SMALL SIDED GAMES

Coaching Education Department
Sam Snow, Director of Coaching Education
John Thomas, Assistant Director of Coaching Education
SMALL SIDED GAMES

Small sided games are (SSG) any game played with less than eleven-a-side teams. Eleven-a-side soccer is an adult game devised by and for adults to play. While US Youth Soccer includes all age groups up to U19, the U16 and older age groups are allowed to play adult, as well as, youth soccer.
SMALL SIDED GAMES

Therefore, the U15 and younger age groups are the ones that can and should be involved in small-sided games. The objective of small-sided games is a stair step approach for young players to grow into the adult game of 11 versus 11.
SSG BENEFITS TO PLAYERS

Soccer games smaller than 11 versus 11 provide many critical advantages to players including:

✓ The ability to repeatedly contact the ball and the ability to repeatedly experience basic tactical problems.

✓ In terms of player development, this ability to actively participate is directly related to fun and enjoyment and to the issues surrounding quality of play and the retention of players.
SSG BENEFITS TO PLAYERS

✓ Makes it difficult for players to “hide” in SSG, all players must attack and defend in order for their team to succeed (mobility).

✓ More space + fewer numbers = less bunching. Enhanced tactical awareness (positioning). The game is less complicated and easier to understand.
SSG BENEFITS TO PLAYERS

✔ Players under twelve are routinely structured into formal positions at ages when their spatial awareness and technical range do not lend themselves to a practical understanding of large group tactics.

✔ More “fun” and personal enjoyment; due to small fields and simplified rules.
SSG BENEFITS TO PLAYERS

- More playing time, which encourages maximum individual participation.
- More individual involvement improves fitness.
- More responsibility, every child has greater opportunities to score or stop the opponents from scoring, this builds their self-esteem and self-confidence.
SSG BENEFITS TO PLAYERS

✓ More freedom of expression; there are no positions; children will find their own position (U6 & U8). A player can be a forward, midfielder and defender during the course of the game. Children will migrate to areas of the field where they feel comfortable. When they are older we will discover their best position.

✓ More child-centered not coach controlled.
SSG BENEFITS TO PLAYERS

- More children will play. For example five four-a-side fields can fit inside a full sized field. This allows for 40 youngsters to play at the same time instead of 22.

- More experience in all phases of the game. There is no hiding or dominant player hogging the ball. Every child has to participate in all facets of the game, attack and defend. The emphasis is on PLAYER DEVELOPMENT.
EVIDENCE OF VALUE OF SSG

The move to SSG for preteen players is based on educational research on the way children learn. Just as with their academic education their soccer education is progressive. Empirical studies have been conducted into the improvement in the game environment for children in SSG as opposed to the adult version of soccer.
EVIDENCE OF VALUE OF SSG

There is also evidence, from exercise physiology studies, of improved physical fitness due to the SSG environment. Anecdotal inquiry shows psychologically children prefer the SSG format.
EVIDENCE OF VALUE OF SSG

- Mathematical formula
- Observation analysis
- Physiological data
- Biological stages of growth
- Cognitive stages of growth
- Social/Emotional stages of growth
- COMMON SENSE
<table>
<thead>
<tr>
<th>Lines of Interaction</th>
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<td>22-players</td>
<td>462</td>
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EVIDENCE OF VALUE OF SSG

✓ Mathematical Formula

- Lines of interaction are the possible passing connections between players. Each time another player enters the field of play the level of complexity of the game environment increases. The interactions are tactical possibilities.
LINES OF INTERACTION

- The point of attach is the place on the field where the pass was initiated.

- The point of insertion is the place on the field where the pass finished.
3 VS 3

- Black = 14 interactions (12/team plus 2 between 1st & 2nd defender)
- Green = 6 interactions
- Blue = 4 interactions
- Purple = 6 interactions
- TOTAL = 30
- Solid Lines = strongest interactions
- Dotted Lines = secondary interactions
- Curved Lines = tertiary (reduced) interactions
3 VS 3

Each player has 4-6 strong interactions, 0-4 intermediate interactions and 0-2 weak interactions based on static relative positions. Players at the point of attach have the most interactions (10) or options. Obviously, to exploit individual differences in the match-ups, players could and should rotate through the scheme.
EVIDENCE OF VALUE OF SSG

