3v3 as the Optimal Pathway for the Development of Youth Basketball Players

Brian McCormick, M.S.S.
Founder, Playmakers Basketball Development League
http://playmakersleague.com
Objectives

1. Establish 3v3 basketball as a real sport.
2. Demonstrate that 3v3 games meet children’s wants as well or better than 5v5 games.
3. Explain how 3v3 games reduce the most common negatives in youth sports.
What makes a sport real?
Game Modifications

2v2 Beach Volleyball

7s Rugby

T-Ball

4v4 Soccer

Flag Football
Common Basketball Modifications

- Lower hoops
- Smaller balls
- No zone defense
- 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.

(Fenoglio, 2005)
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, 2011)
Soccer:
• 4v4 games are a good learning environment = 90.32%
• 4v4 games improve techniques = 88.71%
• 11v11 games improve techniques more than 4v4 = 48.39%
• 11v11 games increase the number of touches per player = 17.74%

(Ball Contacts = Opportunity to Improve)

Basketball:
• 3v3 games feature more ball contacts than 5v5 games (McCormick et al., 2012; McKay, 2011).
• Each player participated more often in an offensive attack in 3v3 compared to 5v5, (Pinar, et al., 2009).
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

Schmidt & Weinberg, *Motor Learning and Performance*. 
## Comparison of Behavioral Training and Decision Training

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**Overall:** low levels of cognitive effort  
**Overall:** high level of athlete cognitive effort

(Vickers, 2007)
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 3v3 and 5v5 games, though average HR and VI was higher in 3v3 (McCormick et al., 2012).
Enjoyment enhanced by inclusiveness and playing a role: Participation and opportunity to test skills help to determine enjoyment (McPhail et al., 2003; Whelan, 2011).

Enjoyment levels significantly higher in 7v7 Gaelic football than 15v15 (Whelan, 2011).

Soccer was enjoyable:
4v4: 95.16%
7v7: 95.16%
11v11: 96.77%

(Small, 2006)
Challenges

Children are not miniature adults.
Challenges

**Space = time = skill**

(Laundry, 2001)

**Player Density**
NBA court scoring zone: 120 sqft/player
High-School court scoring zone (5v5): 84 sqft/player
High-school court scoring zone (3v3): 140 sqft/player

**Interactions**
5v5 = 90 potential interactions
3v3 = 30 potential interactions

(Snow, 2004)
Biggest Issues with Youth Sports

Coach ego
Playing time
Complaints about officials
Attitudes toward the coach were positively associated with perceptions of a mastery-involved climate and negatively associated with perceptions of an ego-involved 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)
Parents and coaches in many sports still approach training with an attitude best characterized as ‘peak 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
A Canadian study found that parents and coaches yelled less during small-sided games compared to full-sided games (McKay, 2011).
The Greatest Game

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

(Jody Brylinsky)
Summary

• 3v3 features all the skills of a 5v5 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.
• 3v3 is a more skill-appropriate challenge than 5v5.
• 3v3 increases playing time and reduces negative coach & parent behaviors.

3v3 = the most appropriate league form for young and beginner players.
References


Whelan, M. (2011). 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.