clinical experience in eating disorders and body image. She was the primary facilitator for the focus group conducted with coaches in Mexico. The last author identifies as a White American lesbian woman and is the director of a research centre on girls, gender, and sport. The research team has a combined 69 years of experience in body image and sport research.

We adopted a limited realism philosophical position, which combines a commitment to a realist ontology with a constructivist epistemology (King & Brooks, 2016). Data from the focus groups were pseudonymized, transcribed verbatim, and where necessary, translated into English by researchers fluent in both languages. The first author's interpretation of the focus group data was confirmed by the facilitators to ensure the original meaning was retained. Data were transferred to, and analysed in, NVivo version 12. Template analysis, an iterative form of thematic analysis, was used to analyse the data (King, 1998, 2012; King & Brooks, 2016). This approach was chosen due to its compatibility with large qualitative datasets, its utility in cross-cultural and diversity research, and the iterative and applied nature of the current study (Brooks et al., 2015; Mallon & Cassell, 1999; Wyatt & Silvester, 2015).

The data were analysed using both deductive and inductive methods of analysis. Specifically, three main research questions

Table 2

A Priori Themes from Previous Literature.

- Identifying the unspoken nature of body image (Sabiston et al., 2020)
 Observable actions (coaches able to observe and identify factors that may
 - represent body image concerns in female athletes)^a 1.2 Apprehension to discuss (coaches generally do not directly broach
- conversations related to body image)^a 2. Agents of body image in sport (Sabiston et al., 2020; Sherry et al., 2016; Vani et al. 2021)
 - 2.1 Interpersonal agents (communications from parents and other coaches that may impact girls' body image)^a
 - 2.2 Uniforms (size, fit, and rigidity of uniforms as a barrier to sport enjoyment and participation)^a
 - 2.3 The media (the ideal figure portrayed in the media as a source of body image concerns in sport)^a
- 3. Body functionality/skill over appearance (Alleva & Tylka, 2021; Sabiston et al. 2020)
- 4. Role models (importance of representation and diversity in sport) (Sabiston et al., 2020)^a

Note. Due to the limited literature on coaches' perceptions of girls' body image in sport, coach, athlete, and general sports literature was consulted in the development of a priori themes.

^aThemes retained; in some cases, wording was modified to better reflect participants' accounts.

guided the analysis, under which themes were categorised: (1) coaches' perspectives of body image among girls in sport; (2) coaches' preferences for intervention design; and (3) cross-cultural considerations. Themes were consequently developed using deductive (i.e., based on a priori themes) and inductive coding (i.e., being responsive to the available data). Prior to the first cycle of coding, the first author completed a preliminary reading of the data to familiarise herself with the content. Subsequently, an initial coding template was developed on the basis of a priori themes agreed upon by the research team and a subset of the data (i.e., two focus groups). This template was then applied to further data using deductive and inductive analytical approaches. A priori themes (see Table 2) were deductively applied from the body image and sport literature and were either removed or modified in light of new data. This process resulted in the final version of the template that encompassed all relevant data, on which the below results are based. Co-authors reviewed and provided feedback on the first, fourth, and eighth (final) iterations of the template.

In line with our philosophical position, we avoided the use of quantitative metrics of inter-rater reliability, as such measures have been contraindicated in qualitative research (King & Brooks, 2016; Smith & McGannon, 2018). Instead, the following quality check

Table 3	
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Final Template Mapping Research Questions to Themes.

Research Questions	First-Order Themes	Second-Order Themes	Third-Order Themes	Integrative Themes
1. Coaches' perspectives of	Objectification & Surveillance	The Body Ideal	The sport ideal ^a The (online) beauty ideal Conflict between performance & appearance values	Disengagement from Sport: (1) Fully (i.e., quitting
body image among girls in		Impact of Uniforms ^a	connict between performance & appearance values	(1) Fully (I.e., quitting sport altogether)
sport		Spatial Concerns & Safety	Availability of private changing rooms	(2) Partially (i.e., not
opore		opulai concerno a balety	Teasing & harassment from boys & men	wanting to do certain
	Impact of Puberty	Health & Hygiene	Body odour, acne, & hair	activities; not enjoying
	1	50	Concerns around periods	the experience)
		Hyper-Awareness of Girls'	Navigating their (changing) bodies	
		Bodies	Body checking, social comparison, & body talk	
	The Role of the	Barriers to Tackling Body	Ability to identify relevant body image concerns ^a	The Role of Community:
	Coach	Image Concerns	Apprehension to broach conversations related to body image ^a	(1) Relying on
			Difficulty in challenging messages girls receive from significant others ^a	community/other
		Opportunities for Tackling	Encouraging open, non-judging, informal communication with athletes	networks to support girls
		Body Image Concerns	Building relationship and trust with athletes	(2) Building a safe and
			Diversity and representation in sport ^a Support from other individuals and administration/organisations	inclusive community through sport
2. Coaches'	Content of the	Having the Correct Tools	Education/information on body image concerns and related topics	through sport
preferences for		having the context loois	Having the terminology to explain common body image issues	
intervention	('The What')		How to broach sensitive and complex topics related to body image	
design		Exchanging Experience &	Interactive	
8		Knowledge	Learning from other coaches and girls	
		Working with Important	How to broach conversations with parents/teachers/other coaches	
		Others	Knowledge of who/where to defer girls to for further support	
		The Role of Intersectionality		
	Accessibility of the Intervention ('The How')	Appropriate & Accessible	Containing a library of resources that are kept relevant and up to date	
		Platform	Easy to navigate & free from jargon	
			Accessible/affordable to coaches from smaller organisations or charities	
		Physical Environment that	Safe and accessible physical space where learnings can be implemented	
		Supports Intervention	Availability of appropriate and comfortable uniforms for girls	
			Organisational & administrative support Safe space for girls to provide feedback to coaches	
	Incentives for	Quality Mark for Coaches &	Sale space for girls to provide recuback to coaches	
	Taking Part	Organisations		
	('The Why')	Part of Coaches'	Integration with existing training for coaches	
		Accreditation	Ongoing training & possibility for renewal	
3. Cross-cultural	Acknowledging	Power Imbalances between		
considerations	ons Your Privilege	Coach and Athlete		
		Coaches' Unconscious		
		Biases		
	Cultural & Societal	Gender Norms &		
	Norms	Stereotypes		
		Sport Education		

