

## Chapter 5

### THE PSYCHOLOGY OF INJURY

#### I. Personality Variables

A. Personality is defined as the “stable enduring qualities of the individual.” Factors that play a role in sports injuries include the athlete’s general personality make up, trait anxiety, locus of control and self-concept.

1. A person’s general personality can be classified as aggressive, passive, introverted, extroverted, etc.
2. **Trait anxiety** is defined as “a general disposition or tendency to perceive certain situations as threatening and to react with an anxiety response.”
3. **Locus of control** refers to people’s belief, or lack thereof, that they are in control of events that affect their lives. People with an external locus of control feel they have little control over their lives; people with an internal locus of control feel they are responsible for what happens to them.
4. Self-concept, particularly low self-concept, may be a factor in sports injury. Athletes with low self-concepts are less able to deal effectively with the stress of competition. In the extreme, being injured may become an attractive alternative to participation because it provides attention for the athlete and gives him or her an excuse to avoid playing.
  - a. Low self-concept can be raised through a program of individualized counseling provided by a trained specialist.

#### B. Seasonal Affective Disorder (SAD)

1. SAD is a psychiatric disorder that occurs primarily during the fall and winter seasons.
2. Symptoms include loss of physical capacity and energy, increased appetite, decreased *libido*, *hypersomnia*, *anhedonia*, and impaired social activity.
  - a. Research on ice hockey players (n = 68) found a total of 22 suffering from either symptomatic SAD or subsyndromal SAD.
3. Accurate diagnostic tests are available and should be administered by a specialist.
4. Rosen, et al. reported that light therapy can be helpful in treating SAD.

II. Psychosocial Variables. Although correlations between personality traits and injury have been weak, recent research has found strong relationships between psychosocial factors and injury. Psychosocial factors develop through interaction between the individual and a changing social environment.

A. Stressful life events have been defined as positive or negative episodes that usually evoke some adaptive or coping behavior or significant change in the ongoing life of the individual.

B. A variety of life-events questionnaires have been developed including the SRRS, SARRS, LESA, LEQ, LESCA and the ALES.

C. Evidence suggests a strong relationship between stressful life events, especially negative events, and sports injury.

1. Athletes with a higher degree of coping skills were less likely to get injured.

D. Coaches should refer athletes to trained specialists for counseling and avoid “playing psychologist.”

### III. Competitive Stress and the Adolescent

A. As more adolescents participate in sports, professionals are growing concerned about the psychological effects of sports activities on youth.

1. The intensity of competition has increased drastically in some sports, particularly women’s gymnastics, tennis, figure skating, BMX cycling, and skate boarding, which routinely produce champions under 16 years of age.

2. Pressure to win can come from parents, coaches, peers, sponsors, and the media. It is assumed that youngsters do not have the coping skills that enable adults to handle such pressure.

3. Young athletes may be more prone to injury, psychosomatic illness, burnout, and other stress-related afflictions.

4. Parents and coaches must take care not to force children beyond their ability to cope with the activity.

### IV. Psychology of the Injured Athlete. Injury is a psychological **stressor** for the athlete.

A. Weiss and Troxel reported that an injury results in a psychophysiological response that follows the classic stress-response model.

1. Phase one of the injury serves as potent stressor as the athlete is forced to adapt to restriction of normal activity.

2. Phase two involves the appraisal of the short- and long-term significance of the injury.

3. Phase three involves the emotional response to the injury that can precipitate psychological and physical reactions including anxiety, depression, anger, and elevated blood pressure and heart rate.

a. Ermler and Thomas as well as Pedersen developed models of injury response that fit into phase three. According to Ermler and Thomas, injury causes an athlete to experience feelings of alienation. Pedersen compared the effects of injury to the grief response that follows a death of a loved one (loss).

4. The final stage involves the long-term consequences of the emotional responses that occur in phase three. If an athlete responds to an injury in a negative manner, various health-related problems can occur, such as sleep disorders, loss of appetite, and possibly decreased motivation.

B. Recommendations. Recommended guidelines for helping athletes cope with injuries are shown in Time Out 5.1 on page 58.

### V. Eating Disorders

A. Majority of sports impose narrow set of parameters for the appropriate body type required for success.

Reality dictates that specific sports require specific body types for competition. Some sports demand leanness for success because of **biomechanics** and societal expectations. Media exposure of top athletes focuses on physical appearance, especially for female athletes.

1. Emphasis on the ideal body has resulted in negative effects for the athletic community, particularly the development of abnormal and dangerous eating behaviors.

#### B. Anorexia Nervosa and Bulimia Nervosa

1. **Anorexia nervosa** is characterized by self-starvation motivated by an obsession with being thin and an overwhelming fear of being fat. People with this condition have grossly distorted body images. They think of themselves as fat even though they are abnormally lean.

2. **Bulimia nervosa** is characterized by repeated bouts of binge eating followed by some form of purging, i.e., vomiting, taking laxatives, fasting, or undertaking vigorous excessive exercise.

3. Both conditions are serious psychological problems that are more common in adolescent and young-adult females.

#### C. Research

1. A significant percentage of female collegiate athletes may practice **pathogenic** dietary habits, usually to improve their performance or appearance. In one study, 70% of subjects who reported having pathogenic eating behaviors felt their dietary practices were harmless.

2. Rosen et al. found that 32% of the athletes studied regularly practiced some form of pathogenic eating behavior. In another study, 39.2% of the females and 14.3% of the males were classified as bulimic, and 4.2% of the females and 1.6% of the males were classified as having anorexia nervosa. In a more recent survey, Johnson et al. found that almost 11% of females and about 13% of males binge-ate on a weekly, or more often, basis.

3. Little is known regarding pathogenic eating behaviors among male athletes; wrestling has been plagued with strange eating behaviors and training practices to “make weight.” Although males comprise around 10% of the diagnosed cases of eating disorders, male athletes report relatively higher indices of the disorders when compared to male nonathletes than when female athletes are compared to female nonathletes.

#### D. Sport Specificity and Eating Disorders

1. Certain sports have a higher risk that participants will develop eating disorders, particularly women’s gymnastics, ballet, diving, and figure skating. In a study of 215 female gymnasts attending college, over 60% reported a variety of disordered eating behaviors.

2. Female athletes in sports that place a premium on physical appearance have a significantly higher prevalence of eating disorder symptoms than female nonathletes.

3. Eating disorders may be becoming a problem in sports that historically have not been associated with these conditions, such as female field hockey, softball, volleyball, track, and tennis.

4. People suffering from anorexia nervosa and bulimia nervosa are at risk of esophageal inflammation, erosion of tooth enamel, hormone imbalances that can lead to osteoporosis, and **amenorrhea**, and

electrolyte imbalances that can result in kidney and heart problems. Additionally, psychological problems such as depression and anxiety disorders often affect people with eating disorders.

E. Prevention. Prevention of eating disorders must be the goal of those involved in organized sports. Referring to weight in a negative manner, requiring mandatory weigh-ins, or ostracizing an athlete publicly for being overweight are practices that should be condemned.

1. Coaches and parents need to be alert to the signs of eating disorders (see Time Out 5.2 on page 60). A sample disordered eating questionnaire is shown in Table 5.1 on page 61.

F. Treatment. Treatment ranges from simple counseling and education when eating disorders are diagnosed early to hospitalization in severe cases. Eating disorders may be symptoms of a more severe problem such as depression or anxiety disorder. According to experts, at least one-third of all cases do not respond to therapy.