



Original research

“It's always the bare minimum” - A qualitative study of players' experiences of tackle coaching in women's rugby union

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ABSTRACT

Objectives: Tackle coaching forms a cornerstone of training in rugby and is designed to enhance performance and mitigate tackle injury. The athlete voice can help key stakeholders understand the psychosocial determinants that shape skill development in relation to tackle coaching. We aimed to capture player experiences of tackle coaching in women's rugby union.

Design: Qualitative study using the grounded theory approach.

Methods: Current women rugby union players, with at least 1-year senior level experience, were recruited from Europe, Africa and North America between December 2021 and March 2022 to participate in the study. Data were collected through semi-structured interviews and analysed in line with grounded theory coding procedures.

Results: The 21 players were aged 20–48 years with a mean 10.6 years of rugby playing experience. Analysis revealed that the experiences of tackle coaching that shaped women's tackle skill development and sense of preparedness ranged from constraining to empowering, and gender was a pivotal influence in creating meaning. Participants expected and accepted the bare minimum in tackle coaching as the price that they had to pay for inclusion in rugby.

Conclusions: Participants' experiences of tackle coaching were entangled in inequitable club structures and cultures where men's rugby is the norm. Empowering tackle coaching in women's rugby union must be bespoke to the given context and the needs of women players. The recommendations offered in this paper encourage discussion as to how best to empower women's tackle development in rugby.

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Practical implications

- Ineffective or a lack of tackle coaching was a dominant experience in this cohort of competitive women rugby players.
- Targeted coach education and institutional support may improve the standard of tackle coaching in women's rugby union.
- Tackle coaching in women's rugby should be tailored to the performance context and specific needs of women rugby players.

1. Introduction

Women's rugby union (henceforth called rugby) has undergone rapid growth in recognition and opportunities, and it is now considered one of the fastest growing sports worldwide.¹ The ability to engage in

the tackle in rugby is a highly demanding sports skill and effective technique is essential for safe participation² and team success.³ Teaching correct tackle technique forms a cornerstone of training in women's rugby, intended to enhance performance and mitigate injury.^{3,4}

Tackle-related injuries account for up to 67% of all match injuries in women's rugby.² Evidence-based coaching frameworks designed for safe and effective tackle learning have been developed,⁴ and tackle guidelines are offered such as the World Rugby Tackle Ready programme.⁵ However, no studies have focused on tackle coaching in women's rugby⁶ and hence, coaching frameworks and guidelines are likely underpinned to date by research in men's rugby.⁶ Without an understanding of how women develop and perform the skill of tackling, existing frameworks may not be entirely conducive to or even appropriate for women rugby players.⁷

Research indicates that skill acquisition is a complex and contextualised process, and that focus should be on the individual athlete and the broader performance context in which they play.^{8,9} As such, the ecological dynamics approach to skill development advocates for performance landscapes to be viewed and coached in a manner that integrates

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the individual, the environment and the task demands.⁸ We cannot assume that men and women are situated in similar or equivalent rugby training contexts.¹⁰ Women's rugby development pathways are still in their infancy^{11,12} and some players may only start playing during adulthood. Gender is a salient feature of women's participation in rugby and has consequences for skill development in female sport.¹² Given the extent of tackle-related injury problems in rugby and the fact that women remain underrepresented in rugby research,⁶ conducting qualitative research to understand the experiences of women rugby players expands the tackle injury mitigation debate and helps ensure that tackle safety and performance strategies are more socio-culturally relevant and representative of the playing population.¹³ Hence, we conducted a qualitative study to investigate player experiences of tackle coaching in women's rugby.

2. Methods

Ethical approval was gained from a local University research ethics committee. The study is reported according to the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines.¹⁴ (Supplementary Table 1). We used grounded theory method and procedures for this study. Grounded theory is a qualitative research approach which builds conceptualised frameworks and theory from data.¹⁵ It is well suited to investigating poorly understood phenomena and is focused on capturing contextual factors and social processes that explain phenomena¹⁵ (in this case, the phenomena of tackle coaching in women's rugby as experienced by women players). A constructivist grounded theory approach¹⁶ was taken because we aimed to capture participants' experiences and perceptions as they were constructed in the study. A key premise of constructivist grounded theory is that the researcher is fully implicated in the construction of the data with the research participants. Our analytical approach comprised induction and abduction to generate concepts, categories and a conceptual framework from the data.¹⁶ The research was also guided by the tenets of the ecological dynamics framework because this framework excels in capturing the complexity of structures and processes among athletes and teams within and across systems.⁸ A coach and player stakeholder reviewed the research proposal and findings to ensure relevance and benefit of the study for 'real-world' practice in women's rugby.