Note. Themes were developed through analysing co-creation workshop data and survey responses from six countries (i.e., France, India, Japan, Mexico, the United Kingdom, and the United States).

^aA priori (deductive) themes (see Table 2).

procedures were employed: (1) keeping an audit trail as a record of the way the analysis developed and the decisions made at each stage; (2) reflexive comments of how the coder's position shaped coding choices and template development at each iteration of the template; (3) critical discussions with the wider research team on three occasions to refine and come to a consensus on the coded data segments (after the initial template, halfway through the analysis process, and upon completion of the final template); and (4) thick description and use of participant quotes in the write-up stage (King & Brooks, 2016).

Two additional considerations of the analysis should be noted as pertinent to the current study. First, the aim of the wider research project is to develop global interventions that upskill girls and coaches to address body image concerns in sport. As such, focus groups conducted in multiple countries were analysed together to create an overarching template that encompassed all data and was representative of coaches from all included countries. However, where relevant, we note if themes differed or were more prevalent among a particular group of coaches. Second, in developing the template, we considered both explicit codes (i.e., what coaches said) and implicit codes (i.e., what was unspoken, but picked up on during the focus groups and throughout the analysis process). While implicit codes underpinned our understanding and interpretation of the themes, explicit codes predominantly guided the analysis and are demonstrated with participant quotes to enhance transparency of our interpretations.

3. Results

Focus group data and qualitative survey responses were analysed for common themes, grouped under three main categories or research questions: (1) coaches' perspectives of body image among girls in sport; (2) coaches' preferences for intervention design; and (3) cross-cultural considerations. Template analysis resulted in eight first-order themes, each split into second and third-order themes. Additionally, two integrative themes were identified that spanned across the first-order themes. The full breakdown of themes is reported in Table 3. The key findings and associated quotes are described narratively below.

3.1. Coaches' perspectives of body image among girls in sport

With regards to coaches' perspectives of body image among girls in sport, three first-order themes were identified: (1) objectification and surveillance; (2) impact of puberty; and (3) the role of the coach.

3.1.1. Objectification and surveillance

For the most part, coaches were aware of body image concerns occurring in their sport settings and among their teams and identified that objectification and surveillance of girls had a large part to play in such concerns. Specifically, coaches identified three key domains where objectification and surveillance of girls occurred. First, all focus groups noted the prevalence of a specific body ideal within and outside of sport, as well as how these two ideals are not always congruent. Indeed, not meeting a specific body ideal within sport or experiencing a conflict between one's body within and outside of sport were often perceived as a barrier to girls' sport participation and enjoyment.

When I was working at kids' camps in America, certain kids wouldn't take part in certain activities; for example, water sports, that was a massive thing and they wouldn't want to take part because they don't look like a swimmer, they don't look like Becky Adlington, they don't look like the Olympians [...]. (Female coach, multisport, United Kingdom)

The players envy the girls with thin legs, but I think I can tell them, "You are aiming to represent Japan in rugby, so it's okay to be different from them". Rugby is a contact sport, so even if the girls are looking for beauty, such as seeking slimmer legs or a thinner stomach, I can't guide them in that direction [...] it's difficult, though, because players are concerned about their appearance even if they know it's for rugby. (Male coach, rugby, Japan)

Second, coaches highlighted the impact of uniforms as a big issue for girls in sport. Issues stem from uniforms that are generally "tight" or "revealing" but become exacerbated by the lack of appropriate size and style options, differences between women's and men's uniforms, and the overall lack of uniforms for girls in certain sports. This theme was particularly prevalent among the focus groups conducted in the United Kingdom and the United States.

