# $3 v 3$ as the Optimal Pathway for the Development of Youth Basketball Players 

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## Objectives

I.Establish 3 v 3 basketball as a real sport.
2.Demonstrate that 3 v 3 games meet children's wants as well or better than 5 v 5 games.
3.Explain how 3 v 3 games reduce the most common negatives in
 youth sports.

## What makes a sport real?



## Game Modifications

2v2 Beach Volleyball


T-Ball
7s Rugby


4v4 Soccer


Flag Football


## Common Basketball Modifications



Lower hoops<br>Smaller balls<br>No zone defense<br>No backcourt press

## 3v3: Real Basketball?



## Skills, Tactics, \& Strategies

- Athletic
- Psychological
- Tactical
- Technical

The optimal game for development is the smallest possible game that does not lose the game's fidelity.

## Technical Skills



Dribbling Passing Shooting Footwork Defense



What is the smallest possible game that includes all of these skills?

## Tactical Skills



Give-and-Go
On-Ball Screen
Off-the-ball Screen
Dribble Hand-off
Penetrate \& Kick Help and Recover Defensive Traps

What is the smallest possible game that includes all of these skills?

## Strategies

Playing 3v3 eliminates:

- positions
- zone defenses
- full-court presses
- set plays



## Reasons for Participation

## Fun

Exercise
Learn new skills
Be challenged Play with friends

(Seefeldt, Ewing, \& Walk, 1992; Weiss \& Petilchkoff, 1989)

## Reasons to Drop out

- Lack of enjoyment/fun
- Low competence feelings
- Lack of improvement
- Injury
(Butcher, Lindner, \& Johns, 2002;Weiss \& Petilchkoff, 1989).



How to maximize the positives
and reduce or eliminate the negatives?


## Advantages of 3v3

Possessing the ball is the most significant way to participate in basketball.

(Arias, Argudo \& Alonso, 2009)

## Ball Contacts = Player Involvement

Greater player involvement may be responsible for higher enjoyment levels.
(Whelan, 201I)

## Soccer:

-4v4 games are a good learning environment $=90.32 \%$
-4v4 games improve techniques $=88.71 \%$

- | |v|l games improve techniques more than $4 \mathrm{v} 4=48.39 \%$
- IIvII games increase the number of touches per player = I7.74\%


## Ball Contacts = Opportunity to Improve

Basketball:

- 3 v 3 games feature more ball contacts than 5 v 5 games (McCormick et al., 20I2; McKay, 20II).
- Each player participated more often in an offensive attack in 3v3 compared to 5v5, (Pinar, et al., 2009).


## Learning

## Block Practice

## Characteristics of Block Practice

- Practice one skill at a time to perfection
- High levels of constant feedback
- Instruction moves from simple to complex
- Limited simulation of game-like conditions


## Block practice leads to:

- Short-term improvement (coaches and players over-estimate improvement)
- Impressive practice performance
- Inconsistent game performance
- Limited transfer to new or different situations


## Random Practice

## Characteristics of Random Practice

- Reduced feedback
- Use of questions as a teaching tool
- Small-sided games as teaching tools
- Emphasis on decision-making skills not just technique practice


## Random practice leads to:

- More self-sufficient players
- More effective transfer to new situations or future games
- Less immediate improvement - practice sometimes appears sloppy or disorganized
- More consistent performance
- More permanent changes in performance

Comparison of Behavioral Training and Decision Training

| Behavioral Training | Decision Training |
| :--- | :--- |
| Instruction | Instruction |
| Part-to-Whole Training | Tactical whole training |
| Simple to complex drills | Competition-like drills |
| Easy-first instruction | Hard-first instruction |
| Technical emphasis | Technique within tactics |
| Internal focus of instruction | External focus of attention |
| Low use of video models | High use of video models |
| Practice |  |
| Blocked practice |  |
| Low variability | Variable practice |
|  | Random practice |
| Abundant coach feedback |  |
| Low use of questioning | Handwidth feedback |
| Low use of video feedback | High use of questioning use of video feedback |
| Low athlete detection and correction of <br> errors | High athlete detection and correction of <br> errors |
| Overall: low levels of cognitive effort | Overall: high level of athlete cognitive effort |

## Physical Activity

Girls prefer a coach who keeps players active; boys prefer a coach who emphasizes fitness and competitive challenges (Martin, Dale, \& Jackson, 2001).