✓ Observation Analysis

- The purpose of the following study, conducted by the California Youth Soccer Association – South using SoftSport SecondLook software, was to collect data to compare the 4 vs. 4 game to the 8 vs. 8 game for U8 players.
Jackie - Player Performance - Total Passes

Blue Team - No “2”

Total Passes by Jackie

8 v 8 game (12)

Legend:
- Green circle: She initiated the pass to her teammates
- Purple circle: She completed the pass to her teammates
- Red square: She lost the pass to her teammates

4 v 4 game (46)

The Game for All Kids!®
Jackie - Player Performance - Total Passes
Blue Team - No “2”

Head-to-Head Comparison

<table>
<thead>
<tr>
<th>Game</th>
<th>GO</th>
<th>IG</th>
<th>SH</th>
<th>IS</th>
<th>CP</th>
<th>LP</th>
<th>TP</th>
<th>CR</th>
<th>IP</th>
<th>CK</th>
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<td>0</td>
<td>1</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>8 v 8</td>
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<td>0</td>
<td>1</td>
<td>9</td>
<td>3</td>
<td>9</td>
<td>12</td>
<td>25%</td>
<td>9</td>
<td>0</td>
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GO: Goals (Number of goals during game)
IG: Impact Goals (Number of passes resulting in a goal)
SH: Shots on Goal (Number of shots on goal)
IS: Impact Shots (Number of passes resulting in a shot on goal)
CP: Completed Passes (Number of passes completed to team-mates)
LP: Lost Passes (Number a passes lost to opponent)
TP: Total Passes (Completed and lost passes during game)
CR: Completion Ratio (Percent of total passes that were completed)
IP: Intercepted Passes (Number of passes that were intercepted from the opponents)
CK: Corner Kicks (Number of corner kicks)
TI: Time (Total number of minutes played in the game)
Jackie - Player Performance - Total Passes

Blue Team - No “2”

Observations & Analysis

8 v 8 game
• She was assigned to play as an attacking player (the data showed that she played mostly as a forward)
• She had 12 total passes
• She completed 3 passes with a completion rate of 25%
• She intercepted 9 passes
• Most of her passes were forward (none into the penalty area)

4 v 4 game
• She played all positions (according to the data shown in the small field)
• She had 46 total passes (the highest in the game by both team players)
• No positions were assigned (she moved on her own all over the field)
• She completed 18 passes with a completion rate of 39%
• She intercepted 42 passes
• Most of her passes were forward but some were in the lateral direction
Jackie - Player Performance - Total Passes

Comparison of Jackie’s Performance

8 v 8 versus 4 v 4 game

• She had almost 4 times more passes in the small game

• She scored 1 goal and had 1 shot on goal in both games

• Her completion rate was up (from 25% to 35% in the small game)

• She intercepted almost 5 times more balls from the opponent in the small game

• She had 6 times more completed passes in the small game (from 3 to 18 passes)
Observational Analysis

- In the 4 vs. 4 game on a smaller field, most of the players (88%) touched the ball 3-4 times more in several different categories such as: goals, shots on goal, completed and lost passes and total passes while still maintaining similar completion ratios of 31 versus 35%.

- When no positions were given to the players (the player's were free to move around the field) the results were that they were much more involved and subsequently touched the ball 3-4 times more.
More Players Benefited

4 vs. 4
- 14 of 16 players had over 19 passes
- Only 1 less than 12
- None less than 8

8 vs. 8
- Only 3 of 16 players had more than 12
- None more than 18
- 6 between 2-6

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Observational Analysis

- In the 8 vs. 8 game, two or three players dominated the game in passes and dribbles.

- The observation of the game was that the 4 vs. 4 game flowed with little breaks compared to the 8 vs. 8 game which had many breaks due to restarts from goals, shots on goals, throw-ins and dribbles by 2-3 dominating players.
Observational Analysis

- Based on the oral survey, 88% of the players answered the oral survey questions #2 and #3 (#2 which game did you have more fun playing, on the small field or the bigger field?) & (#3 which game allowed you to touch the ball more 8 vs. 8 or 4 vs. 4?) in favor of the 4 vs. 4 small-sided game.