The surf therapy environment plays a big role. Our athletes are surrounded by half-naked people on the beach and this unavoidable fact could be a trigger in itself. Also, our 'uniform' the 'wetsuit', on the one hand, it covers you from the top of your neck to your ankles, but wetsuits are also very form-fitting. There is no hiding your curves in a wetsuit. Again, this could be and has been an issue. (Male coach, surfing, United States)

Nine out of ten [times], we always use the male kit because there's not enough female based kit [...] especially when it comes to Muslim people, they don't really want to wear leggings and stuff like that because obviously it's very 'huggie' and very tight and they don't want to take part in gym, so we tend to kind of lean to getting the men's kit version than the female ones, because there's not really that much kit available for the female industry. (Female coach, multisport, United Kingdom)

Since I've been coaching basketball, a lot of the uniforms over the years start off being very baggy but then some have been getting much tighter. But the girls that I have been coaching, their concerns have been about showing too much skin because some of the uniforms have like a tighter cut around, you know, the shoulder area, or even the shorts might be a little bit shorter compared to maybe the men's being closer to the knee [...]. (Male coach, basketball, United States)

Coaches from India also highlighted uniforms as an issue of objectification and surveillance, but their perspective differed somewhat from that of the coaches in the United Kingdom and the United States. Instead, they discussed how shorts as part of the sport uniform often hindered girls from feeling comfortable doing sports, due to fear of judgement from family members and society.

So, when you are a player, you have to go wearing shorts and do the activities. So, I liked it very much. But in our background, family, and society, girls don't get confident about wearing shorts and then wearing shorts, she goes out, and people think "your daughter is wearing shorts and going out". Tackling this thing was very difficult. (Female coach, football, India)

Finally, coaches discussed how spatial concerns and safety relate to the objectification and surveillance of girls in sport. Specifically, coaches across all focus groups described the need for safe spaces, both in terms of private and accessible places to change before and after practice, as well as the need to tackle bullying and harassment from male peers.

For me, being in basketball [...] I'm a male and dealing with all these females, it was very challenging in the beginning due to the fact that at that particular time when I started coaching the young ladies, I was coaching boys, and you know boys, they tend to change anywhere [...] but dealing with the young ladies, they were very conscious about where they changed and who they changed in front of [...]. (Male coach, basketball, United States)

When I was coaching the practice with a mixture of boys and girls in junior high school, I encountered a scene where a girl was crying.

The cause of the girl's crying was bullying, and she was [criticised] about her body shape. (Male coach, rugby, Japan)

So, there have been times when boys have talked about girls' skin colour and that is like a non-negotiable for me, as soon as I hear that pop up like "uh-uh, we need to stop everything we're doing and sit down and talk about it". (Female coach, dance, United States)

3.1.2. Impact of puberty

Coaches also suggested that puberty had an impact on girls' body image and sport participation, particularly due to health and hygiene concerns (e.g., concerns around periods, body odour, acne, skin, and hair) and the hyper-awareness of girls' bodies, in part due to bodily changes that occur during this time. Notably, coaches across multiple focus groups, including India, the United Kingdom, and the United States, discussed girls' discomfort in talking about their periods and their selfconsciousness about bodily changes that occur during puberty. Coaches also identified puberty as a time where body checking, social comparisons, and body talk (comments and conversations that reinforce appearance ideals) were especially prominent.

Girls don't like talking about the changes happening with their bodies freely. They don't feel comfortable with the changes happening with their bodies and they try to hide the changes by wearing loose clothes [...]. (Female coach, netball, India)

[One girl], for example, who you have in group work, she just played basketball, and she's doing Ramadan while no one else in her home does it. On the phone, her mom told me that she does it for dieting reasons and comes to practice anyway to work out. Her mom thinks it's because she has a thinner older sister. She's doing this to lose weight and she's only 11 years old. And she's already thinking about dieting. (Female coach, multisport, France)

3.1.3. The role of the coach

Additionally, coaches across all focus groups identified themselves as having a responsibility to recognise and address body image concerns and highlighted multiple opportunities and barriers for doing so effectively. Barriers to tackling body image concerns included coaches' inability to identify relevant body image concerns that go beyond more obvious behaviours (such as excessive exercise or restrictive dieting), apprehension to broach conversations around body image for fear of making concerns worse, and difficulty in challenging messages girls receive from significant others (e.g., parents, peers) and the media.

Well, I think a very important point is to know how to identify each girl's problem, because how to recognise it, how to learn to identify them and once we have done it, how to handle it in the correct way so that it is the best for the child in this case. (Male coach, boxing, Mexico)

The second challenge comes from the parents. That their daughter has to be at home, and she has to do household work. But then boys [...] go home and tell their parents what they had learnt but they still [...] will not send their daughters. (Male coach, netball, India)

On the other hand, coaches also identified several opportunities for addressing body image concerns among their athletes and shared their advice for how to do this effectively and sensitively. Examples included encouraging open, non-judgemental, and informal communication with their athletes, building a good relationship and trust with their athletes, having diverse and representative female role models in their sport, and gaining support from other individuals, organisations, and administrators.