There was no statistically significant differences in average heart rate or time spent in vigorous intensity activity between 3 v 3 and 5 v 5 games, though average HR and VI was higher in 3 v 3 (McCormick et al., 2012).

## Enjoyment

Enjoyment enhanced by inclusiveness and playing a role: Participation and opportunity to test skills help to determine enjoyment (MCPhail et al., 2003; Whelan, 201I).

Enjoyment levels significantly higher in 7v7 Gaelic football than $15 \mathrm{v} I 5$ (Whelan, 2011).

Soccer was enjoyable: 4v4:95.16\%
7v7: 95.16\%
Ilvil:96.77\%
(Small, 2006)


## Challenges

Children are not miniature adults.


## Challenges

## Space $=$ time $=$ skill <br> (Launder, 200I)

## Player Density

NBA court scoring zone: I20 sqft/player High-School court scoring zone (5v5): 84 sqft/player High-school court scoring zone (3v3): 140 sqft/player

Interactions<br>$5 \mathrm{v} 5=90$ potential interactions<br>$3 \mathrm{v} 3=30$ potential interactions

(Snow, 2004)

## Biggest Issues with Youth Sports

Coach ego
Playing time
Complaints about officials


## Coach Ego

Attitudes toward the coach were positively associated with perceptions of a mastery-involved climate and negatively associated with perceptions of an egoinvolved climate.
(Cumming et al., 2007)


Young athletes' sport enjoyment, and evaluations of their coach were more strongly related to coaching behaviors than to their team's won-loss record.
(Cumming et al., 2007)

## Peak by Friday

"Parents and coaches in many sports still approach training with an attitude best characterized as 'peaking by Friday,' where a short-term approach is taken to training and performance with an overemphasis on immediate results. We now know that a long-term commitment to practice and training is required to produce elite players/athletes in all sports."
(Balyi \& Hamilton, 2003)


## Playing Time

3v3 League
24 players on the court
8 -16 players on the bench


Typical 5v5 League
10 players on the court
10-14 players on the bench


## Complaints about Officials

A Canadian study found that parents and coaches yelled less during small-sided games compared to full-sided games (McKay, 20II).


## The Greatest Game

-Equal opponents

- Motivated to play well
-Adhere to the rules
-Compatible personal goals
-View opponents/officials as facilitators



## Summary

- 3 v 3 features all the skills of a 5 v 5 game.
-SSGs have been found to be as enjoyable as FSGs.
-SSGs provide more opportunities for improvement.
-SSGs meet or exceed the physical activity from FSGs.
$\bullet 3 \mathrm{v} 3$ is a more skill-appropriate challenge than 5 v 5 .
-3 v 3 increases playing time and reduces negative coach \& parent behaviors.


## $3 \mathrm{v} 3=$ the most appropriate league form for young and beginner players.

## References

Balyi, I. \& Hamilton, A. (2003). Long-term athlete development:Trainability in childhood and adolescence:Windows of opportunity, optimal trainability. Scottish Strength and Conditioning Seminar: Largs, Scotland.

Chase, M.A., Ewing, M.E., Lirgg, C.D., \& George,T.R. (1994).The effects of equipment modification on children's self-efficacy and basketball shooting performance. Research Quarterly for Exercise and Sport. 65(2): p. I59-68.

Fenoglio, R. (2005), A 4 v 4 Pilot Scheme for U9 Academy Football Players.A Research Report. Inhouse publication. Manchester Metropolitan University.

MacPhail A, Kirk D, \& Eley D. (2003). Listening to young people's voices:Youth sports leaders advice on facilitating participation in sport. European Physical Education Review, 9(I): p. 57-73. Small, G. (2006). Small-sided games study of young football players in Scotland.

Whelan, M. (20II). Effect of altering the number of players, the dimensions of the playing area, and the playing rules on the number of selected technical skills performed, possession characteristics, physiological responses, and levels of enjoyment and perceived competence during Gaelic football in prepubescent and adolescent boys. Unpublished doctoral dissertation, Dublin City University, Dublin, Ireland.

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