

DIFFERENCES IN MOTIVATIONAL REGULATIONS FOR EXERCISE AMONG MALE AND FEMALE UNIVERSITY STUDENTS IN PRISTINA, REPUBLIC OF KOSOVO

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(Original scientific paper)

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Abstract

The study aimed to determine whether there are differences in motivational regulators between male and female students. The research was conducted on a sample of 160 participants randomly selected from multiple faculties within the University of Pristina. The sample was divided into two sub-samples based on gender, with 80 male participants and 80 female participants. To achieve the research objectives, the Behavior Regulation Exercise Questionnaire (BREQ-2) was used to assess exercise behavior regulation. Based on the obtained results, it can be concluded that male participants showed higher values in external regulation, introjected regulation, identified regulation, and intrinsic regulation. No statistically significant differences were found in amotivation and the autonomous index of the strength of self-regulation towards physical activity. The findings of the study will contribute to the development of strategies and interventions aimed at promoting a sense of self-determination for exercise among the student population. Based on self-determination theory, such interventions will seek to enhance students' perceptions of choice, personal mastery, enjoyment, and excitement in exercising, particularly among those who lack regular physical activity.

Keywords: motivation; self-determination; adolescents; gender differences.

Introduction

The World Health Organization emphasizes the importance of physical activity in maintaining health, particularly in prevention and treatment of chronic diseases (WHO, 2004; McKenzie, 2001). Numerous scientific studies highlight the causal relationship between physical activity, physical fitness, and individual health (Mišigoj-Duraković, 2008; Džepina, 2004). These studies identify factors such as lack of physical activity, sedentary lifestyle, inadequate nutrition, increased body weight, smoking, alcohol and drug consumption, as well as eating disorders like anorexia or bulimia, as contributing to health-related issues. Previous research has highlighted the problem of insufficient physical activity and a propensity for risk-taking behavior, particularly among the student population (Džepina, 2004; Huddleston et al., 2002). Students represent a young population preparing for important roles in society, where their knowledge and experiences as educated individuals will influence future generations of children and young people. A significant decline in physical activity is particularly evident during adolescence (15-19 years) and young adulthood (20-25 years), placing students in a vulnerable group (Walla). In this study, the Self-Determination Theory (SDT) [Ryan & Deci, 1985, 2000] is explored. The Self-Determination Theory can help understand why students engage in physical-sport activities and whether they intend to continue doing so in the future. The most commonly identified motives for engaging in physical activity include improving or maintaining health, enhancing physical appearance, enjoyment, desire for competition, social experiences, and psychological benefits. Motives regulated by external motivational factors (e.g., improving physical appearance) may not be as sustainable as those driven by intrinsic factors (e.g., enjoyment, social and psychological benefits). How individuals perceive their autonomy plays a decisive role in determining their level of engagement in physical-sport activities. Several studies have used the Self-Determination Theory as a framework to investigate physical-sport activity and the influence of sociodemographic factors on it (Wilson et al., 2004; Fredrick & Rajan, 1993; Wilson & Roxers, 2002).

Methods of Work

Sample of Participants

The study was conducted on a sample of 160 participants randomly selected from various faculties within the University of Pristina. The sample was divided into two sub-samples based on gender, comprising 80 male participants and 80 female participants. The survey was conducted in an amphitheater using appropriate work organization typical for such research. The participants were treated in accordance with the Helsinki Declaration.

Variables of the Study

The data was collected using a structured questionnaire survey method. The variables were defined based on the questionnaire items and categorized into two groups: Dependent variable (gender) and independent variables (motivation, external regulation, introjected regulation, identified regulation, intrinsic regulation, and autonomous regulation index).

Motives for Physical Activity (Behavior Regulation Exercise Questionnaire - BREQ-2)

Motives for physical activity were assessed using the Behavior Regulation Exercise Questionnaire (BREQ-2) developed by Mullan, Markland, and Ingledew (Mullan, Markland, & Ingledew, 1997). The questionnaire consists of 19 items and follows a Likert-type scale. It is divided into several subscales, including amotivation (I do not see why I should exercise), external regulation (e.g., I exercise because others tell me to), introjected regulation (e.g., I feel guilty when I don't exercise), identified regulation (e.g., I exercise because I recognize the health and aesthetic benefits), and intrinsic motivation (e.g., I exercise because it is enjoyable). From the four subscales, an autonomous regulation index of the strength of self-regulation towards physical activity is derived using the formula: $(3-)AM + (-2)(EXT) + IJ + 2ID + 3(IM)$.

Confirmatory factor analysis confirmed the presence of four factors, and the Cronbach's alpha coefficient was also high for each of the four factors (external = 0.79, introjected = 0.76, identified = 0.78, intrinsic = 0.90).

Methods for data processing

For all variables, the mean (X), standard deviation (SD), kurtosis (Kurt), and distribution skewness (Skew) were calculated. The normal distribution of the variables was tested using the Kolmogorov-Smirnov test. In order to determine if there are differences in motivational regulators between male and female participants, independent samples t-tests were applied. The data were processed using the statistical package SPSS for Windows Version 22.0.

