

COMPETITIVE ENGINEERING IN JUNIOR AUSTRALIAN FOOTBALL: PERCEPTIONS AND EXPERIENCES OF PARENTS, CHILDREN AND COACHES OF 9-A-SIDE FOOTBALL IN AN UNDER-8 COMPETITION

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ABSTRACT

Junior Australian Football leagues typically adopt rules and positional arrangements that mimic the adult version of Australian Football. This involves fielding 18 players per team on a full-sized oval. While such competition structures are appropriate for adult competition and elite athletes, modifications to field dimensions and number of players may be more appropriate for junior participants. A trial season of competitively engineered Australian Football was piloted by adopting the Australian Football League's (AFL) 9-a-side concept in an Under-8 competition for the first time. The 9-a-side trial occurred on Friday nights alongside the established Under 8's 18-a-side competition conducted on Sunday mornings. Participants in this study experienced both competition formats. A qualitative evaluation of the perceptions and experiences of parents, players and coaches of competitive engineering in junior Australian Football was done. The results indicate that the AFL 9-a-side concept provided an enhanced game experience emerging from (a) a high level of game engagement, (b) the game as an educative context, and (c) an appropriate developmental step before the introduction of players to 18-a-side Australian Football.

Key words: Children; Australian Football; Competition engineering; Sport participation.

INTRODUCTION

While the Metropolitan Football League (MFL) were enthusiastic about better aligning the junior competition with Australian Football League (AFL) guidelines, the modification of rules and positional arrangements may also be a critical step in promoting continuation in Australian Football. Recent evidence suggests that the participatory nature of most youth Australian Football competitions do little to engage participants, leading to disengagement and subsequent withdrawal (Agnew *et al.*, 2016). However, little is known about the consequences of competition engineering in this regard, because few youth Australian Football competitions have adopted the AFL match day guidelines. As such, there was a need to evaluate the participatory experience from the perspective of the players, parents and coaches.

Keeping children in sport

A central reason for the MFL enthusiasm towards the competition engineering from 18-a-side to 9-a-side was the belief that it would provide an improved participatory experience for players and enhance player retention (Agnew *et al.*, 2016). A recent review of children's sport dropout identified five main reasons why children withdraw from sport, including (1) a lack of enjoyment, (2) low perceptions of competence, (3) social pressures, (4) competing priorities and (5) physical factors, such as injuries and maturation (Crane & Temple, 2014). This extends previous research, which suggested that children and youth dropout from sport due to a lack of enjoyment and fun (Butcher *et al.*, 2002). However, the reasons why children stay involved in sport appear to be attributed to reversed notions. For instance, Light *et al.* (2011) examined why children join and stay involved in sport clubs and concluded that social interactions contributed to a highly fun and enjoyable experience, which encouraged continuation tendencies. Therefore, notions of enjoyment and fun cannot be overlooked given that they remain central factors for not only young children, but also young adults who remain involved in organised sport (Jakobsson *et al.*, 2014).

While notions of fun and enjoyment are clearly critical factors that influence dropout or continued involvement in sport, there is also a concern about the lack of coherence in terms of what constitutes enjoyment and fun that complicate understanding the implications of this factor for sport retention (Crane & Temple, 2014). Visek *et al.* (2014) address the matter of conceptual coherence concerning fun and enjoyment by proposing four fundamental constructs of fun in children's sport: *contextual* (practise and games), *internal* (learning and improving, trying hard, mental bonuses), *social* (team friendships, team rituals and being a good sport), and *external* (positive coaching, game time support and swag) imperatives. Visek *et al.* (2014) found that while all four constructs are important concepts relating to the notion of fun, the *contextual* construct emerged as the strongest determinant.

The *contextual* construct include aspects, such as the freedom to play creatively, play in tournaments, receive well-organised training sessions and playing time, and playing against evenly matched teams (Visek *et al.*, 2014). This reiterates previous assertions that children are able to experience high levels of enjoyment from being allowed to 'play' sport (MacPhail & Kirk, 2006), and reinforces the importance of engineering an engaging participatory experience for children. Therefore, although the social, internal and external constructs of fun and enjoyment are important, it is suggested that equal (and arguably more) attention should be given to the contextual construct, which reinforce fun and enjoyment from sport. This has direct implications for the nature of competition design, game rules and modifications to the playing experience to enhance the amount of fun children extract from participation.

Many sport competitions do not necessarily engineer playing conditions that meet the needs of child participants but rather conform to more traditional and 'adult' versions of sport. Concerns were expressed nearly 40 years ago, particularly as children's sport became increasingly 'professionalised' because of coaching practices that focused on competitive success in preference to notions of fun and enjoyment (Brower, 1979). Siegenthaler and Leticia Gonzalez (1997), also suggests that the professionalization of children's sport resulted from coaches who have trouble in making the distinction between children's need for patience, acceptance and sensitivity and their own need to emulate a professional coach.

