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A review of spatio-temporal metrics in invasion game sports

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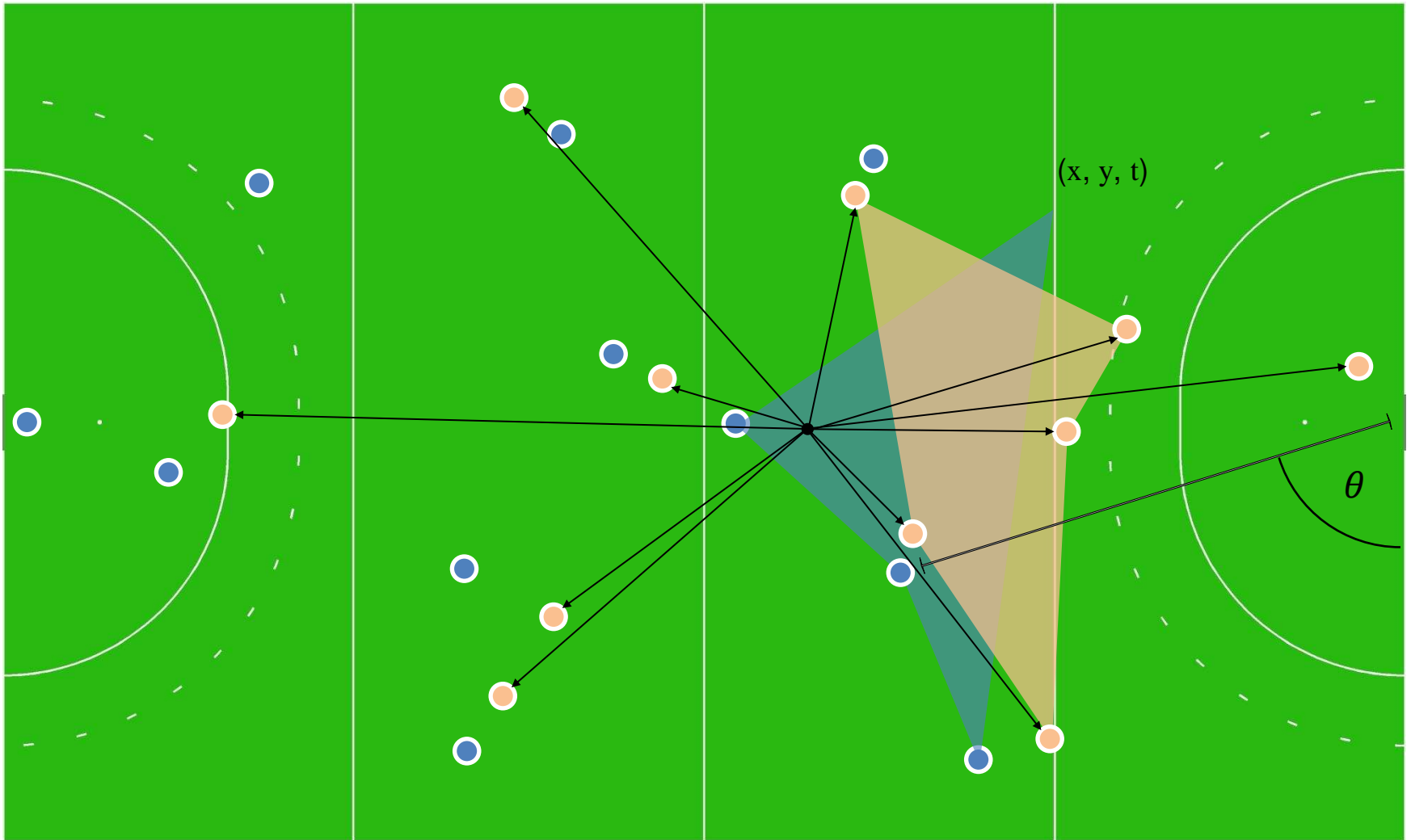
²*Academy of Sport and Physical Activity, Sheffield Hallam University*

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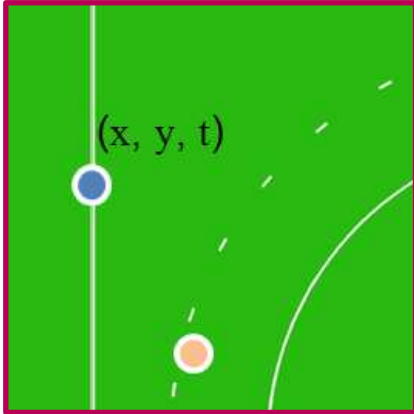


