

1 Running head: Playing for Life and afterschool sports program

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4 **Children's perspectives on the effectiveness of the Playing for Life philosophy in an**
5 **afterschool sports program**

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1 **Abstract**

2 The Playing for Life (P4L) philosophy was developed based on the concept of game play. It
3 emphasizes learning through games within the sporting context to promote sports participation. The
4 main aim of the study was to qualitatively evaluate the effectiveness of the P4L philosophy in
5 contributing to enjoyment and in encouraging continued participation in sports. Ninety-seven
6 children (aged 5-12), who participated in the Active After-school Communities program that
7 adopted the P4L philosophy by the Australian Sports Commission, took part in 56 paired or
8 individual interviews. Transcripts were initially deductively coded based on pre-determined themes,
9 and were inductively coded for additional themes that were indicative of the effectiveness of the
10 after-school sports program following the P4L philosophy. Main themes identified from the
11 interviews were motor development and knowledge acquisition, psychological and cognitive
12 benefits and social development and active living awareness. The P4L philosophy appeared to be
13 effective in engaging children in sports participation and in promoting potentially sustainable
14 positive physical activity behavior.

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16 **Keywords:** sport; physical activity; social development; enjoyment; children

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1 Introduction

2 Increasing evidence suggests that game play within the sporting context is instrumental for
3 skill development and continued participation in youth sports, especially for children aged 6-12.¹⁻³
4 Contrasting with the traditional instructional approach where heavy emphasis is placed on skill
5 improvement in highly structured practice (e.g., repetitious skill drilling), game play involves non-
6 purposeful developmentally appropriate physical activities and is purely for the sake of participation,
7 thus inherently more enjoyable and motivating.⁴ In line with the concept of experiential learning
8 (where knowledge is constructed through experiences and discovery process)⁵ and non-linear
9 pedagogy (which emphasizes working with the constraints faced by individuals in different
10 situations)⁶, game play allows children to experiment with their movements and tactics, within the
11 realm of individual capability and development and without concern over exclusion for reasons
12 such as competency or ‘losing’ which are common barriers to sports participation.⁷ Research has
13 shown that compared to drill training, game play is more effective in enhancing tactical creativity
14 and in developing perceptual and decision-making skills.^{8,9} Moreover, engagement in game play in
15 early developmental years is potentially critical to competence development and long-term
16 engagement in sports.^{10,11}

17 In addition to game play, for a pedagogy to effectively and continuously engage and
18 motivate learning, it is imperative to foster a sustainable motivational orientation.^{12,13} According to
19 self-determination theory, the most sustainable form of motivation is when the learner can attain an
20 inherent satisfaction (intrinsic motivation) from his/her learning experiences to fulfil his/her
21 psychological needs, as opposed to extrinsic motivation when a learner obtain ‘rewards’ that are
22 relatively unrelated to the activity.¹³ The three psychological needs proposed by the self-
23 determination theory are the needs for autonomy in the learning experience, for being able to relate
24 to others in the social environment and for achieving a sense of competence – all considered
25 contributory to positive youth development whereby optimal developmental and affective

1 experiences can be attained and positive identity is formed, which are likely to benefit development
2 into adulthood.^{14,15}

3 For intrinsic motivation and engagement in learning to achieve optimal effects in the context
4 of youth sport participation, the role of coaches is vital. In keeping with self-determination theory,
5 autonomy-supportive coaching is associated with increased perceived autonomy and intrinsic
6 motivation, as well as intention to continued participation.¹⁶ Additionally, the ability of a coach to
7 facilitate a mastery motivational climate where emphasis is on self-referenced accomplishment, as
8 opposed to others-referenced in a performance-centered environment, is more likely to raise
9 enjoyment and self-determined motivation.^{17,18}