More recently, studies also indicate that coaching practices continue to perpetuate a competitive discourse, suppressing a version of sport that is constructed for fun (Shields *et al.*, 2007; LaVoi & Stellino, 2008; Walters *et al.*, 2012).

Although coaches clearly play a central role in children's sport experiences, there is also growing advocacy for exploring the possibilities of modifying the contextual imperatives, which govern the way sport is played. This has been previously described as 'competitive engineering', which involves the modification of equipment, playing space and game rules to enhance children's game involvement, enjoyment and intrinsic motivation (Burton *et al.*, 2011a; Burton *et al.*, 2011b).

For instance, the study by Burton *et al.* (2011b) found that modifying game rules and equipment in flag football, scoring opportunities increased by 100% and attrition rates fell by 50%. As such, competitive engineering has real potential for encouraging sport participation, which can lead to enhanced intrinsic motivation and long-term sport involvement (Burton *et al.*, 2011a; Burton *et al.*, 2011b). The Australian sport "playing for life" philosophy foregrounds a form of competitive engineering for fun, enjoyment and an enhanced educative experience through its "change it" formula for games and sport modification (Schembri, 2005).

Participation pathways in junior Australian Football

Despite the potential advantages associated with competitive engineering in children's sport, with respect to junior Australian Football further modifications are possible as competition structures frequently do not align to the AFL match day guide, nor to the 'playing for life' philosophy. Typical pathways into junior Australian Football include early involvement in introductory programs such as Auskick. Auskick is a national programme for children aged 5 to 8 years that emphasises fun and safety, the improvement of basic football skills and personal responsibility. In terms of player involvement, Auskick is widely characterised by practises designed to develop technical skills such as kicking, hand passing and marking (Hickey & Fitzclarence, 2004). However, while Auskick programs are seen as integral to growing junior participation rates (Booth, 2007), encouraging retention as children progress into organised competition remains a significant challenge for the code (Hickey & Fitzclarence, 2004; Agnew *et al.*, 2016).

The other traditional entry pathway into Australian Football is *via* participation in an organised competition. While the AFL junior match day guidelines encourage competition providers to modify game rules, such as contracting the size of the playing area and reducing the number of players on the field (AFL, 2012), there are concerns that many competitions ignore these guidelines and instead replicate a version of Australian Football that is more suited to adults and elite level participation (Agnew *et al.*, 2016). A secondary issue arising from the replication of adult forms of competition is that players are assigned positional roles based on coaches' perceptions of their playing ability as this maximises the likelihood of winning. Consequently, players who are perceived to possess less skill may be relegated to limited playing time or peripheral roles, limiting their game involvement and thus, capacity to develop and have fun (Walters *et al.*, 2012).

PURPOSE OF THE STUDY

This paper presents findings and an analysis from a pilot project in a junior Metropolitan Football League (MFL) in South Australia. The pilot project involved re-engineering the playing experience by adopting modified rules and positional arrangements as recommended in the junior football match guide of the Australian Football League (AFL, 2012). At the completion of the season, the MFL approached the authors to conduct a qualitative evaluation of the perceptions and experiences of players, parents and coaches of the modified junior Australian Football experience.

A pilot season of junior Australian Football was evaluated whereby the AFL 9's concept was implemented in an Under 8's competition. The MFL continued to facilitate the established Under-8 competition on Sundays, which involved 18 players per team on a full sized ground, but also introduced a 9-a-side competition on Friday nights on a reduced playing space (Figure 1) as an additional trial competition format.

