



PREDICTION OF THE INVOLVEMENT OF INDIVIDUALS IN SIX DIFFERENT OUTDOOR RECREATION ACTIVITIES, BASED ON THEIR INCENTIVES

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ABSTRACT

The purpose of this research was the prediction of the involvement of individuals in six outdoor recreational activities, based on the contribution of the participation incentives that urge participants to take part in these activities. The sample consisted of six hundred participants ($n = 600$), 100 per each activity (windsurfing, snowboarding, climbing, mountaineering, mountain cycling, skiing). Six different questionnaires were used to investigate the aims of this research. For the measurement of the involvement, the questionnaire used was that of Kyle et al (2003) while the questionnaire REP of Manfredro et al., (2007) was used for the measurement of the participation incentives. The results of the statistical analyses revealed that the participants showed high involvement in outdoor recreational activities and it seems that their participation in these activities is a very enjoyable process and plays an important role in their personal and social life. The results are consistent with the results of previous researches that found a high involvement of the participants in the exercise (Alexandris et al., 2008, Alexandris et al., 2011, Beaton et al., 2011). For the incentives the highest average was of the dimensions "exercise", "enjoyment of nature", "rest", "social pressure", "learning", "skill control". The incentives contributed significantly to the prediction of the three dimensions of involvement. It is very important for people to understand and make use of the nature in the right way, to protect it, to experience its positive elements and create opportunities for new jobs, like tourism. Mountaineering, climbing, skiing, snowboarding, windsurfing and mountain cycling are some of the numerous activities that can be carried out in Greece. So, it is necessary for the State and the local entities and all those, who are responsible for the natural environment, even individually, to advertise and promote these activities with the appropriate marketing strategies, in order to broaden people's participation and organize and develop the outdoor activities throughout the Greek State.

KEYWORDS : windsurfing, skiing, mountain cycling, snowboarding, mountaineering, climbing, psychographic segmentation, involvement, incentives for participation.

The participation in recreational activities, and more specifically in outdoor activities, gives the opportunity to participants to derive multiple benefits (physical, social and psychological). Many researchers place great emphasis on psychological and social benefits that follow the participation in outdoor activities. The participation in these activities is associated with a series of emotions, such as achievement, satisfaction, pleasure and success that strengthen and protect the mental health of participants. In addition, through the social and mental activation of individuals participating in outdoor activities and facing various challenges, basic psychological skills such as the skill of self-exploration, self-knowledge and self-control can be developed (Kaplan 1984, Scherl 1989).

As outdoor recreational activities are defined the activities that take place outdoors and they include some form of interaction among the participants and the surrounding area (Miles & Priest, 1990). These sites may be part of the natural environment (forest, beach, mountain, and countryside) or an artificial environment, specially designed to carry out recreational activities (climbing slopes, footpaths, skate parks, adventure parks). The interaction between environment and human beings creates the main feature of these activities, the "challenge" (Miles & Priest, 1990).

Outdoor recreation programs are characterized by the fact that their dominant aim is not the physical and kinetic improvement-empowerment of the participants, but their satisfaction and pleasure, resulting in benefits that arise effortlessly, but surely. In addition, they provide stimulation and encouragement to the participants for life-long-exercise, without high-performance requirements and expectations. The basic principle of outdoor activities, according to which "everyone participates to the point he that wants and chooses" plays a significant role in these activities (Priest & Guss, 1997).

Snowboarding, skiing, windsurfing, mountaineering, climbing and mountain cycling are some of the numerous common activities that take place in the Greek countryside. Greece is a country that has all the natural elements for these activities to be held (mountains, seas, rivers, cliffs, rocks). In the recent years, there has been an increase in the number of participants as well as of foreign tourists in outdoor

activities and extreme sports. There is a big gap in the bibliography regarding to the degree of participation, the psychological and the demographic profile of the participants.

Theoretical background. Involvement in the activity.

