



TESTING THE RELATIONSHIP BETWEEN PERCEIVED CONSTRAINTS AND RECREATIONAL SPORT PARTICIPATION LEVELS IN AN URBAN ENVIRONMENT IN GREECE

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ABSTRACT

The purpose of this study was to test the relationship between perceived constraints and recreational sport participation in an urban environment. The data were collected from an on-site survey in the city of Thessaloniki, Greece, with a sample of one thousand individuals, participants in recreational sport activities. The Leisure Constraints Questionnaire was used to measure sport related constraints, following the hierarchical model of leisure constraints. The results indicated that the Lack of Interest, Psychological Factors, Lack of Knowledge and Previous Experience had statistically significant differences among participants and non-participants. All these dimensions can be categorized within the psychological constraints, which is in line with the hierarchical model of leisure constraints. These results propose that these constraints should be targeted by sport policy makers in their effort to promote recreational sports in a more effective way among citizens.

KEYWORDS : Constraints, Sport Participation, Urban Environment

INTRODUCTION

Sport participation and the frequency of exercise of the citizens, intensely concern the international scientific community in recent years due to the direct relationship between not exercising and poor health. Studies showed that the increase of obesity in more than 775 million people is a fact today, more specifically 125 million children and teenagers are at least overweight worldwide today. Additionally, non-exercising has been linked with increased metabolic and cardiovascular diseases (www.enebariatrics.com, 2019). The present paper intends to explore of the perceived constraints influence sport involvement of adults in an urban environment. The understanding of these factors is important in order to develop sports lifestyle promotion strategies.

Literature Review

Perceived constraints are defined as: "factors which researchers consider and have been understood by the individuals in order to suspend or prevent their participation in physical activity" (Jackson, 1991). The decision of the individual to participate or not in a physical activity is being influenced by a number of limiting or restricting factors that researchers have tried to rank based on their type and nature (Jackson, Crawford & Godbey, 1993).

The most accepted model suggests three dimensions perceived constraints:

- Intrapersonal
- Interpersonal
- Structural

In more detail:

A. Intrapersonal (internal/personal) perceived constraints: "include negative personal psychological states and specific features of the person itself, which may affect their individual preference" (Crawford & Godbey, 1987).

Examples of internal/personal constraints consists of: perceived abilities of the individual such as health, fatigue, stress, depression, anxiety, negative former contact with some leisure activities, self-esteem, lack of interest and lack of knowledge.

B. Interpersonal perceived constraints: referred to as: "The result of interpersonal interaction between participants or the lack of interpersonal relationships" (Crawford & Godbey, 1987). In interpersonal category of perceived constraints are considered "the inability to find company for exercise, the social environment and social isolation"

C. Structural perceived constraints (external obstacles): referred to as: "the intervention between someone's preference for participating in leisure activities and his attendance or not" (Crawford & Godbey, 1987).

Examples of structural perceived constraints are: Lack of financial resources, problems relating to the facilities, absence of suitable programs, working time, reduced sport opportunities.

The hierarchical model of perceived constraints

According to the hierarchical model of perceived constraints, intrapersonal constraints are considered as the most powerful and deterrent to the individual's decision to exercise, while structural constraints are considered less deterrent (Crawford, Jackson, & Godbey 1991). Interpersonal constraints are placed in-between the previous two categories. The theory of perceived constraints has been used to examine the decision-making process of an individual to exercise (Mannell & Loucks-Atkinson, 2005) and has helped to develop and design strategies for the promotion of exercise and leisure (Alexandris & Carroll, 1999).

According to the hierarchical model, intrapersonal perceived constraints are the first to be faced by individuals and interact with motivation, shaping the preferences for participation or not in exercising. If the negotiation of the intrapersonal perceived constraints is successful, which depends on the level of motivation of the individual, then they can be overcome. Provided that the treatment of these constraints is successful, through negotiation strategies and because of the high level of motivation, then the individual faces the structural constraints. Eventually, the participation in exercising can be achieved when the individual face effectively the structural perceived constraints (Crawford, et al., 1991; Jackson, et al., 1993).

Hypotheses

H1: There are statistically significant differences in the perception of perceived constraints and sport participation.

H2: There are statistically significant differences in the perception of constraints among individuals with different frequency of sport participation.

Methods

The sample of the research was 1000 (N=1000) adults, residents of the Prefecture of Thessaloniki. The data were collected with on-site surveys. The Leisure Constraints (Alexandris and Carroll, 1997a) was used to measure leisure constraints. This questionnaire includes the following leisure

constraint dimensions: Time, Facilities, Cost, Psychological Factors, Lack of Knowledge, Lack of Interest, Previous Experience and Lack of Partners. Respondents were asked to answer on a 7-point Likert Scale.

RESULTS

Descriptive characteristics of the scales of perceived constraints

The first Table (Table 1) indicates the mean score, standard deviations, internal consistency reliability (Cronbach α) of the subscales.

Table 1.