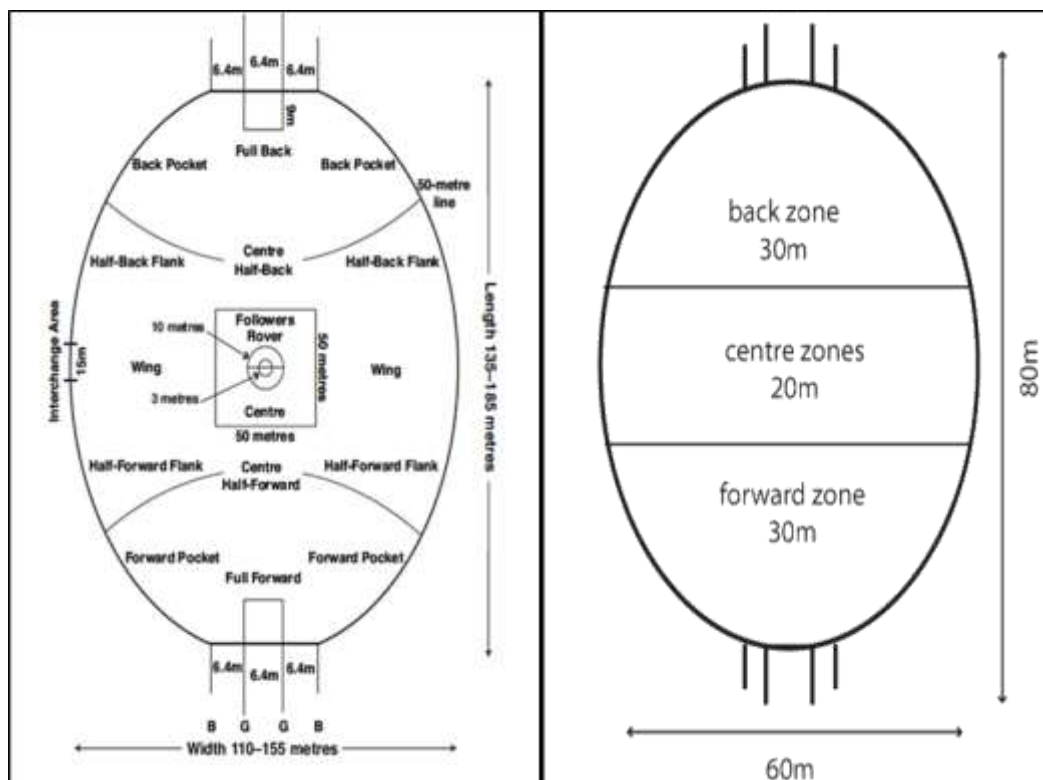


FIGURE 1. POSITIONAL ARRANGEMENTS AND FIELD DIMENSIONS USED IN 18-A-SIDE (LEFT) AND 9-A-SIDE AUSTRALIAN FOOTBALL

Four clubs fielded teams in both the Friday night and Sunday morning competitions. Consistent with the AFL junior match day guide, the 9-a-side competition was governed by

re-engineered game rules and playing space, distinguishing it from the traditional Sunday morning Under 8's competition as follows:

9-a-side: Friday night competition

1. 9 players per team
2. Games played on half of football oval
3. 3 players positioned in each zone (forwards, midfielders, defenders)
4. Coaches can be on the field during play

18-a-side: Sunday morning competition

1. 18 players per team
2. Games played on full football oval
3. No zones
4. Coaches cannot be on the field during play

METHODOLOGY

Nature of research

The purpose of evaluative research is to assist decision-making processes in relation to policies and programs through inquiry that describes and explains program operations and implications (Mark *et al.*, 2000). In the current study, the purpose of the evaluation was to learn about the experiences and perceptions of competitive engineering in junior Australian Football. Specifically, a descriptive evaluative framework was employed whereby the focus included capturing the subjective experience or meaning experienced by participants (Mark *et al.*, 2000). Furthermore, and consistent with evaluative research, this study adopted a sociological lens in the form of Social Constructionism. In evaluative research, Social Constructionism places an emphasis on the sharing and collaboration between the evaluator and those being evaluated (Grbich, 1998). In attempting to understand the perceptions and experiences of competitive engineering in the junior Australian Football setting (or context), it is, therefore, critical to capture this interaction, described by Gergen (1985) as a 'communal interchange' between humans and the context in the construction of meaning and knowledge.

While quantitative research approaches are traditionally characterised by empirical measures and the scientific notion of objectivity, qualitative research paradigms challenge the positivist stance by committing to understanding, with openness, the deeper underlying issues of a social phenomenon (Patton, 2002). It is the qualities of the latter approach, which are most significant to the objectives of this pilot program evaluation concerned with the perceptions and experiences of competition engineering in the form of 9-a-side Australian football. Subsequently, this qualitative evaluation utilises a case-study methodology in which parents, coaches and participants involved in the pilot study of the MFL Under 8's, 9-a-side competition bound the case under inquiry.

Participants

The 20 participants were purposefully recruited from the pilot 9-a-side competition to participate in an individual interview or focus group discussion (2 participants per group). Each focus group represented 1 of the 4 clubs involved in the 9-a-side competition, meaning that children and parents (in separate focus groups) shared their experiences with participants

from the same club. Overall, a total of 8 focus groups and 4 individual interviews were conducted.

The participants consisted of children aged 5 to 8 years (n=8), parents (n=8) and coaches (n=4). The participants were predominantly male, but female voices were captured in all stakeholder groups. Most of the coaches were also parents of participants, but were identified as coaches for the purpose of this study. Collectively, the participants not only represented different demographic and socio-economic backgrounds, but also differing attitudes and backgrounds in sport more broadly. Some parents and coaches were new to junior Australian Football, while others were very familiar with the sport.

Procedures

Prior to data collection, institutional research ethics approval was attained and permission and cooperation from the MFL to conduct the research obtained. Following project approval, the MFL provided contact emails and phone numbers of each of the clubs involved in the 9-a-side pilot project. Once contact was established with each club, information sheets, introductory letters and consent forms were sent to each club for prospective participants to consider. The football clubs placed the documents in common areas for parents, children and coaches to access, at the request of the principal researcher. Some clubs placed the documents in high traffic areas such as the canteen and the football clubrooms for prospective participants to consider, while other clubs disseminated the packages directly to youth, parents and coaches on training nights. This process led to the organisation of 8 separate focus groups with parents and children, and 4 individual interviews with coaches.

