

EMBRACING WOMEN'S FOOTBALL GROWTH AT YOUR CLUB

KIT, BOOTS, AND FACILITY CONSIDERATIONS

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Women's football is growing rapidly at both elite and amateur level globally¹. Clubs are increasingly introducing women's and girls' teams for the first time in their history. Others are experiencing a shift into more match congestion, larger fanbases, and increased media attention. An important message is to not simply copy men's football but to consider the key essential sex-specific requirements when growing or introducing women's football teams in a club. The article focuses on three main areas – the kit, the boots, and the facilities.

Football technology such as kits (clothing) and boots (footwear) have historically been designed with a 'default' focus on men. Women football players have used the same kits, boots, etc. with little to no consideration or adaptation for body shape or other needs². Fit and discomfort issues are common as mentioned recently by female footballers in the media, who

demand adjustments for their specific needs³⁻⁵. Furthermore, in many cases professional Women's teams are rarely offered access to the men's state-of-the-art facilities. Instead, they are located with the academy boys or at their own facilities. Of course, basic needs are required here – e.g., pitches, changing rooms, dining room, meeting rooms, etc. While some clubs have a strong women's football history others have recently made big advancements/changes and adapted their setup to provide access for women's football. Hence in brief, our aim is to share observations and lessons learned on considerations to take when introducing/improving the conditions for women's teams in clubs.

MANY SIMILARITIES

Football is football. Women play on the same sized pitches with the same balls and shoot at similar sized goals as men.

It can, therefore, seem easy to implement women's teams in clubs as the pitches and most essential equipment can be shared between sexes. This is different from many other sports where the game is adjusted between sexes such as in basketball (ball size), handball (ball size) or volleyball (net height).

ESSENTIAL AREAS TO CONSIDER

Fit the kit and avoid the light-coloured shorts

An essential element for any football team – elite or amateur – is football kit. Larger sports brands introduced their first women's fit for the 2019 FIFA World Cup and, hence, we do today have women's fitted kits which should be considered for any women's or girls' team. However, some specific aspect of the kit should be considered in addition to the fit. A key consideration, which players have been outspoken about is the colour of the players' shorts³. The women's team at



Image: Playing football in rainy conditions. Illustration.

the club commonly play in the same colour scheme as their male counterparts. Players have, however, expressed dissatisfaction with this in the media. Their concern stems from the concern of the visibility of bleeding through light-coloured shorts during menstruation. This debate is not unique to football and has been discussed in other sports such as tennis and rugby as well⁶⁷. Consequently, several teams (e.g., Manchester City and the England women's national team) have announced changes so that female players no longer need to wear light-coloured shorts. This is an easy modification to apply in both amateur and elite clubs. And remember that the average age for girls to start having a menstrual cycle with bleeding is 12.8 years, though in rare cases the onset is as early as 8 years of age⁸. Therefore, please consider a darker shorts colour for both women and girls' teams when next negotiating with sponsors or purchase of playing and training kits.

Let the balls do the bouncing and keep the sports bra well fitted

Another unique kit-related garment only used by women's teams is the sports bra. One should know that majority of sports bra research and testing is performed with women running on treadmills⁹. The breast movement performed on a treadmill is different to multi-directional movements performed on a football pitch². Therefore, wearing the same sports bra for running and football may offer variations in discomfort or even pain for the football player and it is known that breast discomfort negatively impacts performance¹⁰. Furthermore, at the elite level, players are required to wear a limited selection of branded sports bras matching the kit sponsors. The sports bra sponsorship has positive effects if players struggle to financially supply themselves with sports bras but offering a single design or limited range sports bras players can negatively impact the fit, support

and comfort of the bra. It is, therefore, recommended that clubs offer to financially cover the cost of sports bras and that players are educated or offered a range of sports bras to try whilst performing football-specific movements (jumping, sprinting, changing direction, etc.). If bra fit is not managed well, it is common for players to wear two bras, suffer in the predefined 'sponsor' bra, or risk fines for not wearing the sponsored brand during match play – all cases that can be avoided when managed well.

