

Participation constraints in ski: measurement model validation

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Aim of abstract/paper - research question

Sport Participation (SP) is one of the most studied subjects among the available leisure and sport literature. SP has been studied from different perspectives. In this context, constraints represent a large proportion of the adopted approaches. Although these have been indiscriminately adopted, constraints approaches are particularly relevant in studies that focus on the general population or in non participants samples. This wide range of works opens the door to the identification of the main constraints and consequent suggestion of possible propositions to facilitate the overcoming of these barriers.

The Spanish and Portuguese ski industries are at their early stages of development, due to the fact that these two countries are considered as popular tourism destination for mass summer vacation or as well known golf destinations. However, developments in the technology of the artificial snow production associated with the growing number of skiers, allowed the development of ski resorts in these countries. These ski centers could be the vehicle for economic development and prosperity for mountain areas, therefore contributing to the reduction of tourism seasonality, to the development of vast mountain areas and to the creation of employment, halting or slowing the migration flows.

Despite the existence of several studies about leisure constraints, the studies about SP in ski, among non participants, are still scarce. Therefore, the main goal of the current study is to explore the constraints related to recreational ski participation, using the hierarchical model initially proposed by Crawford & Godbey, (1987). More specifically, as part of the ongoing investigation, at this stage to test the factorial structure of the measurement model proposed by Gilbert & Hudson (2000).

Theoretical background or literature review

Crawford, et al., (1991) proposed that leisure constraints are categorized into three hierarchically organized levels: intrapersonal, interpersonal, and structural. This is the most widely accepted theoretical framework for leisure constraints. However, works about ski participation do not fully support this model. Gilbert & Hudson (2000) and Andronikidis, Vassiliadis, Priporas, & Kamenidou (2007) suggest the existence of two factors or constraints categories (intrapersonal and structural constraints).

Methodology, research design and data analysis

The questionnaire, proposed by Gilbert & Hudson (2000), was translated into Portuguese and pre-tested. The 30 items questionnaire contained an explanation of the study's purpose, along with the statements on constraints, the instrument asked about skiing experience, likelihood of skiing in the future, and general demographics. An invitation to participate in the study was emailed to 1000 member of the local academia of a small city located in the north of Portugal. This community was chosen due to its closeness to seven ski resorts, at a range of 300 Km (6 in Spain and one in Portugal). Data was collected from September 2011 until June 2012 and, at the moment, 207 answers were received. In this sample, 53% are male, age ranges from 19 to 62 ($x=30,2$), 69% are single, and 18% reported previous ski/snowboard participation.. Collected data was analyzed through factor analysis using maximum likelihood estimation and varimax rotation.

Results, discussion and implications/conclusions

Goodness of fit results did not confirm none of the previously mentioned models [$\chi=1354(403df)$ $p=0,000$; $CFI=0,582$; $RMSA=0,103$]. Consequently, the relational structure of the variables was evaluated by an exploratory factor analysis (EFA). EFA validity was considered good [$KMO=0,821$] and revealed three factors. Two factors perfectly match the structure proposed by Crawford, et al. (1991) and Andronikidis, et al. (2007). These were labeled accordingly as "intrapersonal" and "structural". The third and new factor (that represented four items, all of them related to price) was labeled as "price".

Confirmatory factor analysis indicates that the Measurement Model (MM), in which all concepts are represented by four or more items, revealed itself as over-identified and displays acceptable goodness of fit values [$\chi=165(87df)$ $p=0,000$; $CFI=0,93$; $RMSA=0,063$].

Summing up, the analysis partially supports the works by Crawford, et al. (1991) and Andronikidis, et al. (2007), identifying intrapersonal and structural constraints. Our results differ from previous studies in the identification of the additional factor "price". From our point of view, this can result from several context specificities. The absence of the interpersonal constraints may result from a collectivistic local culture as in the case of Portugal and other Latin countries (Jesuino, 2002). Lastly, constraints related to price may possibly result from the fact that 60% of the sample is a student. Another possible contributor for the price dimension is the present European economical context which, in the case of Portugal, has caused the decrease of the average family total income. These conclusions demand additional theory tests in order to verify these results and sustain upcoming research questions.

References

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