

What do sports medicine professionals working in football need to know about sport psychology?

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Introduction

Sport psychology and sports injury are undeniably linked - psychological factors have been shown to impact on both injury prevention and injury rehabilitation. Factors such as high stress levels can increase the risk of injury, whilst the occurrence of a sports injury can lead to several negative psychological reactions such as anger, frustration, fear, anxiety and depression which can impact on rehabilitation behaviour (e.g. adherence to a rehabilitation programme) and outcomes (e.g. recovery time) (Brewer & Redmond, 2017). Consequently, the use of sport psychology intervention during injury rehabilitation is advocated and has been shown to lead to several positive outcomes such as improved attitude, adherence and self-efficacy (Brewer, 2010).

Why do sport injury rehabilitation professionals need to know about sport psychology?

Given that psychological factors can impact on both the prevention of and rehabilitation from injury, and psychological intervention can lead to positive outcomes, it seems intuitive that sport injury rehabilitation professionals (SIRPs) working in football need to have some understanding of the psychological aspects of sports injury to aid their day-to-day practice. Additionally, consideration of psychological factors is integral to the biopsychosocial approach commonly advocated in sports medicine (Rosen, Frohm, Kottorp, Fridén, & Heijne, 2017; Wiese-Bjornstal, 2010). SIRPs, such as physiotherapists and sports therapists, play an important role in ensuring that injured athletes receive the sport psychology support they need, and due to their frequent contact and close proximity to the injured athlete, are ideally placed to provide some degree of psychological support

(Arvinen-Barrow, Massey, & Hemmings, 2014; Heaney, Rostron, Walker, & Green, 2017; Kamphoff, Thomaes, & Hamson-Utley, 2013).

Working as part of a multidisciplinary team

It is not suggested that football SIRPs need to become experts in sport psychology able to deliver comprehensive psychological interventions, but that they need to have an awareness of psychological factors and their potential impact and know how to access further support. It has been suggested that the SIRP should act as a “frontline practitioner” providing basic sport psychology support, with the sport psychologist delivering more advanced support (Heaney, 2006). This suggests that the injured player should ideally be supported through injury by a multidisciplinary support team that might include, amongst others, a physiotherapist, a doctor, a sport psychologist and a coach. It is, however, recognised that not all injured players are supported by a multidisciplinary team and it is important that these players can still access sport psychology support. It is recommended that SIRPs develop links with sport psychologists in order to maximise the support available to their players.

Research published in 2006 indicated that 51% of physiotherapists working in professional football had referred an injured player to a sport psychologist, which was significantly higher than that seen in other studies which did not specifically investigate SIRPs working in football (Heaney, 2006). This suggests that the nature of professional football clubs may be more conducive to multidisciplinary teams. More recent research examining SIRPs from a range of sports found that only 17% of SIRPs they surveyed had ever referred an injured athlete to a sport psychologist (Clement, Granquist, & Arvinen-Barrow, 2013). Low referral rates could be due to a perceived lack of access or due to a perceived lack of need for referral; both factors that could be influenced by exposure to psychology of sport injury education.

What do SIRPs already know about sport psychology?

Research has consistently shown that SIRPs demonstrate an awareness of psychological reactions to sports injury and the potential importance of psychological intervention during rehabilitation, however, this does not always extend to implementation (Heaney, Walker, Green, & Rostron, 2017).

There is often a gap between SIRPs recognising the importance of psychological intervention and providing such intervention (Alexanders, Anderson, & Henderson, 2015). It has been suggested that this may be a reflection of a lack of sport psychology education (Heaney, Walker, et al., 2017).

Research has shown almost universal agreement that the training of SIRPs in sport psychology is inadequate and that SIRPs consistently express a desire to develop their knowledge of sport injury psychology theory and practice (Arvinen-Barrow, Penny, Hemmings, & Corr, 2010; Heaney, Rostron, et al., 2017). In their study of the psychology content of UK physiotherapy programmes Heaney, Green, Rostron & Walker (Heaney, Green, Rostron, & Walker, 2012) identified vast diversity both within and between universities in the psychology education received by physiotherapy students and called for greater standardisation of the curriculum in this area.

