Self-determined motivation and subjective well-being in Portuguese veteran athletes in different sports

MARCO BATISTA¹²³, MARTA LEYTON⁴, JOÃO SERRANO¹², JOÃO PETRICA¹², SAMUEL HONÓRIO¹²³, JOÃO ROCHA¹², JORGE SANTOS¹², PAULO SILVEIRA¹², RUTH JIMENEZ⁵

¹Sport, Health & Exercise Research Unit (SHERU / RECI), Castelo Branco, Portugal
²Instituto Politécnico de Castelo Branco, Castelo Branco, Portugal
³Research in Education and Community Intervention, RECI- Instituto Piaget, Portugal
⁴Center for Sport Studies, University of Rey Juan Carlos, Madrid, Spain
⁵Research Group on Didactic and Behavioral Analysis of Sport, University of Extremadura, Cáceres. Spain

ABSTRACT

With the increase of life expectancy associated to the need for a healthy lifestyle, there has been an increase in the number of persons involved in veterans’ sports activities. The objective of this study was to evaluate the levels of self-determination for sports practice and subjective well-being in veteran athletes, depending on the different type of sports practiced. For data collection, the validated Portuguese versions of the Basic Psychological Needs Exercise Scale (BPNES), the Behaviour Regulation Sport Questionnaire (BRSQ), the Satisfaction with Life Scale (SWLS) and the Positive and Negative Affects Scale (PANAS) were used. The study sample consisted of 684 Portuguese veterans athletes of both genders, aged between 30 and 90 years (M = 43.78 SD = 8.61), of which 86.3% (590 individuals) of the male gender and 13.7% (94 individuals) of the female gender, mostly with 3 to 5 hours of training per week, with 19.5±12.2 years of practice, competitors in several individual sports (43%), team sports (37%) and individual and teams sports (20%). Veteran athletes are highly satisfied with basic psychological needs. When compared, athletes who practice individual sports and simultaneously individual and team sports differ significantly in the autonomous, controlled and amotivation compared to athletes who only practice team sports, as well as in positive and negative effects.

Keywords: Self-determination; Satisfaction with life; Subjective well-being; Sport; Veterans.
INTRODUCTION

Our society is constantly changing, and in the last decades an increase in life expectancy has been observed, accompanied by an increase in the percentage of individuals above 35 years of age to participate in physical activities of a competitive and non-competitive nature. In the case of veteran athletes, motivation must also be considered a psychological determinant that may interfere with the athlete’s athletic performance (Batista et al., 2017). According to Sancho and Ruiz-Juan (2015), the motivations of these athletes are mainly intrinsic, although the extrinsic motivations, health reasons, the pleasure of practice, social relations and the competition itself are also very important. Diener et al. (1999) tells us that subjective well-being is a global judgment that the individual makes of himself in face of events and circumstances of life, which integrates a cognitive dimension, satisfaction with life and an affective dimension, regarding affections. The present study aims to evaluate the levels of self-determination for sports practice and subjective well-being in veteran athletes, depending on the type of sports practiced.

MATERIAL AND METHODS

Participants
The study sample consisted of 684 Portuguese veterans athletes of both genders, aged between 30 and 90 years (M = 43.78 SD = 8.61), of which 86.3% (590 individuals) of the male gender and 13.7% (94 individuals) of the female gender, mostly with 3 to 5 hours of training per week, with 19.5 ± 12.2 years of practice, competitors in several individual sports (43%), team sports (37%) and individual and teams sports (20%).

Measures
The validated Portuguese versions of the Basic Psychological Needs Exercise Scale (BPNES) by Moutão, Cid, Alves, Leitão and Vlachopoulos (2012), the Behaviour Regulation Sport Questionnaire (BRSQ) by Monteiro, Moutão, Batista and Cid (2014) were used. Also, the Satisfaction with Life Scale (SWLS), Neto (1993) and the Positive and Negative Affects Scale (PANAS) by Galinha and Pais-Ribeiro (2005).

Procedures
Sports centres, such as clubs and associations, were selected, for a convenience sample (Cubo Delgado et al., 2011). The veteran athletes were contacted for the collaboration in the study, after their agreement, filled an informed consent. The described scales were administered in the presence of the investigator. The approximate time of was fifteen minutes.

