Relationship Between Perceived Physical Ability and Indices of Actual Physical Fitness

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Ryckman, Robbins, Thornton, and Cantrell (1982) recently reported on the construction of a generalized Physical Self-Efficacy (PSE) Scale consisting of two differentially meaningful components, perceived physical ability (PPA) and physical self-presentation confidence (PSPC). The PPA subscale appraises individuals' perceptions of their physical abilities (e.g., strength, endurance, and agility), while the PSPC subscale measures their confidence as reflected by their physical demeanor in the presence of evaluative others. Ryckman et al. (1982) reported that individuals' beliefs about their own physical competence, and their confidence in performing physical tasks in the presence of others, were related positively to feelings of self-esteem. Research in corroboration with the relation between a perceived abilities component and self-esteem has been provided by many sport psychologists utilizing populations that differ in age, gender, and educational level (e.g., Fox, Corbin, & Couldry, 1985; Heaps, 1978; Sonstroem, 1976, 1978; Young, 1985).

While both PPA and PSPC were related positively to self-esteem in the Ryckman et al. research, PPA and PSPC were found to have differential predictive power in situations involving sports and the use of physical skills. Specifically, PPA scores predicted not only subjects' expectancies for success but also their actual performance on tasks involving physical skills. The PSPC factor, by contrast, was unable to predict these physical task outcomes as well. Ryckman et al. (1982) also provided evidence that the PPA scale was a more potent predictor than the PSPC scale of the amount and level of subjects' sports participation. High PPA individuals reported participating in more sports activities and at higher levels of involvement (e.g., varsity vs. intramural participation) than low PPA individuals. PSPC scores were unrelated to these sports participation indices. Subsequent research by Ryckman, Robbins, Thornton, and Kaczor (1983) indicated further that, for both men and women, PPA was related

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positively to the frequency, duration, and intensity of participation in various aerobic and muscle strength and endurance activities. Again, PSPC scores were unrelated to exercise activity.

Pollock, Wilmore, and Fox (1978) have reviewed research findings which indicate that enhanced physical fitness (i.e., cardiorespiratory endurance, body composition, flexibility, and muscle strength and endurance) is a function of the frequency, duration, and intensity of a fitness training program. Although PPA may be correlated with these three facets of a physical fitness exercise regimen, it has yet to be demonstrated whether PPA may be of predictive utility where indices of actual physical fitness are concerned. Therefore the present research was conducted to assess the relationship between PPA and physical fitness evaluations, anticipating that individuals with greater PPA scores would be more physically fit than those with lesser PPA scores in each of the areas cited by Pollock et al. PSPC scores, by contrast, were expected to be unrelated to such physical fitness indices.

In addition, Pollock et al. (1978) noted general sex and age differences in physical ability such that males typically outperform females on physical fitness indices and that actual physical abilities generally decline with age. Evidence of both sex and age differences were expected in the present study for actual physical ability as well as perceived physical ability. Thus, males were expected to have higher PPA scores than females and, for both sexes, PPA was predicted to be negatively correlated with age. Males were also expected to have greater actual physical abilities than females.

Method

In all, 135 individuals (college employees, relatives of employees, and students) took part in a physical fitness evaluation program conducted by staff members of the Fitness Training Center at Gettysburg College. There were 67 Caucasian males ranging in age from 17 to 64 years ($M = 30.7$, $SD = 13.46$), and 68 Caucasian females ranging in age from 18 to 64 years ($M = 28.9$, $SD = 11.88$). At individual sessions, each subject completed a set of questionnaires and then participated in the evaluation of actual physical abilities.

Evaluations

**Physical Activity Profile.** This measure provided basic demographic information, as well as a general physical and medical history, about each participant.

**RISKO.** RISKO is a nonclinical heart hazard appraisal instrument that assesses an individual’s level of risk for developing coronary problems within the next several years (American Heart Association, 1981). This measure takes into account the most important modifiable factors that contribute to the development of heart disease (e.g., weight, blood pressure, cholesterol level, smoking) and provides a composite assessment of coronary risk for one's sex and age group. Possible response range for this composite is 0 (lowest level of risk) to 27 (highest level of risk).

**Physical Self-Efficacy Scale.** This inventory assesses individuals’ perceptions of their physical efficacy (Ryckman et al., 1982). It consists of a 10-item perceived physical ability subscale and a 12-item physical self-presentation con-