The involvement is defined as the personal connection that is created between the individual and an activity and the degree in which he is expressed and communicates through his participation in this activity (Kyle & Chick, 2004). Iwasaki and Havitz (1998) presented a comprehensive theoretical model in order to make clear the mechanisms of the development of devotion as a behavior of the participants in recreational programs. In this model the concept of involvement is considered to be a determinant factor of the psychological connection and resistance to the change of activity. These concepts affect positively the dedication as a behavior of the participants in outdoor recreation activities (e.g. the time available for daily exercise and the frequency of their involvement). Havitz and Dimance (1997) defined the involvement in recreation as a non-observable state of motivation, arousal or interesting for a recreation activity or a product that is connected to it that is caused by a specific stimulus or a condition that activates the individual. According to this definition the involvement refers to the way in which the individuals realize their participation in an activity and how significant it is for them. After the studies of the above researchers, Kyle, Graefe, Manning and Bacon (2004) state that the involvement has three dimensions: the attraction, the centrality and the self-expression.

The attraction refers to the personal satisfaction that the individual gains participating in an activity and how significant it is for him. The centrality, refers to how important this activity is for his life. Finally, the self-expression indicates the possibility of satisfaction of the personal beliefs of the individuals through their participation in an activity and the image that they wish to project to the others through this participation. The model of the involvement of three dimensions is widely accepted by the majority of the researchers in the field of exercise and recreation (Gahwiler & Havitz 1998; Iwasaki & Havitz, 2004; Kyle & Chick, 2002; Kyle, Bricker, Graefe, & Wickham, 2004; Kyle, Graefe, Manning, & Bacon, 2003; 2004a; 2004b; Kyle & Mowen, 2005; McIntyre, 1989; Wiley, Shaw, & Havitz, 2000).

Incentives for participation.

The reasons that urge a person to behave in a particular way of behavior are defined as incentives (Iso-Ahola, 1999). The aim of the study of the incentives in recreation is the determination of the reasons that urge a person to carry out some actions and specifically his participation in recreational activities. The study and the understanding of incentives can be used to predict the dimensions of participation, such as the prediction of the intention to continue, the dedication, the involvement and the specialization (Alexandris & Kouthouris, 2005). There are several theories that have developed in the international bibliography. According to the theory of self-determination (Deci & Ryan, 1985), which is one of the most widespread, the behavior of a person regarding the decision for participation in recreational sports activities can be affected by: interior incentives associated with the experiencing of positive experiences from the participation, such as aesthetic beauty, recreation, knowledge and enthusiasm. Internal incentives are those that urge a person to follow some form of exercise having as a goal the self-realization and the energy that he will take from his inside world, just only because of this participation. On the other hand, the external incentives refer to the rewards that a person gains from his outside environment by participating in the activity, such as social recognition and positive criticism of the social environment (Deci & Ryan, 1985). In the bibliography of recreation, the interior incentives have been suggested as more powerful and important than the external ones (Beard & Ragheb, 1987, Alexandris et al., 2002). The basic categories of incentives of the participants that have been suggested in the bibliography of recreation are the following: health and fitness, improvement of appearance, relaxation and calmness, escape from everyday life, competition and achievement, socialization, learning and improvement of the individual skills (Alexandris & Carroll, 1997, Davis et al.,1995, Iso-Ahola,1999).These categories are included in an analytical and completed questionnaire suggested by Manfredo and Driver (1997).

The aims of the research.

This research had the following aims: a) to investigate the demographic profile of participants in six outdoor recreational activities, b)to investigate the involvement and the incentives of participation in the activity and c)to predict the involvement in the activity from the incentives of the participation of the participants.

Methodology.

The participants.

The sample were Greek participants over 18 years old, from various places, where the specific activities took place. More specifically, 600 questionnaires were given, from which 555 were collected and were considered valid, as follows:

Snowboarding and Skiing in Seli, in Tria-pente Pigadia and in Vasilitsa, (100 skiing and 100 snowboarding).

Windsurfing, in Angelochori, in Perea and in the island of Lemnos (100 questionnaires).

Mountaineering, in Paggion, in Valia Calda, in Siniatsiko-askio and in Olympus (100 questionnaires).

Climbing, in Meteora, in Mouzaki, in Retziki and in Sidirokastro (55 questionnaires). **Mountain cycling** in Chortiatis and Seih-Sou (100 questionnaires).

