Effects of Subjective Evaluation of Daily-life and Competitive Stressors on Occurrence of Injuries in Collegiate Athletes

Koichiro Oka Waseda University
Koji Takenaka Waseda University
Naoko Matsuo Waseda University

Abstract
The present study examined the relationship between subjective evaluation of daily-life and competitive stressors and athletic injury variables in collegiate athletes according to the theoretical model of Andersen and Williams (1988). In the first study, athletic injury data through the season were analyzed in 146 collegiate athletes who completed the daily-life and competitive stressor scale (DCSS) before the season. Results of Pearson-product correlations revealed that most of stressors significantly correlated with injury frequency rather than injury severity. In order to determine which stressor was most highly related to the occurrence of injury, athletes divided into two groups: injured and non-injured groups. Discriminant analysis indicated that two stressors (content of club activity and competitive record) especially differentiated the injured and non-injured groups. In the second study, the effects of daily-life and competitive stressors on injury frequency were investigated according to the type of sport (contact and noncontact-sport). Two hundreds seventy three contact-sport athletes and 197 noncontact-sport athletes completed the DCSS and the injury-related items. According to injury frequency, both athlete groups were classified into three subgroups: non-injured (no injuries), low frequency (1 injury), and high frequency (2 or more injuries). MANOVAs were conducted in which group served as the independent variable and the 6 stressors served as dependent variables. The results revealed that there was a significant main effect for injury frequency group in contact sport athletes. Follow-up univariate ANOVAs and Tukey post hoc tests indicated that high frequency group had significantly greater evaluation score of 3 stressors (expectation and pressure from others, content of club activity, and economic evaluation and academic record) than non-injured group. Finally, implications for future research were discussed with respect to the stress-injury relationship.

Key words: collegiate athletes, daily-life and competitive stressors, athletic injuries, contact-sport, noncontact-sport