- The individual Player Performance Analysis clearly illustrates a much more active involved player in the 4 vs. 4 game in comparison with that same player that seemed hidden and uninvolved in the 8 vs. 8 game.
Mini Soccer

What Game Format and Development Model is Best?
A Study by the Sports University of Cologne
The Study

- Conducted by the German Football Association, in conjunction with Sports University of Cologne on 6-10 year olds

- 1992 – 11 vs. 11 on 68 x 95 yard fields

- 1994 – 4 vs. 4 and 7 vs. 7 on 40 x 30 and 50 x 70 yard fields respectively

- 1995 – 6 vs. 6 and 7 vs. 7 games on 40 x 36 yard and 36 x 55 yard fields respectively

- 2 x 5 yard wide goals used in all cases
11 vs. 11 On Smaller Field

- High Lactate Levels - Over 4200 yards covered in 50 minutes
- Ball contacts - 38 average in midfield, only 20 on defense
- Tactics and rules too complicated for this age group
- **Conclusion:** Totally inappropriate for this age group, high danger of “burnout”!
7 vs. 7 on Half Field (50x70 yards.)

- Field is still too big for this age
- Hard to distribute players evenly
- No build up in midfield, goals are scored from long uncontrolled passes causing breakaways or mistakes by opponents
- No attacking imagination used or learned

**Conclusion:** Better than 11 vs. 11 but still not the best format
Physical Stresses

Players cover 4236 yards in 25 minutes, compared to a professional Bundesliga player who covers only about 1000 yards more in the same period.

**Lactate Levels in mmol/l - 11v11 against 7v7**

- **Mid 1st half**
  - 11v11: 2.5
  - 7v7: 2.0

- **End First Half**
  - 11v11: 3.0
  - 7v7: 2.5

- **Mid 2nd Half**
  - 11v11: 3.0
  - 7v7: 2.0

- **End 2nd Half**
  - 11v11: 2.5
  - 7v7: 1.5

**The Game for All Kids!®**
4 vs. 4 on 40 x 30 (5 vs. 5 with GK)

- Teaches all the building blocks - dribbling, shooting, passing and ball control followed by tackling and heading.
- Frequent 1 vs. 1 situations.
- Attack oriented game - frequency of shots much higher than any other game.
- Few opportunities for tactical mistakes, therefore accent is on technical training.
- 20 x 30 fields should be used for training.

Conclusion: Provides the best vehicle for enjoyment and activity. A must for players who do not have a high level of technical development.
7 vs. 7 in Smaller (35 x 55) Field

- Optimal physical load on players
- Teaches flexible attacking and defending
- Lots of ball contact - less talented players are involved more
- More opportunity to practice basic elements of good soccer
- More opportunities to attack and defend

Conclusion: The ideal game for young players with good technical ability, but it must be used in conjunction with 4 vs. 4 training and tournaments
Attacking Tactics in 7 vs. 7
Ideal Field vs. Half Field

Methods used to set up shots on Goal per 10 minutes - Ideal Field vs Half Field

- Dribbling
- Crossing
- Passing
- Opp. Error

Graph showing the comparison between 30x55 and 1/2 Field.
Number of Ball Touches per Player In 10 Minutes

![Bar chart showing number of ball touches per 10 minutes for different game formats: 4v4, 6v6, 7v7 Ideal, 7v7 Half, and 11v11.](chart_image)

The Game for All Kids!
Training Objectives

- Provide maximum fun and enjoyment for the players
- Challenge players
- Develop playing ability incrementally
- Create opportunities for success, regardless of ability
Developmental Considerations

- Children like to compete with each other
- **Skills need to be developed in playful environment**
- Players can’t learn when game demands skills or tactics they haven’t yet learned
- If they encounter the same situation many times over, they learn to deal with it
- Complicated rules, such as offside, detract from the ability to learn fundamentals
- Commonly accepted now that ages 8 to 12 are ideal for developing technique and coordination
- In spite of this many coaches continue to implement adult rules and strategies, which hinder this development
Coaching Considerations

- It’s not enough to merely substitute smaller games for 11 vs. 11
- Basic concepts such as passing, control, dribbling and ball possession must be taught
- Players should not be forced into rigid positional responsibilities until they have mastered the basics
- Development is a long term process and the players’ enjoyment should take precedence over that of the parents - games that teach soccer fundamentals may not be the most exciting to watch
- By changing conditions and variations of the training games the coach can alter the playing style of the children
Conclusions:

- 4 vs. 4 and 5 vs. 5 (with goalkeeper) training and tournament games are a must for technical and basic tactical development