[The] coach should maintain the atmosphere at the ground very friendly, that every girl, every boy if you have any problem, you can come and tell the coach. And [...] from time to time take group meetings, give examples in the group of girls who have faced all this and moved ahead [...]. (Male coach, football, India)

Having a variety of body types present within our studio community, so that these young dancers can see older dancers who have body types other than what is commonly depicted as a 'dancer's body'. (Female coach, dance, United States)

3.2. Coaches' preferences for intervention design

With regards to coaches' preferences for intervention design, coaches identified three domains as important: (1) the content of the intervention ('The What'); (2) the accessibility of the intervention ('The How'); and (3) incentives for taking part ('The Why').

3.2.1. Content of the intervention

All coaches emphasised the need to have appropriate tools in the intervention, such as education and information around body image concerns in sport, having the correct terminology to explain common body image concerns, and recommendations for how to broach complex conversations around body image in a sensitive way.

Having more knowledge about the ways that teenage girls are experiencing body image concerns, and the signs of them. I think building stronger relationships will also help so that there is a stronger established trust between us. (Female coach, dance, United States)

Resources, information about terms such as 'body talk' so we can help the young people develop their critical thinking skills to identify these topics in their own lives. This will help them navigate it and reduce the impact they have on them. (Female coach, multisport, United Kingdom)

Additionally, coaches highlighted the importance of exchanging experiences and knowledge within community practice groups, and, in particular, learning how to work with important others (e.g., parents, teachers, other coaches) who have an influence on girls' body image within and outside of sport.

I think it is definitely giving the parents tools as well to be able to have conversations with their children, because it's all good and well that coaches have those conversations with the child [...] but definitely parents need to and not to be so afraid of having those conversations [...]. (Female coach, dance, United Kingdom)

Finally, coaches from several focus groups, including India, Mexico, the United Kingdom, and the United States discussed wanting to learn about issues that intersect with body image, such as race, sexuality, and religion. Many of these coaches also highlighted their discomfort in addressing such issues, particularly when they do not hold the same identities as their athletes.

Casteism also has an important role to play. Like right now I am working with 10 children, and I had seen that there is a Muslim girl who wants to wear shorts and in girls, they see themselves through others' eyes because they don't have confidence: "What [will] he say?", "He is looking at me?", or "If my coach is there and if I will wear shorts with what eyes he will see me?" [...]. They want to wear shorts but at their homes they are told that you cannot wear shorts, so they wear shorts on leggings. (Male coach, netball, India)

I mean like we still probably haven't had much formal education around that as coaches and I don't really see it in the sports world. Like in the sports world they're just starting to talk about disability inclusion. They're just starting to make racism in sport a priority to stop and it's still a big thing but trans/non-binary people, people from like the LGBTQ+ community, like there [tends] to be more education and how to deal with these, say like a women's session where you talk about periods and just in relation to the women. There are people who don't identify as women that have periods or can relate to these things, so I think a way that coaches can be guided to be sensitive to those young people and make them feel comfortable and supported as well. Because I'd say, myself, I'm not 100% confident on that, like I wouldn't want to be exclusive in my language or approach, but I probably don't know the best way to go about it right now. (Female coach, multisport, United Kingdom)

3.2.2. Accessibility of the intervention

In terms of accessibility of the intervention, several focus groups (i.e., Mexico, the United Kingdom, and the United States) emphasised the need for the intervention to be hosted on an appropriate and accessible platform that is easy to navigate, contains a library of resources for coaches who want to learn more, and is free or affordable, particularly for coaches from smaller organisations or volunteer coaches.

It needs to be relevant to current issues on social media that the young women are seeing. Therefore, it would be helpful to keep it updated so it continues to be relevant to young people or they will not find it helpful. (Female coach, multisport, United Kingdom)

At a global level, we also need to make it acceptable to those in a smaller charity versus all the way up to big organisations, like it has to be on a platform that isn't requiring high tech or subscriptions [...] and it's just so important and is at the heart of this kind of movement. We want everyone to know about this. (Female coach, dance, United Kingdom)

Notably, most focus groups (apart from Japan) also discussed the importance of having a physical environment that supports the intervention. This includes safe physical spaces for their athletes and appropriate tools, equipment, and uniforms, as well as support from organisations and administrators to implement the intervention.

How do coaches create a physically safe space that is welcoming to girls because, you know, you can have the perfect programme in theory but then if your physical space lets you down because girls don't want to go there or they feel unsafe [...] then it all falls through. (Female coach, dance, United Kingdom)

3.2.3. Incentives for taking part

Finally, incentives were brought up in the focus groups conducted in France, the United Kingdom, and the United States. Specifically, coaches mentioned that they would be more likely to take part in a body image intervention if it was integrated with existing training and CDPs and formed part of coaches' accreditation.