Individual interviews and focus groups were utilised for data collection because they are effective in gathering rich, descriptive, cumulative and elaborate data (Lambert & Loisele, 2008; Smith & Caddick, 2012). Smith and Caddick (2012) add that qualitative interviews and focus groups enable participants to direct the discussion, which is critical in producing dialectical depth. The duration of focus groups and individual interviews ranged from 10 minutes with children up to 80 minutes with parents and coaches. The vast difference in duration resulted from children's inability to elaborate extensively on their experiences in contrast to parents and coaches. The data was recorded using an audio-recording device.

A preliminary interview guide was developed based on interview guides previously used in evaluative research in youth Australian Football (Drummond *et al.*, 2013). For example: *What are the best things about playing football? What have you enjoyed the most/least about football this season?* This assisted the research to adopt a guided line of inquiry (Patton, 2002), and to adapt it to suit the participants (scaffolding questions when working with 5 to 8 year old children).

Analysis of data

The textual data were manually transcribed verbatim and thematically analysed following the 6-step model of Smith and Caddick (2012). The 6-steps include phases of immersion, code generation, theme identification, theme review, theme labelling and definition and reporting of themes. Pseudonyms were used to conceal the identity of participants and their affiliated football clubs and league. To enhance methodological rigour, triangulation was applied in an

attempt to get what Silverman (2006) describes as a true fix on a situation by combining different perspectives. This was achieved, in part, by the nature of the participant cohort, which included multiple data sources (the voices of parents, coaches and children). To enhance the trustworthiness of the findings further, inter-coder reliability techniques (Lombard *et al.*, 2002) were employed, involving both authors independently coding a sample of focus group and individual interview data. This technique was undertaken with approximately 25% of the qualitative data, at which point both authors were satisfied with the sameness emerging from the independent coding process. The lead author coded the final 75% of the transcript data individually.

RESULTS

Throughout interviews and discussions with children, parents and coaches, a number of topics were canvassed in relation to the introduction of a 9-a-side Australian Football competition for Under 8's. From the data, 3 central themes emerged: game engagement and enjoyment; football as an educational context; and 9-a-side as an appropriate developmental step for 18-a-side football (Figure 2). Importantly, the experiences and perceptions surrounding 9-a-side Australian Football were unanimously positive, highlighted by the voices of children, parents and coaches in the ensuing section.

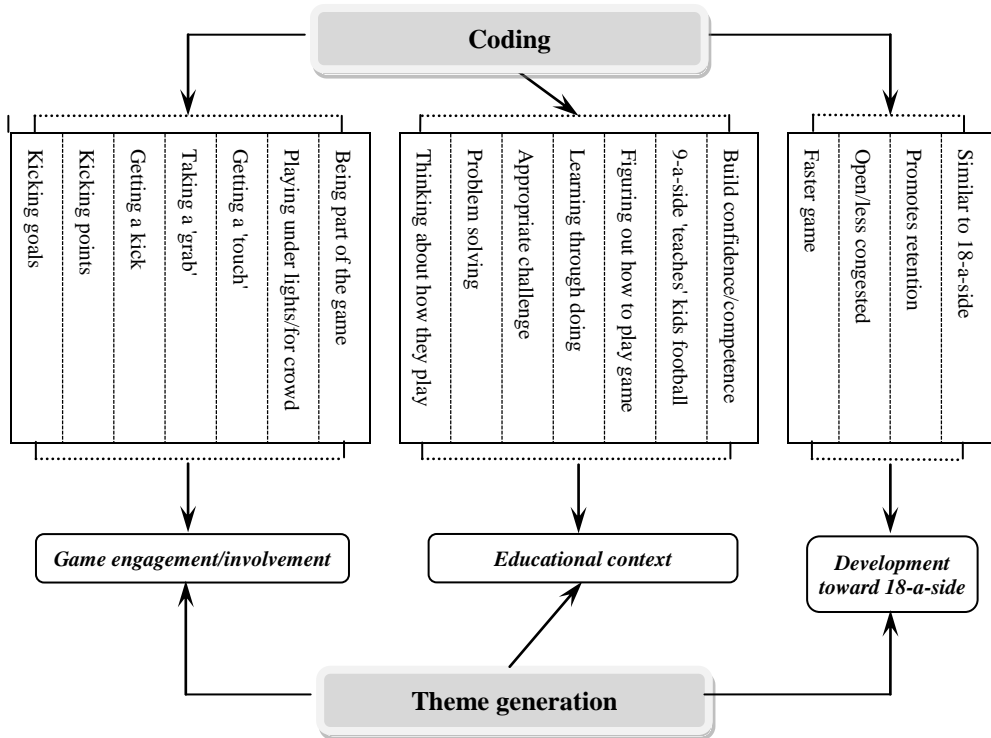


FIGURE 2. A CODING TREE LEADING TO THEME GENERATION

Game engagement and enjoyment

By participating in both 9- and 18-a-side junior Australian Football, children were able to compare playing experiences and share their thoughts on the 'new' style of 9-a-side footy. Positive perceptions associated with a higher level of game involvement in the 9-a-side format emerged. As one child shared, "I enjoyed getting a few goals and running around going hard for the ball". One of the major issues with regard to the experience in 18-a-side football raised by children and parents was being positioned in peripheral roles where the player was least likely to touch the ball, such as the back and forward pockets. However, the 9-a-side format enabled **children** to feel 'more involved in the game', reflected by the following group discussion:

