

Investigating the Relationships among Motivation, Negotiation, and Alpine Skiing Participation

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This study aimed to investigate the negotiation strategies used by recreational skiers to overcome constraints' influences, and to test the degree to which negotiation acts as a mediator of the relationship between motivation and intention to continue participation. Two hundred and twenty ($N = 220$) recreational skiers completed the intrinsic and extrinsic dimensions of the Sport Motivation Scale (Pelletier et al., 1995) and a fifteen-item negotiation scale. Five negotiation dimensions were revealed by an exploratory factor analysis: "improve skiing knowledge," "adjust lifestyle," "acquire information regarding resorts," "time management," and "find partners." The results indicated that: (a) both intrinsic and extrinsic motivation had statistical significant associations with intention to continue skiing, (b) the "time management" and "improve skiing knowledge" dimensions offered significant contributions to the prediction of intention, (c) the negotiation dimensions partially (not fully) mediated the relationship between intrinsic motivation and intention. These results provide support for the negotiation proposition, developed by Jackson et al. (1993), and further explain the relationships among motivation, negotiation, and an individual's leisure behavior.

KEYWORDS: *Motivation, negotiation, recreational skiing.*

Introduction

In an effort to expand the hierarchical model of leisure constraints (Crawford, Jackson, & Godbey, 1991), Jackson, Crawford and Godbey (1993) discussed several theoretical propositions for future research in the area of leisure constraints. The incorporation of the negotiation construct, which was originally introduced by Scott (1991), was one of their major propositions that aimed to clarify the role of constraints within an individual's decision-making process, and explain the inability of constraint data to predict leisure participation (Kay & Jackson, 1991; Shaw, Bonen, & McCabe, 1991). Recent studies provided support for the negotiation proposition (e.g., Frederick & Shaw, 1995; Henderson, Bedini, Hecht, & Schuler, 1995; Hubbard & Mannell, 2001), and further investigated the nature of the negotiation strategies adopted by individuals (Coble, Selin, Erickson, 2003; Jackson & Rucks, 1995; Livengood & Stodolska, 2004; Samdahl & Jekubovich, 1997). Most of these studies used qualitative methodologies. There have been lim-

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ited attempts to develop reliable and valid scales to measure negotiation strategies, relate them with actual participation levels, and evaluate the effectiveness of these strategies (Hubbard & Mannell; Mannell & Iwasaki, 2005). Jackson and Rucks suggested that future studies should aim to develop quantitative negotiation scales that should be empirically tested and validated.

Jackson et al. (1993) developed the "balance" proposition, which introduced the concept of motivation in leisure constraint research. They proposed that "both the negotiation and the outcome of the negotiation process are dependent on the relative strength of, and interaction between, constraints on participating in an activity and motivations for such participation" (p. 9). Some individuals are successful in developing negotiation strategies, while some are not successful. Motivation was proposed as one of the determinants of the successful negotiation (Crawford & Jackson, 2005). There have been a few studies (Alexandris, Tsobatzoudis, & Grouios, 2002; Carroll & Alexandris, 1997) that investigated the relationship between motivation and constraints; however, only Hubbard and Mannell (2001) empirically tested the relationship between motivation and negotiation strategies. They discussed four models in order to explain the relationships among motivation, constraints, negotiation and participation. Negotiation and motivation were proposed to directly and independently influence participation only in the independence model. In the rest models (negotiation-buffer, constraint-effects-mitigation, and perceived constraint-reduction) motivation was proposed to be positively related with negotiation, and influence participation both directly and indirectly through negotiation (constraint-effects-mitigation and perceived-constraint-reduction models). Their results provided support for the constraint-effects-mitigation model, in which constraints negatively influence participation, and positively influence negotiation. Motivation, however, was reported to be positively related with negotiation, but was not shown to be directly related with participation. As the authors noted, this was an unexpected finding, and might have been, in part, related to measurement issues, since they adopted a global measure of motivation.

Following Hubbard and Mannell's (2001) results and propositions, the current study aimed to further examine the interaction between motivation and negotiation in relation to leisure participation. The model tested is presented in Figure 1. Based on the balance proposition (Jackson et al., 1993) and on Hubbard and Mannell's results, we first proposed that motivation positively influences negotiation. Jackson et al. (1993) stated that "the outcome of negotiation is dependent on the relative strength of, and interactions between constraints on participation in an activity and motivations for such participation" (p. 9). Furthermore, we aimed to test if negotiation mediates the relationship between motivation and intention. This idea was based on Hubbard and Mannell's results: "the links between the health and enjoyment motives and participation were clearly mediated by negotiation" (p. 159). In order to improve the measurement of motivation, we adopted

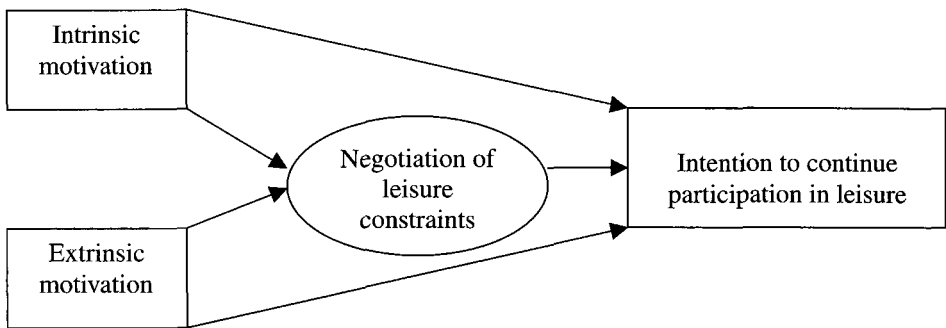


Figure 1. A proposed model of the relationships among motivation, negotiation of leisure constraints, and intention to continue participation in leisure.

a two-dimensional motivation model, including both extrinsic and intrinsic motivation factors (Pelletier et al., 1995). While intrinsic motivation has been shown to be a major factor in leisure behavior (Weissinger & Bandalos, 1995), the inclusion of the extrinsic dimension was judged to be appropriate in the context of the present study. Studies in sport and recreation settings have shown that extrinsic motivation might also influence an individual's behavior (Alexandris et al., 2002).