Twenty-one women rugby players participated in the study between December 2021 and March 2022. Participants were recruited via rugby social media networks. Participants were eligible to participate in the study if they were: > 18 years old; currently playing rugby for at least one year at a senior level in women's rugby; and able to converse in English. First, we conveniently sampled participants through self-selection ($n = 11$). We then reviewed the sample at this point for equality, diversity, and inclusion (EDI) and proceeded to purposively sample participants from clubs in global south settings ($n = 2$) to ensure that we captured diversity and inclusion in the sample.¹⁷ In line with grounded theory method, sampling then proceeded from purposive to theoretical sampling¹⁶ ($n = 8$) on the basis of emerging findings that players felt both empowered and constrained by tackle coaching. After interviewing 21 participants, we reached saturation of the data whereby no new constructs had emerged in the data and key categories were saturated for meaning.^{15,16}

The experiences of 21 women rugby players from Europe ($n = 16$), Africa ($n = 2$) and North America ($n = 3$) are represented. Participant age ranged between 20 and 48 years. Playing experience varied from club to international level with a mean 10.6 years of playing experience (range: 1–20 years). Players from diverse backgrounds and sporting systems were recruited. For two participants, commencing rugby in adulthood was their first exposure to organised sport. The remaining participants engaged in a variety of sports and to varying degrees of competition. Participants' introduction to rugby varied between five and 32 years, but most participants ($n = 16$) commenced playing rugby in adulthood. Twelve participants had competed at senior international level. Prior to interviews, participants provided written informed

consent and completed a demographic questionnaire about their age, playing position, the highest level of competition achieved, previous sport exposure, and years playing rugby (Supplementary Table 2).

A semi-structured qualitative interview was conducted with each participant. The interview guide was developed to cover multiple dimensions of participants' experiences of tackle coaching (Supplementary Table 3). Questions were also informed by a recently published scoping review on the physical and technical demands including preparatory strategies in female field collision sports.⁶ Two pilot interviews were first conducted by KD to explore the suitability of the interview guide which was then revised by three authors (KD, FW, and GF) to allow for flexibility in the interview and for further interrogation of key findings in the data.¹⁶ The interview guide comprised a set of eight open-ended questions covering participants' experiences of tackle coaching. KD and FW conducted all interviews with participants via the video conferencing platform Zoom.¹⁸ Interviews ranged between 35 and 67 min in duration. None of the participants had known the interviewer prior to interview. Interviewers (KD and FW) probed participants to elaborate on the specifics (i.e., tackle learning experiences, environment, practice designs) provided in their responses. Interviews were audio-recorded and transcribed verbatim. Field notes and case-based memo reflections were made and combined following interviews to help contextualise the interview for analysis. Each participant reviewed their transcribed interview to ensure that it was a credible account of their own experiences. Minor adjustments were made to the wording in one transcript following participant review.

As per grounded theory method, we collected and analysed data in tandem, and compared data with data (also known as constant comparison) to generate concepts for further questioning and sampling.¹⁶ GF is proficient in grounded theory analysis, and KD was guided in the analysis by both FW and GF. KD analysed the data using initial, focused, and theoretical coding¹⁶ using the NVivo V1.6 software.¹⁹ First, data were broken down into units of meaning ('codes') and then expanded to form concepts and categories (larger concepts) by coding for both similarities and differences (i.e., variation). During focused coding, key concepts and categories were interrogated further to understand their characteristics and variation and to build tentative connections between them. Conceptual-based memos aided in identifying relationships i) between concepts and ii) between concepts and categories. Key processes emerged in the data from identifying relationships between concepts and categories and from deciphering key contexts (e.g., gender) which underpinned the data. During the final stage of analysis (i.e., theoretical coding), central processes in the data (in this case, feeling empowered and constrained by tackle coaching) were fully expanded and refined.

We used different strategies and procedures to ensure that the data was reflective of how the interviews were constructed. To promote dependability and credibility of the data, we compiled field notes, conceptual memos, conceptual diagrams, and summary tables, to track emerging concepts and identify gaps in the data.¹⁶ We also met regularly as a research team to examine our own assumptions of the data and how the interviewer impacted on the data.¹⁶ In addition, peer debriefing with other player and coach stakeholders were used to account for our interpretation of the data.

3. Results

We outline here a conceptual framework which explains the experience of tackle coaching for participants (Fig. 1). We report key categories from our data – 'constraining' and 'empowering', and the concepts of 'tackle coaching attitudes' and 'tackle coaching practices' which comprise these categories. We also elucidate the impact both 'constraining' and 'empowering' tackle coaching can have on player safety and performance. The first subsection of the results summarises the particular context in which participants' experiences are situated.