I enjoyed getting a few goals, running and going in hard for the ball. [Tina]

I enjoyed kicking a goal. [Shaun]

Um, running around the oval. [Toby]

Yeah – running around the oval. [John]

Kicking goals and getting kicks. [Shaun]

I kicked two goals in one game. [Toby]

I kicked one goal. [Shaun]

I kicked five. [John]

While children viewed increased game involvement as merely 'fun' and enjoyable elements of participation, parents and coaches perceived it as advantageous for children's football development. One **coach** reflected:

There were about 15 of our kids such as Tom who kicked five goals in one game and yet had probably only four kicks on a Sunday for the whole year. There were also twins who both kicked a couple of goals each in one game whereas on Sunday they are a bit overawed by the size of some kids and won't go in and get the ball a lot of the time, so 9-a-side has been fantastic. [Jason]

The coaches added that the combination of less players and a smaller playing field benefited children to gain possession of the ball with greater frequency and resulted in more scoring opportunities, which players enjoy. One **coach** summarised:

The main advantage that I have seen is that players can get a touch more easily than they can in 18-a-side competition. It was also easier to umpire because you have only 18 players in total on the field as opposed to 36 players, but just generally being able to get a touch. The kids found it a lot easier to get into it a lot of the time, but in the 18-a-side, due to having more numbers it's a lot harder to find the footy. [Robin]

The participatory experience in this regard was perceived to be widely beneficial. One parent also noted that the 9-a-side concept meets children's desire to 'touch the ball'. In 18-a-side games, the playing experience was perceived to be largely limiting due to player congestion around the ball, described as "bees to a honey pot" by one coach. Yet, in 9-a-side, children's

preferences for 'being involved in the game' were satisfied. This is exemplified in the following **parent** comment:

As I said, 9-a-side allows the kids to do the things they want. They want to kick a goal and not get smashed by a big pack of kids. In the end, they wanted to participate in 9-a-side because it was fun. It is really hard to take a negative out of it honestly. As a parent, it was good to watch, seeing each kid get a kick and coming off the ground smiling. [Mary]

Educational context

Adult participants viewed the 9-a-side format as more than a sporting activity for children, but an educational context for playing and learning about the skills and thinking required to play Australian Football. A prominent perception among **parents** is exemplified in this extract:

Just watching them from week to week, playing 9-a-side, once they got started, they could really mix it with the rest of them on a Sunday. It helped them with their confidence levels and their ability to figure out how to go and get the ball, rather than watch their opponent run past them. [Colin]

While parents and coaches perceived similar competencies could be taught in 18-a-side Australian Football, they argued that 9-a-side was a more appropriate context for learning about concepts relating to offence and defence, playing 'team'-oriented football, and maintaining/dispossessing ball possession. The reduced number of players on the ground, coupled with positional 'zones' emerged as important in this regard, noted as leading to the development of numerous technical and tactical skills. One **coach** stated:

The 9-a-side teaches the back men that they have to look after their player at a young age rather than letting their opponent run around, which isn't always bad, but as you get older, you learn to run up, but as a junior, it just reinforces the fact that there are positions and that's where you learn to play. [Tim]

Another **parent** claimed:

On a personal level, my son had not kicked a goal up until he played 9-a-side and then all of a sudden, he figured out how to get to a position and kick a goal and from then on, you couldn't stop him! [Steve]

From the children's perspective, most did not observe the playing experience as 'educational', but rather an engaging sporting activity. However, according to 2 of the children, 9-a-side provided an appropriate challenge level for attacking when in possession with the ball. As such, 9-a-side helped these **children** develop thinking skills surrounding the best approach to kicking the ball to team mates.

It [9-a-side] was really good because we had more chance of touching the ball. It was also difficult because, not in a bad way, there were 3 players in each zone, and it was difficult to decide to whom to kick. Normally I would kick it to the person who doesn't have much people on them because the opposition team go and defend the taller players. [Wade]

Playing in a 9-a-side competition, children were perceived by adults to develop greater confidence in competing for possession and executing technical actions during games. Parents and coaches widely discussed notions of 'building confidence' as a result of touching the ball more frequently. This was perceived to influence the individual and the team positively. One focus group of **parents** discussed:

I mainly noticed in our team that the older one's helping the younger ones in the 9-a-side that got them all involved in the game, which is good, and they all came off smiling at the end of the day, which is what we want. [Sam]

Yeah, well my kid is only young and he didn't get much of the ball and that didn't really bother him but after doing 9-a-side, a couple of the older boys hand passed to him, wanted to help him, that's the team work we talk about. It all came together really well. [Barry]

The children claimed that they felt more competent as a result of playing in the 9-a-side competition. Some of the children made comments, such as "I can do it now" and "I know I can get a kick", demonstrating positive levels of confidence in relation to playing Australian Football. Others stated they not only felt more confident with playing the game, but also understanding the basic rules that governed play.