Introduction

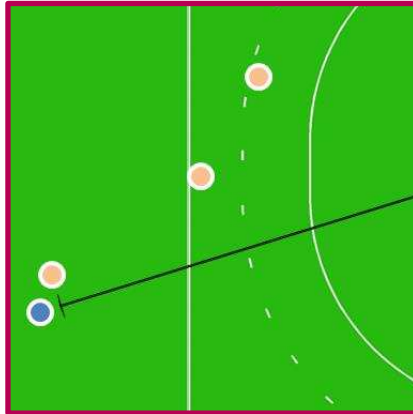


Introduction

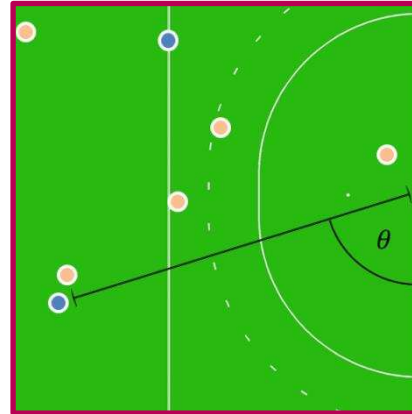
Positions



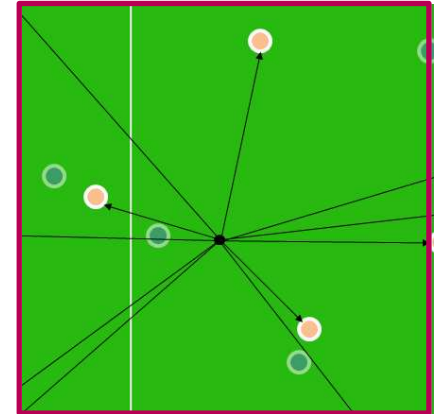
Distances



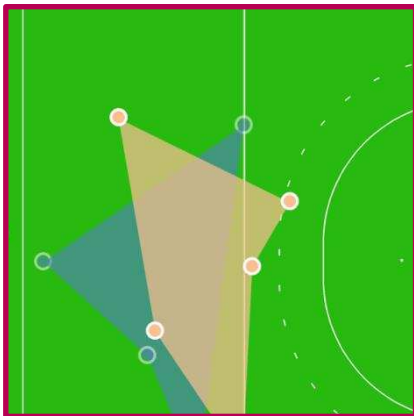
Angles



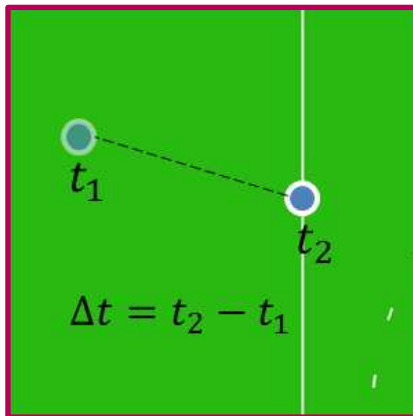
Spread



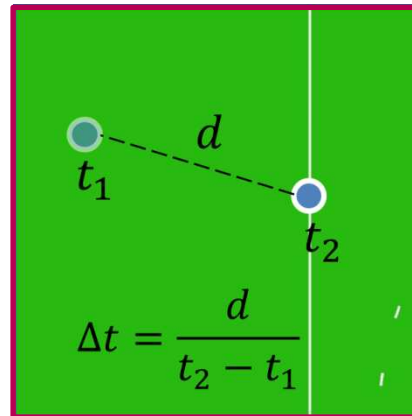
Area



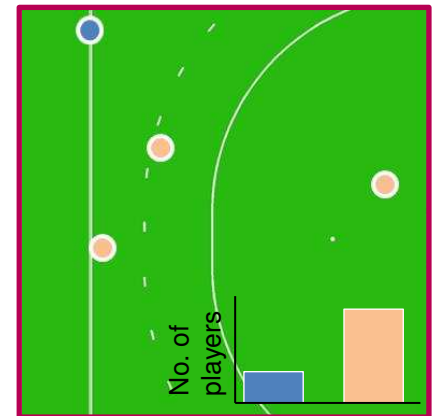
Duration



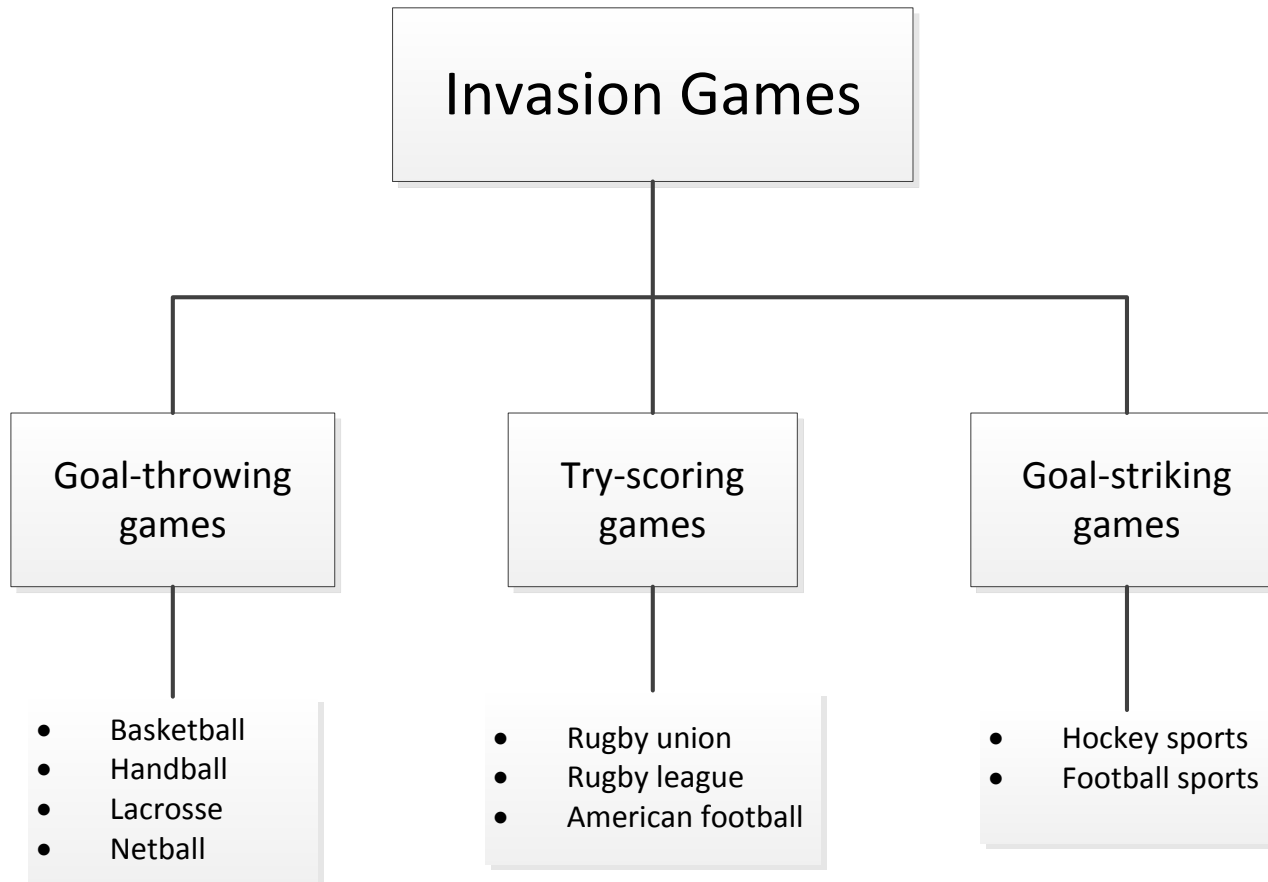
Speed



Context



Introduction



Read & Edwards (1997) *Teaching children to play: A resources for primary teachers 5-11*

Method

Databases:

Scopus

SPORTDiscus

PubMed

Web of Science

Science Direct

GoogleScholar

Search criteria:

("performance analysis" *OR* "notational analysis" *OR* "performance indicator*")

AND (sports *OR* sport) *AND* (goal* *OR* scor*)

AND (offen* *OR* defen*) *AND* (team *OR* teams)

Method

Articles for review of
title and abstract

n = 640

Articles excluded:

Unavailable, n = 37

Articles for review of
title full text

n = 603

Articles excluded:

Unavailable in English, n = 22

Not about competitive sport, n = 47

Not an invasion game sport, n = 92

Not investigating open play, n = 73

No performance metrics, n = 14

Articles included

n = 355

Discussion

1. Consensus on definitions

International Journal of Performance Analysis in Sport
2012, 12, 52-63.