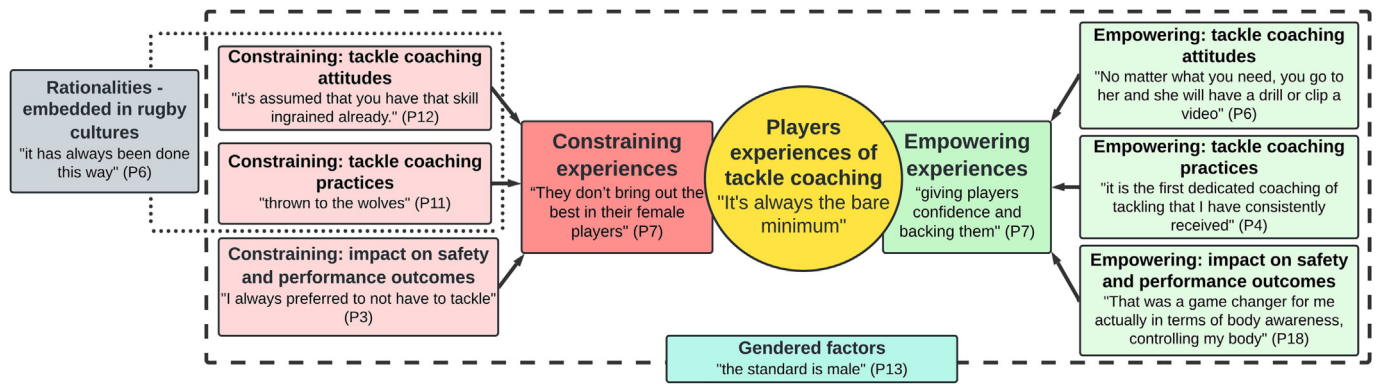


Fig. 1. Conceptual diagram of participants' experiences of tackle coaching in women's rugby union. Based on interviews, empowering and constraining experiences of tackle coaching (categories) comprised of tackle coaching attitudes, practices, and outcomes (concepts) and were underpinned by rationalities embedded in rugby cultures and gender-related factors.

3.1. Background and context to participants' coaching environment

Women's rugby is structured by age and level of performance. Opportunities for girls to participate in youth rugby (U8–12) and club or secondary schools' rugby (U16–18) are growing. However, in our study, the majority of participants' first introduction to rugby was at a senior level through university or clubs. Women can be selected for provincial competitions and for international competitions representing their country. Recently, women have attained professional rugby contracts through clubs, unions, and universities. Despite progress in women's rugby, participants described a playing context of "being at the mercy of the men in the club" (P13) and inequality in terms of "a seat at the table" (P9), access to facilities, quality coaching and support staff, stating "we should just be happy for what we've got" (P4) (Q1). They also experienced social repercussions (stereotypes, homophobia and stigma) for their participation in a "men's game" (P7) (Q2).

Heterogeneity in coaching quality, previous sport exposures, and participatory pathways were reported across the sample. For some players, commencing rugby in adulthood was their first exposure to an organised sport. Participants reported playing on teams with players of mixed abilities and different motivations to play (e.g., increased social connectedness, ambition to progress). Six participants described being "fast tracked" (P18) (≤ 1 year participation) to compete internationally and two participants' first ever exposure to rugby was at the international level.

Participants viewed tackling as a "complex" skill that required emotional, physical, and technical preparedness which can only be acquired through training and experience. Some participants felt that they benefited from skills transferred from other sports including soccer and Gaelic football. All participants agreed that the tackle was practised proportionately less than other skills and they "didn't really get a chance to learn how to tackle until your first match" (P4). Participants believed in a chronological window for effective tackle skill acquisition, and many of them felt that a later engagement in rugby restricted their development. Tackling was described by participants as a "skill that no-one actually masters" (P20), and that "no two tackles are the same" (P5). As such, participants' bodily knowledge of tackling was a "constantly evolving" (P5) process where executing "the perfect tackle" (P19) was a rare occurrence (Q3).

Participants articulated how tackle coaching had empowered but, to a greater extent, also constrained their skill development. Here, we outline the findings pertaining to *constraining* and *empowering* from our study. Feeling constrained was underpinned by concerns with coaching attitudes and practices which participants felt that they had to conform to but were not conducive to tackle skill development. Conversely, empowering coaches granted participants autonomy to explore tackling potential and imparted preparedness to meet demands of match play. In many cases, participants had experience of both constraining

and empowering tackle coaching. These categories (i.e., *constraining* and *empowering*), including concepts that comprise the categories, are visually depicted (Fig. 1) and are explained in the remaining results sections with supporting quotes presented in the category sections of Table 1. Additional perspectives from participants are documented in Supplementary Tables 4 and 5.