10 Therefore, based on the concept of game play as well as the theoretical synthesis of self-
11 determined motivation and the above-mentioned pedagogical stances behind youth sport
12 participation, the 'Playing for Life' (P4L) philosophy was developed by the Australian Sports
13 Commission (ASC), as a means to engage children of all abilities in junior sports and to provide
14 positive sporting experiences in a secure and inclusive environment which might lead to sustained
15 sport participation.^{19,20} The P4L philosophy follows six principles. It emphasizes the use of fun
16 games primarily to introduce the skills and tactics of sports rather than a skill/drills approach
17 (Principle 1 – Game is the focus). Through game play, children are encouraged to resolve
18 challenges under coaches' facilitation mostly through questioning (Principle 2 – Coach is a
19 facilitator) and coaching is provided only as required (Principle 3 – Discrete coaching) as a means
20 to supplement experiential and discovery learning processes²¹ and to foster a sense of
21 competence/confidence.¹³ Children are also involved as role models during games to demonstrate
22 and emphasize skillful play where appropriate (Principle 4 – Role models) as a closer fit between
23 the learner and the model in terms of psychophysical constraints such as limb lengths, strength and
24 hand sizes can provide a more appropriate movement solution than what a larger adult may
25 provide.²² Additionally, viewing peer models who were more skilled could potentially elicit more
26 effective learning as it motivated the observers to emulate the models through practice, which may

1 be attributable to the enhanced sense of relatedness due to similar experiences.^{13,23} Children are also
2 given the autonomy to decide on the activities they find engaging and challenging (Principle 5 –
3 Ask the players) and depending on the skill level of individuals and their progress during each
4 session, variations of the activities targeting at the focused skills are constantly provided by the
5 coach (Principle 6 – Change it) in order to optimize intrinsic motivation and hence participation.¹³
6 From the social ecological perspective^{24,25}, the inherently enjoyable nature of the game play
7 promoted by the P4L philosophy can potentially provide a fertile ground for participants to learn the
8 interrelatedness between themselves and their environment and how they can be an active agent to
9 promote positive change within themselves (e.g., skills and confidence) and/or in their environment
10 (e.g., choice of activities during the coaching sessions).²⁶

11 However, the P4L philosophy has yet to be validated and its effectiveness tested within the
12 context of a youth sports program. A potential avenue for the implementation of the P4L philosophy
13 is through afterschool sports programs located at the school premise. This would provide a safe
14 environment for children to engage in physical activities with their peers and be logistically viable
15 particularly for working parents. Moreover, afterschool sports programs can provide children with
16 the opportunity to sample a variety of sports that might not be commonly offered or readily
17 accessible in their environment.²⁷ For these reasons, we examined the effectiveness of the ASC's
18 Active After-school Communities (AASC) program²⁸ that adopted the P4L philosophy. Our main
19 aim was to qualitatively evaluate the effectiveness of the P4L philosophy in contributing to
20 primary-school children's enjoyment and in encouraging potential long-term participation in sports
21 through accounts of the children's participation experiences. For any youth program to improve and
22 achieve its goals, participants' feedback on their experiences is essential. However, program
23 evaluations have mostly been conducted using established questionnaires that include
24 predetermined factors considered as important by adults, yet deprived of in-depth understanding of
25 children's perception of the elements pertaining to enjoyment and possible long-term engagement in
26 sports within the context of their lived experiences.²⁹ This may lead to perception bias and

1 subsequent intervention futility.³⁰ An alternative means to gather more meaningful and rich
2 information is through interviews within the children's natural environment.³¹ Therefore, for our
3 current evaluation, interviews were conducted with 5-12 year-old participants.

4 As the focus of the current study is on the effectiveness of an afterschool sport program that
5 adopted the P4L philosophy, coaching quality would not be central to our discussion albeit our
6 recognition of the importance of coaches' role in the success of any sport programs. Nonetheless,
7 results from this investigation can potentially inform coaching practice, coach education and
8 physical education curriculum development on developmentally-appropriate strategies to cultivate
9 an inclusive sporting environment through which children's engagement in, and benefits from,
10 sports participation can be optimized and sustained in the long-term.

11

12 **Methods**

13 *Participants*

14 Two hundred and forty-nine participants aged 5-12 (137 boys, 112 girls) were recruited
15 from 10 local primary schools (7 State schools and 3 Catholic schools) who participated in the
16 AASC program that adopted the P4L philosophy.²⁵ All schools were in the Melbourne metropolitan
17 region of Victoria, Australia. Parental (and Department of Education) consent was obtained for
18 participation in the program and follow-up interviews. The program was comprised of 28
19 afterschool sessions in total. Eight percent of participants (n = 20) completed 1-5 sessions, 22.9% (n
20 = 57) completed 6-10 sessions, 64.3% (n = 160) completed 11-15 sessions, 2.4% (n = 6) completed
21 16-20 sessions and 2.4% (n = 6) completed 21-28 sessions. Of the 249 consented participants, 97
22 were randomly selected to take part in 56 paired/individual interviews. Fourteen interviews were
23 conducted with 5-6 year-olds, 17 interviews with 7-8 year-olds, 18 interviews with 9-10 year-olds
24 and 7 interviews with 11-12 year-olds. The study was approved by the Institutional Ethics
25 Committee for Human Research and the Department of Education.