Purpose of the Study

The aim of this study was to test the relationships among motivation, negotiation, and intention to continue participation in recreation skiing, and to test the mediating role of negotiation in the relationship between motivation and intention to continue participation (Figure 1). We hypothesized that motivation influences negotiation, as Hubbard and Mannell (2001) reported, which in turn influences intention to continue participation. However, considering previous motivation research regarding motivation's direct relationship with participation (e.g. Alexandris et al., 2002; Vallerand & Losier, 1999), we further aimed to test if motivation (intrinsic and extrinsic) has a relationship with intention to continue participation. More specifically, the objectives of the study were as follows:

- To investigate the negotiation strategies that recreational skiers use in order to overcome the effects of constraints.
- To investigate the influence of negotiation and motivation on intention to continue participation in recreational skiing.
- To test if negotiation acts as a mediator of the relationship between motivation and intention to continue participation.

Literature Review

Negotiation of Leisure Constraints

Following the introduction of the hierarchical model of leisure constraints (Crawford et al., 1991), a number of conceptual and empirical stud-

ies were conducted that sought to test and further develop the proposed model. While there has been general support for the model and its propositions (e.g., Carroll & Alexandris, 1997; Jackson & Rucks, 1995; Raymore, Godbey, Crawford, & von Eye, 1993), studies have also criticized the effectiveness of the model to predict activity participation (e.g., Samdahl & Jekubovic, 1997). There have been some studies (e.g., Kay & Jackson, 1991; Shaw et al., 1991) that challenged the early assumption that constraints necessarily lead to non-participation. Shaw et al. (1991), for example, reported weak relationships between perception of constraints and physical activity participation; furthermore, Kay and Jackson (1991) concluded that participants also face and report constraints that have presumably been overcome. In contrast to these studies, Carroll and Alexandris (1997) and Raedeke and Burton (1997) provided support for the negative relationship between intrapersonal constraints and participation.

Despite the contradictory findings among the above studies, it is clear that they all shared the same conclusion that participants also face constraints. The expanded model proposed by Jackson et al. (1993), with the incorporation of the negotiation proposition, offered explanations for the weak relationship between constraints and participation. It was suggested that leisure participation "is dependent not on the absence of constraints (although this may be true for some people) but on negotiation through them. Such negotiations may modify rather than foreclose participation" (p. 4). The idea of negotiating constraints was first introduced by Scott (1991), who, based on a qualitative study, proposed that leisure constraints are forces that must be successfully negotiated in order for the individuals to be involved in leisure. Scott also reported that individuals used three main negotiation strategies in order to overcome the effects of constraints: acquisition of information, altering the scheduling of games, and skill development.

Since then, a number of qualitative studies were conducted, aiming to investigate the negotiation strategies that female individuals adopt in order to overcome leisure constraints. References should be made to Henderson et al.'s (1995) study of women with disabilities, Henderson and Bialeschki's (1993) study of female recreation participants, Frederick and Shaw's (1995) study of female aerobic participants, James' (2000) study of female adolescents, Little's (2002) study of women's adventure recreation, Coble et al.'s (2003) study of women's hiking, and Livengood and Stodoloska's (2004) study of leisure behavior among ethnic minority groups; all the above cited studies provided support for the negotiation proposition and identified several negotiation strategies. These studies indicated that negotiation strategies are contextual and related to the nature of the population and the activity in question (Livengood & Stodolska). In a study conducted by James (2000), for example, among recreational female swimmers, body image related constraints were reported; female swimmers used strategies such as the support of their friends, keeping their anonymity and avoiding attracting attention. Body image was also the main constraint of female fitness participants in Frederick and Shaw's study. Women were found to use mainly cognitive strategies related to minimizing their concerns about their physical appearance.

Little reported that females who participate in adventure recreation try to prioritize their family and social commitments as well as their leisure activities in order to overcome constraints related to lack of time and lack of resources.

Jackson and Rucks (1995) and Hubbard and Mannell (2001) conducted the only two studies that employed a quantitative approach. Jackson and Rucks were the first to specifically develop a scale to measure negotiation strategies. They developed a list of different strategies used by students, and classified them into behavioral and cognitive. Cognitive strategies were related to either the activity itself (e.g., skill acquisition) or to actions in daily life (e.g., time management). Behavioral strategies were developed based on cognitive dissonance theory and were related to the perceived value of leisure participation. The authors grouped negotiation strategies conceptually, without the use of statistical techniques. In the second study, Hubbard and Mannell (2001), who used a sample of corporate employees in the context of fitness, developed a negotiation questionnaire that included four sub-scales: time management, skill acquisition, interpersonal coordination, and financial resources. Some of these dimensions were similar to those proposed by Jackson and Rucks. While Hubbard and Mannell provided support for the internal consistency reliability of the sub-scales (with the exception of the financial scale), they did not validate the multi-dimensionality of the construct of negotiation with the use of factor analysis.

The Relationship between Motivation and Negotiation

As previously discussed, Hubbard and Mannell's (2001) study was the only quantitative work that aimed to test a series of models incorporating constraints, motivation, and negotiation. The authors originally proposed that motivation has both a direct and indirect impact on participation, through its positive impact on negotiation (constraint-effects-mitigation model). However, their results did not support a direct link between motivation and participation. This was an unexpected finding considering that it is well documented today that motivation leads to cognitive, affective, and behavioral outcomes (Alexandris et al., 2002; Vallerand, 2001; Vallerand & Losier, 1999). One of the limitations of this study was related to the global measurement of motivation, including two individual items (health and enjoyment motives). Hubbard and Mannell addressed this limitation and suggested that further research is required in order to clarify the role of motivation in the hierarchical model of leisure constraints.