I feel like body image training for all high school coaches [...] should be mandated almost [...] there's like a national federation for high school in America that a lot of coaches have to go through [...] I feel like that should be on there, definitely. (Male coach, multisport, United States)

Similarly, coaches highlighted the importance of organisational buy-in to ensure the quality of, and continued engagement in, the intervention.

It would be really good if the programme was part of some sort of quality mark that kind of not just for the coaches but for the organisations that get involved as well. I know from experience that if you're [relying] on funding [being passed] and ticked all those boxes with policies and procedures and quality mark stuff it gives it a bit more weight and a bit more clout. (Female coach, dance, United Kingdom)

3.3. Cross-cultural considerations

Finally, with regards to cross-cultural considerations, two firstorder themes were identified: (1) acknowledging your privilege and (2) cultural and societal norms.

3.3.1. Acknowledging your privilege

Coaches across all focus groups acknowledged their privilege and showed some awareness of the power imbalances that are sometimes present between coaches and their athletes (e.g., White coach, athletes of colour; male coach, female athletes).

I think it is complicated [...] with my girls because it is difficult to generate that identification or that maybe because of the only fact of being a woman you could look up to me as a role model but we are very different, from the fact that I am White it already implies a shock that they see me and say "ah you are super different from me" and being thin because I almost do not have to do anything [...] then suddenly that generates rather the opposite effect as of "oh well yes, for you everything is easy" [...]. What I noticed was that this shock of "you are very different from me, I do not identify with you" and of finding a lot of resistance to practising soccer for the youngest girls especially. (Female coach, football, Mexico)

However, others showed implicit biases and gender stereotypes when discussing body image concerns in sport and in how they train their athletes. This was particularly prevalent among the focus groups conducted in Mexico and Japan.

There were more girls than boys and this is rare because regularly it's the boy who is used to the, let's call it 'violence', and the girls are not. As soon as a girl arrives with me, for example, what I do is first work individually with her, I do not put her to work in a group either with everyone or as a team with a partner but individually so that she can get to know the sport [...]. If I go to a girl and say "you know what? I need you to go to the bag and work with this person and do this combination that you already practised", well the girl doesn't do it because she does not have, well, let's say the competitive spirit and they say "how am I going to hit someone?", "as a girl, I can't hit anyone". Unlike the boys, the boys are, let's say, more daring and when I tell them "go to the sack" well, they go with all their might and burst against the sack, not with the girls, the girls they are like, they are calmer. So, awakening that competitive spirit in them is a little bit more difficult. (Male coach, boxing, Mexico)

I don't think the girl is really fat. She even looks slender in rugby, and there are fatter players. In rugby, there are some positions that being fat is positive, and some others are not. So, if anything, I think that bullying will occur regardless of sports. It's not different from the bullying that happens in school, so I think it has nothing to do with 'sports' and/or 'athletes'. (Male coach, rugby, Japan)

3.3.2. Cultural and societal norms

Coaches also spoke about different gender norms and stereotypes that exist in their countries and present a barrier to girls' participation, enjoyment, and safety in sport settings and when going to and from practice. These themes were particularly prevalent in the focus groups conducted in India, Japan, France, and Mexico. Coaches from France and Mexico, in particular, spoke about how gender roles and norms affect girls in sport, and the potentially problematic differences in how girls and boys are coached.

I think it has a lot to do with how we are culturally educated on gender issues, like that girls always the parents take care of us more and they're more like "oh don't do this" or "don't get so and so" or "don't go so and so" and with the boys it's always "yes, do what you want" even more, "you have to do it" that is, they even encourage them [...] and homophobia also comes out, that is, using words of sexual orientation as insults [...] and homophobia, misogyny, and all that mixed machismo comes to light. (Female coach, football, Mexico)

The way in which mixed sport is conducted, saying that a girl who scores a basket/a goal is worth double, at the same time it stimulates mixed collaboration, but at the same time, it reinforces an inequality in the value of the girl/boy performance [...]. (Female coach, multisport, France)

Notably, coaches from France and Japan acknowledged that the differences in how coaches are educated around the world contributes to how they train and interact with their athletes. In the below example, coaches in Japan viewed sport as unavoidably "unhealthy" for the body and for athletes' overall well-being and argued that athletes who want to compete at a high level and represent their country need to be aware of, and accept, the risks associated with the sport.

When I entered the Physical Education Department of [University], the first thing I was told was that "sports are unhealthy for the body". Now, I can agree with that comment. I think it's important to make the content of education based on the assumption that coaches will influence ideas like well-being, which go much further than body image and performance, and that this will become the norm. I think it is important for coaches to be aware that they are choosing to challenge themselves in sports in exchange for well-being and to educate their athletes to understand that they are doing so with an understanding of the risks. (Male coach, rugby, Japan)

3.4. Integrative themes

Two integrative themes were identified, spanning across the first-order themes: (1) disengagement from sport and (2) the role of community.

3.4.1. Disengagement from sport

Coaches across all focus groups explicitly and implicitly emphasised that body image concerns often lead to girls disengaging from sport, either fully (i.e., quitting sport altogether) or partially (i.e., not wanting to do certain activities, not enjoying the sport experience).

