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## **Developing decision-making in rugby**

**A 152.786 (50 point) research report presented in partial fulfillment of  
the requirements for the degree of  
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## Abstract

The purpose of the study was to examine how fifteen-year-old rugby players' perceive their ability to make decisions in game situations, after participating in a seven-week decision-based training intervention. Data was collected from six players, pre, during, and post the intervention using semi-structured interviews. Two further training sessions were provided six weeks post intervention to review content and skills and determine player retention of learning; a final interview was then also conducted. Content analysis of the descriptive data involved identifying the main concepts and then categorising them into common themes using NVivo (N6), a qualitative software programme. Video analysis of the player's games (early, mid and end of season matches) as well as analysis of a post intervention interview with the facilitator allowed methodological triangulation. Comparison of the main themes from the findings enhanced the data's trustworthiness, reliability (dependability) and validity (credibility and transferability). The findings showed that all six players who participated in the study developed some perception and motor skills (such as: peripheral vision; attention strategies; spatial and tactical awareness; and motor skills), and tactical sport specific knowledge (such as: functional roles as ball carrier, support player, and defender; understanding of defence patterns and positional play) similar to that of an expert player. The findings also showed that better intra-communications among the players were critical in their ability to make informed decisions. These findings, as a result of the intervention, suggest that deliberate and purposeful decision-based training may add-value to player decision-making on the rugby field as the players' knowledge representation and game understanding have improved. However, the ability of players to execute and demonstrate transfer of skills from intervention to games, varied among the players. Further research is needed in tracking and monitoring individual players and their ability to make effective decisions from intervention to games and from season to season.

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## Glossary of Terminology

- Action schemata** – abstract structure applied to different situations
- Anticipation** – prediction of what and when something is going to happen
- Attentional flexibility** – switching attention from one source to another
- Ball Carrier** – player in possession of the rugby ball, roles are to stress the defence and listen and be aware
- Boot man** – stands back and in between ‘rocks’ on both sides of a ruck or maul and defends if attacker breaks first tackle
- Channel** – line to run on attack or defence
- Chunking** – grouping items of information in memory
- Cognitive knowledge** – decision on strategy about movement to make
- Cue utilisation** – feedback, directing attention to the most relevant information
- Declarative knowledge** – knowledge of what to do
- Defender** – prevent ball carrier from making advantage – roles are to scan for cues, align inside shoulder communicate what’s happening control the collision and regain the ball
- Divided attention** – ability to divide attention to more than one sensory stimulus, as attention is needed
- Dummy runner** – run and pretend to receive the ball from ball carrier to confuse and draw the defender in to create space for ball carrier
- Encode** – processing of information into memory
- Environmental cues** – feedback, regarding specific sensory information
- Expert** – consistent athlete performance over extended period
- Functional role** – term used to understand player positional role in either attack, defence position on field or in relation to the ball
- Guard dog** – second defender off ruck or maul responsible for first attacker
- L running** – straightening running line instead of running across the field, draws the defence in to create space
- Long Term Memory (LTM)** – information committed to memory
- Pattern recognition** – identifying patterns of play
- Perceptual skills** – interpretation of stimuli that lead to the correct performance

**Peripheral vision** – ability to see left and right outside direct line of vision (where the player needs to be looking in relation to the role)

**Procedural knowledge** – knowledge of how to do it

**Production system** – allows athlete to handle particular information tasks in an automatic fashion

**Push/Pressure pass** – Non spiral pass used under pressure and when time and space is limited, also enables ball carrier to keep head up to see the options

**Retrieval** – how memory is assessed to respond to task at hand

**Rock** – first defender off the ruck or maul responsible for first space inside first attacker

**Selective attention** – selects some sensory information for further processing

**Situational probabilities** – likely expectations of what is to happen in a given situation

**Short Term Memory (STM)** – memory store capable of holding moderately abstract information for up to 60 seconds

**Space** – instant in time where the opportunity exists to break the defence through manipulating the defence

**Spiral pass** – pass used to cover longer distances takes more time and space to position ball in hands and execute the pass

**Stress the defence** – position or use ball to force the defence to commit to a course of action

**Support player** – player from same team as ball carrier and in position to receive a pass or assist in control play