The conceptualization and measurement of motivation has been shown to be an important issue in behavioral research (Vallerand, 2001). A number of studies conducted in exercise and recreation settings adopted the two-motivational dimension approach, including both extrinsic and intrinsic factors (e.g., Frederick & Ryan, 1993; Iwasaki & Mannell, 1999). Intrinsic motivation exists in the absence of external rewards; it refers to doing an activity

for its own sake, for the pleasure and satisfaction derived simply from performing the activity (Deci & Ryan, 1985). In a pure leisure context, behavior is usually intrinsically motivated (Weissinger & Bandalos, 1995). However, in the case of recreation and sport activities (including skiing), studies have shown that behavior can also be extrinsically motivated (Alexandris et al., 2002). Extrinsic motivation refers to behaviors that are engaged in as a means to an end and not for their own sake (Deci & Ryan, 1985). Many individuals, for example, participate in sport activities in order to improve their appearance, to lose weight, and to win games, and are extrinsically motivated. Research in exercise settings has shown that intrinsic motivation is associated with more positive behavioral consequences than extrinsic motivation (Vallerand, 1999, 2001). Individuals who are intrinsically motivated are more likely to participate frequently and to develop adherence to an activity than are extrinsically motivated individuals. As previously discussed, while motivation is one of the constructs that have been widely researched in sport and exercise literature, there have been limited attempts to investigate its influence on constraint negotiation strategies in relation to intention to continue participation in leisure activities. Thus, this study aimed to incorporate intrinsic and extrinsic motivation, negotiation strategies in a integrated model, and test the mediation effects of negotiation strategies on the relationship between motivation and intention to continue participation in recreational skiing.

Methods

Participants and Procedures

The data were collected at a ski resort located in northern Greece by a team of three researchers who were familiar with the resort. The collection of the data took place over one weekend during February of 2004. Due to weather conditions, February is usually the peak period for skiing resorts in Greece. The questionnaires were distributed in the cafeteria of the resort, and were completed by adults (more than 18 years old) who had participated in skiing activities during the specific day. Two hundred and fifty questionnaires were distributed, and two hundred and twenty ($N = 220$) were collected, resulting in a response rate of 88%. Commenting on the sampling method, it should be noted that it was not a probability method, and thus generalizations of the results should be made with caution.

In terms of the demographic characteristics of the sample, 58% were males and 42% were females, and the vast majority of the sample was married individuals (78%). Furthermore, recreational skiers were mainly young individuals (39% were between 18 and 22 years old, and 32% were between 23-30 years old). Finally, the majority of the sample was university graduates (42%) and employees of the public sector (37%). All the demographic characteristics of the sample are presented in Table 1.

TABLE 1
Demographic Characteristics of the Sample (N and %)

Age groups in years	Gender	Marital Status	Occupation	Education Level
18-22:	Males:	Married:	Managerial level:	Primary level:
86 (39%)	128 (58%)	172 (78%)	17 (8%)	37 (17%)
23-30:	Females:	Single:	Public sector employees:	Secondary level:
71 (32%)	92 (42%)	40 (18%)	82 (937%)	79 (36%)
31-40:		Divorced:	Private sector	Graduates:
41 (19%)		8 (4%)	employees: 71 (32%)	93 (42%)
> 40:			Self-employed:	Post-graduate:
22 (10%)			22 (10%)	11 (5%)
			Students: 20 (9%)	
			Unemployed: 8 (4%)	

Research Instruments

Negotiation scale. As previously noted, there are only two published negotiation scales. Jackson and Rucks' (1995) scale is very detailed, and it was developed for students' recreation activities. Hubbard and Mannell's (2001) scale is shorter and was developed in the context of fitness participation of corporate employees. Since both of these scales are not fully applicable to the present study, we developed a new scale, aiming to validate it with the use of factor analyses. The scale was developed based on the literature on leisure constraints and leisure negotiation (Hubbard & Mannell; Jackson & Rucks), and on informal interviews conducted with recreational skiers and ski instructors.

The interviews sought to collect information about the constraints that skiers face and the negotiation strategies that they use. These interviews took place three weeks before the study. Ten skiers were randomly selected from a group of 45 individuals who were participating in skiing teaching sessions. Two group interviews were conducted by a member of the research team. Each group interview lasted about forty-five minutes and took place in the office of the skiing instructor. Issues related to the lifestyles of recreational skiers, the motives that drive them to participate, the constraints that recreational skiers face, the negotiation strategies that they use, the value of teaching sessions, and the quality of the services of the resort were discussed. The interviews were tape-recorded. A simple theme analysis was conducted with the objective to identify negotiation strategies specific to recreational skiing. Time and accessibility issues were revealed as the most important constraints that recreational skiers face. Five interviews were also conducted with ski instructors to identify the constraints that skiers face based on instructors' views. The five instructors were chosen using the personal contacts of one of the researchers. The instructors mainly emphasized safety issues, skills acquisition and skills improvement of recreational skiers.

Based on the interviews, a 20-item questionnaire was developed. Respondents were asked to score the negotiation items on a seven-point Likert type scale ranging from "Never" to "Very Often." Items were developed in order to address intrapersonal (e.g., "improve my physical fitness," "follow a healthy lifestyle," "prioritize my leisure activities"), interpersonal ("find partners to go skiing together," "persuade my friends/family to go skiing") and structural constraints (e.g., "get information about the services offered," "get information about skiing resorts").

Motivation scale. The intrinsic and extrinsic motivation dimensions from the Sport Motivation Scale (SMS, Pelletier et al., 1995) were used. According to Pelletier et al. (1995), intrinsic motivation consists of three dimensions: intrinsic motivation to know; intrinsic motivation toward accomplishment; and intrinsic motivation to experience stimulation. Twelve items were proposed to measure these dimensions. They included items such as "for the pleasure it gives me to know more about skiing," (motivation to know) "for the satisfaction I experience while I am perfecting my abilities," (motivation toward accomplishment) and "for the pleasure I feel in trying exciting experiences" (motivation to experience stimulation). Pelletier et al. (1995) proposed that extrinsic motivation also consists of three dimensions: external regulation, introjected regulation, and identified regulation. These dimensions are measured with 12 items, such as "because people around me think it is important to be in shape," "because skiing helps me feel good about myself," and "because it is a good way to learn things which could be useful to me in other areas of my life." These two motivation scales were used in previous research in Greece (Alexandris et al., 2002), and were shown to be reliable. The reliability analysis in this study indicated that both the scales had acceptable values of alpha (.87 for the intrinsic scale, and .89 for the extrinsic scale).