I've had people tell me like "this is the first time I haven't worn make-up out of the house" and I think they're very conscious about you know having foundation and whatnot to hide, you know, acne or you know just make-up in general because they get so used to it and society and social media and what looks really good, so I think that's also one thing. I've also had others come up and say "oh, I just washed my hair, so I don't want to get [it wet]", so that's actually come up a couple of times. (Female coach, surfing, United States)

One example I have is when we were at camp, [...] if one kid gets made fun of for one part of their body, that's the end of it—they won't participate in any activities for the rest of the trip, sports and group activities. They'll close themselves off. (Female coach, multisport, France)

3.4.2. The role of community

When discussing ways to address body image concerns in sport, coaches discussed the role of the community as an important mechanism. Notably, the notion of community presented itself in two distinct ways. First, coaches mentioned the importance of *relying on* community and other support networks (e.g., parents, administrators) to improve girls' experiences in sport.

So, a coach should have this information available with him/her all the time. They should be well connected with social media. There is no harm in talking with other teams, a coach can connect and talk with the coaches of other NGOs and they can take support from him [...] we have to support each other [...] and we can see in our history itself that there are a lot of women whose names we can take and motivate [our athletes]. (Female coach, netball, India)

Secondly, coaches discussed how sport is an avenue for *creating* a community, by building safe and inclusive sport environments that consider athletes' experiences and well-being beyond sport and performance.

Although there isn't necessarily a one size fits all solution to tackle all the issues for those who struggle with body image issues. These same individuals are coping with their problems, whether they are on a basketball court or a beach or isolated alone in their bedrooms, so there are elements to the [intervention] that could have a broader reach. Ideally, our efforts to combat body image issues, as coaches 'on the field' would positively impact our athletes 'off the field'. (Male coach, surfing, United States)

And I think the number-one answer to all of this, I mean there's the techniques we can use and knowing how to handle the situations and meeting them where they're at and all of that, the number-one answer is a safe community [...] so we spend a lot of time before we go into the water just creating a safe community. (Female coach, surfing, United States)

3.5. Quantitative data from follow-up surveys

Coaches' preferences for intervention format and content, as well as completion time are presented in Table 4. The majority of coaches indicated their preference for the intervention completion time to be 1–3 h and 'Time to completion' was one of the highest rated format features in terms of perceived importance. Further, coaches rated 'Interactive content' and 'Availability of quizzes/assessments to assess knowledge and provide feedback' as important format features. With regard to potential intervention content, coaches rated 'Information/recommendations on how to recognise signs of body image concerns', 'Guidance on how to speak with parents about children's concerns', and 'Guidance on how to speak with others (e.g., teachers) about athletes' concerns' as the most important intervention features.

4. Discussion

The aim of the current study was to explore coaches' perspectives of body image among girls in sport and gain their insights and preferences for a novel intervention that will upskill coaches in improving athletes' body image and creating body positive sport environments. Findings from focus groups and surveys with coaches generally aligned with previous research identifying a problem of body image in sport and a need to address this in a formal and accessible CDP (Sabiston et al., 2020). Template analysis of survey and focus group data resulted in eight first-order themes grouped under three categories: (1) perspectives of body image among girls in sport (objectification and surveillance, impact of puberty, the role of the coach); (2) preferences for intervention design (content of the intervention, accessibility of the intervention, incentives for taking part): and (3) cross-cultural considerations (acknowledging your privilege, cultural and societal norms). The analysis further demonstrated the interconnected nature of the identified themes, and two integrative themes were defined that are present throughout the discussion: (1) girls' disengagement from sport and (2) the role of community.

Table 4

Coaches' Intervention Preferences for Length of Intervention and Intervention Format and Content.

Intervention Features	Coaches' Responses
Preferences for Completion Time	Frequency (%)
Less than 1 h	6 (20.7)
1–3 h	15 (51.7)
4–7 h	5 (17.2)
8–10 h	1 (3.4)
More than 10 h	2 (6.9)
Importance of Intervention Format	M (SD)
Time to completion (i.e., how long it takes for you to complete the training)	4.42 (0.79)
Ease of access (i.e., available on multiple devices)	4.18 (1.07)
Ease of access (i.e., available offline)	4.25 (1.05)
Availability of quizzes/assessments to assess knowledge and provide feedback	4.42 (0.83)
Interactive content	4.48 (0.71)
Importance of Intervention Content	M (SD)
Real-life scenarios of athlete interactions (e.g., in video format)	4.12 (0.93)
Real-life scenarios of coach-athlete interactions (e.g., in video format)	4.33 (0.85)
Information on what body image is and how it relates to sports	4.59 (0.62)
Information on how to talk to athletes about their body shape and weight concerns	4.63 (0.71)
Information/recommendations on how to recognise signs of body image concerns	4.69 (0.82)
Quizzes/assessments to assess knowledge and provide feedback	4.16 (1.05)
Exercises for how to tackle negative body image practices in sport	4.44 (0.84)
Personal reflection exercises	4.44 (0.84)
Written exercises on engaging in positive body image language	4.09 (1.03)
Resources on appropriate/not appropriate communication and behaviour	4.41 (0.95)
Video/audio accounts from the perspectives of athletes	4.25 (0.92)
Guidance on how to speak with parents about children's concerns	4.66 (0.70)
Guidance on how to speak with others (e.g., teachers) about athletes' concerns	4.66 (0.70)
Helpline/chat to answer body image related questions	4.03 (1.06)

