Small Sided Games
What is going on?

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“Small sided games are commonly used by coaches to **develop the technical abilities** of soccer players and are increasingly being used for aerobic fitness development”


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Small Sided Games

• Research into Small sided games is patchy
• Inconsistent rules, formats and team sizes
• Difficult to identify players
• What should we look for?
• Levels of physical activity?
• Ball in play%?
• Ball contacts per player?
Lower Island Soccer Association

• Southern portion of Vancouver Island
• 10 clubs
• Approx. 7800 players
• Approx. 660 coaches
• Mandate coach certification by summer 2015
• High Performance to grassroots
Study Method

• Not scientific- Weekend life is not a lab
• Boys and girls data together
• Ball in play- manual with two stopwatches
• Physical activity-Accelerometers
• Ball contacts manually recorded- tick sheets
• To provide a general picture of what happens in U8-U9 soccer games
Physical Activity Levels

- Accelerometers used to measure activity
- Four categories of activity
- Sedentary, Light, Moderate and Vigorous
- Each player’s activity levels measured during the game and half time
- Unit’s are time stamped
- Provided no other data, GPS, distance covered
Findings

• The Government of Canada states that every child should get 60 minutes MVPA each day
• How much MVPA in their soccer game
• Only 63% of time spent in MVPA
• More players on the team leads to less MVPA
• That’s not rocket science, its common sense
Average amounts of MVPA

Average amount of physical activity by category during 6v6 game time

- Sedentary: 25%
- Light: 12%
- Moderate: 33%
- Vigorous: 30%
- MVPA: 63%
MVPA 11v9

*Significant difference between teams on MVPA (p=.018)
MVPA 9v8

Team 1 (n=9) vs Team 2 (n=8)

- MVPA:
  - Team 1: 34.0
  - Team 2: 32.1

- Total Minutes:
  - Both teams: 56
Summary and comments

• The game itself may not provide the levels of physical activity that is required each day
• What extra do we need to fill the gap and provide the level of activity needed
• Is it as simple as a couple of laps at the start and at the end of the game?
• Experience is heavily dependant on the coach
Ball in play

- In the adult game ball is in play for 60 of the 90 minutes
- 66% in play 34% out of play
- Stoppages in play-
  - time wasting by design
  - feigning injury
  - substitutions late in the game
Ball in play study

• U9 and U10 games dual age group jamboree
• 8 games studied
• 4 girls games
• 4 boys games
• Some mixed teams in boys games
Game total time vs. in play
Summary of ball in play

• High 57% Low 46% Ave 52%
• Boys game more consistent than girls
• Ball is out of play almost as often as in play
• “It’s like turning the light off at a children's party for half of the time”
Ball Contacts

• Simple contact with the ball during the game
• Touches per minute TPM
• 5 games, 10 teams, 89 players recorded
• All games on the same field 2 x 25 mins
• Jean Tigana “Players need 2500 touches a day to develop” 2001-unsourced comment
• How many touches do our players need
• How many touches do they get?
The Games

- # 1 678 touches 17 players active
  - 40 touches per player 13.5 TPM in the game
- # 2 685 touches 21 players active
  - 33 touches per players 13.7 TPM in the game
- # 3 637 touches 16 players active
  - 40 touches per player 12.7 TPM in the game
- # 4 732 touches 17 players active
  - 43 touches per player 14.6 TPM in the game
- # 5 732 touches 18 players active
  - 40 touches per player 14.6 TPM in the game
Game Summary
Total Touches in each game

1
2
3
4
5
The Teams

1. 380/8 players = 47 touches pp = 0.95 TPM
2. 298/9 players = 33 touches pp = 0.66 TPM
3. 356/11 players = 32 touches pp = 0.64 TPM
4. 329/10 players = 33 touches pp = 0.66 TPM
5. 280/8 players = 36 touches pp = 0.72 TPM
6. 357/8 players = 44 touches pp = 0.84 TPM
7. 340/9 players = 38 touches pp = 0.76 TPM
8. 392/8 players = 49 touches pp = 0.98 TPM
9. 307/8 players = 38 touches pp = 0.76 TPM
10. 425/10 players = 43 touches pp = 0.84 TPM
The Players

- 89 players
- 250 minutes of soccer
- 3464 touches of the ball
- Only 28 players (31%) had more than 1 TPM
- Highest TPM 1.82 - 91 touches
- 61 players (69%) had less than 1 TPM
- 26 players (30%) had less than 0.5 TPM
Touches Per Minute
Summary of Ball Contacts

- Game touches range 637-732
- 4 of 5 games within 54 touches
- Smaller squads = more touches per player
- Team touches range 280 to 425
- 6 teams within 63 touches
- Game time was constant
- Field size was constant
Overall Picture

- Ball is out of play as often as its in play
- Players are relatively active for two thirds of the time
- Game alone does not provide enough activity
- Games did not provide adequate opportunities for ball contact and technical development
- No ball contact = no fun?
So What

- Does it really matter?
- The cream rises to the top
- We need more cream!
- LTAD tells us that the late developer can develop better over time
- Talent Code- We want ignition in our sport
- Keep them interested and engaged
Touches Per Minute

Graph showing the relationship between touches per minute and a numerical scale, with a linear trend line indicating an increase in touches as time progresses.
Areas to look at

• Can we improve the environment and if so how many modifications do we need to make?
• Reduce players on the field
• Reduce lost time when ball is out of play
• Roll in: kick in: don’t repeat the throw in
• Danish FA suggests 5 balls at each field and parents and siblings as ball boys (2013)
• What is the optimum number of touches
Talent Predictor

• What else can you measure in youth soccer players that will tell you who is going to be the best? In the 10-year Groningen sports talent study, good predictors were technical skills at age 12 and psychological skills along the lines of "how can I make myself a better player" (high levels of reflection and effort; aspects of self-regulation of learning) [Elferink-Gemser, M].

• Reflection was also the skill that distinguished those who rose to senior international level in a 4-y prospective study of 54 elite youth athletes by these researchers [Jonker, L].
Touches Per Minute
Questions or Comments?