Football is multicultural and the kit should be too

Football is global and multicultural. Players, hence, represent different cultural and religious backgrounds. If a woman wishes to, she can play with a sports hijab. Having kit-matching hijabs available for players in amateur, academy or even elite clubs shows openness and inclusivity. Whether this is done through kit sponsorship deals or an additional offer is up to the clubs themselves. The study behind the legalisation of hijabs is interesting. Hijabs were only incorporated into FIFA's laws in 2014^{11,12}. Before this, several incidences had taken place, including one in 2011 where the Iranian national team was forced forfeit a qualifying match for the 2012 Olympics. The ban was reasoned as a concern of increased risk of head and neck injuries, despite the fact that there had never been a reported injury from the use of the hijab¹¹. As a result, the sports technology companies Capsters and Resport proved the safety of wearing sports hijabs during football using scientific evidence. This is a strong example highlighting the importance of using and collaborating with sports technology to ensure that football is for everyone.

These boots weren't made for women

Football boots designed specifically for women even among larger brands have been near non-existent¹³. Women have a different foot shape than men¹⁴ and whilst a football boot's fit is tight around the foot to allow for optimal agility, it is essential that fit is optimal to reduce risk of blisters and more serious injuries such as Achilles tendon problems and overload or stress fracture in the forefoot bones^{13,14}. In addition, the number, shape, length, and location of studs under the boot are essential for a player to be able to move optimally on the pitch i.e., neither sliding on the ground nor



Most of these considerations are not costly if done right but they can make a big impact on breaking down barriers to football participation and offering the players a feeling of being seen, heard, and valued.



getting stuck. Hence, outsoles are designed to match a surface type (i.e., soft, firm, or artificial grass). However, these guidelines are based on shoe-surface traction requirements of males and not adapted to women's body weight, muscle mass, or movements strategies, and increased risk of cruciate ligament injuries^{13,15,16}. A common mechanism of ACL injuries in elite women's football has been identified to be non-contact with an external foot position planted on the ground (identified using systematic video analysis¹⁷). This mechanism is associated with increased shoe-surface traction (the boot getting stuck in the surface) which is thought to contribute to increased risk of ACL injury.

Until further football boot research is done for women our advice is try find the boots that best match your unique foot shape. They should feel comfortable interact with the pitch doing football movements. The so-called goldilocks principal. Shoe-surface interaction should not feel like too much traction (increased chance of foot fixation), too little traction (increased chance of slipping), it should feel just right!

Therefore, players should preferably have two to three pairs of boots with different outsole types (artificial grass AG, firm ground FG, and soft ground SG), which they can choose from on the day. Climate plays a part in this decision. Hot dry conditions generally mean a high traction playing surface so a high traction boot such as soft ground metal screw-in studs or aggressive bladed cleats should not be used. Women's boots will be launched by the big manufacturers for the 2023 World Cup.

Pitch quality equality

During the FIFA 2019 WWC, international level players (n = 196) ranked poor pitch quality and artificial turf as the 2nd and 3rd most important risk factors, respectively, for sustaining an injury, after low muscle strength¹⁸. Clearly players are concerned about surface type and/or conditions. Concerns shared by the authors and others¹⁹⁻²². The Women's Super League is often played in stadia shared with men's teams from lower leagues who play on Saturday, leading to an eroded and worn-out playing surface for the women's match played on the following day. Since the quality of the pitch is essential for the quality of the game as well as the players' risk of injury, it is worrying that the women often do not play on optimally curated pitches.

Funding to improve pitch quality is needed for integration of technologies such as hybrid pitch reinforcement and sub-soil vacuum systems that are commonplace in elite men's football²³. A focus on preparation and maintenance of good quality natural grass pitches that have not been worn out by men's games the previous day (common in e.g., Women's Super League) or being allocated better quality neutral pitches (e.g., qualifying rounds for UEFA Champions League games) is paramount.