Operational definitions in performance Analysis and the need for consensus.

Jason J. Williams

Cardiff School of Management, Cardiff Metropolitan University, Cardiff, UK.

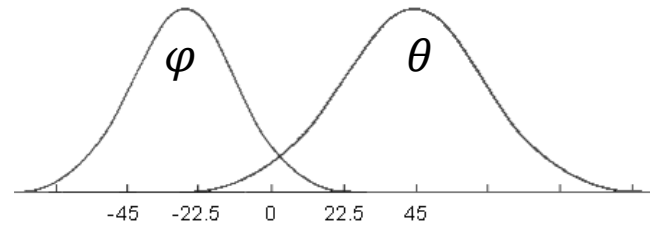
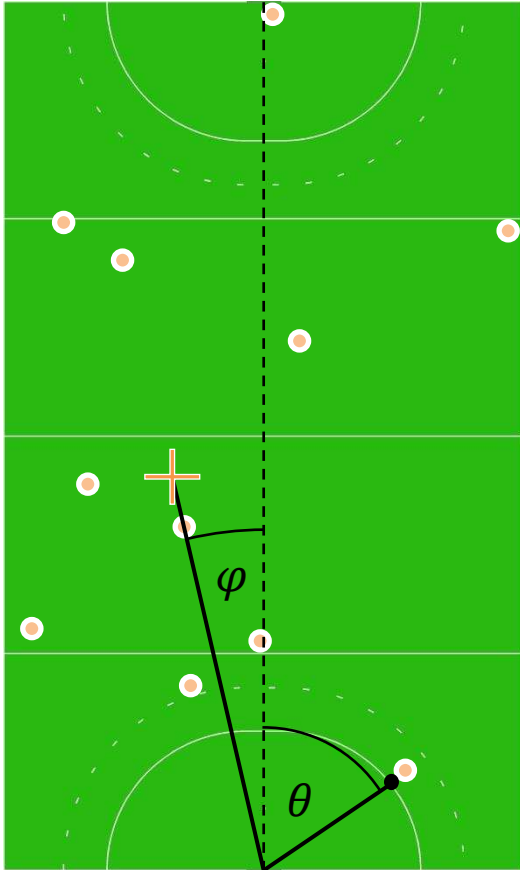
Discussion

2. Sport-specific metrics

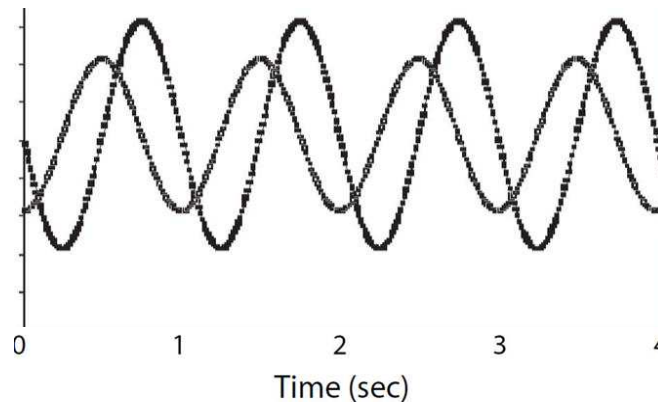
Sport	Sport-specific actions
Australian Rules Football	Hit-outs, Kicks
Basketball (including wheelchair)	Rebounds
Hockey (field, ice, sledge)	Circle entries, Off-sides, Saves
Floorball	Saves
Football (Soccer)	Kicks, Off-sides, Saves
Futsal	Kicks, Saves
Gaelic football	Kicks, Saves
Handball	Saves
Rugby (league, sevens, union, wheelchair)	Breakdowns, Conversions, Jackals, Kicks, Line breaks, Mauls, Offside, Rucks
Water polo	Saves

Discussion

3. Data guides analysts



Discrete data



Continuous data

Conclusion

1. Consensus on definitions

2. Sport-specific metrics

3. Data guides analysis

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