


# Self-determined motivation and subjective well-being of adapted sport athletes members of Special Olympics

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## ABSTRACT

Adapted sport is an organized participation whose objective is to obtain improvement in physical and psychic conditions, that is, it represents one of the most important factors promoting educational success, inclusion and psychosocial development. The objective of this study was to evaluate the self-determined competences for the practice of sport and the levels of well-being, in athletes with Intellectual and Developmental Difficulties (IDD) participating in the Special Olympics in Portugal, to be correlated as variables in study and which variables of self-determination are predictors of subjective well-being in this collective. Participated 54 Adapted Sport athletes, with IDD, belonging to Portuguese Private Social Solidarity Institutions, participating in the Special Olympics competitive regime. Of the 54 athletes, 12 are female (22.22%) and 42 males (77.78%), aged between 11 and 53 years old ( $\bar{x}$  = 29.57 and SD = 10.59). For the data collection, the following validated scales were applied for the Portuguese population, The Basis Psychological Needs in Exercise Scale, The Behavioural Regulation in Sport Questionnaire, The Satisfaction with Life Scale, and The Positive and Negative Affect Scale. The athletes with intellectual and developmental difficulties (IDD) participating in the Special Olympics revealed a high self-determined motivation for sports practice, and their subjective well-being was high enough and dependent on their levels of autonomous motivation. The regression models revealed that the best predictor of subjective well-being in this group was the autonomous motivation. **Keywords:** Adapted Sport; Intellectual and Developmental Difficulties (IDD); Self-Determination theory; Subjective well-being; Special Olympics.



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## **INTRODUCTION**

The research developed in the sphere of Sport Sciences is based on the benefits of sport, being a psychological, physical and social level, and which have a positive impact on the gains of autonomy and self-confidence (Celestino & Pereira, 2015). The Self-Determination Theory (Deci & Ryan, 2012) allows us to motivate the athletes to a sporting practice by providing an opportunity for better intervention in the training and competition process, guaranteeing the consequence, levels of subjective wellbeing in the highest practice (Batista, Lercas, Santos, Honório, Serrano and Petrica, 2018). In this sense, the objective of this study was to evaluate the self-determined competences for the practice of sport and the levels of well-being, in athletes with Intellectual and Developmental Difficulties (IDD) participating in the Special Olympics in Portugal, to be correlated as variables in study and which variables of self-determination are predictors of subjective well-being in this collective.

## **MATERIAL AND METHODS**

### ***Participants***

Participated 54 Adapted Sport athletes, with IDD, belonging to Portuguese Private Social Solidarity Institutions, participating in the Special Olympics competitive regime. Of the 54 athletes, 12 are female (22.22%) and 42 males (77.78%), aged between 11 and 53 years old ( $\bar{x}$  = 29.57 and SD = 10.59).

### ***Instruments***

For the data collection, the following validated scales were applied for the Portuguese population, The Basic Psychological Needs in Exercise Scale (Moutão, Cid, Alves, Leitão & Vlachopoulos, 2012), The Behavioural Regulation in Sport Questionnaire (Monteiro, Moutão, Batista & Cid, 2014), The Satisfaction with Life Scale (Albuquerque, Sousa & Martins, 2010), and The Positive and Negative Affect Scale (Galinha & Pais-Ribeiro, 2005).

### ***Procedures***

The institutional ethics committee of the first author provided ethical approval for this study. After obtaining approval from the team managers or coaches, signed informed consents were obtained from the athletes or by the legal guardians. Athletes completed the questionnaire one hour before the first match of the tournament. The instrument was completed, individually, with support of researchers.

### ***Analysis***

Statistical analysis included descriptive statistics (mean, standard deviation), internal consistency (Cronbach's alpha), Spearman correlations and multivariable linear regression. Significance was set at  $p < 0.05$ . All analyses were performed using SPSS 21.0 (SPSS Inc., Chicago).