- 7 vs. 7 in a 35 x 55 or 40 x 60 yard field provides the ideal game for players who have already acquired enough technical development to allow them to cope with more testing tactical decisions

- 4 vs. 4 MUST be used regularly in training and tournaments
Conclusions:

- 7 vs. 7 in half field and 11 vs. 11 are totally inappropriate for players under 12 years of age as they encourage Kick and Run Soccer.
- Kick and Run Soccer does not develop the building blocks - close control, passing, dribbling and ball possession.
BIOLOGICAL STAGES

- Infancy and toddler ages span from birth to approximately 5-years-old
- Childhood extends from the age of 5 to 15
- The average age for the beginning of pubescence in girls is 10 years with a range from 7-14; for boys, age 12 with a range from 9-16
- The general range for adolescence is 15 to 23 years of age
COGNITIVE GROWTH

0  1  2  3  4  5  6  7  8  9  10  11  12

Years

Sensory-Motor

Pre-Operational

Concrete Operational

Formal Operational

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SOCIAL - EMOTIONAL GROWTH

- 4- to 8-years-old
  - From self-centered to playmates & sharing
  - Developing a conscience
- 8- to 10-years-old
  - Developing a conscience
  - Begin to initiate activities on their own
- 10- to 12-years-old
  - Developing a sense of self-worth
  - Gender social roles coming to the fore
SOCIAL - EMOTIONAL GROWTH

- Piaget's Stages in Consciousness of Rules
  
  0 1 2 3 4 5 6 7 8 9 10 11 12
  
Years

- Product of Mutual Consent

- Sacred, Untouchable

- Not Coercive
SOCIAL - EMOTIONAL GROWTH

- Piaget's Stages in the Practice of Rules
  0 1 2 3 4 5 6 7 8 9 10 11 12
- Codification
- Cooperation
- Egocentric
- Motor
IMPLEMENTATION OF SSG

**Logistical Issues**

- FIELD AVAILABILITY
  - Markings and size
- REFEREEES
  - No need for them in the U6 & U8 matches
  - Training for novice referees in the U10 & U12 matches
- COACHES
  - Field Coordinators
  - Facilitators
- ROSTER SIZE
  - Less structured ‘teams’ for U6 & U8 ... players show up and play
- GOALS
  - Cones or corner flags in lieu of or in addition to regular goals
IMPLEMENTATION OF SSG

- Diagram of the dual field layout:

Suggested Set-up for 4v4 Fields Dual Mode

Spectators

Team Bench

Spectators

The Game for All Kids!®
Only need to switch one of the teams at half time
IMPACT ON PLAYER DEVELOPMENT

- Technical abilities will accelerate due to increased time with the ball. Further, the ball skill demands are now realistic on a smaller field.

- Athletic growth is enhanced due to continuous movement.
IMPACT ON PLAYER DEVELOPMENT

- There is a greater demand on mental concentration. The game is more fun to play because the players are always involved.

- More opportunities for problem solving are created for the players to work out together. Hence “teamwork” is promoted!
IMPACT ON PLAYER DEVELOPMENT

- This match environment now demands *transition* and thus tactical awareness. The players are involved on both sides of the ball, so there is no hiding in the weeds.

- There is a greater demand on individual and group tactics. The team tactical concept of compactness is enhanced in the small sided game.
Soccer Shapes

Triangles (3 players)
Soccer Shapes

Diamonds (4 Players)

Diamonds provide Principles of Attack and Defense: Length, Depth, Width
Playing 3 vs. 3

Ideal Attacking Shape
Includes options:
1. Forward
2. Back
3. Left
4. Right
Playing 3 vs. 3

Ideal Defending Shape
Provides:
1. Pressure
2. Cover
3. Balance
Playing 4 vs. 4

Ideal Attacking Shape
Provides:
1. Length (north)
2. Depth (south)
3. Width (east and west)
Playing 4 vs. 4

Ideal Defending Shape

Pressure (on the ball)

1. Cover (2nd closest to ball)
2. Balance (players behind 2nd closest to ball)
U-10 (6 players)

Possible team formations are 1-3-1 (pictured here), 2-2-1 and 3-2.
U-12 (8 players)

Possible team formations are 2-4-1 (pictured here), 2-3-2 and 3-2-2.
F.I.F.A. ASSOCIATIONS

Here is a sampling of FIFA national football associations, which have instituted Small Sided Games for children.