A developmental step toward 18-a-side Australian Football

By their own admission, many parents and coaches reflected on initial concerns about 9-a-side football prior to the trial competition commencing. Underpinning their concerns was a belief that 9-a-side was not 'real footy' because there were less players on the ground. However, attitudes of the parents and coaches changed significantly following observations of the nature and standard of games over the course of the season. Several parents commented that it was much more pleasurable to watch as a spectator because the game constantly 'moved'. In contrast, 18-a-side games in the Sunday competition were perceived to be 'more stagnant'. As one focus group with **parents** found:

It's not so congested on a Friday night (9-a-side). [Darren]

Not so scrappy yeah. [Ian]

The ball movement speed is pretty similar. The 9-a-side had a little bit more time to think, steady the kick, get it a bit more right and not rush it as much. [Kelly]

This distinction led to a high level of advocacy for the 9-a-side concept as an important developmental step toward playing 18-a-side football. As 1 parent suggested, "it would make sense to have Under 8's as 9-a-side, Under 10's as 12-a-side, Under 14's as 15-a-side – that might work well". However, parents and coaches who perceived children to favour the Friday night competition over Sunday morning 18-a-side football also supported advocacy for 9-a-side. As two **coaches** noticed:

Both games are very similar yet different with quicker ball movement in the 9-a-side. They moved the ball quicker on a Friday night than they do on a Sunday. Once the kids realised how fun Friday night was, they all wanted to play and have a go at it. It wasn't necessarily better ball movement, but it was quicker. [Ryan]

The enjoyment on the kids' faces after the games, they were stoked, they were happy and pumped and they were buzzing because they got heaps of the ball and they kicked a couple of goals – the kind of stuff that might be harder to do in the 18-a-side competition. [Tim]

For 1 **parent** in particular, 9-a-side was perceived to complement 18-a-side football by allowing children to develop their skills and understanding about the game, which then enabled them to participate in Sunday 18-a-side games with more confidence.

Sometimes in the 18-a-side, you have got bigger kids that are going for the ball so there are some kids who are a bit timid and stand out a little bit and don't get a touch, but then you see them getting a touch in the 9-a-side and the older kids helping them out – that's how you build confidence in each other. They started smiling and got to touch the ball and thought "we can actually do this" and I found they actually went in a bit harder and got the ball in the 18-a-side because they have already had that touch and know what it's about from the 9-a-side. [Ian]

Overall, according to the children, parents and coaches, the 9-a-side concept in Under 8's Australian Football was positively received. Not only did it comprise a sport experience that demonstrated higher levels of game engagement and involvement, it also represented an educational construct for learning about the game and a developmental step appropriate for the age group.

DISCUSSION

The purpose of this study was to evaluate the perceptions of children, parents and coaches of competitively re-engineered experience in an Under 8's Australian Football competition. The re-engineering was characterised by a reduction in the number of players on a contracted playing space, and the modification of game rules. Previous research has found that competitive engineering can positively increase player's game engagement and decrease attrition in flag football (Burton *et al.*, 2011a; Burton *et al.*, 2011b). The current evaluation also suggests that competitive engineering in junior Australian Football, using the AFL 9's concept, has significant and positive potential for participants. Specifically, it was perceived to be a highly engaging game, a unique educative context for learning about Australian Football and an appropriate developmental step before the full version of 18-a-side Australian Football. Competitive engineering in this regard played a critical role in constructing a positively perceived experience as players, parents and coaches.

One of the important findings surrounding the 9-a-side concept was the high levels of fun and enjoyment that emerged from meaningful game engagement and involvement. In addition to spending time with peers, children found enjoyment from kicking goals, gaining ball possession and disposing of the ball by hand (handball) or foot (kick). The findings suggest that an authentic level of enjoyment emerged from children's ability to 'touch' the ball and contribute to the construction of play. This is consistent with the contention of Walters *et al.* (2012) that children extract immense and unparalleled enjoyment from being allowed to 'play' sport. However, in reality, it is likely that such experiences are constrained in many sport

settings whereby adult rules and structures prohibit high game engagement in children's and youth sport.

For some children, this may mean that they experience a marginalising introduction to organised sport. As such, coaches and sport providers may benefit from rethinking the organisational structure of competition and engineering a more engaging and enjoyable framework for participation. In contrast, parents, children and coaches perceived the competitive engineering of the game experience in this project (Figure 2), as a more enjoyable participatory experience for players.