## **RESULTS**

All of the subscales demonstrated satisfactory reliability (i.e., Cronbach's alpha  $> 0.60$ ) (Hardy et al., 2010).

We observed that athletes with IDD presented high levels of satisfaction of basic psychological needs, as well as autonomous motivation for sports practice and, consequently, high satisfaction with life and positive effects. They also showed reduced values of controlled motivation, amotivation, and negative effects. The correlations between the studied variables were moderate, respecting the expected meaning.

Multivariable linear regression analysis using the satisfaction with life as the dependent variable showed that autonomous motivation ( $\beta = 0.40$ ,  $p < 0.05$ ), was the significant predictor in the model ( $R^2 = 0.23$ ,  $p = 0.046$ ), and the analysis using the positive effects as the dependent variable showed that autonomous motivation ( $\beta = 0.65$ ,  $p < 0.01$ ), was the significant predictor in the model ( $R^2 = 0.33$ ,  $p = 0.026$ ).

Table 1. Descriptive data of the variables analysed in the sample, normality and Cronbach's

	min.	Max.	Mean	SD	KS	$\alpha$
Autonomy	2.00	5.00	4.44	0.71	0.01*	0.60
Competence	3.63	5.00	4.78	0.34	0.01*	0.60
Relationship	3.63	5.00	4.88	0.32	0.01*	0.60
Mot. Autonomous	3.00	7.00	6.69	0.68	0.02*	0.81
Mot. Controlled	1.00	7.00	2.30	1.68	0.01*	0.75
Amotivation	1.00	6.00	2.19	1.48	0.01*	0.62
SWL	1.75	7.00	6.46	1.06	0.00*	0.85
Aff. Positives	2.78	5.00	4.32	0.52	0.00*	0.60
Aff. Negatives	1.00	3.89	1.70	0.74	0.09*	0.85

## DISCUSSION

The descriptive results obtained in relation to self-determined motivation and subjective well-being of athletes with DID respect the findings of Batista et al. (2018) and Ferreira, Petrica & Batista (2018) developed with adapted athletes without DID. The regression models revealed that the best predictor of subjective well-being in this group was the autonomous motivation, which is not in complete agreement with the studies cited, since the satisfaction of the basic psychological needs was equally good predictors.

## CONCLUSION

The athletes with intellectual and developmental difficulties (DID) participating in the Special Olympics revealed a high self-determined motivation for sports practice, and their subjective well-being was high enough and dependent on their levels of autonomous motivation.

## REFERENCES

- Batista, M., Lercas, A., Santos, J., Honório, S., Serrano, J. & Petrica, J. (2018). Practice motivation and life satisfaction of athletes of team sports: Comparative study between adapted and regular sport. *Journal of Human Sport & Exercise*, 14(1), p. 20-29. <https://doi.org/10.14198/jhse.2019.14.proc1.03>
- Celestino, T. & Pereira, A. (2015). *Orientação Adaptada: Características e Potencialidade de um Desporto de Inclusão*.
- Deci, E. & Ryan, R. (2012). Self-determination theory. In A. W. Kruglanski, P. A. M. Van Lange, & E. T. Higgins (Eds.), *Handbook of theories social psychology* (pp. 416-437). London: Sage.
- Ferreira, D., Petrica, J. & Batista, M. (2018). *Motivação Autodeterminada, Satisfação com a Vida e Integração Social de Atletas de Desporto Adaptado no Atletismo. Desporto e Atividade Física para Todos - Revista Científica da FPDD*, 4(1), p. 14-23. <https://doi.org/10.24197/aefd.2-3.2018.256-278>

Hardy, L., Roberts, R., Thomas, P., & Murphy, S. (2010). Test of Performance Strategies (TOPS): Instrument refinement using confirmatory factor analysis. *Psychol Sport Exerc*, 11(1), 27-35.  
<https://doi.org/10.1016/j.psychsport.2009.04.007>



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