✓ AUSTRALIA
6 vs. 6, including the goalkeeper, for U8
9 vs. 9, including the goalkeeper, for U10
There is no organized soccer for the U6 age group. The U12 age group plays 11 vs. 11. This modified version of soccer for children is referred to as Rooball. Modifications are made to the size of the goal, the field of play, the ball, length of play and field markings.

Ms. Connie Selby
Coaching and Development Coordinator of the Australian Soccer Association
F.I.F.A. ASSOCIATIONS

✔ BOLIVIA

BOLIVIA USES THE FOLLOWING RULES FOR SOCCER:

Age under 6 and under 7 -- 8 on the field including goalies with unlimited substitutions

Age under 8 to under 13 -- 8 on the field including goalies with only 5 substitutions

Age 14 and up -- 11 on field with only 3 substitutions
F.I.F.A. ASSOCIATIONS

✓ FINLAND

5 vs. 5, 7 vs. 7 & Futsal for all age groups
7 vs. 7 for U11
9 vs. 9 for U13

FOOTBALL ASSOCIATION OF FINLAND
Mr. Timo Huttunen
The Head of the Youth Department
F.I.F.A. ASSOCIATIONS

✓ SCOTLAND

4 vs. 4 for U8 – no goalkeepers
7 vs. 7 for U10 to U12 including goalkeepers
11 vs. 11 for U13 and older

Mr. David Little
National Secretary for the Scottish Youth Football Association
CONCLUSIONS

- The small-sided game allows coaches a perfect opportunity to observe and analyze the individual and collective responses of players under quick game-like conditions.

- All over the world, soccer leagues have begun to realize...
  - Soccer is viewed differently by young players than by older players
  - Young players cannot fully grasp the complexity of a full 11 vs. 11 game and learn best through a progression of building blocks
  - Without the building blocks, many players are thrown into more tactical situations bypassing technical and personal growth
  - We set the young players up for failure if we continue at the larger numbers at the younger age groups
COMMON SENSE

✓ “Even when the kids graduate to six-v-six, there should remain little or no emphasis on playing a position, on winning, or on restricting individual decision-making. The individualist who would rather dribble than pass may not quite be the pariah that (s)he’s assumed to be. The ability to dribble past several defenders in a limited space is a quality that only a handful of the game’s greatest players have acquired. Kids should not have their creativity stifled, especially at younger ages.”

Bobby Howe, former US Soccer Federation Director of Coaching
Soccer, How to Play the Game: The official playing and coaching manual of the United States Soccer Federation
COMMON SENSE

✓ “We found most children pre-12 years of age wanted to “play,” so we wanted to capture this personal (intrinsic) motivation.”

Rod Thorpe, Educator.
COMMON SENSE

✓ “As a kid you need to touch the ball as much as you can. You should always be with the ball. You should have a feeling that wherever the ball is, you can do anything with it. No matter where it is, where it is on your body, how it’s spinning, how it’s coming at you, the speed it’s coming at you, anything. You can learn the tactical side of the game later. It’s amazing to me that people put so much emphasis on trying to be tactical and worry about winning when it doesn’t matter when you’re 12 years old. We’re going to have big, strong, fast players. We’re Americans, we’re athletes. But if we never learn at an early age to be good on the ball, then it’s just useless.”

Landon Donovan, USA World Cup hero, in Soccer America, July 2002
CREDITS

- All 55 of the state Directors of Coaching of US Youth Soccer and the U. S. Soccer National Staff Coaches along with innumerable administrators, coaches and referees at the local level have contributed to the success and growth of Small-Sided Games in the United States of America.

- Following are a few who contributed directly to this presentation!
Exploring The Benefits of Small-Sided Games

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Small-Sided Games Pilot Study

By John Weinerth
Chief Operating Officer
Small-Sided Games
“How Will It Impact Your Operation?”

Glen Buckley
State Director of Coaching
New York State West Youth Soccer Association

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CREDITS

❖ The data and graphs on the lines of interaction were provided by Mr. Virgil Stringfield of the Florida Youth Soccer Association and Dr. Pete Didier of Covington Youth Soccer Association in Louisiana.

❖ Charts and data on slides numbered 43, 46 & 71 provided by Cryder, et al. of AYSO.

❖ Quotes provided by Dr. Tom Turner.