Intention to continue participation. A scale with three items was used in order to measure intention to continue participation. The three items were: "I intend to go skiing over the next month," "I am determined to go skiing over the next month," and "I will try to go skiing over the next month." Similar items have been used in previous studies (e.g., Alexandris & Stodolska, 2004; Armitage & Conner, 1999; Smith & Biddle, 1999). A seven-point Likert-type scale from strongly agree to strongly disagree was used.

Results

Negotiation Dimensions

A principal component analysis was performed with the objective to test the factorial validity of the constraint scale. It should be pointed out that an exploratory factor analysis was chosen instead of confirmatory because there was not a well-defined theoretical framework to support a certain factorial structure. The components with eigenvalues greater than 1.0 were retained and rotated with an orthogonal rotation. Five items did not significantly load on any of the factors and were dropped. Furthermore, five items were loaded on more than one factor (using the .25 as the cut-off point). However, in all

the cases, the second loading was much lower than the first one (see Table 1). The analysis revealed five factors that accounted for 75% of the variance. They were defined as follows: "improve skiing knowledge" (3 items), "adjust lifestyle" (3 items), "acquire information regarding resorts" (3 items), "time management" (3 items), and "find partners" (3 items). The values of alpha for the sub-scales were satisfactory, as they ranged from .69 (find partners) to .84 (improve skiing knowledge). The descriptive statistics indicated that the "adjust life style" and "find partners" scales achieved the highest mean score (5.0), followed by the "time management" scale (4.3). The results of the principal component analysis, the descriptive statistics of the scales, and the alpha scores are presented in Table 2.

Testing for the Mediation Effects of Negotiation

As previously discussed, we hypothesized that negotiation would mediate the relationship between motivation (predictor) and intention to continue participation (outcome). Baron and Kenny (1986) suggested that a four-step approach should be conducted in order to test for the mediation effect of a variable, as follows: (a) a regression analysis with the independent variable (i.e. motivation) predicting the dependent (i.e. intention); (b) a regression analysis with the independent variable (motivation) predicting the mediator (e.g., negotiation); (c) a regression analysis with the mediator (negotiation) predicting the dependent (intention); (d) a regression analysis with both the independent (motivation) and mediator (negotiation) predicting the dependent. Full mediation is supported when the effect of the independent is non-significantly different from zero. If this effect is reduced but still being significant then it is partially mediated.

First Step: Establishment of the Link between Motivation and Intention

A regression analysis was conducted to establish the link between motivation and intention. Intention was set as the dependent variable and the two motivation dimensions were set as the independent variables (Table 3). The results indicated that motivation predicted a significant amount of the variance in intention ($F = 27.8, p < .001$). Both the dimensions significantly contributed to the prediction, with the intrinsic one being the major contributor ($t = 6.8, p < .001, \beta = .63$). The contribution of the extrinsic dimension was marginal ($t = 2.1, p < .05, \beta = .20$).

Second Step: Establish the Link between Motivation and Negotiation

Five regressions were conducted to establish the link between motivation and the negotiation dimensions. All the regressions were significant. Intrinsic motivation significantly predicted the "improved skiing knowledge" ($t = 3.7, p < .001, \beta = .33$), "acquire information" ($t = 4.0, p < .001, \beta = .39$), "time management" ($t = 4.4, p < .001, \beta = .44$) and "find partners" ($t = 4.5, p < .001, \beta = .45$). Extrinsic motivation significantly predicted the "improved

TABLE 2
Exploratory Factor Analysis of the Negotiation Scale, and Descriptive Statistics

	Improve Skiing Knowledge	Adjust Lifestyle	Acquire Information	Time Management	Find Partners
Get information about skiing activities	.85				
Watch relevant programs on TV	.82		.29		
Read relevant books, articles and magazines	.78		.30		
Improve physical fitness		.87			
Follow a healthy lifestyle		.87			
Do more sports except skiing		.70			
Get information about skiing resorts			.80		
Get information about the services offered in the resorts			.74		
Get information about accessibility issues			.69		
Organize my weekly schedule				.82	
Prioritize my leisure activities				.68	.33
Set aside time for skiing during weekends				.64	.32
Find partners to go skiing together					.91
Persuade my friends/family to go skiing					.74
Meet people who like skiing				.29	.59
Eigenvalue	4.0	2.1	1.5	1.1	1.1
% of variance explained	31.9	48.0	59.9	68.5	75.4
Mean scores (on a 7-point scale)	3.3	5.0	4.1	4.3	5.0
Alpha	.84	.77	.71	.75	.69

Note: .25 was used as the cut-off point of factor loadings

TABLE 3
Regression Analysis for the Prediction of Intention from Motivation (Step 1)

Motivation Dimensions	<i>b</i>	β	<i>t</i>	<i>p</i>
Intrinsic Motivation	.43	.63	6.8	.001
Extrinsic Motivation	.13	.20	2.1	.05

$F = 27.8$, $p < .001$, Adjusted $R^2 = .28$ (unadjusted $R^2 = .29$)

skiing knowledge" ($t = 2.9$, $p < .001$, $\beta = .26$) and "adjust lifestyle" ($t = 3.8$, $p < .001$, $\beta = .37$) dimensions (Table 4).

Third Step: Establishing the link between Negotiation and Intention

A regression analysis was conducted with intention as the dependent and negotiation dimensions as the independent variables (Table 5). The regression was significant overall ($F = 23$, $p < .001$). The "time management" ($t = 6.7$, $p < .001$, $\beta = .49$) and "improve skiing knowledge" ($t = 3.1$, $p < .001$, $\beta = .23$) dimensions offered significant contributions.