Further evidence of gaps in the sport psychology related knowledge of SIRPs is demonstrated in the psychological interventions they employ in their work with injured players where there are commonly discrepancies between the types of sport psychology interventions SIRPs favour and research evidence (Cormier & Zizzi, 2015). For example, SIRPs gravitate towards more practical techniques that are motivational in nature such as goal setting rather than more unfamiliar techniques such as imagery or relaxation strategies. This perhaps indicates the fact that SIRPs often develop their skills in delivering psychological support through experiential rather than formal learning and lack confidence, knowledge and training relating to specific techniques. Alternatively, it could be indicative of a perception that delivering sport psychology support is beyond the professional role of the SIRP and is best delivered by a sport psychologist, as part of a multidisciplinary sports medicine support team.

What impact does sport psychology education have?

The gaps evident in SIRPs use of sport psychology in their work with injured players and their expressed desire for further training suggest that sport psychology education opportunities would be of great benefit to SIRPs. Two UK based studies, which included SIRPs working in football, have investigated this in recent years. Firstly, Heaney, Rostron, et al. (2017) compared the sport psychology related attitudes and behaviours of physiotherapists and sports therapists who had studied the psychological aspects of sport injury as part of their training to those who had not. They found that those who had studied the psychological aspects of sport injury reported using significantly more sport psychology in their practice and making more referrals to sport psychologists. Secondly, Heaney, Walker, et al. (2017) compared the and their attitudes and behaviours towards sport psychology physiotherapists who studied either a sport psychology module or a control module over a six-month period. It was found that those who had studied the sport psychology module demonstrated an improvement in their attitudes towards sport psychology immediately following its completion that was significantly higher than those who had studied the control module. Use of sport psychology also increased with those who had studied the sport psychology module integrating more sport psychology techniques into their practice than those who had studied the control module.

What do SIRPs need to know about sport psychology?

A model recommending the content of sport psychology education for SIRPs is presented in Figure 1. The model shows that sport psychology education is appropriate to be embedded both into undergraduate / postgraduate training and into CPD programmes for those already qualified. This is to ensure that both qualified SIRPs and those still in training are able to improve their sport psychology related practice. In time, if such a model is widely adopted and SIRPs receive a consistent grounding in sport psychology through undergraduate and postgraduate education, the need for

CPD training may diminish or develop to address more specific areas as a progression from undergraduate / postgraduate sport psychology education rather than an alternative to it. The question as to whether sport psychology education is best placed in the curriculum at an undergraduate or postgraduate level is an area for debate. It is argued that as the ability to recognise and address psychological issues during rehabilitation from sports injury is such an essential skill it should be embedded in both undergraduate and postgraduate curricula, however, this may depend on the requirements of the specific profession. In UK physiotherapy, for example, opponents to this stance may argue that this is impractical for undergraduate physiotherapy programmes as the curriculum is already very full and physiotherapists are being trained to work in a variety of settings of which sport is just one. Whilst this is a valid point previous research (Clement & Shannon, 2009; Heaney, Walker, et al., 2017; Stiller-Ostrowski, Gould, & Covassin, 2009) has demonstrated that sport psychology education for physiotherapists does not need to be time consuming. There is scope for students to be introduced to sport psychology at an undergraduate level, perhaps with deeper investigation at a postgraduate level where greater specificity is possible. Additionally, it can be argued that the skills that can be developed through sport psychology education are transferable to other settings.

SPORT PSYCHOLOGY EDUCATION FOR SPORTS INJURY REHABILITATION PROFESSIONALS (SIRPs)			
<p>AIMS:</p> <ul style="list-style-type: none"> To provide SIRPs with a functional understanding of the psychological aspects of sports injury in order to have a positive impact on their day-to-day practice and the rehabilitation outcomes and experiences of the athletes they work with To equip SIRPs with the knowledge and skills to be able to: <ol style="list-style-type: none"> recognise psychosocial factors that may increase the risk of injury recognise psychological reactions to sport injury and their potential impact on the rehabilitation process incorporate basic psychological strategies into their practice recognise when and how to refer an athlete for psychological support 			
SUGGESTED STUDY TOPICS			
<p>Understanding of the psychological antecedents of injury</p> <p>SIRPs need to have an understanding of the psychosocial factors that may contribute to the development of a sports injury</p> <p><i>Indicative content:</i></p> <ul style="list-style-type: none"> Factors that can increase injury risk e.g. stress, personality Stress-injury model (Williams & Anderson, 1998) Biopsychosocial approach to injury prevention 	<p>Understanding of the psychological impact of injury</p> <p>SIRPs need to have an understanding of the psychological impact of sports injury and its potential influence on the rehabilitation process</p> <p><i>Indicative content:</i></p> <ul style="list-style-type: none"> Common psychological reactions to sport injury and their potential impact Models of psychological reactions to sports injury e.g. cognitive appraisal models, Wiese-Bjornstal et al.'s (1998) integrated model, Brewer et al.'s (2002) biopsychosocial model 	<p>Interventions and psychological skills / techniques</p> <p>SIRPs need to know how to respond and intervene when psychological factors are impeding recovery and well-being and be aware of how to use basic psychological strategies to enhance recovery</p> <p><i>Indicative content:</i></p> <p>The potential uses of techniques such as:</p> <ul style="list-style-type: none"> Social support Goal setting Imagery Positive self-talk Relaxation strategies 	<p>Referral and professional boundaries</p> <p>SIRPs need to be able to recognise when and how to refer an athlete to a sport psychologist or other professional</p> <p><i>Indicative content:</i></p> <ul style="list-style-type: none"> Professional boundaries and ethics in delivering sport psychology support Role of the SIRP Role of the sport psychologist Working with a sport psychologist How to find a sport psychologist
<p>ALL TOPICS: - Applied focus - Theoretical underpinning AUDIENCE: - Undergraduate - Postgraduate - Already qualified</p>			