The questionnaires were given to the participants in a printed form. Before they start to fill in the questionnaires, oral information and instructions were also given to them. Also, they were told about the confidential personal data. There were the following criteria:

- a) The participants must be Greeks
- b) They must be over 18 years old
- c) They must be active participants in the activities of the research

Questionnaire.

Questionnaire of participation incentives.

For the measurement of the incentives the REP was used (Manfredo et al, 2007).**Questionnaire of the involvement with the activity.**

Involvement with the activity: for the measurement of the involvement the questionnaire of Kyle et al. (2007) was used. It includes three dimensions: attraction, centrality and self-expression. The answers were given in the five-degree scale Likert.

Results.

Demographic characteristics.

Regarding the profile of the participants involved in the activity of windsurfing, the research showed that 26% were women and 74% were men. Regarding the profile of the participants involved in the activity of snowboarding, the research showed that 77% were men and 23% were women. Regarding the profile of participants involving in the rock climbing activity, the research showed that 77% were men and 23% were women. In the winter activity of skiing 41% were women and 59% were men. In the activity of mountain cycling 82% were men and 18% were women. In the activity of climbing 80% were men and 20% were women (Table 1).

Table 1. Demographic characteristics of the participants in the six outdoor recreational activities.

Activities	Men	Women
Windsurfing	74%	26%
Snowboarding	77%	23%
Rock climbing	77%	23%
Skiing	59%	41%
Mountain cycling	82%	18%
Mountaineering	80%	20%

Averages of participation incentives.

Regarding the internal coherence of the scales the alpha indices showed satisfactory values ranged over 70 (Churchill, 1979; DeVellis, 2003;Hinkin,1988).The values of the averages of the scales ranged from 2.0 to 4.2 (table 2).

Table 2. Averages and indices of internal coherence (Cronbach a) of scales of participation incentives (Minimum value = 1, Maximum value = 5).

	Mean	SD	α
Achievement	2.6	1.1	.88
Social recognition	2.0	1.0	.88
Development of skills	3.6	.9	.88
Ability control	3.7	1.0	.88
Excitement	3.5	1.0	.88
Exchange of views	2.2	1.1	.88
Leadership	2.7	1.0	.88
Strength control	2.6	1.2	.88
Risk taking	2.9	1.3	.92
Equipment buy	2.0	1.1	.82
Participation with the family	2.2	1.3	.91
Meeting people with common interests	3.5	1.1	.86
Socialization	3.0	1.1	.85
Learning	3.7	1.0	.87
Enjoy the nature	4.2	.8	.85
Self-control	3.0	1.1	.87
Creativity	3.4	1.0	.81
Exercise	4.2	.8	.87
Rest	3.8	.9	.67
Escape from the city	3.8	1.0	.84
Relaxation	2.7	.9	.84
Social security	3.0	1.2	.89
Leadership	2.9	1.2	.89

Averages of involvement with the activity.

Regarding the internal coherence of the scales alpha, indices showed satisfactory values ranged over 0.70 (Churchill, 1979; De Vellis, 2003; Hinkin, 1988), while the values of the averages of the scales ranged from 4.0 to 5.5 (table 3).

Table 3. Averages and indices of internal coherence (Cronbach a) of the scales of involvement. (Minimum value = 1, maximum value = 7).

	Average	Typical deviation	alpha
Attraction	5.5	1.3	.85
Centrality	4.4	1.7	.89
Self-expression	4.0	1.7	.78

Prediction of involvement in the activity from the incentives of the participants. Multiple regression control with simultaneous entry of all the variables was used for each of the parameters of the activity. In each of the analyses, each one of the parameters of the activity was considered as a dependent variable. The results listed in table 9 show that the variables new acquaintances, learning and rest provide the attraction at 20,6%, the new acquaintances and learning provide the centrality at 16,3% and the risk-taking, new acquaintances, learning, creativity, physical condition and teaching provide the self-expression at 33.8%.

Table 4. Regression analysis results.