Mean, standard deviations, internal consistency reliability (Cronbach α) of the subscales of perceived constraints. (Minimum value=1, Maximum value=7)

		Mean	SD	alpha	Items
Perceived Constraints	Structural Perceived Constraints				
	Time	4.0	1.5	.73	3
	Facilities	3.7	1.5	.86	3
	Cost	3.9	1.7	.94	3
Intrapersonal Perceived Constraints	Psychological Factors	3.6	1.4	.87	7
	Lack of Knowledge	3.1	1.6	.89	3
	Lack of Interest	3.5	1.5	.80	3
	Previous Experience	2.6	1.4	.87	3
	Lack of Partners	3.1	1.6	.90	3

The alpha scores were satisfactory as they had values over .73 (Churchill, 1979; De Vellis, 2003; Hinkin, 1988) while, the average mean scores of the subscales ranged from 2.6 for "previous experience" (Mean=2.6) to 4 for "time" (Mean=4.0).

Hypotheses

There are statistically significant differences in the perception of constraints between A) Participants and non-participants in recreational sport activities and B) Individuals with different frequency of sports participation.

In order to research the differences between participants and non-participants in recreational sport activities in terms of how they perceive intrapersonal perceived constraints, a t-test was used.

Particularly, in the t-test statistically significant differences were found in the dimensions "Psychological Factors (t = -6.89**, p<.001) (Mean = 2.9 and Mean= 3.9), "Lack of Knowledge" (t = -3.25**, p<.001) (Mean = 2.6 and Mean 3.2), "Lack of Interest" (t = -7.90**, p<.001) (Mean= 2.6 and Mean=3.8) (Table 2).

Table 2.

Comparison between the mean scores of perceived constraints and participants vs. non-participants (Minimum value=1, Maximum value=7).

Meaning	Dimensions	Participants	Non-participants	t	Items
Intrapersonal perceived constraints	Psychological factors	2.9	3.9	-6.89**	7
	Lack of Knowledge	2.6	3.2	-3.25**	3

	Lack of interest	2.6	3.8	-7.90**	3
	Previous Experience	2.4	2.7	-1.73	3

*p<.001, *p<.05

One way ANOVA was ran to compare intrapersonal perceived constraints of sport participation among individuals with different frequency of sport participation. The results indicated significant statistical differences at "psychological factors" (F=5.9, p<.001) and "lack of interest" (F=7.5, p<.001).

As far of "psychological factors" statistically significant differences were found between: a) individuals who participated "almost every day" (mean=2.4) and individuals who participated "1-2 times/week" (mean 3.4), b) individuals who participated "3-5 times/week" (mean=2.7) and individuals who participated "1-2 times/week" (mean= 3.4)

As far of "lack of interest" statistical differences were found between a) individuals who participated "almost every day" (AVG=1.8) and individuals who participated "less than one time per week" (AVG=3.9), b) individuals who participated "3-5 times/week" (AVG=2.5) and individuals who participated "less than one time per week" (AVG=3.9) (Table 3).

Table 3.

One Way ANOVA

Subscale	S1 M	S2 M	S3 M	S4 M	F	Post Hoc**
Intrapersonal Perceived Constraints	SD	SD	SD	SD		
Psychological Factors	2.4 1.0	2.7 1.1	3.4 1.3	3.4 1.1	5.9**	1-3, 2-3
Lack of Knowledge	2.1 1.4	2.5 1.7	3.0 1.5	3.1 1.4	2.0	-
Lack of Interest	1.8 1.3	2.5 1.4	2.8 1.2	3.9 1.5	7.5**	1-4, 2-4
Previous Experience	1.8 1.4	2.5 1.8	2.7 1.2	2.8 1.4	2.1	-

S1=almost every day, S2= 3-5 times / week, S3=1-2 times / week, S4=less than one time per week

**p<.001, **p<.01, *p<.05

DISCUSSION

Examining the differences between participants and non-participants in recreational sports activities in terms of perceived constraints statistically significant difference were found mainly in the intrapersonal constraints, supporting our first hypothesis. In terms of frequency of sport participation differences were found in the "lack of interest" and "psychological constraints".

The results from the present research support the hierarchical model of leisure constraints (Crawford et al., 1991) since interpersonal perceived constraints can predict the individual's participation in sports. In more detail, "psychological factors", "lack of interest", "previous experience" and "lack of knowledge" are the most important constraints that block sport participation. These constraints should be targeted by policy makers and sport administrators. Since most of these constraints are internal ones, motivation strategies should be developed and should be targeted in cooperation with the sport leaders and instructors. If these constraints are removed, it is very likely that sport participation will be increased.

Limitations and Suggestions for Future Research

Like any research, this one has a few limitations which need to be addressed. More specifically, the sample of the research

was selected by the Metropolitan Region of Thessaloniki and sampling was convenient. Moreover, the results cannot be representative of the Greek population due to the sample size used. However, they still depict some important trends. Furthermore, based on the theoretical model chosen, the dependent variables were examined based on the theoretical concepts that were considered important. There are obviously other variables that can be incorporated into theoretical models in the future (e.g. personality). Finally, it should be noted that the present research was based only on quantitative data.

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