26

1 *Procedure*

2 *The AASC program.* The AASC program is an afterschool sports program adopting the P4L
3 philosophy and was developed by the ASC in 2005.²⁸ For the current study, the AASC program
4 was delivered within the participating local primary schools. Depending on the preference of the
5 schools, different sports and activities were offered to participants in different schools one
6 session/week (60 minutes/session) for two consecutive school terms. Classifications of the sports
7 and activities were a) Ball Games - Australian rules football, basketball, ice-hockey, hockey,
8 dodgeball, soccer, netball, multi-skill, rugby league, baseball, and Frisbee; b) Non-Ball Games -
9 Dance, aerobics, yoga, triathlon, martial arts, gymnastics and athletics; or c) Mixed Games - all the
10 sports and activities combined. Each session was led by a nationally accredited coach who had at
11 least attained the basic level of sport-specific coaching accreditation, and some at higher levels, and
12 were trained to deliver the program according to the P4L philosophy.³² All coaching sessions were
13 videotaped and randomly checked to ensure that the coaching followed the P4L philosophy.

14
15 *Interviews.* To evaluate the effectiveness of the P4L philosophy through the lenses of children who
16 had participated in the AASC program, 97 participants were randomly selected to take part in semi-
17 structured interviews at their respective schools 1-2 weeks before the end of the program by
18 researchers experienced working with this age group in research/interviewing, coaching and/or
19 teaching. To minimize disruptions to the school curriculum, most interviews were conducted during
20 recess or lunch break and lasted 10-15 minutes. Due to time constraint, the majority of interviews
21 involved only two participants as a bigger size might compromise the depth of interviews.³³
22 Nevertheless, one interview included three participants and 12 participants were in individual
23 interviews due to unexpected issues such as absence from school on the interview day and
24 rescheduling was not favoured by the schools. Each paired interview comprised children of the
25 same age and where possible the same sex as recommended for optimal interaction for this age
26 group.^{30,31}

1 A semi-structured interview guide of 10 open-ended questions was constructed to direct the
2 flow of the interviews with probing questions applied where appropriate.³⁴ Content of the
3 interviews primarily focused on the effectiveness of the P4L philosophy on participant enjoyment
4 and engagement, role of the coaches, intention of future participation and feedback on the program
5 in general. Example questions were “What do you think about the program and what makes you
6 think that?”, “What do you think about the coaches and what they did in the sessions?” and “When
7 you first started in this sports program, did you find anything difficult to do? If yes, can you give
8 examples and tell me if you still feel the same now? ” The term ‘program’ was used in the line of
9 questioning as a proxy for the P4L philosophy as children were too young to comprehend the term
10 P4L. All interviews were tape-recorded and transcribed verbatim for data analysis.

12 *Data codin and analysis*

13 A deductive approach was adopted for the initial interview thematic coding as it is
14 recommended for qualitative analysis when existing theories are to be tested as it is the case for the
15 current study.³⁵ Primarily, our interests were in children’s enjoyment in the AASC program that
16 adopted the P4L philosophy and what might have constituted enjoyment, or the lack of it, as well as
17 children’s intention for future sport participation. Due to the semi-structured nature of the interview
18 and the richness of data that could potentially be generated, the researchers considered it
19 appropriate to also inductively code any additional themes emerged from the interviews that might
20 also address our aim. To implement the coding strategies, the first and second authors were each
21 randomly allocated 10% of the transcripts to code based on broad themes such as ‘enjoyment’,
22 ‘physical benefits’, ‘psychological benefits’ and ‘cognitive development’ (including the lack of
23 these), and generate additional main themes, first-ordered and/or lower-ordered themes using
24 NVivo9 software (QSR International). Consensus on the final themes was then reached between the
25 same two researchers who then both coded another identical 10% of the transcripts based on the
26 existing themes for inter-rater reliability.²⁹ The researchers’ coding results were compared and only

