Rationale for Using a Pre-Assessment Tool Prior to Injury Rehabilitation

GIVEN the many technological advances currently being experienced in the field of sports medicine, injured athletes are being ushered into rehabilitation, the final stage of the injury process, faster than at any time in history.1 Often overlooked within the context of injury rehabilitation, however, is that many injured athletes experience psychological distress in addition to physical trauma when injured.1 Research in psychology of injury has shown that psychological trauma related to athletic injuries may manifest itself in ways, ranging from elevated stress levels to clinical concerns such as depression and impaired self-concept.2,3 Additionally, athletes have expressed an inability to cope with injury, which may develop into rehabilitation-inhibiting feelings of fear, guilt, inadequacy, and loss of control.4 Consequently, it is quite conceivable that some athletes, due to the nature and severity of their injury and the accompanying trauma, may not be psychologically ready for injury rehabilitation.

Psychological Readiness

Taking into account the potentially serious nature of these psychological reactions, it is surprising that athletes are transitioned into rehabilitation without any regular consideration given to their readiness to embark on this phase of the injury recovery process. By assessing athletes’ psychological readiness, the athletic training staff could better understand whether or not athletes are ready to initiate injury rehabilitation and avoid some of the psychological barriers often encountered by athletes during the recovery process, specifically, fear of reinjury, decreased confidence, a sense of helplessness, unrealistic expectation of recovery, and/or feelings of shock, denial, frustration, and desperation.5 In addition, when the athletic training staff becomes aware of athletes who are not ready for this stage of the injury recovery process, the necessary referrals can be made. By referring the athlete to the appropriate sport psychology practitioner (SPP), the athletic training staff is allowing the athlete time to confront potential psychological barriers and mentally prepare for the impending rehabilitation and reintegration into competition.

As such, assessment of psychological readiness in injured athletes can aid the athletic training staff in the construction and tailoring of rehabilitation programs that not only

Key Points

- A preassessment tool can determine an injured athlete’s psychological readiness for rehabilitation.
- Athletes reflect varying degrees of readiness for rehabilitation.
- Utilizing a pre-assessment tool has been extensively documented within behavior change.
- Starting a rehabilitation program has been likened to adopting a new behavior.
facilitate an injured athlete’s rapid return to play, but also ensure that their psychological needs are met and their confidence is restored.

It should be mentioned that the concept of assessing individuals’ psychological readiness has, for the most part, been limited to behavior changes related to exercise, smoking, and health behaviors. Many of these changes in behavior involve initiation of a new behavior and a change in an individual’s activities of daily living. When considering that most injured athletes experience a disruption in their daily routine, it is easy to see how initiating a rehabilitation program is a similar type of behavior modification. Instead of attending practice, going to games, or traveling with the team, injured athletes have to attend scheduled rehabilitation sessions, which may interfere with the ability to be a part of regular team functions. Furthermore, injured athletes may have to adjust levels of involvement in team practices (e.g., workouts, training sessions) in order to prevent aggravation of their injury. As a result, it is quite reasonable to assume that beginning a rehabilitation program can be likened to other types of behavior change.

**Transtheoretical Model**

According to the current literature, assessing psychological readiness with respect to behavior change has proven to be quite efficacious in a number of settings. Therefore, it might be assumed that similar benefits can be derived if this concept is applied to injury rehabilitation. Psychological readiness can best be assessed using the Transtheoretical Model (TTM) of behavior change, which provides an excellent framework for understanding how people adapt to new behaviors. When initially developed by Prochaska and DiClemente, the TTM consisted of the stages of change and the processes of change. The stages of change are thought to reflect the varying degrees of readiness experienced by individuals as they initiate new behaviors. According to Prochaska and DiClemente, an injured athlete entering rehabilitation would move through five different stages:

- **Precontemplation** (no intention to start rehabilitation)
- **Contemplation** (thinking about starting to attend rehabilitation)
- **Preparation** (making small changes in order to start attending rehabilitation)
- **Action** (actively attending rehabilitation)
- **Maintenance** (continuing to attend rehabilitation as long as necessary)

Processes of change are thought to be various techniques and strategies, which could be used by individuals as they progress through the stages of change. These ten processes are divided into experiential and behavioral processes. Experiential processes focus on the individual’s awareness and the feelings experienced while initiating the behavior change. Behavioral processes refer to the overt activities in which an individual will engage during the course of behavior modification. Two further components were later added to the TTM: self-efficacy, which is an assessment of an individual’s confidence in his/her ability to perform a behavior, and decisional balance, which is an analysis of the pros and cons of beginning a rehabilitation program.

**Assessing Psychological Readiness Using the Transtheoretical Model**

In order to assess an individual’s psychological readiness, stage of change, processes of change, self-efficacy, and decisional balance must all be measured. The first measure, Stages of Change Instrument (SOCI), was developed by Prochaska and DiClemente. The SOCI assesses varying degrees of readiness experienced by individuals as they enter the behavior change process. The instrument is a ladder ranging from 0 (precontemplation) to 4 (maintenance), which asks individuals to choose the number that best describes their present behavior. The second measure, Processes of Change Questionnaire for Injury Rehabilitation (POCQ-IR), was developed by Wong. The POCQ-IR assesses the techniques and strategies that are being used by individuals as they progress through the stages of change. Individuals are asked to rate the frequency they are currently using or have used specific techniques and strategies (e.g., “I recall information people have personally given me on the benefits of rehabilitating my injury,” “I look for information related to my injury and how to rehabilitate it”). Individuals rate the frequency they engage in the specific behavior on a scale from 1 (never) to 5 (frequently). Self-efficacy is assessed using the Self-Efficacy for Injury Rehabilitation (SEIR). The SEIR consists of five items that assess an individual’s situation-specific confidence relative to the injury rehabilitation process. Specifically, individuals