3.2. Category 1. "They don't bring out the best in their female players" - feeling constrained by tackle coaching

3.2.1. Constraining: tackle coaching attitudes

Participants felt conflicted by gendered messages that encouraged harmful behaviours such as "sometimes you have to use your head" (P14) and "hitting to hurt" (P13) the opposition. Participants embraced narratives used by coaches that tackle injuries were "part of the game" (P5) and that rugby involved "destroying your body and trying to hold on for dear life until the end of season" (P17). Overall, participants problematised but also accepted gendered messages that exacerbated injury fears and undermined their self-efficacy (Q4).

Exacerbating an apparent culture of misinterpretation and misconception, participants reported that in their experience, coaches often used word prompts such as "shoulders on" (P5) and "split the laces" (P2) to aid tackle technique, assuming (sometimes erroneously) that such prompts were understood by players. A perceived lack of monitoring and awareness by coaching staff of players' physical and psychosocial demands was challenging for participants. These manifested from unrealistic expectations of coaches who prioritised winning at the expense of their emotional readiness and player development (Q5). Participants reported that match tackle preparation was often "neglected" (P1) and left to experiential learning with limited integration of technical, tactical, and psychological preparedness. Participants described tackle training as "a reactive process" where "It wasn't instructive or intuitive to develop these skills to improve, it was more 'oh we had a bad tackling game last week'" (P4). Participants complied with but did not endorse harmful coaching assumptions "that you have that skill ingrained already" (P18) and requested "more contact training to get better at tackling" (P1) (Q6). Overall, although participants felt conflicted by coaching attitudes that undermined their preparedness to tackle safely, they continued to accept the gendered discourses used by their coaches (Q7).

3.2.2. Constraining: tackle coaching practices

Despite concerns of "second rate coaches" (P7) and maladaptive learning environments, participants expected and accepted the current coaching situation stating, "it's always the bare minimum as opposed to having huge aspirations for the women's team" (P7). Participants reported "playing catch-up" (P15) and relied on resources such as "YouTube videos" (P19) and "teammates" (P14) for knowledge on

Table 1
Supporting quotes.