1 minimal differences were found. These differences were then discussed with themes further
2 clarified before coding continued. Discussions on the addition or the removal of existing themes
3 remained on-going based on the data presented in the coding process. This continuous interaction
4 between the researchers is likely to enhance the credibility of the data coded and the subsequent
5 analysis.³⁶ Once all transcripts were coded, the researchers proceeded with discussions on the
6 coding results to determine if certain themes could be collapsed (e.g. a few first-ordered themes
7 under ‘coaching quality’ and ‘program design’, such as ‘autonomy’ and ‘variations’, were collapsed
8 as they were pointing to the essence of the P4L philosophy). They also explored the prominent
9 themes that emerged from the coding and how these themes, especially the newly emerged themes
10 (e.g. active living awareness), that might answer the research question on the effectiveness of the
11 P4L philosophy in the context of an afterschool sports program for school-aged children. At the end
12 of the coding process, the other authors checked that the quotations were reflective of each final
13 theme.

14

15 **Results**

16 As a main aim of the current study is to investigate the effectiveness of the P4L philosophy
17 in the context of an afterschool school program in promoting enjoyment of sport participation, we
18 attempted to identify, from the children’s own accounts, aspects within the program that sustained
19 and/or enhanced enjoyment, and aspects that might not work as well as they intended to. Four
20 prominent themes were identified from the interviews and they were categorised into motor
21 development and knowledge acquisition, psychological and cognitive benefits, social development
22 and active living awareness. The last theme can potentially address another aim of the study which
23 examines the effectiveness of the P4L philosophy in encouraging continued sport participation.

24

25 *Motor development and knowledge acquisition*

1 All interviewees expressed their enjoyment of the AASC program. Sources of enjoyment
2 were largely from playing many different games and activities (based on the ‘Game is the focus’
3 and ‘Change it’ principles; Principle 1 and 6 respectively) through which new skills and knowledge
4 about a sport were acquired, and this was also where ‘Discrete coaching’ (Principle 3) came into
5 place.

6 They make the games fun like in sometimes you don’t realize that you’re actually
7 practicing it but you actually are. [9yr old girl]

8 The best part of the program is that we get to learn more of you know, the soccer
9 and it’s basically what they’re trying to help us with and making it more fun and to
10 help us understand what soccer is. [8yr old boy]

11 (There were) different activities and also lots of sports and not like strict, strict erm, training.
12 [6yr old boy]

13 Interestingly, despite being at a fairly young age, many children seemed to have an
14 accurate perception of the intention behind the game-play approach. The source of that perception
15 could be from the coaches’ explicit expression of the purpose of these activities, or it could be that
16 the children had experienced other coaching approaches before which were perhaps less preferred
17 in comparison. In any case, it appears that learning new (sport) skills through games was
18 particularly engaging for the participants as the traditional drill training was considered to be time-
19 consuming, and perhaps even ineffective in facilitating learning.

20 I wouldn’t make someone do it 1,000 times because then it would be taking like a whole night and
21 the next day and the next night and the next night, next day... [7yr old girl]

22 Nonetheless, one participant derived enjoyment from practicing ‘drills’. As a 10-year-old girl
23 expressed about certain dance moves that she would ‘practice every day’ even after her dance
24 lessons as she would like to improve from the repetitive practice.

25 Not only were the children enthusiastic about playing different games and exploring
26 different sports in order to enrich their sporting experience, the program was also considered to

1 have presented more stimulating activity options than spending afterschool time at home and
2 engaging in sedentary activities.

3 Like more sports. It would be more fun if you had more sports. If there were more
4 sports, like eight sports, I'll do them all. [10yr old boy]

5 Well, it gets me out of watching TV and gets me out of, well, doing erm, what people do after
6 school, watching TV. [9yr old girl]

7 Thus, from the participants' accounts, enjoyment of participant mainly came from the
8 opportunity to learn new skills and knowledge about a sport through game play (for the majority) or
9 through traditional drill practice. Interestingly, this after-school experience also indirectly raised the
10 awareness of the preference for a more active after-school program over the habitual inactive time
11 spent at home.

12

13 *Psychological and cognitive benefits*

14 What might have added to the enjoyment from learning through games is the confidence
15 gained from overcoming the challenges presented in the learning process and the improvements
16 achieved. This newly developed confidence had helped shape participants' sporting identity when
17 strikingly, *all* accounts of boosted confidence were self-referenced rather than other-referenced, i.e.,
18 confidence was gained from noticing one's own improvement rather than from comparison against
19 others.