Figure 1: Recommendations for sport psychology education for Sport Injury Rehabilitation Professionals

As illustrated in the model (Figure 1) the aim of sport psychology education for SIRPs is to provide them with a functional understanding of the psychological aspects of sports injury in order to have a positive impact on their day-to-day practice and the rehabilitation outcomes and experiences of the players they work with. The key term here is 'functional' – SIRPs are not training to be psychologists and therefore do not need to have a vast and deep understanding of psychological concepts and theories, rather they need to develop practical skills, underpinned by psychological theory, that can be applied in an injury rehabilitation setting. Specifically, sport psychology education for SIRPs should aim to equip them with the knowledge and skills to be able recognise psychological reactions to sports injury and their potential impact on the rehabilitation process, to incorporate basic psychological strategies into their practice and to recognise when and how to refer a player for psychological support.

To achieve these aims sport psychology education for SIRPs needs to be highly relevant and specifically address the psychological aspects of sports injury, rather than more generic sport psychology topics. In line with the recommendations of previous research (Heaney, Walker, Green, & Rostron, 2015) the model suggests that the topic areas that should be covered are: (1) understanding of the psychological impact of injury, (2) interventions and psychological skills/techniques, and (3) referral and professional boundaries, with the addition of a fourth topic 'understanding of the psychosocial antecedents of injury'. This topic has been added to acknowledge the importance psychological factors can play in the development of sports injury (Ivarsson, Johnson, Tranaeus, Stenling, & Lindwall, 2017) and in recognition of the fact that SIRPs are commonly involved in the prevention of injury as well as the treatment of injury. In order to maximise the adoption of sport psychology into the day-to-day practice of SIRPs and enhance its perceived credibility it is essential that this content is delivered in an applied context with a strong theoretical underpinning.

The first of the four topic areas, *understanding of the psychosocial antecedents of injury*, will allow SIRPs to understand how psychosocial factors such as stress can increase the risk of injury and how risk can be reduced using a biopsychosocial approach to injury prevention. The second topic area, *understanding of the psychological impact of sports injury*, will help SIRPs to gain the ability to understand and recognise the potential psychological impact of sports injury on rehabilitation, and as Figure 1 indicates, should cover models of psychological reaction to sports injury and encourage SIRPs to consider their positioning within these models. Having gained an understanding of the potential impact of psychological factors of sports injury, the third topic area, *interventions and psychological skills / techniques*, introduces SIRPs to basic psychological strategies they can integrate into their practice. Figure 1 suggests that strategies such as social support, effective goal setting, imagery, positive self-talk and relaxation can be introduced to SIRPs, however, SIRPs will not be

qualified to deliver some of these strategies, so this education is primarily focused on awareness of these potential interventions. It is important that SIRPs know their limitations in delivering sport psychology support to the injured athlete and are aware of the professional ethics involved; therefore, the final topic area proposed in Figure 1 is *referral and professional boundaries*. The model indicates that this topic area should address when it is appropriate to refer an injured athlete to a sport psychologist, the processes involved in doing so, and the working relationship between the SIRP and sport psychologist.

Conclusion

Psychological factors are important in the prevention and treatment of sports injury. To allow SIRPs to fully adopt a biopsychosocial approach to their work there is a need for improved and more consistent sport psychology education. The model proposed in this article provides a framework for such education and should be adopted by stakeholders involved in the of education and training for SIRPs.

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