Who needs the toilet?

Women and girls commonly wish to have toilet facilities in proximity when playing or training football^{24,25}. It is known that female athletes are 2.77 times more likely to present with complaints of urinary incontinence when compared with sedentary females²⁶.

Women also, especially if heavy bleeders, often wish to change sanitary product during long training passes or at half-time during match play^{24,25}. Therefore, it is essential for clubs to consider the location and duration of training passes. Women may not verbalise these concerns directly to coaches or other club staff as menstruation and urinary incontinence are often still considered a taboo in society^{24,25,27}.

Time for a shower

Following on from the conversations women may not verbalise to the club staff. Showing after football is essential and it should not be needed to emphasise that women and girls need access to changing and shower facilities at their training centre and match play locations. A factor, which, on the other hand, may be worth mentioning is some cultures and individuals find group showers a barrier to sports participation when on their period²⁸. It is, therefore, essential to understand how this barrier can be broken down by options such as individual showers or access to shower facilities on an individual basis when needed.

Access to sanitary products

Another essential consideration is to ensure that sanitary products and toilet bins for disposing are always available for players (and female staff) – either in the toilet facilities or, if playing away, carried by medical or other staff. Access to sanitary products might seem like triviality, however, not having appropriate sanitary products available when needed can be detrimental to the players ability to focus on pitch when

playing. The access to sanitary product also varies globally. An example of this can be taken from the COSAFA Women's Championship 2020, where 36% of national team players used alternative sanitary products such as old rags during their periods²⁷.

Gym access helps facilitate better football

Research suggest that multicomponent, exercise-based programmes reduce overall and ACL injuries by 27% and 45%, respectively^{29,30}. Some of these exercise programme components can be done on the pitch with limited or no equipment needed (e.g., FIFA 11+²⁷), however, the effectiveness of gym equipment to facilitate strength and plyometric interventions for performance improvement and injury prevention should not be neglected. Therefore, most men's clubs have access to state-of-the-art gym facilities. There is no physiological reasoning for why only men's teams should use gym facilities as part of their training. So, when growing the game of women's football, equal access to gym facilities should be a key consideration.

HOW DO I KNOW IF WE ARE DOING IT RIGHT?

To know whether you are doing things right, you need to ask the stakeholders – i.e., the players and their club staff. The list of considerations in this paper was developed based on conversations had with players, coaches, performance staff and medical staff in multiple countries with varying access to financial and organisational support within their clubs. Most of these considerations are not costly if done right but they can make a big impact on breaking down barriers to football participation and offering the players a feeling of being seen, heard, and valued.

Note: It is appreciated by the authors that multiple stakeholders are responsible for inclusion of women's specific consideration in football. The authors have previously addressed the responsibility of the sports equipment and technology research and manufacturing industry².

References

Available at www.aspetar.com/journal

Key takeaway messages



Have women's fitted kits available for all women's and girls' teams.



Avoid light coloured shorts in your training and match kits to avoid the risk of visible leakage for both women's and girls' teams.



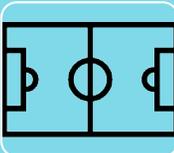
Support players in having access to the right sports bra for them (financially, accessibility).



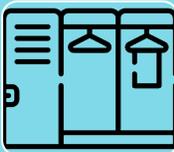
Offer hijabs and long-sleeved kit options for inclusivity



Womens foot shape specific + traction requirement specific



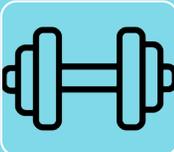
Optimal pitch maintenance. Less use of artificial surfaces?



Consider the location and duration of training passes to allow for toilet breaks. Ensure appropriate facilities are available for match play – incl. access to toilets at half-time. Consider separate shower facilities



Have sanitary products available for players to use



Access to gym facilities is beneficial for injury prevention and performance enhancement

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