Fourth Step: Examining of the Mediation Role of Negotiation

A regression analysis was performed examining simultaneously the influence of motivation (two dimensions) and negotiation (five dimensions) on intention (Table 6). Overall, the regression model was significant ($F = 21.1$, $p < .001$). The Beta's of intrinsic motivation dimension reduced to .33, though still being significant, which shows that negotiations partially (not fully) mediated the relationship between motivation and intention. On the other hand, there was no major change on the beta of extrinsic motivation (.24), which means that negotiations did not mediate the relationship between extrinsic motivation and intention. The results of mediation effects are presented in Figure 2.

Discussion

The objective of the present study was to test the relationships among motivation, negotiation, and intention to continue participation in recreation skiing, and to test the mediating role of negotiation in the relationship between motivation and intention to continue participation. Before discussing the findings, the cultural context of the study should be addressed. Since culture is an important determinant of human behavior (included leisure behavior, Chick & Dong, 2005), it is expected that individuals' decisions related to activity participation and the selection of appropriate negotiation strategies will be influenced by their cultural values, beliefs and life-styles. The culture of the study population (Greeks) and the context in which the study was conducted (Greece) are related to issues such as the availability of free time, family/work commitments, importance of recreation participation, and availability of opportunities for leisure participation. The study of the role of culture on constraints negotiation is with no doubt an important area of research (Chick & Dong, 2005); however, it was not among the objectives of this study to investigate cultural constraints and make direct cross-cultural comparisons with North American populations.

Factor Structure of Negotiation Strategies

The exploratory factor analysis revealed a conceptually clear factorial structure with reliable sub-scales. Despite cultural and methodological dif-

TABLE 4
 Regression Analyses for the Prediction of the Negotiation Dimensions by the two Motivational Dimensions (Step 2)

	Knowledge		Lifestyle		Information		Time management		Partners	
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>
Intrinsic Motivation	.33 (.49) ¹	3.7**	.09 (.11) ¹	n.s.	.39 (.59) ¹	4.0**	.44 (.54) ¹	4.4**	.45	4.5**
Extrinsic Motivation	.26 (.38) ¹	2.9**	.37 (.44) ¹	3.8**	.09 (.14) ¹	n.s.	.05 (.07) ¹	n.s.	.02 (.04) ¹	n.s.
	$F = 30.1, p < .001$ Adjusted $R^2 = .28$		$F = 16.6, p < .001$ Adjusted $R^2 = .18$		$F = 19.2, p < .001$ Adjusted $R^2 = .20$		$F = 14.1, p < .001$ Adjusted $R^2 = .16$		$F = 16.5, p < .001$ Adjusted $R^2 = .18$	

** $p < .001$

¹Unstandardized coefficients

TABLE 5
Regression Analysis for the Prediction of Intention from Negotiation Dimensions (Step 3)

Negotiation Dimensions	<i>B</i>	β	<i>t</i>	<i>p</i>
Improve Skiing Knowledge	.10	.23	3.1	.005
Adjust Lifestyle	—	.04	.63	n.s.
Acquire information	—	.008	.10	n.s.
Time management	.27	.49	6.7	.001
Find partners	—	.12	1.7	n.s.

$F = 23.8$, $p < .001$, Adjusted $R^2 = .44$ (unadjusted $R^2 = .46$)

TABLE 6
Regression Analysis for the Prediction of Intention from Negotiation and Motivation Dimensions (Step 4)

Negotiation Dimensions	<i>b</i>	β	<i>t</i>	<i>p</i>
Improve Skiing Knowledge	.10	.21	2.8	.005
Adjust Lifestyle	—	.05	.76	n.s.
Acquire information	—	.02	.31	n.s.
Time management	.25	.45	6.4	.001
Find partners	—	.12	1.0	n.s.
Intrinsic Motivation	.22	.33	3.7	.001
Extrinsic Motivation	.16	.24	2.9	.005

$F = 21.1$, $p < .001$, Adjusted $R^2 = .49$ (unadjusted $R^2 = .52$)

ferences, some similarities were revealed when comparing the results of this study with previous studies. The time management scale seems to be universally applicable, irrespective of the nature of the population, the culture, and the activities in question (Hubbard & Mannell, 2001; Jackson & Rucks, 1995; Samdahl & Jekubovich, 1997). The high mean score of this factor is not surprising, since studies that investigated leisure constraints have consistently reported problems related to lack of time as major constraints (Alexandris & Carroll, 1997; Godbey, 2005; Jackson, 1993).

The "find partners" factor seems also to be applicable irrespective of the context of the study. This factor was named "interpersonal coordination" by Hubbard and Mannell (2001), and "change interpersonal relations" by Jackson and Rucks (1995). Recreational skiing is a family activity, often providing an opportunity for social interaction. Individuals who cannot find partners are unlikely to visit these resorts regularly. Finally, the "improve skiing knowledge" factor is similar to the "skill acquisition" factor proposed by Jackson and Rucks and Hubbard and Mannell, and the "ac-

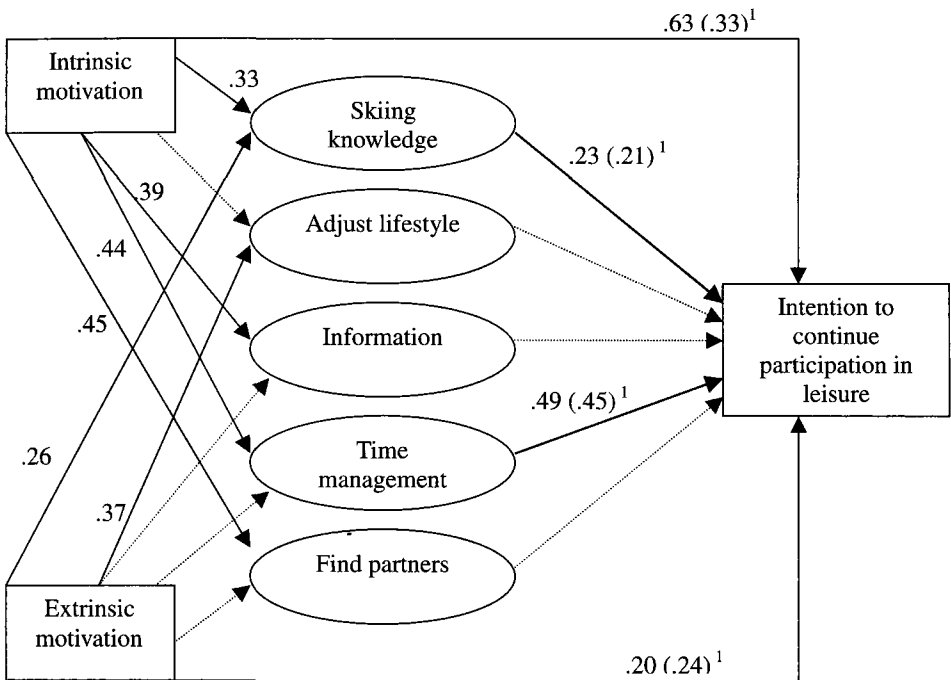


Figure 2. Negotiation dimensions as mediators of the motivation-intention relationship.

