Subjective Exercise Experience Scale Japaniese-version :
Development and Applicability

Teru Nabetani  Kyushu University
Mikio Tokunaga  Kyushu University
Yasuhisa Kusumoto  Nippon Sports Science University

Abstract

This paper documents the development and application of the Subjective Exercise Experience Scale, Japanese version (SEES-J). This psychological assessment tool is composed of three sub-scales including those concerning positive well-being (PWB), psychological distress (PD), and fatigue (FAT). An initial study arrived at a threefactor structure through an exploratory factor analysis of college students' imagery of physical exercise. Then, 12 items in the SEES-J corresponding to 12 items in the original SEES were carefully selected. The tool's internal consistency was ascertained by coefficient alpha. It's high reliability was indicated in all three-factor scales: FAT alpha=.88, PD alpha=.87, and PWB alpha=.85. In a second study, the SEES-J was supported by a three-factor structure using confirmatory factor analysis in regard to observations of exercising college students. The factorial validity of the SEES-J was demonstrated in the context of physical exercise. The goodness of fit index (GFI) showed .925 in a modified model for post-exercise data. Moreover, all items indicated a sufficient score of .60 or higher concerning the results of standardized maximal likelihood factor loading. In the context of physical exercise, the results of the SEES-J show that psychological responses depended upon the sports activity in which the subjects were engaged. This suggests that the SEES-J reflects the uniqueness of various sports.

The SEES-J may support criterion-related validity in the context of physical exercise, because in it there exists a relationship between the feeling scale (FS) and sub-scales of PWB and PD. Judging from the above, we think that although the developed SEES-J is applicable to the context of physical exercise, further systematic research is required.

Key words : mood, exercise-experience and confirmatory factor analysis