Variables	B	T	p	sr
New acquaintances	.236	4.41	.001	.186
Learning	.111	2.23	.026	.096
Rest	.105	2.03	.043	.087
Dependent variable attraction	R ² =.206	F _(16, 540) =8,76	p<.001	
Variables	B	T	p	sr
New acquaintances	.215	3.9	.001	.165
Learning	.169	3.31	.001	.141
Dependent variable Centrality	R ² =.163	F _(16, 540) =6,57	p<.001	
Variables	B	T	p	sr
Risk taking	.253	4.67	.001	.197
New acquaintances	.135	2.75	.006	.118
Learning	.095	2.08	.038	.089
Creativity	.151	2.08	.037	.089
Fitness	.112	2.08	.038	.089
Teaching	.202	2.29	.022	.098
Dependent variable Self-expression	R ² =.338	F _(16, 540) =17,23	p<.001	

Discussion.

Regarding the profile of participants in the activity of snowboarding an earlier research of Kaimakamis (2007) for this activity showed that the average of age was lower, while in the present research the average was higher. This is justified because the young people who used to do snowboarding then, continue to do it and nowadays, so there is dedication to the activity and also after nine years the activity has begun to become more accessible and in the older ages. The number of male participants continues to be greater, but it seems that there is an increasing trend of the number of female participants. The most popular skiing center for the participants in the activity of the snowboarding is still Vasilitsa, Grevena.

Regarding the profile of participants involving in the rock climbing activity the research showed that persons of older ages involve in climbing and the most of them are male participants. The most popular place for climbing is Meteora, because it combines climbing and tourism. It is worldwide known for its climbing sites and for the religious tourism, since there are numerous monasteries built on the steep and rough rocks and cliffs. The climbers' activities are: mountaineering, combined and mixed with climbing, skiing and mountaineering skiing, mountain cycling, jogging and mountain running.

Women involve in the activity of skiing more than in other activities, because skiing was quite popular in Greece a long time ago. In the past, people mainly from rich families used to involve in this activity, since it was considered delicate. In the last decades snowboarding and skiing are quite popular in Greece. Today, in the continental part of the country totally 19 ski resorts operate with modern standards and facilities. These resorts are important poles of attraction for the development of the winter tourism and they are also particularly popular both to Greeks and to foreign visitors of the country. Regarding Greece, the skiing market has developed rapidly over the last ten years (Tsiotsiou, 2006), since 19 ski resorts attract more than 400,000 visitors every year (Hudson & Cross, 2004,) while as mentioned in the research of Kouthouris, Alexandris, Giobanis and Chatzigiannis (2005), the number of recreation skiers is about 250,000 persons per year nowadays.

The favorite places for skiing are: Seli in Veria, Bansko in Bulgaria and Vasilitsa in Grevena. They seem to be the most popular destinations for skiers. During the period that the research was held, Seli was the ski center with the best offers in family and individual packages. Vasilitsa was the ski center with the best quality of snow and Bansko was the most popular destination for the Greeks of northern Greece, since it offers affordable stay, lunches, very good services in general and modern facilities. The activity of mountaineering is one of the most popular activities in Greece, because of the numerous high and steep mountains that there are throughout the length and breadth of Greece. There have been a lot of Greek and foreign climbers, who attempted to climb and conquest the peaks of these mountains over the years. It seems that climbing is an activity that especially individuals over 30 years old enjoy it, mostly men. Most of them choose the mountain Olympus for mountaineering and less of them the mountain Pindus. The activity of mountain biking is usually selected by men. Once again it seems that the participation of women is limited.

Chortiatis and Seih -Sou and generally the mountains and hills inside and outside of the city (Perevou stream) seem to be the most favorite places for mountain cycling. Generally, the research shows the need of promotion of the women's participation in these activities using marketing strategies.

Regarding to the involvement in the activity the results showed that the major averages have occurred in the dimensions "attraction" and "centrality". Attraction refers to the pleasure that the individual takes participating in an outdoor recreational activity, but also how this activity is important for the person. "Centrality" refers to the role of the activity in a person's life as it is expressed in his daily life and in his socialization. It seems that the participants feel pleasure and satisfaction as it is very important for their lives to participate in outdoor recreational activities. They organize their lives around these activities and spend their free -time in this way.