¹Numbers in brackets show betas after mediation was examined.

Note: Solid arrows indicate statistically significant Betas at .01 levels. Dotted arrows indicate non-statistically significant Betas

quiring information” factor reported by Scott (1991). Individuals who scored high on this dimension motivate themselves to go skiing by improving their knowledge about the outdoors, which gives them a feeling of being more involved in the activity. Previous studies (Pritchard, Howard, & Havitz, 1992) have also suggested that greater knowledge about an activity is usually associated with increased involvement.

The remaining two factors (“adjust lifestyle” and “acquire information regarding the resorts”) seem to be contextual, since they were not reported in previous studies. The “adjust lifestyle” factor, which received the highest mean score, relates to changes in everyday life. Individuals who scored high on this dimension try to have a healthy and active lifestyle in order to feel physically and psychologically strong for recreational skiing. Strategies related to adjusting the lifestyle target mainly intrapersonal constraints. It has been suggested that the adoption of a healthy lifestyle helps individuals to be more committed to exercise participation (Hunt & Hildson, 1996). Finally, the “acquire information regarding the resorts” factor seems also to be a contextual factor, related to the specific requirements of recreational

skiing. Issues related to the quality of facilities, the road conditions, and the accessibility of the resorts are important ones for potential skiers, and especially for recreational skiers who usually go to ski resorts with their families. It is clear that resorts and tourist organizations should help potential skiers by having this kind of information available for them. It should be noted that all of these strategies are considered behavioral, following the definition given by Jackson and Rucks (1995).

The Interaction between Motivation, Negotiation, and Intention to Continue Participation

As previously discussed, there have been limited attempts so far to empirically link negotiation strategies with behavioural outcomes, such as participation levels and intention to continue participation (Jackson, 2005; Mannell & Loucks-Atkinson, 2005). All of the studies, with the exception of the one by Hubbard and Mannell (2001), focused on identifying negotiation strategies, with the vast majority of them using qualitative data. The results of the current study provide support for the value of the negotiation construct in explaining recreation behavior, and for the negotiation proposition developed by Crawford et al. (1991). The negotiation dimensions predicted a significant and fairly high proportion of variance in intention. Specifically, the "time management" and "improve skiing knowledge" dimensions offered significant contributions, which suggests that individuals who are successful in managing their time effectively and improving their knowledge regarding skiing, are more likely to continue their participation. It should be noted that strategies related to "improving skiing knowledge" target mainly intrapersonal constraints (e.g., lack of knowledge and lack of skills), which have been shown by previous studies to be important determinants of exercise behavior (Alexandris & Carroll, 1997). On the other hand, the development of time-related strategies seems to be particularly applicable in the context of the specific study, since recreational skiing is a time consuming activity.

Hubbard and Mannell (2001) reported that the strength and effectiveness of negotiation efforts depend on individuals' motivation. The results of the present study provide partial support for these findings, since both intrinsic and extrinsic motivation factors were shown to significantly predict the negotiation strategies. Specifically, intrinsic motivation significantly predicted the "improved skiing knowledge," "acquire information," "time management" and "find partners" dimensions, while extrinsic motivation significantly predicted the "improved skiing knowledge" and "adjust lifestyle" dimensions. While the influence of intrinsic motivation was expected, the relationship between extrinsic motivation and negotiation dimensions is a finding worth noting. This is probably related to the activity in question (skiing). In contrast to leisure behaviour, which is mainly intrinsically motivated, it seems that participants in recreational sport activities can also be extrinsically motivated (Alexandris et al., 2002). It would be interesting to

further investigate the relationship between extrinsic motivation and negotiation strategies in more recreational sport activities in similar (outdoor activities) or different settings (indoor activities).

In summary, the results suggested that individuals, who are intrinsically and extrinsically motivated, are more likely to effectively use negotiation strategies in order to overcome constraints. However, motivation's limited predictive power suggests that there are more factors that determine the development of negotiation strategies. Hubbard and Mannell (2001) proposed that feelings of personal control and "negotiation self-efficacy" could be examples of behavioral factors that might also influence negotiation. An interesting attempt to develop the concept of "efficacy negotiation" was made by Loucks-Atkinson (2002), who developed a measure of negotiation efficacy and linked it with leisure participation. She found that individuals with high negotiation efficacy reported higher levels of motivation and were more likely to be successful negotiators. Personality could also be suggested as one of the possible determinants of negotiation efficacy and individuals' confidence in negotiating constraints. Social-psychological theories, such as the Theory of Planned Behavior (Ajzen, 1985, 1988; Ajzen & Driver, 1991, 1992), the Health Belief Model (Janz & Becker, 1984), and Bandura's (1997) theory of self-efficacy can also be used to further understand constraints negotiation. The concept of perceived barriers has been recognized in the above social-psychological models. Elements of the theory of planned behavior such as the perceived behavioural control, which refers to an individual's perceptions about her/his capability of successfully engaging in the behavior, and the subjective norm, which expresses an individual's motivation to comply with significant other's beliefs, can also influence the development of successful negotiation strategies (Alexandris & Stodoloska, 2004; Mannell & Loucks-Atkinson, 2005). There is some evidence from a recent study (Alexandris, Barkoukis, & Tsorbatzoudis, 2005), which was conducted among older individuals, that perceived behavior control acts as a mediator of the relationship between constraints and individuals' intention to continue participation in recreational activities.

