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Comparison of motivational factors for the practice of exercise at gyms and nature and adventure sports

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ABSTRACT

Physical inactivity continues rising making it necessary to understand what motives the practice of physical exercise and sports. 901 Portuguese practitioners of exercise at gyms and nature and adventure sports modalities were recruited. Participants answered to the Portuguese version of the Exercise Motivations Inventory-2 (EMI-2) to assess the motives for the practice. Independent t-test were executed to compare the motives between the 2 groups and d Cohen was executed for effect size. We found that some motives were significantly higher in exercise at gyms compared to nature and adventure sports, namely Health Avoidance ($p = 0.001$; $d = 1.27$), Health Pressures ($p = 0.001$; $d = 0.76$), Positive Health ($p = 0.001$; $d = 1.09$), Strength & Endurance ($p = 0.001$; $d = 1.02$) and Nimbleness ($p = 0.001$; $d = 0.80$). These results are in line with previous studies suggesting that the pursuit of health benefits is usually most identified by physical exercise practitioners. These studies are important to create different motivational profiles which may have an impact in the practice (and in the avoidance of withdrawals) in physical activity practice. **Keywords:** Exercise at gyms; Nature and adventure sports; Motivation.



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INTRODUCTION

Physical exercise and sports are extremely important in an era where the pandemic of physical inactivity continues rising (Ding et al., 2016). Motivation is crucial for solving this problem. Identifying the main reasons that motivate people to engage in exercise and sports is extremely important. Physical exercise and sports have different specificities, but both contribute to an improvement in people's quality of life and wellbeing. Understanding what motivates people to practice exercise at gyms and/or nature and adventure sports may be related to different benefits: 1) will help improve the programs and classes presented; 2) may help people practice safer and structured physical exercise and sports; 3) will help find the most appropriate strategies to remove possible barriers for the practice and, thus, decrease dropouts.

MATERIAL AND METHODS

Participants

The sample consisted of 901 Portuguese practitioners of exercise at gyms (recruited in 2 gyms and social networks) and nature and adventure sports modalities (NAS): Canyoning, Mountain Biking, Paragliding, Climbing, Hiking and Canoeing (recruited in clubs, associations, federations and social networks). Participants had a mean age of 35.93 ± 10.19 . 450 practised exercise at gyms (average age 33.79 ± 9.91) and 451 practised NAS (average age 38.06 ± 10.03). The majority of the sample (71.37%) was male.

Measures

To assess the motives for the practice, the Exercise Motivations Inventory-2 (EMI-2) adapted to the Portuguese population (Alves & Lourenço, 2003) was used. It consists of a 51 item questionnaire answered on a Likert scale ranging from 0 to 5 (0 = "nothing true to me" to 5 = "completely true to me"). The items may be grouped into 5 dimensions (psychological motives, interpersonal motives, health motives, body-related motives, and fitness motives) and 14 factors (table 1). The questionnaire has good psychometric qualities.

Procedures

Participants filled an informed consent form and all data was collected and analysed anonymously, ensuring the principle of confidentiality.

Analysis

Dependent variables were tested for normality and homogeneity. After assumptions of normality and homogeneity being observed, independent t-test were executed to compare the motives between the 2 groups. The effect size was calculated using the d Cohen. The following scale was used to classify the magnitude of the effect size (Batterham & Hopkins, 2006): 0.00-0.20, trivial; 0.21-0.50, minimum; 0.51-0.80, moderate; > 0.80, strong. The calculation of statistical procedures, with the exception of the magnitude of the effect, was performed using the software SPSS (v.24, IBM statistics, USA) for a level of significance of 5%.

RESULTS

Table 1 presents the comparisons between the groups for the motivational factors. We found that the Health Avoidance motive was significantly higher in exercise at gyms (EG) compared to NAS with a strong effect size ($p = 0.001$; $d = 1.27$). With a moderate dimension, it was also observed that the values of Health Pressures ($p = 0.001$; $d = 0.76$), Positive Health ($p = 0.001$; $d = 1.09$), Strength & Endurance ($p = 0.001$; $d = 1.02$) and Nimbleness ($p = 0.001$; $d = 0.80$) were higher in EG practitioners.

Table 1. Comparisons between activities for the motivational factors

	EG (N=450) M(SD)	NAS (N=451) M(SD)	% of difference (EG-NAS)	<i>p</i>	<i>d</i> (effect) (EG-NAS)
Stress Management	3.18(1.16)	3.15(1.22)	-0.94	0.763	0.03, trivial
Revitalisation	4.08(0.98)	3.97(0.86)	-2.70	0.060	0.12, trivial
Enjoyment	3.93(1.10)	3.56(1.24)	-9.41	0.001	0.32, minimum
Challenge	2.97(1.30)	2.92(1.19)	-1.68	0.557	0.04, trivial
Health Pressures	1.47(1.29)	0.61(0.94)	-58.50	0.001	0.76, moderate
Health Avoidance	3.51(1.21)	1.75(1.54)	-50.14	0.001	1.27, strong
Positive Health	4.35(0.88)	2.99(1.52)	-31.26	0.001	1.09, moderate
Strength & Endurance	3.81(1.07)	2.52(1.44)	-33.86	0.001	1.02, moderate
Nimbleness	3.54(1.20)	2.47(1.46)	-30.23	0.001	0.80, moderate
Social Recognition	0.81(1.03)	0.97(1.16)	19.75	0.031	-0.15, trivial
Affiliation	2.66(1.40)	3.17(1.33)	19.17	0.001	-0.37, minimum
Competition	1.61(1.40)	1.84(1.47)	14.29	0.017	-0.16, trivial
Weight Management	2.53(1.62)	2.34(1.64)	-7.51	0.085	0.12, trivial
Appearance	2.16(1.55)	1.86(1.56)	-13.89	0.004	0.19, trivial

EG: exercise at gyms; NAS: nature and adventure sports modalities; M: mean; SD: standard deviation; *p*: *p*-value; *d*: Cohen *d* and effect size

DISCUSSION

Research has shown that the pursuit of health benefits is one of the reasons most identified by physical exercise practitioners which is in line with our results. It is possible that practitioners of exercise at gyms are more accustomed to hearing about the benefits of physical activity for health compared to NAS practitioners. The planning of NAS may also include aspects related to the health and fitness gains associated with these activities. In fact, studies have shown that the practice of these sports is related to physical and mental improvements (Calogiuri & Elliott, 2017). Nonetheless, it is possible that this information is not well transmitted to NAS practitioners. An interesting finding was that Strength & Endurance and Nimbleness were higher in EG practitioners than NAS. It is possible that NAS practitioners seek more convenience and experiencing nature (Calogiuri & Elliott, 2017) and less physical and health improvements. These studies are important, especially since different fields of leisure-time physical activity have been shown to be associated with different motivational profiles (Calogiuri & Elliott, 2017). Creating these profiles may be enlightening to help better tailor exercise plans that will meet the needs of the practitioners, helping them continue the practice and motivating them not to give up.

CONCLUSIONS

According to our results, gyms may use the importance of physical exercise for health in order to engage and recruit possible practitioners. They may also create partnerships with health institutions and professionals (e.g., nutritionists, physicians who prescribe exercise) as a way to enhance their gym. Future studies should continue exploring the motives usually more referred by people who exercise and practice sports. It would be important to create different motivational profiles to guide gyms, clubs, associations and federations.

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