The dimension "self-expression" showed a lower but also high average, indicating the possibility of confirmation of a person through his participation in a recreation activity and the image-making that he wishes to project to his social environment through his participation.

Generally, the participants showed a high involvement in outdoor recreational activities and it seems that their participation in them is a very enjoyable process and plays an important role in their personal and social life. The results are consistent with results of previous researches that found a high involvement of the participants in the exercise (Alexandris et al. 2008; Alexandris et al., 2011; Beaton et al. 2011).

In the incentives, the highest average was of the dimensions "Exercise", "enjoyment of nature", "rest", "social pressure", "learning", and "skill control". Probably the participants are motivated by the desire of experiencing positive experiences such as pleasure by participating, bright and strong emotions and satisfaction for the improvement of the technique, the joy of learning new exercises

and generally the psychological relaxation and the escape from everyday life.

The averages of dimensions "creativity", "self-control", "socialization", "excitement", "risk taking" and "meeting people with common interests" were moderate. The participants want to be creative and make new acquaintances with people, who have the same interests, through their participation in activities. They want to experience a stimulation of emotions and adrenaline and so they take the risk, necessary for these activities. The outdoor research foundation (2013) showed the same results for the reasons that the Americans participate in outdoor activities. The average of external motivation was low for "involvement with the family", "contact", "social recognition", "isolation", "equipment buy" and "achievement" that referred to the existence of external rewards for the individual for his participation in the outdoor activities.

The incentives contributed significantly to the prediction of the three dimensions. Specifically the dimension "attraction" was significantly predicted by the dimensions of the incentives "new acquaintances", "learning", and "rest". The dimension "centrality" was significantly predicted by the dimensions "new acquaintances" and "learning". Finally the dimension "self-expression" was significantly predicted by the dimensions of the incentives "risk taking", "teaching", "learning", "creativity", "fitness" and "new acquaintances". Specifically, the possibility and the opportunity of meeting people, who have the same interests and the same preferences, enhance the pleasure that the person takes participating in a recreational activity, but also this activity is very important for the individual. Also this possibility of meeting new people, increases the role of this activity in a person's life as it is expressed in his daily life and in socialization.

The sense of danger and risk that the participant enjoys, expresses and provides the "self-expression" of the participant, because through the experience of the risk he has the possibility of confirmation and making the image, he wants to project in his social environment.

Conclusions

The outdoor recreational activities are very important for the sport-tourism worldwide, as the rates and the various researches show. This admission must be understood and developed and in Greece, because Greece has a lot of mountains, rivers, gorges, cliffs, rocks and it is surrounded by seas. This fact makes Greece suitable for the development and cultivation of such activities. It is very important for people to understand and exploit the nature in the right way, in order to experience its positive elements, to create job opportunities (tourism) and at the same time to protect it. Mountaineering, climbing, skiing, snowboarding, windsurfing and mountain biking are some of the numerous activities that can be carried out in Greece. It is necessary the State and the local entities and all those who are responsible for the natural environment, even individually, to advertise and promote these activities with the suitable marketing strategies, in order to organize and develop these activities and increase the number of the participants.

Recommendations.

- Emphasis on creating new outdoor exercise and recreation sites in cities, such as drafting exercise paths in parks and squares or creating theme parks for outdoor activities.
- The information about the benefits of the exercise and particularly of the outdoor recreation activities is very important.
- Extensive and persistent promotion of the athletic lifestyle within the society, by those who deal with the development of recreation sport. The correct information for the multiple benefits of the exercise is necessary.
- Also, every population group and each activity must be faced according to its particular demographic characteristics.
- Construction and organization of sites, where activities can be held.

- Emphasis on the organization and control of the companies that operate and deal with these activities. According to informal evidence, there are many omissions in the safety and operation of these companies and non-certified instructors-trainers.
- Emphasis on the promotion of the concrete activities to the women. Some other researches show that women participate less than men in outdoor recreation activities.

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