20 I feel like I, I believe in myself like, if I can't shoot, I go, I try and do it. [10yr old
21 girl]

22 Yeah, because I used to think the worst of sport and it might never change, but now
23 I'm like fully good at sports and I enjoy it. [7yr old girl]

24 My favourite sport is soccer and I just want to be a soccer player, so I just like it.
25 [9yr old girl]

1 This growth in confidence could also be attributable to the fulfilment of the ‘Ask the player’
2 principle (Principle 5) where autonomy was given to the participants to input their own ideas in the
3 activities within the structure in place and it was certainly preferred by many. This may also reflect
4 children’s desire in satisfying their curiosity and in having a positive outlet to their creativity. Thus
5 having the coach as a facilitator, rather than the traditional director, is likely to provide a secure
6 environment where curiosity and creativity are valued and encouraged.

7 Like sometimes she gives us free time to think about dancing and mood dance and
8 we had to like prepare into our own stuff in dance. Like we perform it to everyone
9 and stuff’. [10yr old girl]

10 They pretty much let us choose the things that we want to do at all in basketball
11 game or the game like Octopus sort of like basketball which is a lot harder. Or they
12 let us choose the sort of sport that we want to do like the game. Actually like some
13 of them are really nice. But, yeah, that’s what made us enjoy it. [12yr old girl]

14 To sum up, the psychological and cognitive benefits from engaging in the after-school
15 activities following the P4L philosophy were gained through overcoming challenges, especially
16 when one was allowed to be an active agent in deciding the way to enhance learning and to achieve
17 improvements through which one’s sporting identity was cultivated.

18

19 *Social development*

20 Peer influence is another prevailing theme noted from the interviews. Peer influence is
21 behind some participants’ decisions to join the program and a common source of enjoyment in their
22 participation, for reasons such as the opportunity to play with friends, to make new friends and to
23 face the challenge in playing against unfamiliar people.

24 Because my friend said it would be fun and my two friends are going to come as
25 well. So, I decided to come join them. [10yr old girl]

1 I liked the soccer match too because you get to meet other people and you could be
2 with other people you've never ever played with before... [8yr old boy]

3 An emphasis of the P4L philosophy is in fostering an environment where children can work
4 together to resolve challenging situations during game play and 'Discrete coaching' (Principle 3) is
5 provided only when necessary. From the children's accounts, this teamwork focused environment
6 seemed to be favoured by a few, boys and girls alike, when they were asked about what they
7 enjoyed most about the program.

8 ...the teamwork and how we all worked together to just help each other out and just have fun.
9 [5yr old boy]

10 It's not just by yourself it's with other people so you get to make new friends and you get to use
11 teamwork and it's really fun. [7yr old girl]

12 ...you can learn skills off people. [8yr old boy]

13 Through interaction with their peers, participants' social awareness was also heightened in
14 their observations of socially acceptable or unacceptable behaviours.

15 (The children are) all right but some people like to do other stuff like not listen and
16 stuff. [9yr old boy]

17 Like (the children) were cooperating a lot, but not cooperating sensibly. [8yr old
18 boy]

19 Perhaps not so surprisingly, the after-school program provided participants with extra
20 opportunities to engage in meaningful social interactions where teamwork was emphasized which
21 had directly and indirectly contributed to enjoyment. In addition, the program provided a safe
22 environment through which participants could observe positive and negative social behaviours, and
23 possibly through which they could reflect on their own.

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1 *Active living awareness*

2 Related to the theme on motor development and psychological benefits, a number of
3 participants noted the physical and psychological changes through participation. Many children
4 across all ages expressed that they felt ‘good’, ‘energised’, happy’, ‘fit’, ‘strong’, ‘active’, ‘more
5 sporty’, ‘less tired’ and that they ‘felt better at stuff (activities)’ when asked how they felt during as
6 well as after the program. It is perhaps unsurprising that many children also found the physicality
7 during the activities enjoyable.