Q1	"Women's rugby was seen as a bit of a joke by men and some women in society. It used to be not valued in the same way as men's rugby is valued, and therefore not supported...the high performance coaches wouldn't consider taking a role with a women's team over a lower league men's team...I think people expect that what the men get, women get as well...at [provincial] training we didn't have the gym or S&C support and people would've been like 'really, I would've thought that was a given that if you were on the [provincial] squad you would expect the same stadium and gym as the men's provincial squad.'" (P14)
Q2	"People judge how you look as opposed to acknowledging that you play a sport for your country. Again, they kind of say, 'oh well how many lesbians are on the team?' yeah, all those stereotypical comments...I think of when I first told my mum that I wanted to go and play rugby, straight away she hated it, she was worried about me getting injured, couldn't watch me play...in the majority of sports unfortunately that it's [women's rugby] not as good quality or to the same standard as the males. The standard is male and there is just a completely different standard of female. You are judged always in comparison to your male counterparts as opposed to, as a female, a female sport." (P13)
Q3	"one or two occasions where you get it right and it goes really well for you 'oh that's what it's meant to feel like' an unthinking, it just sort of happens...it doesn't hurt...almost comfy." (P9)
Supporting quotes for categories	
Category 1: "They don't bring out the best in their female players" - Feeling constrained by tackle coaching	
Q4	"When coaches are teaching tackle tech to boys it's... 'okay hit the thing' and there's no soft language and with girls it's ... 'oh you won't get hurt' so even framing it in that way you... picture yourself getting hurt...using that soft language because it's a woman or girl 'that's a very physical game'...you'll have girls thinking of this 'brutish physical game' and they will question their ability as opposed to the guys where that is never brought up and it's not given a second thought" (P7)
Q5	"There is a lot of expectation on me, they're '[nickname] you are massive, like hit people'...I was really scared. There is an assumption that... you are ready to smash people, whereas you are scared, you don't want to pop your shoulder out...That is a key thing that you don't talk about with your coach obviously" (P18)
Q6	"There are a lot of technical elements that we still don't know...I don't think you can avoid, even at the top level...still teaching those really fundamental basics" (P13)
Q7	"Whenever I'm being coached in the tackle area I'm always being told 'you're not going in hard enough' 'you'll not bring your opponent down if you go in that gently'. I'd say that gender is probably a part to play in that rugby is a physical sport and people still view rugby as a male sport so there is an element of women needing more coaching in the tackle area for women. At the same time, you don't want to hurt anybody." (P8)
Q8	"I realised I've been in training for two weeks with the [X International] team...So I'd never been tackled or ever made a tackle...I stood there for my first game...you know what we'll see what happens." (P21)
Q9	"I think there should be a curriculum for people to show that they can [safely tackle] before you're signed off to play a full-contact game of rugby. They have the thing about the front row and showing that you're front row trained to play...you should have something similar to that" (P12)
Q10	"Everything is padwork, 'run at this player with a pad'...that is nothing like a real tackle...so as soon as somebody side steps you that is where I was having my issues of being on the wrong side or controlling my head...The falling stuff is really important...It just isn't covered enough because we focus on the approach in close, get low, shoulder, leg drive." (P18)
Q11	"I would teach any human to tackle any human exactly the same way. They will have hips and they all have knees, so they are the target points...the template [approach to tackle coaching] fits well for women." (P9)
Q12	"I think it's just the case of like 'what works for men will work for women'. I don't think anyone's questioned it...I don't think anything about the game should be changed, but should we change how we approach it [the tackle]?...If there's a better way or an alternative way I would love to use that because the way we do it right now, you can see it click with some athletes and then others are just like 'I don't know what to do.'" (P11)
Q13	"A tackle is a tackle whether it's two women or two men or a man and a woman tackling each other. It is the same thing, same safety principles...we are on a path of making it a product worth selling and worth watching but it's still a far way out. I feel like there is definitely not that support from the public and it's not received the same as the men's game yet but hopefully we will get there. Hopefully, I think, when the quality of rugby picks up and when they see that we can do similar things as the men can do on the field, I think that will definitely make it better." (P21)
Q14	"I will never really enjoy tackling...I worked on it constantly, and...with the shoulder injury, which really affected me physically and mentally, I always preferred to not have to tackle" (P3)
Q15	"It's the main core skill...so as often as you do passing you should be doing tackle specific skills...I feel like I am not as skilled in that area...in training you don't always do full contact training, it's 'bump'...I don't think bump is adequate but you can't do live contact all the time either because our bodies aren't made for it" (P5)
Q16	"I reckon on any pitch there are half of the players s****g* themselves about who is running at them...Did we get taught the tackle? Nothing more than, tackle below the hip...I would often go in on the wrong side. I remember academy coaches saying '[nickname] you keep getting knocked out because of your tackle technique'. But there was never any 1 on 1 'this is your tackle technique'" (P18)
Category 2: "Giving players confidence and backing them" - Feeling empowered by tackle coaching	
Q17	"You need to have that relationship with coaches where you can come to them with things you'd like to focus on...I suppose we're quite lucky in that the coaches have been good for facilitating that." (P2)
Q18	"If you teach people the basics and the 'why?' behind it early and then let them make mistakes in a safe way, they can pick up those technical things...and you're giving players confidence and backing them." (P7)
Q19	"There have been points in our season where our coach is... 'we've had too many minutes played'...we are tired and hurting...We were never overtrained, that is the communication part. We would be open...on how we were feeling physically and mentally, and he would adjust" (P16)
Q20	"It wasn't until I started working with [x coach] when we did stuff on falling, general body awareness and more real-life scenarios. A lot of players running at you in a real-life situation, smashing them onto a crash mat were the best drills for confidence and head positioning. Then taking that into small-sided contact games" (P18)
Q21	"You can tackle anyone [men or women] with a good tackle. Obviously, there is a difference in strength, but a tackle won't hurt if you know the right way to do it...there are actually less injuries when we train against the boys because they know how to tackle properly...you will never win that upper body fight with the men because they are...stronger...so you automatically just go into eliminating the legs, that is a fight you know you can win every time." (P21)
Q22	"How you teach it definitely needs to be different...from talking to coaches: 'well women want to know why you're doing this. How is it going to benefit the broader game?'...from what I have heard about coaching lads...You say, 'jump!' They say 'how high?'" (P13)
Q23	"We went live once a week, so we would play an actual game against each other for 10 minutes once a week, that's it...Doing that and having that real-life game experience really helped us" (P16)

how to tackle. Participants recalled matches in which they felt ill-prepared, akin to being “thrown in at the deep end” (P7) (Q8). Participants voiced concerns about coaches' competence and experience with some having to “unlearn some of their poor habits” (P11) and suggested implementing “minimum tackling proficiency standards” (P11), similar to existing scrummaging safety guidelines that require players to be suitably trained to play (Q9).

