Adaptation and Validation of Behavioral Regulation in Exercise Questionnaire - 2 for Use with Brazilian Adolescents

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Abstract: The aim of this research is to adapt and validate the Portuguese version of the Behavioral Regulation in Exercise Questionnaire - 2 (BREQ - 2) for use with Brazilian adolescents. Was counted with the participation of 487 adolescent students (13-18 years) of both sexes, high school students from public schools in the Greater Florianópolis, Santa Catarina, Brazil. We conclude that the Brazilian version of the BREQ - 2 is clear and valid, but the use of different factor structure of the original version of the scale is recommended, as indicated by the results.

1 INTRODUCTION

Although Self-Determination Theory is highlighted in studies covering the motivation for physical activity (Teixeira et al., 2012), in Brazil it has still been little explored (Silva et al., 2012). This lack of studies, partly due to the lack of well validated instruments for Brazilian populations, making research in this field does not follow international developments. It is believed that the instrument validation is a key point for the development of national research interested in the study of motivation for physical activity.

Considering the importance of knowledge about the motivation of adolescents with physical exercises and the lack of national instruments to assess this construct, the objective of this study was to adapt and validate the Portuguese version of the Behavioral Regulation in Exercise Questionnaire - 2 (Markland, Tobin, 2004; Palmeira et al., 2007) for use with Brazilian adolescents.

2 METHOD

Was counted with the participation of 487 adolescent students (13-18 years) of both sexes, high school students from public schools in the Greater Florianópolis, Santa Catarina, Brazil. Based upon the Theory of Self-Determination, the BREQ - 2

aims to evaluate the different motivational, internal and external regulations, as well as amotivation related to exercise. The questionnaire consists of 19 Likert subscales, which are divided into five constructs: amotivation, external regulation, introjected regulation, identified regulation and intrinsic motivation. Held adaptation to Brazilian Portuguese, evaluation of clarity, factor analysis (principal component analysis) and internal consistency (Cronbach's alpha).

3 RESULTS

About the clarity of the questionnaire items, evaluated with the participation of 87 students, 93% concordance hear about the "clear" option. In less than 3% of cases there was indication of an item as "confusing". Factor analysis indicated the existence of five factors that explained 58.62 % of the total variance of the instrument. None of the items was considering that only one item had significant load on the factor of five, and that this same item had significant saturation in one factor, it was decided to disregard the factor of five. The other constructs identified through factor analysis and variance explained (%) by the factor: intrinsic regulations (7 items - 26.66%), amotivation (four items - 12.92%), introjected regulation (four items - 7, 21%), external regulation (four items - 6.47 %). The Cronbach's

alphas of the different scales ranged from 0.79 (identified regulations) to 0.64 (external regulation). About the clarity of the questionnaire items, evaluated with the participation of 87 students, 93% concordance hear about the "clear" option. In less than 3% of cases there was indication of an item as "confusing". Factor analysis indicated the existence of five factors that explained 58.62 % of the total variance of the instrument. None of the items was considering that only one item had significant load on the factor of five, and that this same item had significant saturation in one factor, it was decided to disregard the factor of five. The other constructs identified through factor analysis and variance explained (%) by the factor: intrinsic regulations (7 items - 26.66%), amotivation (four items - 12.92%), introjected regulation (four items - 7, 21%), external regulation (four items - 6.47 %). The Cronbach's alphas of the different scales ranged from 0.79 (identified regulations) to 0.64 (external regulation).

4 CONCLUSIONS

We conclude that the Brazilian version of the BREQ - 2 is clear and valid, but the use of different factor structure of the original version of the scale is recommended, as indicated by the results.

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