An Investigation into the Structure, Reliability, and Validity of the Physical Self Perception Profile in Non English Speaking Settings

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The purpose of this study was to examine the structure, reliability, and preliminary validity of a Portuguese translation of the Physical Self Perception Profile (PSPP) in a non English speaking student population. The PSPP was originally developed with American participants (Fox & Corbin, 1989; Fox, 1990) and has since been the subject of validation studies in other English speaking countries. Additionally, Flemish, Turkish, Russian, Spanish, Italian, French, and Chinese versions have been reported in published papers and conference proceedings. The psychometric properties and validity of this version of the PSPP were evaluated with a sample of female and male Portuguese students (N=1052) similar in age to the samples with which the original version was developed. Three sub samples (A, B and C) were used. Cronbach alpha values ranged from .72 to .79 for females, and .68 to .78 for males. Zero order and partial correlation coefficients replicated the established hierarchical organisation of constructs with physical self worth (PSW) functioning as a mediator between PSPP sub scales and global self esteem (GSE) for all sub samples. However, principal components factor analysis using sub samples A and B indicated that the original factor structure was not fully supported for both gender. As with the Flemish version (Van der Vliet et al., 2001, 2002), the CONDITION and SPORT constructs appeared to suffer from some confusion. Confirmatory factor analysis (CFA) also showed a poor goodness of fit for the original model for both genders, with CFI, GFI and AGFI indices for the original four factor structure only reaching .88, .89 and .87 for females, and .78, .76 and .71 for males.

Three factor models were tested, producing higher values for the goodness of fit indexes. The conceptual and cultural implications of modifications to the PSPP in non English speaking populations are discussed.

\textit{key words:} Physical Self Perception Profile, physical self, self esteem, young adults

Received : 2 November 2006, Accepted : 25 June 2007
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Introduction

Research evidence has accumulated to support the effects of regular physical activity on aspects of mental health and illness, such as mood, depression, anxiety, stress, and self-esteem (Biddle, Fox, & Boutcher, 2000). Health organisations now emphasise self-esteem as a central component of mental health (US Dept of Health and Human Services, 1999). It is often regarded as the single most important factor contributing to psychological well-being and is associated with a number of important life adjustment qualities. Conversely, low self-esteem is associated with poor health behaviours and mental disorders. There is some evidence that self-esteem can be improved through exercise (Etnier et al., 1997; Fox, 2000; Spence & Poon, 1997), however, the relationship is inconsistent and only weak to moderate in strength. Because of the global nature of self-esteem and its potential to be influenced by interactions in several life domains, researchers have consistently emphasised the need to assess several dimensions of the self, alongside self-esteem. The physical self has emerged as consistently important, demonstrating moderate to strong correlations with global self-esteem throughout the lifespan (Fox & Corbin, 1989; Harter, 1985). Additionally, physical self-perceptions have been directly related to indicators of emotional adjustment, independent of self-esteem (Sonstroem & Potts, 1996). There is therefore a need for high quality instrumentation to assess self-perceptions within the physical domain. This is particularly the case when examining the impact of exercise, which is most likely to influence perceptions of the physical self (Fox, 1997; Marsh & Redmayne, 1994).

Several instruments have emerged with excellent psychometric properties to assess elements of the physical self. The profile approach taken with the Physical Self Description Questionnaire (PSDQ) of Marsh and colleagues (1994) and the Physical Self Perception Profile (PSPP) of Fox and Corbin (1989) provide a rich multidimensional assessment. The PSPP was initially developed with a college population in the USA. It consists of four sub-domain subscales, which assess perceived sport competence (Sport), physical condition (Condition), bodily attractiveness (Body), and physical strength (Strength). A fifth sub-scale is designed to provide a global measure of physical self-worth (PSW) that acts as a superordinate outcome of perceptions in the four sub-domains and as a mediator between sub-domains and self-esteem. This provides a hierarchical structure leading from specific self-perceptions at the base to global self-esteem (GSE) at the apex.