Hubbard and Mannell (2001) reported that motivation indirectly influences participation through its positive effects on negotiation. The results of this study did not fully support Hubbard and Mannell's findings. Motivation was shown to have both direct and indirect effects on intention to continue participation. Negotiation dimensions partially (not-fully) mediated the relationship between intrinsic motivation and intention, which was the strongest relationship found at the beginning of the analysis, while there was no mediation of the relationship between extrinsic motivation and intention to continue participation, which was the weakest relationship originally. The direct relationship between motivation and intention is not a surprising finding, since the majority of previous studies have established the link between motivation and human behavior (Vallerand, 2001; Vallerand & Losier, 1999). It is not, however, clear why negotiation mediated mainly intrinsic motivation, while it had no effect on extrinsic motivation. A possible explanation

can be related to the strength of the association between the two dimensions and intention found at the beginning of the analysis. Intrinsic motivation had at the beginning a strong association with intention ($\beta = .63$), in contrast to extrinsic motivation whose association was at the beginning weaker ($\beta = .20$).

Limitations of the Study and Future Research

Some limitations of the study should be noted. First, as Hubbard and Mannell (2001) noted, there is a shortage of reliable and valid scales in the literature to measure constraint negotiation strategies. In the present study, a new scale was developed, using the framework proposed by Jackson and Rucks (1995) and Hubbard and Mannell, aimed also at examining the contextual aspects of the study (recreational skiing). The sub-scales used in the study sought to cover strategies that target interpersonal, interpersonal, and structural constraints. While negotiation strategies seem to be contextual and related to the study population and the activity in question (Livengood & Stodolska, 2004), it is necessary for future researchers to develop some core negotiation dimensions based on the theoretical framework of constraints, as well as contextual ones that can be adjusted to the requirements of each study. While the psychometric properties of the scale used in this study were acceptable, it should be further verified and tested so that researchers can more confident about validity and reliability issues.

Although the results of the study addressed some key questions related to the interactions between motivation, negotiation, and intention to continue participation, a number of issues related to individuals' decision-making need further investigation. First, more variables should be incorporated into future models in order to predict individuals' behavior. Hubbard and Mannell (2001) suggested that variables such as feelings of personal control and "negotiation self-efficacy" are examples that could be investigated in relation to motivation and negotiation. Attitudes and personality might also play a role in the negotiation of leisure constraints. There has been, for example, some evidence that attitudinal variables interact with intrapersonal constraints (Alexandris & Stodolska, 2004).

Another issue that should be noted is related to the measurement of behavior. Intention to continue participation was used in this study as the dependent variable, and this can also be considered as a limitation of the study. Future studies should use more behavioral variables, such as actual participation levels, intensity of participation, and strength of effort, in order to investigate the interaction among motivation, constraints, and negotiation. The participants in this study were all examples of successful negotiators. It would be interesting to also include non-successful negotiators (non-participants), and test for differences in motivation, negotiation strategies (if any), attitudes, and personality characteristics. The classification of individuals into categories of "negotiators," as proposed by previous studies (e.g., Henderson & Bialeschki, 1993), and the examination of the interaction

among the above variables within different groups of negotiators would, also be an interesting endeavour.

In summary, the present study indicated that measuring motivation with the use of Pelletier et al.'s (1995) model can help to a better understanding of an individual's decision-making process for recreation participation. It further provided support for the study of leisure negotiation strategies, since the results indicated that negotiation strategies interact with motivation and influence participation in recreational skiing. Finally, the study provided evidence that negotiations interact with motivation, and act as mediators of the relationships between intrinsic motivation and intention to participate in recreational skiing.

References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 11-39). Heidelberg: Springer.
- Ajzen, I. (1988). *Attitudes, personality and behavior*. Chicago: Dorsey Press.
- Ajzen, I. & Driver, B. (1991). Prediction of leisure participation from behavioural, normative, and control beliefs: an application of the theory of planned behaviour. *Leisure Sciences, 13*, 185-204.
- Ajzen, I. & Driver, B. (1992). Application of the theory of planned behavior to leisure choice. *Journal of Leisure Research, 24*, 207-224.
- Alexandris, K., Barkoukis, B., Tsorbatoudis, B. (2005). *Do theory of planned behavior elements mediate the relationship between perceived constraints and intention to participate in physical activities? A study among older individuals*. Manuscript submitted for publication.
- Alexandris, K. & Carroll, B. (1997). An analysis of leisure constraints based on different recreational sport participation levels: Results from a study in Greece. *Leisure Sciences, 19*, 1-15.
- Alexandris, K. & Stodolska, M. (2004). The influence of perceived constraints on the attitudes towards recreational sport participation. *Loisir et Societe, 27*, 197-217.
- Alexandris, K., Tsorbatzoudis, C., & Grouios, G. (2002). Perceived constraints on recreational participation: Investigating their relationship with intrinsic motivation, extrinsic motivation and amotivation. *Journal of Leisure Research, 34*, 233-252.
- Armitage, C. & Conner, M. (1999). The theory of planned behavior: Assessment of predictive validity and "perceived control". *British Journal of Social Psychology, 38*, 35-54.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Baron, M., & Kenny, A. (1986). The moderator-mediator variable distinction in social-psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Carroll, B. & Alexandris, K. (1997). Perception of constraints and strength of motivation: Their relation to recreational sport participation. *Journal of Leisure Research, 29*, 279-299.
- Chick, G. & Dong, E. (2005). Cultural constraints to leisure. In Jackson, E. (Ed.), *Constraints to leisure* (pp. 169-184). Pennsylvania: Venture Publishing.
- Coble, T., Selin, S., & Erickson, B. (2003). Hiking alone: Understanding fear, negotiation strategies and leisure experiences. *Journal of Leisure Research, 35*, 1-22.
- Crawford, D., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences, 13*, 309-320.
- Crawford, D. & Jackson, E. L. (2005). Leisure constraints theory: Dimensions, directions and dilemmas. In Jackson, E. (Ed.), *Constraints to leisure* (pp. 153-168). Pennsylvania: Venture Publishing.