Analysis
Statistical analysis included descriptive statistics (mean, standard deviation), internal consistency (Cronbach's alpha), One Way ANOVA with Sheffé post-hoc analysis and Cohen’s d. Significance was set at p< 0.05. All analyses were performed using SPSS 21.0 (SPSS Inc., Chicago).

RESULTS

All the subscales demonstrated satisfactory reliability (i.e., Cronbach's alpha > 0.70). The descriptive values obtained were more favourable in all variables under analysis, in the athletes who practice individual and team sports, or only individual sports. Significant differences were observed between groups, particularly among athletes who only practice team sports compared to the other two groups, at the level of autonomous motivation, controlled motivation, amotivation, positive and negative effects, using Cohen’s effect-size evaluated from small to moderates (Hattie, 2009).
Table 1. Descriptive values of the variables under study and statistical significance according to the type of sports

<table>
<thead>
<tr>
<th>Variable</th>
<th>Individual sports</th>
<th>Team sports</th>
<th>Individual and team sports</th>
<th>Sig</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy perception</td>
<td>0.78</td>
<td>4.04 ± 0.63</td>
<td>4.02 ± 0.57</td>
<td>4.14 ± 0.53</td>
<td>0.13</td>
</tr>
<tr>
<td>Competence perception</td>
<td>0.71</td>
<td>4.04 ± 0.53</td>
<td>3.98 ± 0.46</td>
<td>4.07 ± 0.50</td>
<td>0.20</td>
</tr>
<tr>
<td>Social relations perception</td>
<td>0.78</td>
<td>4.35 ± 0.54</td>
<td>4.27 ± 0.55</td>
<td>4.32 ± 0.56</td>
<td>0.27</td>
</tr>
<tr>
<td>Autonomous motivation</td>
<td>0.88</td>
<td>5.72 ± 0.94</td>
<td>5.50 ± 0.82</td>
<td>5.75 ± 0.75</td>
<td>0.01**  0.29</td>
</tr>
<tr>
<td>Controlled motivation</td>
<td>0.89</td>
<td>1.96 ± 1.08</td>
<td>2.11 ± 1.15</td>
<td>1.77 ± 0.89</td>
<td>0.01**  0.32</td>
</tr>
<tr>
<td>Amotivation</td>
<td>0.85</td>
<td>2.16 ± 1.27</td>
<td>2.50 ± 1.32</td>
<td>2.03 ± 1.00</td>
<td>0.01**  0.38</td>
</tr>
<tr>
<td>Satisfaction with life</td>
<td>0.87</td>
<td>5.17 ± 1.05</td>
<td>5.00 ± 0.88</td>
<td>5.12 ± 0.95</td>
<td>0.14</td>
</tr>
<tr>
<td>Positive affects</td>
<td>0.85</td>
<td>3.66 ± 0.60</td>
<td>3.58 ± 0.60</td>
<td>3.73 ± 0.46</td>
<td>0.04*   0.26</td>
</tr>
<tr>
<td>Negative affects</td>
<td>0.86</td>
<td>1.70 ± 0.54</td>
<td>1.84 ± 0.64</td>
<td>1.73 ± 0.56</td>
<td>0.02*   0.24</td>
</tr>
</tbody>
</table>

*Sig α ≤ 0.05; **Sig α ≤ 0.01

**DISCUSSION**

The results showed that the athletes who practice individual and team sports, or only individual sports, showed a higher satisfaction of the basic psychological needs, as well as a higher autonomous motivation. The values of controlled motivation and amotivation were shown to be lower, following the findings of Sancho and Ruiz-Juan (2015) or Batista et al. (2017). The levels of satisfaction with life and positive effects were higher, in disagreement with the production of negative effects, however in agreement with Diener et al. (1999) as well as the study by Batista et al. (2017).

**CONCLUSIONS**

Veteran athletes are highly satisfied with basic psychological needs. When compared, athletes who practice individual sports and simultaneously individual and team sports differ significantly in the autonomous, controlled and amotivation once compared with athletes who only practice team sports, as well as in the production of positive and negative effects.

**REFERENCES**