8 (Now) I think I can run so fast and get the ball. [5yr old boy]

9 Well, when we got into it, it was kind of fun because you got the ball – you could smash the ball
10 anywhere you want and shoot goals and stuff. [6yr old boy]

11 From the enjoyment of the physicality through participation, the increased awareness of
12 their physical capability and the confidence that came with it seemed to have encouraged
13 participation in other sporting activities as some expressed their wish to ‘try out other sports’ when
14 chances were available. The following quote even appeared to suggest that the physicality
15 experienced in one sport could further enhance that in another, perhaps more high-energy sport.

16 And with dance, it’s because if I do dance, I’ll get hot and then I could be more like go more
17 powerful in soccer. [9yr old girl]

18 With greater confidence in their sporting ability since participation in the program, many
19 expressed their increased awareness of living an active lifestyle. While a few 5-year-olds suggested
20 to have ‘longer’ sessions, others expressed their intention to continue participation in sports should
21 opportunities arise in future.

22 I’m happy that, I’m more confident in myself now and I’m happy that I do it and I’ll continue doing
23 it. [8yr old girl]

24 Yeah, because I used to think the worst of sport and it might never change, but
25 now I’m like fully good at sports and I enjoy it unlike my sister who all just lays

1 around sitting down on her laptop and stuff... So when I grow up I think I'm going
2 to be kind of like active. [7yr old girl]

3
4 Through the above accounts, not only did the participants recognize the physical
5 and mental benefits from the after-school program, these experiences also prompted them
6 to seek similar positive reinforcement in the future through engagement in an active
7 lifestyle.

8 9 **Discussion**

10 To our knowledge, this is the first study to qualitatively evaluate the P4L philosophy within
11 the context of an afterschool sports program. Not only has this qualitative enquiry provided us with
12 children's first-hand accounts of their experience in the afterschool sports program that adopted the
13 P4L philosophy, the information obtained is possibly richer and more in-depth than a traditional
14 survey could provide. This could be attributable to the personable interview setup, be it paired or
15 individual, within the children's familiar environment that might have helped build rapport between
16 the interviewers and the interviewees and provided a secure base for children to reflect and discuss
17 their experiences. Through participants' accounts of their lived experiences, we have gained
18 insights into factors that might have contributed to the effectiveness of the P4L philosophy, adopted
19 in an afterschool sport program, in enhancing enjoyment and in encouraging future sport
20 participation.

21 Our results have demonstrated that a major source of enjoyment was from the challenge
22 presented to the participant in their acquisition of new knowledge and skills through sport
23 participation. This challenge appears to be generated from a sporting environment where autonomy
24 was emphasized (the 'Ask the player' and 'Discrete coaching' principles) and experiential learning
25 through game play was encouraged (the 'Game is the focus' principle). Engagement was also
26 accentuated through regular variations in activities (the 'Change it' principle). Previous research has

1 consistently indicated that enjoyment is often derived from engagement where a child is immersed
2 in an activity that presents learning opportunities and challenge to his/her skills/knowledge.¹² This
3 is more likely to be achieved in an environment where autonomy is valued to allow personal goals
4 to be set and ambitions to be realized.¹³ The autonomy-supportive environment in our study also
5 seemed to have fostered teamwork when the participants were given room to resolve challenging
6 situations with their counterparts during game play and to learn from each other. Additional social
7 benefits from participation in the afterschool sports program included increased social interactions
8 as well as awareness of socially (un)acceptable behaviours, both are somewhat inherent in sport
9 participation.

10 Through the positive learning experiences, recognized competencies and social development,
11 all pivotal to the nurturing of self-confidence³⁷, intrinsic motivational orientation is further
12 encouraged and the child's sporting identity is fostered.^{38,39} Our data appear to reflect this process
13 of sport identity formation, in that the children acquired sporting skills/knowledge and resolved
14 challenges from which confidence and perceived competency grew. The improvements experienced
15 were also self-referenced which might reinforce the potential of an autonomy-supportive
16 environment that the P4L philosophy advocates in strengthening mastery motivation in the
17 participants.