Note. N = 29–33. Importance of intervention format and content were scored on a 1–5 Likert scale, with 1 = Not Important At All and 5 = Very Important.

4.1. Coaches' perspectives of girls' body image

Overall, coaches were to some extent aware that body image concerns occur in sport settings and identified common causes of body image concerns, including issues surrounding athletes' uniforms. These findings support and extend previous literature that shows that coaches perceive the uniform size, fit, and rigidity as a key influence of athlete confidence and body image concerns (Sabiston et al., 2020). Coaches in the present study further described the differences between women's and men's uniforms and the overall lack of uniforms tailored for female athletes across various sports. These findings mirror evidence from research with female athletes showing that uniforms can contribute to girls feeling uncomfortable, objectified, and self-conscious about their bodies during sport (Steinfeldt et al., 2011; Koulanova et al., 2021). Such concerns are even more pronounced in athletes who have religious, cultural, or other considerations and preferences for uniform requirements (Erickson, 2017). Although coaches may not always have control over the types of uniforms available to their athletes, several coaches described strategies they used to mitigate these issues, such as ordering additional sizes and styles of uniforms, ensuring that various options were available to their athletes where possible (e.g., long trousers instead of leggings or shorts), and allowing their athletes to choose the clothes they felt most comfortable in for practice and competition.

Furthermore, coaches highlighted the athlete body ideal as a cause of girls' body image concerns. Previous studies have found that coaches perceive that the focus on appearance and the pervasive societal ideal of what athletes should look like presents a key barrier to girls' participation in sport (Koulanova et al., 2021). The current research expands on this further, in particular through coaches' awareness of the conflict between appearance ideals within sport (which are largely based on performance requirements) and appearance ideals outside of sport. Previous research has found that young female athletes often have to balance the 'performing body' (i.e., the culture within sport emphasising physical performance) and the 'objectified body' (i.e., the culture outside of sport

emphasising physical appearance; Lunde & Gattario, 2017). This may be further exacerbated by unrealistic, sexualised, and objectifying portrayals of female athletes in the media (Dafferner et al., 2019; Daniels and LaVoi, 2013; van Ingen & Kovacs, 2012) and the changing body ideals as athletes progress in their careers and ultimately retire from sport (Galli et al., 2022).

Despite some awareness of the causes and consequences of negative body image in sport, coaches felt apprehensive to discuss body image concerns and difficulty in identifying more unique concerns, related to intersecting factors such as religion, sexuality, and gender identity. Moreover, in line with previous literature, coaches identified the difficulty in challenging external influences of negative body image, such as messages girls receive from parents, peers, and the media (Sabiston et al., 2020). For example, coaches in India reported that parents often pose a barrier to girls' sport participation and discourage girls from wearing their sport uniforms in public. Coaches in India, Mexico, and France also highlighted differences in whether and what sports girls and boys were encouraged to participate in, and how girls were trained compared to boys. Although research beyond the Western context is still limited, similar findings have been reported in research conducted from the perspective of athletes. For example, women in Qatar reported that the level of acceptance of sport activities from family members, especially parents and close male relatives, was one of the primary reasons accounting for sports participation, or lack thereof (Harkness, 2012). Therefore, body image interventions for coaches should include guidance for coaches on how to interact with other members of the wider community to improve girls' experiences and wellbeing in sport.

4.2. Coaches' intervention preferences and implications for intervention development

Importantly, confirming findings from previous research, coaches identified an urgent need to develop an accessible, accredited, and effective body image training programme for coaches (Koulanova et al., 2021; Sabiston et al., 2020; Voelker et al., 2022) and made

multiple suggestions for the preferred content, mode, and delivery method of such an intervention. Specifically, coaches believed that the intervention should incorporate guidance on how to identify, prevent, and address athletes' body image concerns; provide coaches with the opportunity to apply knowledge to their own coaching practice; be hosted on an appropriate, accessible, and up to date platform; and be integrated with ongoing coach development opportunities. Further, coaches preferred to be able to complete the intervention within 1–3 h in their own time.

These findings align with, and extend on, previous research conducted with coaches that has demonstrated coaches' preferences for multisession interventions comprising targeted exercises and activities and additional handouts and resources to supplement the training; standardised asynchronous e-learning; education and guidance around working with parents and important others; and for the training to be a mandatory part of coaches' education, after which coaches can receive a certificate of completion (Koulanova et al., 2021; Sabiston et al., 2020; Sick et al., 2022).