Participants felt that training which centred only on executing the “perfect tackle technique” (P19) was not conducive to adapting to defensive scenarios in the context of their individual capacities. Overemphasis on repetitive “controlled contact tackle pad drills” (P2) that did not faithfully represent match conditions was regarded as “a tick box exercise” (P10). Participants felt that constraining coaching practices included inconsistent tackle programming which often lacked sufficient intensity and intent, and overlooked components of tackle safety (i.e., falling) (Q10).

Whilst many participants expected and desired that coaches made no distinction for how they coached men or women to tackle (Q11), they still reported concerns that traditional coaching methods were not conducive to optimal skill development or preparedness in women's rugby (Q12). Some participants questioned the merit of a “one-size fits all” (P12) approach to coaching the tackle to women but rationalised these traditional coaching behaviours because “it's the same game” (P11) and “it's always been done this way” (P6). In this context, opposition to constraining experiences of tackle coaching remained muted because participants were more concerned with “making it a product worth selling” (P21) and being socially accepted in the sport of rugby (Q13). Overall, tackle coaching practices that participants felt constrained by were entangled in gendered and inequitable club structures where “the standard is male” (P13) and participants felt “judged always in comparison” (P13) to these norms.

3.2.3. Constraining: impact on safety and performance outcomes

Although several participants played on very successful teams, they described the physical and emotional consequences of constraining coaching practices which exacerbated players' “fears of reinjury” (P18) and created a “dread going into training” (P7) (Q14). Participants acknowledged that coaches were conflicted between “live tackling” (P5) in training and risk of injuring players. However, this conflict was counterproductive to their skill development and “contact readiness” (P15) (Q15). Participants perceived that negligent oversight from coaches at all levels of competition denied them the ability to tackle to their full potential and feel safe on the pitch (Q16). Although participants problematised feeling constrained by tackle coaching, they accepted the maladaptive learning environments created by coaches. This was shaped by an entanglement of rationalities (e.g., traditional coaching customs) and gendered contexts (both physical and social) in women's rugby.

3.3. Category 2. “Giving players confidence and backing them” - feeling empowered by tackle coaching

3.3.1. Empowering: tackle coaching attitudes

Participants praised coaches who seemed knowledgeable and/or experienced in coaching the tackle. The first team was “really formative” (P1) in acquiring “good habits” (P19) and progressive structured tackle coaching was perceived by participants to “create a safe atmosphere” (P4). Empowering experiences were characterised by consistent and “memorable” (P17) instruction that acknowledged the ability and needs of each player. Coaches who afforded “extra” time (P21) and promoted player input to aid their tackle skill development were valued (Q17).

Gender discourses emerged in relation to coaches' investment in helping women to “understand the why” (P13) behind tackle training objectives and avoid “overthinking it” (P15). This contrasted with participants' observations of men's learning preferences. Supportive

coaching attitudes were seen as vital given that tackling was cited as a “counterintuitive” (P21) skill, particularly for women who started playing rugby “later in life” (P5) (Q18). Coaches that placed a higher value on player wellbeing over performance were perceived to foster greater levels of motivation and positive developmental experiences among participants (Q19).

3.3.2. Empowering: tackle coaching practices

Avoiding “over-coaching” (P7), using video analysis, and adopting adjuncts such as tackle mats and collaborating with external expertise (e.g., mixed martial arts) were key aspects of empowering practices (Q20). Ability-level appropriate training, goal-setting and individualised coaching, were perceived by participants as important to tackle skill development and decision-making. In some contexts (e.g., elite playing levels), players of both genders trained and tackled together. As explained by a participant, the nature of women tackling men subconsciously reinforced safer tackling behaviours and boosted their self-confidence (Q21).

Beyond the physical and technical aspects of tackling, all participants discussed the need for coaches to be sensitive to players' “injury fears” (P18) and fluctuations in confidence. This emotional investment and the questioning communication style of participants were marked by them and by their coaches as different to that of their male counterparts. In response to players' request, coaching instruction and practices which focused on the provision of logical justifications for specific training rules and tasks, helped participants “buy-in more and perform the skill better” (P4) (Q22). Overall, participants felt empowered by consistent, individualised and safe tackle coaching practices that accounted for the development needs of players.