18 Essentially, the P4L philosophy aims for children to explore their physical and cognitive
19 capabilities within a secure and inclusive sporting environment through which enjoyment can be
20 enhanced. As suggested from the interviews, following the P4L philosophy, coaches in the program
21 took on a facilitating role and allowed participants to inject their creativity into the activities within
22 the game play framework. Albeit competitive in nature, game play emphasizes cooperation rather
23 than winning or losing, and losing is considered as an opportunity to improve.⁴⁰ Game play is also
24 more effective in developing a 'game sense' and tactical creativity compared to repetitious drills
25 especially in formative years as it simulates a real game environment where decision-making ability
26 is required.⁴¹ Previous research has shown that elite athletes spent significantly more time in game

1 play than structured practice at an early age, suggesting that engagement in game play in early
2 developmental years, and the benefits associated with it, are potentially critical to competence
3 development and long-term engagement in sports.^{42,43} This non-linear learning process could indeed
4 complement well with the P4L philosophy's emphasis on autonomy-supportive coaching whereby
5 children were encouraged to resolve challenges through self-discovery and through teamwork.
6 While game play was favoured by most of our participants, skill drilling also appeared to have a
7 place in sports programs, though to a lesser extent, as expressed by one participant.

8 From the interviews, the enhanced physical and psychological well-being from participating
9 in the sport program were articulated explicitly. The physicality of sport participation was also
10 enjoyed by many, and it appeared that some children recognised that the experience of physicality
11 could be transferred across sports too. Together with the increased sporting confidence, it is perhaps
12 not surprising that most interviewees expressed their enthusiasm in continued participation in sports
13 – an inherent goal that the P4L philosophy attempts to accomplish. As such, many were keen to
14 sample a variety of sports, for which early childhood was considered to be an ideal period.⁴ The
15 implications of these findings are twofold. With the positive sporting experiences, children are more
16 likely to stay in their sporting pursuits which could lead to greater specialisation and elite athlete
17 development in later years.^{1,4} Crucially, the enjoyment gained through sports and the increased
18 active living awareness can potentially prompt a sustainable active lifestyle and reduce time spent
19 sedentary.^{24,26,44} With a third of Australian children not meeting the recommended moderate to
20 vigorous physical activity level (at least 60 minutes/day) and only a third meeting the daily screen
21 time recommendation (less than 2 hours/day)⁴⁵, the development and implementation of P4L
22 philosophy in afterschool sports programs would seem to be a viable means to promote positive
23 physical activity behaviours in children. To accomplish this objective, education on the P4L
24 philosophy and the associated pedagogy, such as experiential learning and non-linear pedagogy, is
25 likely to be beneficial to coaches and physical activity educators alike.

1 Several limitations of this study are worth mentioning. The varying cognitive ability and
2 experiences of children at different developmental stages and for each gender may have constrained
3 the ability to articulate ideas at the interviews, thus making direct comparisons between age groups
4 and genders unfeasible. Nonetheless, as our findings were derived from a relatively large sample,
5 we trust that results of this study are largely generalizable across age and gender in early childhood.
6 Moreover, although our sample might not be representative across cultures, it is likely to have
7 provided some insight into factors that could attract school aged children to sports participation in
8 the Australian population.

9

10 **Conclusions**

11 Our qualitative results highlight the effectiveness of the P4L philosophy in engaging
12 children in sports and in promoting long-term participation. Specifically, our data indicated that
13 sources of enjoyment were derived from motor skill development, knowledge acquisition,
14 psychological and cognitive benefits, physical and psychological benefits including a heightened
15 sense of well-being as well as the physicality of sport participation. Some of these positive
16 experiences appear to be largely attributable to the emphasis of fostering an experiential learning
17 environment where autonomy was encouraged within the realm of game play as advocated by the
18 P4L philosophy. Not only were confidence and mastery motivation enhanced through self-
19 discovery of sport-specific skills and knowledge, children's sporting identity was fostered when
20 improvements were observed and physical and psychological well-being was noted during and after
21 participation.

22 Through these positive experiences, the participants were keen to continue sport
23 participation, be it in the same sport or other sports, at the end of the afterschool sport program that
24 adopted the P4L philosophy. Although follow-up studies would be necessary to ascertain if future
25 participation is indeed substantiated, the current study has provided some indication on the intention

1 to do so and the reasons that might have contributed to it, not least the enjoyment of the program
2 founded on the P4L philosophy.

3 Lastly, our study has highlighted the value of qualitative inquiries in advancing our
4 understanding of factors affecting sports participation and physical activity behaviour in children.
5 Not only do the findings have vital significance to youth sports development and coach education,
6 they can also be transferred to physical activity research in promoting sustainable positive physical
7 activity behaviour to be carried into adulthood.

8

1 **Competing interests**

2 The authors declare that they have no competing interests.

3

4

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