Charting Guidelines for ScR

| **Data item** | **Definition and charting guidelines (reference numbers for studies are provided)** |
| --- | --- |
| ***Assessment tool characteristics*** | |
| 1. Tool name | The name of the tool. Abbreviations or acronyms may be used if presented in studies.  Where no name was provided, and to avoid many un-named tools, the following options were applied in order. All names were capitalised as proper nouns.  Option 1: Where the name for the same tool was provided in another reference, that name was coded. For example, reference 26 does not identify the TSAP by name, but multiple studies do (9, 29, 30, 33, 44, 45, 52, 60, 61, 66).  Option 2: Where another tool is acknowledged as the base of the current tool, that name will be coded. For example, reference 25 refers to the tool used in reference 4. In the case of reference 23, the observation instrument acknowledged reference 19, the observation**al** instrument, and was coded as the same tool despite the different suffix.  Option 3 - The name is derived from the study title. For example, the Australian Football Small-Sided Game Kicking Proficiency Assessment (5) and Polar Coordinate Analysis (32). |
| 1. Original context | The intended context for the tool’s application (community or school). With tools used in multiple studies this was derived from the earliest reference in the corpus.  As an anomaly, reference 63 drew on a sample of players from youth clubs (the community) but classified them into school-age groups and assessed them in a school. This was coded as community. |
| 1. Developed for use in: (IGS) | The intended GS the tool was developed for. With tools used in multiple studies this was derived from the earliest reference in the corpus. |
| 1. Tool outcome: Rating scale | Any reference to the tool rating performance, in contrast to counting actions/behaviours. This may include the use of Likert scales or rubric formats. This does not include the myriad frequency-tools that use a binary or ternary coding system to tally player behaviours.  Two tools applied both rating scales and frequency-count approaches (5 and 14). |
| 1. Tool outcome: Frequency-count | Any reference to the tool counting actions/choices. This contrasts with the act of rating performance. |
| 1. Tool outcome: Indices | Any reference to a frequency-count tool generating a quantifiable performance index (ratio) as a summary of performance. For example, indices are used in the GPAI and TSAP. |
| 1. Reported validity | Any reference to the type(s) of validity data of the tool analysed using the current study sample.  This includes the actual type of validity type. As exceptions, reference 63 referred to five experts developing assessment criteria using the Delphi method (content validity), reference 2 referred to six experts determining the criteria conjointly (content validity), and reference 58 referred to ecological dynamics in assessing a match (ecological validity). These 3 instances were coded as validity. |
| 1. Reported reliability | Any reference to intra-rater or inter-rater reliability data of the tool analysed using the current study sample. This includes any reference to the percentage agreement but excludes any reference to the performance stability of the tool.  Further, the use of an ICC coefficient between observers was coded as inter-rater reliability. For example, see references 24 and 37. |
| ***Assessment tool criteria***  All assessment criteria were reviewed to identify the following. | |
| 1. On-the-ball skills | Any reference to on-the-ball skills within the assessment criteria that include actions of receiving, dribbling, passing, scoring and defending. This criterion may be assessed independent of any other criterion, as in the GPAI (50), or within the criterion of decision-making, as in the Coding Instrument (4).  Of note, the five named on-the-ball skills below are only coded when assessed from a skill execution perspective (that is, not if they are named within decision-making). |
| 1. Receive | Any reference to the action of a catch, reception, possession or ball control that comes from a team-mate that does not create a score. This includes balls received in open play where the ball was not in possession of either team (termed a ‘loose ball’ in reference 10).  It excludes any act of stealing or intercepting which is coded as defend. This is best demonstrated in the TSAP that codes a received ball (from own team) and conquered ball (from opposition) as two separate criteria. As with all five named on-the-ball skills, this is not reported if assessed within decision-making. |
| 1. Dribble | Any reference to the action of dribbling, carrying, maintaining possession or running with the ball that does not create a score. As with all five named on-the-ball skills, this is not reported if assessed within decision-making. |
| 1. Pass | Any reference to the action of a pass, kick or throw that does not create a score. As with all five named on-the-ball skills, this is not reported if assessed within decision-making. |
| 1. Score | Any reference to the action of a score/shot. As with all five named on-the-ball skills, this is not reported if assessed within decision-making. |
| 1. Defend | Any reference to defensive actions, for example, tackle, deflect, intercept, save goal or defensive pressure. As with all five named on-the-ball skills, this is not reported if assessed within decision-making. |
| 1. Off-the-ball movement | Any reference to off-the-ball behaviours, movement patterns/skills, positioning, support, or cover. This may be assessed independent of any other criterion, as in the GPAI (50), or within the criterion of decision-making, as in the Coding Instrument (4). |
| 1. Decision-making | Any reference to decision-making/selection/or making choices within the assessment criteria.  As an example of not coding DM, reference 5 suggested players/coaches felt the tool assessed decision-making similar to match play (p.81), but on p.80 only kicking total and efficiency are indicated as criteria.  Decision-making is invariably based on on-the-ball skills and/or off-the ball movement. In both cases, on-the-ball skills and off-the ball movement are also coded. |
| 1. ‘Other’ criteria | Any reference to criteria that cannot be classified as on-the-ball skills, off-the-ball movement, or decision-making. |
| ***Assessment tool applications*** | |
| 1. Study aim (abbreviated) | A concise statement that captured the most relevant study aim pertaining to the assessment of game performance. |
| 1. Sample size | The total number of participants used to generate the assessment data for the GS reported. This may be different to a larger total *n* reported.  Where an *n* was not provided separately for the test and any control group the total *n* was reported. For example, reference 11. |
| 1. Gender | Gender of participants (where indicated). |
| 1. Age (years) | The age of all participants in years between ages 5 to 19, or grade/ year/ school level. Where an age or mean age is reported, this is preferred over an age band. For example, reference 64 is reported as age 9 rather than U/10. The mean will be rounded up.  Where more than two ages or age bands are reported, the range (top and bottom ages) will be reported, for example reference 15 provides mean ages for four bands, so the bottom and top mean age is reported, and reference 12 provides no ages and is reported as U/11 to U/20.  Where a grade, year or school type is mentioned without any accompanying ages that will be reported. For example, reference 69 was reported as Grade 6 to 7, reference 72 was reported as High school and reference 53 was reported as Year 11. |
| 1. Applied context | The context the tool was applied in (community or school). |
| 1. Applied GS | The GS that reports data collected by the tool.  For simplicity, any subsequent ‘study’ using the same tool within the same reference was excluded. The two instances were reference 21 and reference 37. |
| 1. Game format | This involves coding from two options of small-sided game (SSG) or full-sided game (FSG), based on the adult form of the game. |
| 1. Observation period | The total time (in minutes) that a single player/team is assessed. Where time in minutes cannot be calculated, the figure will be based on the number of plays or matches. The observation period is reported for a single game, game format and reporting period, rather than aggregating any of these data points. In some cases, where the observation period cannot be established for a single player/team, the figure represents the observation period for assessment of the entire population. |
| 1. Video capture | Any reference to the use of video capture during player assessment.  This excludes references to the use of video capture outside of player assessment (for example reference 20 uses video to examine construct validity, but then assesses the game in real time, this was coded as not using video capture). |
| 1. Peer assessor | Any reference to players completing the assessment. |

*Note.* The abbreviated study aim was the only item that was independently charted by the researcher in the original search.

To reduce confusion in reporting data, where an article applied the same assessment tool in a second study, only the first study was charted (for example, French & Thomas, 1987; Memmert, 2010).