Psychological readiness to return to sport: 3 key elements to help the practitioner decide whether the athlete is REALLY ready?

Corresponding author: Dale Forsdyke

Applied Human Sciences Department, Faculty of Health and Life Sciences, York St John University, Lord Mayors Walk, York, UK, YO31 7EX

Tel: +44(0)1904 876475

Email: d.forsdyke@yorksj.ac.uk

Twitter: @forsdyke_dale

Second author: Dr Adam Gledhill

School of Clinical and Applied Sciences, Faculty of Health and Social Sciences, Leeds Beckett University, Portland Building: PD620, Leeds, UK, LS1 3HE

Tel: +44(0)113 8125119

Email: adam.gledhill@leedsbeckett.ac.uk

Twitter: @gleds13

Third author: Dr Clare Ardern

Aspetar Orthopaedic & Sports Medicine Hospital, Doha, QATAR

Division of Physiotherapy, Linköping University, Linköping, SWEDEN

School of Allied Health, La Trobe University, Melbourne, AUSTRALIA

Email: c.ardern@latrobe.edu.au

Twitter: @clare_ardern

Word count: 800 (excluding Boxes 1, 2 and references).

Return to sport (RTS) outcomes after severe injury are consistently poor,[1,2] Psychological factors are important influences on returning to sport[3], yet what it means to be psychologically ready to RTS is unclear[4]. Rarely will an athlete be held back from RTS because he/she is not psychologically ready to return. Psychological factors correlate with injury occurrence,[5] therefore these factors should be offered greater weighting in RTS decision making.

Characteristics of an athlete who is psychologically ready to RTS are multifaceted and include, among others,: realistic expectations, high levels of self-efficacy and low levels of anxiety.[1, 4, 6] Psychological readiness to RTS is likely influenced by multiple social agents, personal and contextual factors (e.g. coaches, sports medicine practitioners, personality traits, performance level).[4] Consequently, RTS decisions should be made from an interdisciplinary perspective; with multidimensional monitoring of psychological factors (e.g., concurrently monitoring self-efficacy and re-injury anxiety levels).[6]

Psychological readiness to RTS is not commonly monitored in practice, despite specific instruments being available (e.g.,[7]). Many practitioners feel under-prepared to work within this area,[8] or might view evaluating psychological readiness to RTS as being outside their scope of their practice. On the other hand sports medicine practitioners are ideally positioned to monitor athletes, because of the strong working relationship developed throughout injury rehabilitation.

In this editorial we describe three key elements that practitioners can consider when monitoring psychological readiness to RTS in preparation for RTS decision making.

3 KEY ELEMENTS IN PSYCHOLOGICAL READINESS TO RTS DECISION MAKING

To facilitate effective RTS monitoring, practitioners should be empowered to confidently consider the psychological aspects of RTS. An empowered practitioner is better able to appreciate the role of psychology within severe injury, and use this knowledge to inform referrals to appropriate professionals (e.g. accredited sport psychologist, mental health practitioner) when the limits of their professional competency have been reached (see box 1.).

Key element #1: How can the practitioner best monitor athletes?

Box 2 identifies tools that practitioners might use to get to know the athlete and for monitoring psychological readiness to RTS. These tools suggest thresholds to guide RTS decisions, although their use as clinical measures requires further evaluation and validation. We are mindful that no tool is perfect, and might have completion issues associated with social desirability to RTS at a time when athlete's emotional integrity is poor.[5] For example, athlete's inaccurately completing tools when under pressure for premature RTS. One limitation of these tools is their unidimensional nature[6] (e.g. focus on a specific injury, joint, or construct), therefore it is advantageous to use multiple tools to compare and contrast findings.

Key element #2: Use working knowledge of the athlete

We embrace the notion of 'knowing your athlete'. Practitioners and athletes share significant interactions prior to injury, and during phased return to participation. Knowledge, understanding, and rapport develop through these interactions. For example, the practitioner might observe an athlete is preoccupied with RTS concerns, is becoming withdrawn, or adapting performance of specific movement patterns leading to subjective evaluations of RTS status. Clarifying the athlete's perceptions of support from coaches and team-mates may provide information on RTS stressors and the collective RTS expectations. While tools may infer an athlete is psychologically ready to RTS, working knowledge of the athlete might suggest otherwise, and vice versa. Monitoring athletes with tools is useful, however, the practitioner should avoid being overly reliant on these as collectively both forms of information (tools and subjective evaluations) require consideration when making informed RTS decisions.

Key element #3: Adopt an interdisciplinary, shared decision making approach

Shared decision making, involving the key stakeholders, is central to quality RTS decisions.[3] Historically, the sport medicine practitioner was the gate keeper of the RTS decision, relying primarily on physical assessments. Now the consensus is that RTS decisions should be collaborative and involve practitioners (sports medicine, sports psychology, and sports science team), coach(es), parents or carers (in the case of children or vulnerable adults), and the athlete.[3] Considering the collective perspectives of all stakeholders provides a more robust picture of an athlete's psychological readiness to RTS. For example, coaches can provide information regarding the athlete's intent and engagement during technical practice (e.g., is there hesitance when anticipating contact?); family members can provide valuable information about behaviours away from sport. Both perspectives help build a picture of the athlete's psychological readiness to RTS.

SUMMARY

When can the practitioner be sure that the athlete is psychologically ready to RTS? Perhaps this is difficult to predict? Or at least more difficult than physical readiness, which is, at least in part, dictated by tissue healing. As practitioners, we recognise and accept that biological scarring can have a long-term effect on function and performance. Severe injury could imprint (metaphorically)

psychological scar tissue (e.g. athletes report that their injury will "never leave them"), and we should consider this aspect of RTS equally alongside the physical aspect.

REFERENCES

1 Ardern CL, Österberg A, Tagesson S, et al. The impact of psychological readiness to return to sport and recreational activities after anterior cruciate ligament reconstruction. *British Journal of Sports Medicine* 2014; 48:1613–1619.

2 Fältström A, Hägglund M, Kvist J. Factors associated with playing football after anterior cruciate ligament reconstruction in female football players. *Scandinavian Journal of Medicine and Science in Sports* 2015; doi:10.1111/sms.12588 [epub ahead of print].

3 Ardern CL, Glasgow P, Schneiders A, *et al*. 2016 Consensus statement on return to sport from the First World Congress in Sports Physical Therapy, Bern. *British Journal of Sports Medicine* 2016;50:853–864.

4 Forsdyke D, Smith A, Jones M et al. Psychosocial factors associated with outcomes of sports injury rehabilitation in competitive athletes: a mixed studies systematic review. *British Journal of Sports Medicine*; 50:537-544.

5 Ivarsson A, Johnson U, Podlog L. Psychological Predictors of Injury Occurrence: A Prospective Investigation of Professional Swedish Soccer Players. *Journal of Sport Rehabilitation* 2013; 22:19-26.

6 Podlog L, Banham SM, Wadey R, et al. Psychological readiness to return to competitive sport following injury: A qualitative study. *The Sport Psychologist* 2015; 03;29(1):1-14.

7 Walker N, Thatcher J, Lavallee D. A preliminary development of the Re-Injury Anxiety Inventory (RIAI). *Physical Therapy in Sport* 2010; 11(1):23-29.

8 Heaney C, Green A, Rostron, C et al. A qualitative and quantitative investigation of the psychology content of UK physiotherapy education. *Journal of Physical Therapy Education* 2012; 26(3):48-56.