3.3.3. Empowering: impact on safety and performance outcomes

Empowering experiences of coaching positively influenced participants' development and confidence to perform. Drill-based tackling tasks were rationalised as necessary to acquire sufficient repetitions and embed technical competence for players to “end up doing it without even thinking about it” (P20). Participants benefited from safe training environments that allowed players to explore the “how, why, where, and when” of tackling (P5), and to experiment and even make mistakes. Despite “reluctance” (P4) from coaches to use match-specific tackle practice, participants acknowledged that regular exposure to short and intense bursts of live tackling in training established a higher level of contact preparedness (Q23). Overall, participants felt empowered by positive coaching attitudes and safe training practices which resulted in greater confidence in their tackling ability and level of preparedness to tackle effectively in games.

4. Discussion

This study explored player experiences of tackle coaching in women's rugby. Participants described a dualism of constraining/empowering experiences of coaching that shaped their skill development and sense of preparedness for tackling. The normalisation of men within constraining tackle coaching practices was pervasive, and participants perceived that they were judged in relation to these norms. Participants felt constructed as interlopers in the sport who had issues regulating emotions, displaying aggression, tackling effectively, and doing what the coach tells them to do without question. In some cases, participants played matches before ever making or taking a tackle and felt obliged to exhibit playing characteristics that were associated with male rugby players. Participants expected but also accepted “the bare minimum” standards of tackle coaching as the price that they had to pay for inclusion.

Our study is the first to explore player perceptions of tackle coaching in rugby. Given the high risk of injuries from tackling,^{2,3} it provides a timely contribution to growing research exploring effective and safe tackle-training approaches. The ecological dynamics framework⁹ provided a lens to understand the performance context in women's rugby

and identify opportunities and challenges for tackle skill acquisition. We found that tackle skill learning occurred in a social context in which coaches facilitated the tackling competence of women of mixed experiences, age, and abilities. Even at the elite level, many participants' first exposure to rugby was in early adulthood and some had been fast-tracked to international representation. This may contrast with the playing context in men's rugby.^{20,21} If players learn the fundamentals of tackling at a later age and in a shorter amount of time, rethinking tackle skill learning in women's rugby is needed.

Bandura defined self-efficacy as "beliefs in one's capabilities to organise and execute the course of action required to produce given attainments".²² Tackling skill is complex and generated considerable stress and fears of failure and injury. Both physical and social barriers influenced participants' self-efficacy and embodied experiences of tackle coaching. Coupled with inconsistent contact programming and unrealistic expectations from coaches, participants' emotions were exacerbated by harmful coaching decisions resulting in women playing a competitive rugby match when unprepared. Trial and error is a recognised learning strategy, but participants felt that it did not increase their tackling self-efficacy. World Rugby's scrummaging safety laws require all front-row players and replacements to be suitably trained to partake in play.²³ Participants suggested the same premise should be applied for tackling training. Insufficient contact preparation in training, meant players relied less on their coaches and took ownership of their own tackle skill development. It is questionable whether such experiences of tackle coaching can help women rugby players to achieve their full potential and safe participation.

Our findings are supported by research in men's rugby²⁴ where participants only spent a small percentage of their weekly training on tackling. Considering the frequency of tackle events in matches,⁶ and in light of participants in our study feeling under-prepared, a stronger focus on tackle coaching strategies in women's rugby is needed. Men's rugby research has identified that coaches may understand the importance of tackle training to enhance safety performance but may not be fully aware of how best to coach it.²⁵ From the perspective of participants in our study, the most common approaches to tackling coaching and practice included the implementation of decontextualised and deconstructed tasks based around the reproduction of putative gold-standard movement templates. Players perceived little consideration to be given to training periodisation, tactics, player mental skills and adaptability despite evidence of their importance.⁴ Consistent with findings in junior rugby,²⁶ participants in our study felt that coaches preferred using tackle pads rather than live tackling to safeguard players from injury. Whilst the use of the padded equipment may lower the risk of injury in training, tackling a pad does not mimic match tackle conditions and may limit the emergence of functional tackling actions and desired performance outcomes.^{8,9} In response to participants' calls for practice designs which better reflect match tackle demands, coaches could consider using the performance-learning paradox^{4,27} to progress from structured prescriptive tasks to 'wayfinding'.⁸ Participants in our study were more likely to engage with tackle training when they understood the value of the drill for application to match demands. Coaches' training behaviours are related to how confident and equipped they believe themselves to be in delivering training.²⁸ As such, interventions to 'boost' coaches tackle coaching competencies²⁸ are needed to optimise more effective and safer tackle preparation in practice.