Another important finding was that 9-a-side represented a possible educational context through which children were able to learn about basic principles of play with respect to Australian Football. By participating in the competitively engineered football season on Friday nights, the children in this study expressed that they developed the confidence and capacity to perform with greater effectiveness in the Sunday 18-a-side competition. In addition to obtaining a greater frequency of possession, children learnt about concepts relating to attack and defence by being involved in more passages of play. In this way, competition engineering in junior Australian Football has the capacity to yield a distinct educative advantage for participants, which may encourage continued involvement. We suggest that this may offer the AFL and its affiliated junior competitions a complimentary yet educationally beneficial introduction to Australian Football, rather than relying primarily on Auskick programs which have historically struggled to successfully transition participants into organised competitions (Hickey & Fitzclarence, 2004; Agnew *et al.*, 2016).

While there are clear developmental advantages associated with engagement in deliberate forms of play during the early years (Côté & Vierimaa, 2014), this study suggests that 9-a-side also comprises an educational context through which participants perceived gains in confidence and sport-related competence from learning about the basic principles of play in Australian Football. This arises from the decrease in player density around the ball in the 9-a-side compared to 18-a-side game format, providing players more time and space to think and act in the game, as well as have more time in possession as players "touch the ball" more often.

The findings further provide strong advocacy for 9-a-side as a representative, yet, developmentally important 'stepping stone' to more 'complete' adult iterations of Australian Football. The perceived benefits of competitive engineering in junior Australian Football may not only provide participants with a higher level of game engagement, which has positive implications for player development, but may also comprise a more fun and enjoyable sport experience. Such an approach to children's and youth sport may consequently have a capacity to disrupt traditional competition structures and coaching styles, which limit game play and subsequent game engagement.

PRACTICAL APPLICATIONS

Given that children want to play sport and be central to the experience (MacPhail & Kirk, 2006), the AFL 9's concept as an example of competitive engineering, appears to engender a promising initiative for junior Australian Football from an educative, developmental, and

motivational perspective. The findings support the notion of competition engineering, including a reduction of players in junior Australian Football as seen in a 9-a-side competition, as an appropriate intermediary step between skill development programs like Auskick, and organised 'adult' competitions. The findings provide further advocacy for competitive engineering, including the modification of rules, positional arrangements, field dimensions, and number of players, particularly in junior sport competitions. This has implications for not only competition providers and leading sport organisations, but for coaches and parents who also play vital roles in facilitating children's sport.

CONCLUSIONS

Junior Australian Football leagues typically adopt rules and positional arrangements that mimic the adult 18-a-side version of Australian Football. This research evaluated parent, player and coach responses to a trial of the AFL 9-a-side concept adopted in an Under 8's competition for the first time. The 9-a-side trial occurred alongside the established Under 8, 18-a-side competition, but on a different day, meaning all the participants in this study experienced both competition formats. The qualitative evaluation found that participants considered that the 9-a-side Australian Football format provide players with an enhanced game experience due to: (a) a high level of game engagement; (b) an educational context; and (c) an appropriate developmental step before the introduction of players to 18-a-side Australian Football, which was appreciated and even preferred to the common 18-a-side format by parents, players and coaches.

Further evaluative research is necessary to build the case for junior MFL adoption of the 9-a-side modified game format as the competition entry point for junior Australian Football, and the potential of additional competition engineering for game representation progressing from the "simple" 9-a-side format at entry level progressively through grades towards the full ground and full rules 18-a-side game format. Research of this nature investigating modified game progressions from entry to more developmentally advanced forms has occurred in other invasion sports (notably, soccer-association football), and may not only have great applicability for developing more robust programs in junior Australian Football, but for team sport programs generally where optimising game engagement and enjoyment is necessary.

It is also recommended that a longitudinal study tracking player and parent experiences of the progression of the competition engineering recommended in the AFL (2012) match day guide, from 9-a-side football at the point of competition entry to 12-, 15- and then 18-a-side on a full field. Such a study would address the long term effects of competition engineering on player engagement, retention at the critical period at the transition point from junior to youth football (Drummond *et al.*, 2013), as well as technical and tactical player-game development.

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Ethical clearance

An application for ethics clearance was submitted to the Flinders University Social and Behavioural Research Ethics Committee (ethics number 6570) for approval. Approval was attained in August 2014.