4.3. Strengths, limitations, and future directions

There are multiple strengths to the current study. First, we conducted focus groups in six diverse countries across three continents, overcoming limitations of previous studies on body image in sport that have been conducted primarily in Western and Englishspeaking countries (Sabiston et al., 2019). Relatedly, we included coaches with a wide range of experience in a variety of sport and movement settings. Second, we provided coaches with definitions of body image, appearance, and functionality before the focus groups were conducted, allowing them to become more familiar with the terms, thus enabling richer discussions and insights. This also allowed for a discussion of both positive and negative body image during the focus groups (Koulanova et al., 2021). By including coaches from diverse sports and cultural backgrounds, as well as providing materials in advance of the focus groups, we were also able to tap into a wide range of constructs that are associated with girls' body image in sport, such as sociocultural considerations, gender norms, and body image concerns that go beyond weight and shape. Third, focus groups were translated and facilitated by researchers fluent in English and the primary language of the respective country, as well as expertise in body image and/or sport. This allowed us to capture explicit and implicit nuances in what coaches said during the focus groups.

However, several limitations should also be acknowledged. First, although diversity and cross-cultural considerations were prioritised in the current study and the overall intervention development process, certain athletes and sports were not represented (e.g., athletes with disabilities, transgender athletes) and focus groups were limited to six countries. Second, the core research team consisted of researchers who identify as women, which may have implications for how comfortable male coaches were to share their experiences, as well as for the interpretation of the identified themes. Third, although we provided information and definitions of the key terms to coaches in advance of the focus groups, we did not assess their understanding of body image prior to, or during, the focus groups. There are commonly reported issues in translating the construct of body image, related to conceptual equivalence, respondent comprehension, and contextualised meaning (Swami & Barron, 2019; Swami et al., 2021). Indeed, while body image is arguably a universal construct, its expression, understanding, and relevance is likely impacted by culture and language (Swami & Barron, 2019). Therefore, although we collaborated with local researchers and experts in translating the focus group materials, the term body image proved challenging to translate in countries where less research has been conducted and where there may be a lower awareness of body image and its relevance to sport (e.g., Japan). Thus, more research is

required in non-Western and non-English-speaking countries, to ensure coaches' and athletes' perceptions related to body image are accurately captured in consideration of historical, cultural, and linguistic nuances.

In the next phase of this project, data from the current study and the existing literature will be combined to develop a novel intervention for coaches, aimed at upskilling coaches in identifying and addressing body image concerns among girls in sport. Taking into account considerations from focus group discussions and survey responses, the intervention will comprise online modules that coaches can complete at their own pace and will include bite-sized interactive content and exercises, with opportunity for feedback and reflection. The content will aim to upskill coaches in recognising and tackling negative body image among their athletes, promoting positive body image, and normalising discussions about body image with athletes and important others. This intervention will fill a gap in the existing literature and the need to target coaches in interventions as key agents of athletes' body image (Voelker et al., 2022). Following development, the intervention will be pilot tested with coaches before a large-scale randomised controlled trial is commenced.

5. Conclusions

The findings of the current study add to the limited literature on body image in sport from the perspective of coaches and demonstrate a need for the development of new body image prevention and intervention programmes targeting coaches as key influences of athletes' body image. Specifically, data from semi-structured focus groups and online surveys with 34 coaches across six countries show that although coaches view body image as an important issue in sport that warrants targeted education, little support currently exists for coaches to positively influence their athletes' body image. Therefore, new CDPs are required to educate coaches on body image in sport and offer support, recommendations, and tools for how to address negative body image and promote positive body image among their athletes. The current intervention will thus fill an important gap in the existing research and service provision of body image training in sport settings. Following intervention development and refinement, future research will be required to rigorously and systematically evaluate the intervention to ensure it is suitable for a diverse range of coaches, athletes, and sport settings around the globe.

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CRediT authorship contribution statement

Jekaterina Schneider: Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing – original draft, Supervision (Lead), Project Administration. Emily L. Matheson: Conceptualization, Methodology, Investigation, Writing – review & editing, Supervision, Project Administration, Funding Acquisition. Aline Tinoco: Conceptualization, Methodology, Investigation, Writing – review & editing. Hannah Silva-Breen: Investigation, Writing – review & editing. Phillippa C. Diedrichs: Conceptualisation, Writing – review & editing, Supervision, Project administration, Funding acquisition. **Nicole M. LaVoi:** Conceptualisation, Writing – review & editing, Supervision, Project administration, Funding acquisition.

Data Availability

Data will be made available on request.

Declaration of Competing Interest

This research was externally funded by commercial funders (Dove Self-Esteem Project, Unilever; Nike). PCD is an independent consultant for Dove (Unilever). PCD and ELM are independent consultants for the Social & Community Impact, Nike. PCD was on the Dove Self-Esteem Project Global Advisory Board from 2013 to 2016. The authors declare no other conflicts of interest in relation to this work.

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