Our study expands on current coaching research by exposing factors such as gender that significantly impact women players' experiences in rugby.¹² Although at the beginning of each interview, participants professed that tackle coaching was the same regardless of gender, we noted that as their interview progressed, they drew increasingly on biased gender practices and discourses. For example, participants confessed that opportunities, resources, and coaching expertise were predominantly directed towards men's teams. Participants adopted dominant cultural discourses with comparative comments that described

characteristics as desirable in men and lacking in women. Participants' discourse about gender in rugby coaching resonates with muted group theory²⁹ where dominant groups establish the rules and systems of accepted discourse, leaving nondominant groups marginalised without equal representation. As such, through the ideological norms in rugby that privileges toughness and masculinity,^{12,21} women players may feel as though they cannot challenge constraining tackle coaching practices. In our study, participants reported that they were encouraged to display more aggression and hit to hurt their opposition and that missed tackles were likely a product of female deficiency. 'Gender-responsive' education could allow coaches to review their coaching practices, and to move away from embedding norms associated with men's rugby into women's rugby.³⁰

In our study, some participants engaged in match-like training against male players. Sporting cultures shape and frame the behaviours of the people (i.e., coaches and players) who inhabit them.²¹ In rugby, culturally learned dispositions shape the ways of doing, seeing, and feeling that is considered 'normal'.²¹ According to participants, 'normal' rugby training customs borrowed from men's rugby were not always conducive to their tackle skill development or preparedness. Despite feeling under-prepared and fearful of injury or failure, women accepted and conformed to these practices, muting their own interpretation of their development needs.²⁹ There is a risk that prevailing rationalities and gendered discourses in rugby could hamper the necessary reconfiguration of structures and coaching practices that are fit for purpose in women's rugby.³⁰ Whilst this study does not seek to perpetuate the 'special casing' of women, we do argue that tackle skill frameworks should be co-created with coaches and players to better align with the contexts specific to women's rugby. In conjunction with the increased demand of playing against men, participants supported the adoption of mixed training environments for fostering inclusiveness in rugby spaces and empowering the acquisition of safer and more successful tackling technical actions. Coupled with the tackle skill framework,⁴ the 'empowering' findings have major implications for coaches when designing tackle training in women's rugby.

Our findings show that participants' perceptions of tackle coaching were consistent across different countries. However, variation in narratives may have reflected differences in the cultures and maturity of female sports systems across countries.¹⁷ European participants more readily identified various forms of gender disparities in the structures of women's rugby, whereas African participants were often reluctant to discuss gender-related factors. In contrast, North American participants praised the interuniversity sporting systems, reporting very few social and physical barriers to empowering experiences of tackle coaching. Grounded in women rugby players' accounts, and from an ecological dynamics perspective,⁹ we recommend tackle coaching attitudes and practices that consider the training needs of the individual (e.g., age, learning preferences, and technical proficiency), the complexity of tackle skill,⁸ and the performance context of women's rugby (e.g., professionalism, access to facilities and expertise). For this to occur, coaches need to be educated on best practice for women players' preparatory needs and organisations need to address the implicit gender bias that exists in rugby.

We focused on the perspective of women rugby players and so the findings might not be wholly applicable to other sports. Coaches' own perceptions of tackle coaching should be examined and compared with players' experiences. Exploration of similarities and differences between men's and women's experiences as coaches in rugby could help decipher further how gender impacts directly on tackle coaching. Our study did not include any record of frequency, intensity and duration of tackle-training activities among participants which could have helped further contextualise the findings. Future research should consider using innovative methodologies (e.g., longitudinal observation of training coupled with qualitative interviews) to record and evaluate the efficacy of the approaches recommended by players in this study (e.g., minimum tackle technical proficiency standards).

5. Conclusion

Participants' experiences of tackle coaching were entangled in inequitable club structures and cultures where men's rugby was the norm. Overall, we contend that we should not simply apply men's tackle coaching approaches to women's rugby as effective coaching should be sensitive to and fit within the context of women players' training needs. We anticipate that our study findings will serve much needed discussion within the rugby community on how best to empower women rugby players in tackle coaching.

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Confirmation of ethical compliance

Faculty of Health Sciences Research Ethics Committee, Trinity College Dublin. Application No: 20210906.

CRedit authorship contribution statement

KD, FW, and GF designed the study. KD and FW collected the data. KD conducted the analysis and both FW and GF contributed to the analysis. KD wrote the manuscript assisted by both FW and GF. GF contributed substantially to the writing of the methods section and worked with KD to frame the structure of the results section. SH commented on the design and/or interpretation of the data and made critical contributions to the manuscript. All authors approved the final draft.

Declaration of interest statement

None.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jsams.2023.01.002>.

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