- Deci, L. & Ryan, M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Frederick, C. & Ryan, R. (1993). Differences in motivation for sport and exercise and their relations with participation and mental health. *Journal of Sport Behavior*, 16, 124-145.
- Frederick, C. & Shaw, S. M. (1995). Body image as a leisure constraint: Examining the experience of aerobic exercise classes for young women. *Leisure Sciences*, 17, 57-73.
- Godbey, G. (2005). Time as a constraint to leisure. In Jackson, E. (Ed.), *Constraints to leisure* (pp. 185-200). Pennsylvania: Venture Publishing.
- Henderson, K. A., Bedini, L. A., Hecht, L., & Schuler, R. (1995). Women with disabilities and the negotiation of leisure constraints. *Leisure Studies*, 14, 17-31.
- Henderson, K. A. & Bialeschki, M. (1993). Negotiation constraints to women's physical recreation. *Society and Leisure*, 16, 389-412.
- Hubbard, J. & Mannell, R. (2001). Testing competing models of the leisure constraint negotiation process in a corporate employee recreation setting. *Leisure Sciences*, 23, 145-163.
- Hunt, P. & Hildson, M. (1996). *Changing eating and exercise behavior*. London: Blackwell.
- Iwasaki, Y. & Mannell, R. (1999). Situational and personality influences on intrinsically motivated leisure behavior: Interaction effects and cognitive processes. *Leisure Sciences*, 21, 287-306.
- Jackson, E. L. (1993). Recognizing patterns of leisure constraints: Results from alternative analyses. *Journal of Leisure Research*, 25, 129-149.
- Jackson, E. L. (2005). Leisure constraints research: Overview of a developing theme in leisure studies. In Jackson, E. (Ed.), *Constraints to leisure* (pp. 3-22). Pennsylvania: Venture Publishing.
- Jackson, E. L., Crawford, D., & Godbey, G. (1993). Negotiation of leisure constraints. *Leisure Sciences*, 15, 1-12.
- Jackson, E. L. & Rucks, V. (1995). Negotiation of leisure constraints by junior-high and high-school students: An exploratory study. *Journal of Leisure Research*, 23, 301-313.
- James, K. (2000). "You can feel them looking at you:" The experience of adolescent girls at swimming pools. *Journal of Leisure Research*, 32, 262-280.
- Janz, N. K. & Becker, M. H. (1984). The health belief model: A decade later. *Health Education Quarterly*, 11, 1-47.
- Kay, T. & Jackson, G. (1991). Leisure despite constraint: The impact of leisure constraints on leisure participation. *Journal of Leisure Research*, 23, 301-313.
- Little, D. (2002). Women and adventure recreation: reconstructing leisure constraints and adventure experiences to negotiation continuing participation. *Journal of Leisure Research*, 34, 157-177.
- Livengood, J. S. & Stodoloska, M. (2004). The effects of discrimination and constraints negotiation on leisure behavior of American Muslims in the Post-September 11 America. *Journal of Leisure Research*, 36, 183-208.
- Loucks-Atkinson, A. (2005). Role of self-efficacy in the constraint negotiation process: The case of individuals with fibromyalgia syndrome. In E. Jackson (Ed.) *Proceedings of the tenth Canadian congress on leisure research* (pp. 196-198). Edmonton, Alberta, Canada: CALS.
- Mannell, R. & Iwasaki, Y. (2005). Advancing quantitative research on social cognitive theories of the constraint-negotiation process. In Jackson, E. (Ed.), *Constraints to leisure* (pp. 261-278). Pennsylvania: Venture Publishing.
- Mannell, R. & Loucks-Atkinson, A. (2005). Why don't people do what's "good" for them? Cross-fertilization among the psychologies of non-participation in leisure, health and exercise behaviors. In Jackson, E. (Ed.), *Constraints to leisure* (pp. 221-232). Pennsylvania: Venture Publishing.
- Pelletier, L., Fortier, M., Vallerand, R., Tuson, K., Briere, N., & Blais, M. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: The sport motivation scale (SMS). *Journal of Sport and Exercise Psychology*, 17, 35-53.

- Pritchard, M., Howard, D., & Havitz, M. (1992). Loyalty measurement: A critical examination and theoretical extension. *Leisure Sciences, 14*, 155-164.
- Raedeke, T. D. & Burton, D. (1997). Personal investment perspective on leisure-time physical activity participation: Role of incentives, program compatibility, and constraints. *Leisure Sciences, 19*, 201-228.
- Raymore, L., Godbey, G., Crawford, D., & von Eye, A. (1993). Nature and process of leisure constraints: An empirical test. *Leisure Sciences, 15*, 99-113.
- Samdahl, D. M. & Jekubovich, N. J. (1997). A critique of leisure constraints: Comparative analyses and understandings. *Journal of Leisure Research, 29*, 430-452.
- Scott, D. (1991). The problematic nature of participation in contract bridge: A qualitative study of group related constraints. *Leisure Sciences, 13*, 321-336.
- Shaw, S., Bonen, A., & McCabe, J. (1991). Do more constraints mean less leisure? Examining the relationship between constraints and participation. *Journal of Leisure Research, 23*, 286-300.
- Smith, A. & Biddle, S. (1999). Attitudes and exercise adherence: test of the theories of reasoned action and planned behavior. *Journal of Sport Sciences, 17*, 269-281.
- Vallerand, R. (2001). A hierarchical model of intrinsic and extrinsic motivation in sport and exercise. In G. Robert (Ed.), *Advances in motivation in sport and exercise* (pp. 263-320). Champaign: Human Kinetics.
- Vallerand, R. & Losier, G. (1999). An integrative analysis of intrinsic and extrinsic motivation in sport. *Journal of Applied Sport Psychology, 11*, 142-169.
- Weissinger, E. & Bandalos, D. (1995). Development, reliability and validity of a scale to measure intrinsic motivation in leisure. *Journal of Leisure Research, 27*, 379-400.