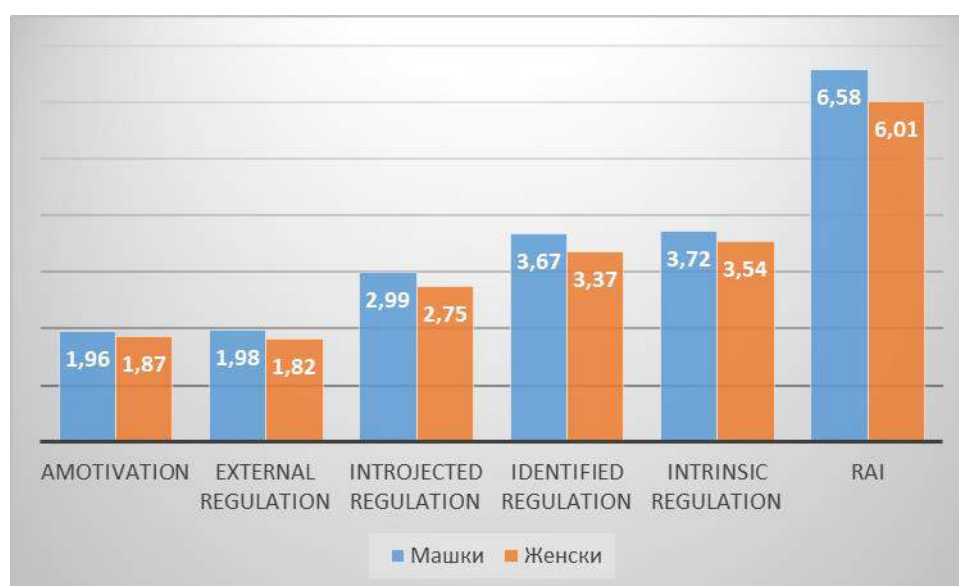
Results

In order to determine if there are differences in motivational regulators between male and female students, independent samples t-tests were conducted. The results of the t-tests are presented in Table 1. From the examination of the table, it can be seen that statistically significant intergroup gender differences were found in external regulation (e.g., exercising because others say one should), introjected regulation (e.g., feeling guilty when not exercising), identified regulation (e.g., exercising because of health and aesthetic benefits), and intrinsic motivation (e.g., exercising because it is enjoyable). However, no statistically significant differences were found in amotivation and the autonomous index of self-regulation for exercise.

Table 1. Gender Differences in Motivational Regulators

	Male		Female		t	df	Sig.
	Mean	SD	Mean	SD			
Amotivation	1,96	1,14	1,87	0,82	0,92	362,28	0,358
External regulation	1,98	0,84	1,82	0,71	2,08	396,84	0,038
Introjected regulation	2,99	1,02	2,75	0,92	2,55	406,41	0,011
Identified regulation	3,67	0,87	3,37	0,88	3,56	417,59	0,000
Intrinsic regulation	3,72	0,90	3,54	0,88	2,16	415,09	0,032
RAI	6,58	5,15	6,01	4,67	1,19	406,35	0,236

Figure 1. Gender Differences in Motivational Regulators



From the values of the means and the level of statistical significance, it can be observed that male participants showed higher values in external regulation, introjected regulation, identified regulation, and intrinsic motivation.

Discussion

Appropriate physical activity plays a crucial role in well-being and quality of life (McAuley & Rudolph, 1995). The university is a significant institution in promoting health-enhancing behaviors. It is believed that this age group is receptive and easily influenced to change their behavior in a positive direction. Additionally, this is a time when individuals can establish habits that may persist into adulthood (Wallace et al., 2000). Therefore, the university environment presents a key opportunity for promoting good physical activity behaviors. However, the lack of sufficient data related to motives, perceptions, and attitudes towards exercise among the student population limits the design of effective interventions to promote physical activity. The aim of this study was to determine whether there are gender differences in amotivation, external regulation, introjected regulation, identified regulation, and intrinsic motivation among students at the University of Pristina.

Based on the obtained results, it can be noted that male participants exhibited higher values in external regulation, regulation of guilt, identified regulation, and intrinsic regulation. Statistically significant differences were not found in amotivation and the autonomous index of the strength of self-regulation towards physical activity.

These differences in motivation levels between male and female students can be explained by socio-cultural differences that exist in traditional families. Parents, the family, and society create differences in children based on gender from an early age, as examined by various researchers. Speaking about socialization and gender differences, Hardman states that based on developmental experience in the family, children gradually prepare for assuming the gender role they will adopt in later years (Hardman, 1997). As a reason for this division (to some extent), the influence originating from parents, family members, teachers, as well as the influence of electronic and print media, historical traditions, and established stereotypes can be considered. Investigating the interaction between mother and child, the author points out differences in the mother's approach to boys and girls, even when she believes she treats them equally. The author also suggests that biological evidence facilitates the understanding of gender differences. However, Rowland and Sallis state that many people consider gender differences in physical activity more as socialization factors than biological factors (Rowland, 1999; Sallis, 2000). The authors note that students are less influenced by parents and more influenced by peers, so motivation for physical activity depends more on social factors than biological or family factors. Additionally, media influences contribute to the formation of differences between boys and girls.

According to self-determination theory and the results obtained from this research, it can be concluded that self-determination may play a significant role in regulating exercise-related behaviors in the later stages of motivational readiness for changing physical activity habits. The findings of this study, along with previous research, can be used to develop strategies and interventions aimed at promoting feelings of self-determination for exercise. Based on self-determination theory, such interventions will seek to enhance students' perceptions of choice, personal mastery, enjoyment, and excitement in exercise, especially among those who do not engage in regular physical activity. Furthermore, it is important to make the values of physical activity (in terms of physical, psychological, and emotional benefits) explicit in the strategies used to promote physical activity.

Conclusion

Based on the obtained results, it can be concluded that male participants exhibited higher values in external regulation, regulation of guilt, identified regulation, and intrinsic regulation. Statistically significant differences were not found in amotivation and the autonomous index of the strength of self-regulation towards physical activity.

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