REFERENCES

- AGNEW, D.; PILL, S. & DRUMMOND, M. (2016). Investigating the elements that encourage or inhibit the participation of children and youth in Australian Football. *Annals of Leisure Research*, 19(1): 27-46. (Doi:10.1080/11745398.2015.1036898, Pre-published online on 19 May 2015.)
- AFL (AUSTRALIAN FOOTBALL LEAGUE) (2012). *Junior football match guide*. Canberra, Australia: Australian Sports Commission.
- BOOTH, R. (2007). Executive interview: Andrew Demetriou, CEO of the Australian Football League. *International Journal of Sport Finance*, 2(3): 123-129.
- BROWER, J.J. (1979). Organised youth sport: Social psychological impacts and outcomes. *The ANNALS of the American Academy of Political and Social Science*, 445(1): 39-46.
- BURTON, D.; GILLHAM, A. & HAMMERMEISTER, J. (2011a). Competitive engineering: Structural climate modifications to enhance youth athletes' competitive experience. *International Journal of Sports Science and Coaching*, 6(2): 201-217.
- BURTON, D.; O'CONNELL, K.; GILLHAM, A. & HAMMERMEISTER, J. (2011b). More cheers and fewer tears: Examining the impact of competitive engineering on scoring and attrition in youth flag football. *International Journal of Sports Science and Coaching*, 6(2): 219-228.
- BUTCHER, J.; LINDNER, K.J. & JOHNS, D.P. (2002). Withdrawal from competitive youth sport: A retrospective ten-year study. *Journal of Sport Behaviour*, 25(2): 145-163.
- CÔTÉ, J. & VIERIMAA, M. (2014). The developmental model of sport participation: 15 years after its first conceptualization. *Science and Sports*, 29(Supplement): S63-S69.
- CRANE, J. & TEMPLE, V. (2014). A systematic review of dropout from organized sport among children and youth. *European Physical Education Review*, 21(1): 114-131.
- DRUMMOND, M.; AGNEW, D.; PILL, S. & DOLLMAN, J. (2013). SANFL Youth Retention Project: A report for the Australian Football League. Adelaide, South Australia: Australian Football League.
- GERGEN, K.J. (1985). The social constructionist movement in modern psychology. *American Psychologist*, 40(3): 266-275.
- GRBICH, C. (1998). *Qualitative research in health: An introduction*. St. Leonards, NSW, Australia: Allen and Unwin.
- HICKEY, C. & FITZCLARENCE, L. (2004). "I like football when it doesn't hurt": Factors influencing participation in Auskick. *ACHPER Healthy Lifestyles Journal*, 51(4): 7-11.
- JAKOBSSON, B.T.; LUNDEVALL, S. & REDELIUS, K. (2014). Reasons to stay in club sport according to 19-year-old Swedish participants: A salutogenic approach. *Sport Science Review*, 23(5-6): 205-224.
- LAVOI, N.M. & STELLINO, M.B. (2008). The relation between perceived parent-created sport climate and competitive male youth hockey players' good and poor sport behaviours. *Journal of Psychology*, 142(5): 471-495.
- LAMBERT, S.D. & LOISELLE, C.G. (2008). Combining individual interviews and focus groups to enhance data richness. *Journal of Advanced Nursing*, 62(2): 228-237.

- LIGHT, R.; HARVEY, S. & MEMMERT, D. (2011). Why children join and stay in sports clubs: Case studies in Australian, French and German swimming clubs. *Sport, Education and Society*, 18(4): 1-17.
- LOMBARD, M.; SNYDER-DUCH, J. & BRACKEN, C.C. (2002). Content analysis in mass communication: Assessment and reporting of intercoder reliability. *Human Communication Research*, 28(4): 587-604.
- MACPHAIL, A. & KIRK, D. (2006). Young people's socialisation into sport: Experiencing the specialising phase. *Leisure Studies*, 25(1): 57-74.
- MARK, M.M.; HENRY, G.T. & JULNES, G. (2000). *Evaluation: An integrated framework for understanding, guiding and improving policies and programs*. San Francisco, CA: Jossey-Bass Pfeiffer.
- PATTON, M.Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.
- SCHEMBRI, G. (2005). Active after schools communities playing for life coach's guide. Canberra, Australia: Australian Sports Commission.
- SHIELDS, D.L.; LAVOI, N.M.; BREDEMEIER, B.L. & POWER, F.C. (2007). Predictors of poor sportspersonship in youth sports: Personal attitudes and social influences. *Journal of Sport & Exercise Psychology*, 29(6): 747-762.
- SIEGENTHALER, K.L. & LETICIA GONZALEZ, G. (1997). Youth sports as serious leisure: A critique. *Journal of Sport and Social Issues*, 21(3): 298-314.
- SILVERMAN, D. (2006). *Interpreting qualitative data: Methods for analysing talk, text and interaction*. London, UK: Sage.
- SMITH, B. & CADDICK, N. (2012). Qualitative methods in sport: A concise overview for guiding social scientific sport research. *Asia Pacific Journal of Sport and Social Science*, 1(1): 60-73.
- WISEK, A.J.; ACHRATI, S.M.; MANNING, H.; MCDONNELL, K.; HARRIS, B.S. & DIPIETRO, L. (2014). The Fun Integration Theory: Towards sustaining children and adolescents sport participation. *Journal of Physical Activity and Health*, 12(3): 424-433.
- WALTERS, S.; PAYNE, D.; SCHLUTER, P. & THOMSON, R. (2012). 'It just makes you feel invincible': A Foucauldian analysis of children's experiences of organised team sports. *Sport, Education and Society*, 20(2): 241-257.