

# The psychological impact of sports injury

While we might have an understanding of the physiological symptoms of our clients' injuries, there is also a significant amount of psychological distress that can manifest itself.<sup>1</sup>

Research has shown that about 65% of runners are injured in an average year, one running injury occurs for about every 100 hours of running, and runners miss about 5-10% of their workouts due to injury.<sup>2</sup> As a result of an injury an athlete might experience a temporary loss of the ability to participate in their exercise programme, or sport, as well as perceiving a threat to continue participating in the future.

## The importance of self-identity

An individual's sense of self-identity is constructed of separate components from a variety of areas that the individual gains reward and satisfaction.<sup>3</sup> For athletes, or the committed exerciser, a large part of their self-identity, and self-worth, will be ingrained in their "active life". The more committed and serious an individual is with their exercise then the greater contribution their athletic self-worth will have on their global identity. If injury undermines an individual's athletic self-worth then, for the committed exerciser, this can lead to a dramatic decline in how they "value" themselves as a person.<sup>4</sup>

## The stress of injury

Heil proposed that an injury can have a multi-dimensional impact on the athlete/exerciser's psychological well-being.<sup>5</sup> Heil commented that the stress of an injury can negatively manifest itself in four main areas of well-being:

### 1. Physical well-being

- Physical injury
- Pain of injury
- Physical rigors of treatment and rehabilitation
- Temporary physical restriction
- Permanent physical changes

### 2. Emotional well-being

- Psychological trauma when the injury occurs
- Feelings of loss and grief
- Threats to future performance
- Emotional demands of treatment and rehabilitation

### 3. Social well-being

- Loss of important social roles
- Separation from family, friends, and teammates
- New relationships with treatment providers
- Necessity of depending on others

### 4. Self-concept

- Loss of sense of control
- Dealing with altered self-image
- Threat to important life goals and values
- Necessity for decision-making under stressful circumstances

Heil believed that stress caused by the impairment of psychological well-being can have a debilitating effect on the physical rehabilitation process. Larson et al estimated that approximately 8% of injured athletes are referred to counselling to help them cope with the injury and their rehabilitation.<sup>6</sup>

Through the work of Heil it can be seen that there are psychological responses to injury that can have a negative impact on the well-being of the individual, and that this can manifest itself in maladaptive behaviours that will impede effective rehabilitation.

## Cognitive consequences of injury

When an individual experiences a traumatic injury that has an impact on their being this is often accompanied by related "thoughts of distress". This can lead to the distorted and irrational thinking (cognitive beliefs), about both the individual's current situation and their future. Beck and Emery identified five general types of cognitive distortion that can accompany the experience of a traumatic event.<sup>7</sup> The five categories of distortion are:

1. Catastrophising: exaggerating the severity of the injury.  
At the time of injury: "I'll never be able to play again".
2. Overgeneralisation: incorrectly extending the impact of the injury to aspects of performance, or other unrelated daily behaviours that are unlikely to be affected.  
Following a wrist injury: "I won't be able to run as fast again".
3. Personalisation: taking undue personal responsibility for injury

or giving it some exaggerated meaning.

“Why is it always me who gets injured?”

4. Selective Abstraction: attending to specific aspects of the injury that have little meaning in the overall context of the injury.

“When John had this injury he never fully recovered and neither will I.”

5. Absolute/Dichotomous thinking: simplistically reducing complex experiences into all-or-none categories.

“Because I am injured I am no use for the team.”

### Psychological distress and stages of rehabilitation

It is useful to have a framework to help identify psychological problems that are likely to occur during rehabilitation from injury and at which stage of the injury-rehabilitation timeframe these issues are likely to be raised. Taylor and Taylor examined five distinct phases of post-injury and identified the key causes of psychological distress related to that point in rehabilitation, and the most likely strategies that would contribute to the injured individual's adaptation (Taylor and Taylor stated that “adaptation was likely to occur as the athlete comes to accept the injury, recognises the inevitability of what might lie ahead, and receives adequate social support to alleviate negative emotions”).<sup>8</sup>

Point of rehabilitation	Causes of psychological distress	Contributors to adaptation
Immediately post-injury	Suddenness of injury Lack of control Disruption of goals Pain and discomfort Uncertainty	Acceptance of injury Recognition of inevitability of injury Social support
Following diagnosis	Realisation of severity of injury Recognition of rehabilitation Sense of hopelessness Doubts about full recovery	Understanding of diagnosis Shift to future orientation Education about the rehabilitation process Examples of injured athletes who have recovered
If surgery is required	Realisation of seriousness of injury Unfamiliarity of surgery Impact of injury on future participation	Understanding the benefits of surgery Education about the surgery process Successful repair of injury
Third quarter of rehabilitation process	Physically tired Emotionally drained Depleted resources for remainder of recovery Frustration over the length of rehabilitation process	Focus on positive aspects of rehabilitation Ensure adequate rest See progress toward complete recovery
Approaching return to sport	Awareness of the time and effort invested Facing the possibility of failure	Focus on quality of rehabilitation Recognise their readiness to return to sport Remember their desire to return to sport

### Assessing psychological distress during rehabilitation

Taylor and Taylor also developed a Psychological Distress Checklist (PDC) that can be used by professionals working with individuals during the rehabilitation process. The PDC is designed to highlight a variety of observable behaviours that indicate a generally poor psychological response to injury and the rehabilitation process. Taylor and Taylor believed that if personal trainers, physiotherapists, and other professionals who are involved with the rehabilitation of individuals from sport injury are aware of these symptoms of psychological distress then this can be used to

informally monitor your client's progress and this can inform how you work with that client to ensure that they do not respond maladaptively to their injury and rehabilitation.

Psychological distress checklist	
Place a tick next to each behaviour that you observe on a consistent basis with a client. The persistent presence of any of these behaviours may warrant a referral. The more items that are checked then the greater the need for a referral.	
1	Not accepting the injury
2	Denying the seriousness or extent of the injury
3	Displaying depression
4	Displaying anger
5	Displaying apprehension or anxiety
6	Failing to take responsibility for rehabilitation
7	Not adhering to rehabilitation
8	Missing appointments
9	Overdoing rehabilitation
10	Not cooperating with rehabilitation staff
11	Bargaining with rehabilitation staff over treatment or time out of competition
12	Frequent negative statements about injury and rehabilitation
13	Reduce effort in rehabilitation sessions
14	Poor focus and intensity on physical therapy sessions
15	Unconfirmable reports of pain
16	Interfering behaviours outside of rehab sessions: eg, using injured body part
17	Inappropriate emotions
18	Emotional swings

The challenge for professionals who work with clients who have experienced injury and are involved in active rehabilitation is to be able to empathise, and appreciate, the potentially huge impact that this process can have on their client's psychological well-being. If the health professional is able to identify possible stressors and psychological distress that this process might evoke, they can help facilitate the rehabilitation process to ensure that their client enjoys both a physically, and psychologically, effective rehabilitation and integration back into their sport/exercise regime.<sup>9</sup> **fm**

### References

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