

# The Course to Tee off: Golfers' Participation Constraints, Age, Income, and Leisure Identity Salience

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## Abstract

The aim of this study was to investigate whether perceived constraints in playing golf (social isolation, access, personal reasons, cost, time, and facilities) differed based on golfers' age, income level, and leisure identity salience (LIS) as a golfer. A multivariate analysis of variance revealed the significant main effects of age, income level, and LIS on perceived constraints in playing golf. A subsequent multivariate of covariance found that, after controlling for golfers' age and income level, highly identified golfers perceived greater constraints in access, personal reasons, and facilities-related constraints than did less identified golfers. Findings suggest that golfers' socio-demographic characteristics and leisure identity salience may be useful in developing better management or marketing strategies.

## *The Course to Tee off: Golfers' Participation Constraints, Age, Income, and Leisure Identity Salience*

Playing a full round of golf at a golf course requires at least four hours of time, relatively expensive equipment, and payment of substantial user fees. It is well known that golf is a leisure or sport activity that requires a considerable amount of time, money, and effort to participate. Consequently, golf is a leisure activity that comes with a variety of constraints. These constraints could perhaps be the root of the recently observed decline in the total number of golfers in the United States (National Golf Foundation, 2006). According to the NGF, the total number of golfers has declined from 30 million to 26 million since 2000 (NGF, 2006). From this perspective, it is essential to investigate the barriers that prevent people who would like to play golf from participating in the activity. Mitigation of these barriers can provide potential and current golfers with more opportunities for access to golf.

The participation in golf as a leisure activity brings substantial direct and indirect economic impact to adjacent communities. For example, it was estimated that in 2005 the golf industry in the state of Virginia alone generated a direct impact of \$1.591 billion, and an indirect and induced economic impact of \$1.629 billion (Golf 20/20, 2006). Similarly, the state of South Carolina generated \$180 million in federal, state, and local taxes from golf-related expenditures in 2004 (Golf 20/20, 2006). In the case of the Canadian golf industry, it was estimated that golfers spent CND \$12.9 billion in 2006 on direct golf expenditures such as greens fees, membership, equipment, and travel expenses (Royal Canadian Golf Association, 2006). Consequently, the Canadian golf community generated substantial tax revenues to local and provincial governments. Therefore, maintaining or increasing the participation in golfing activities by understanding golfers' constraints has substantial monetary value for both individual golf course operators and state and local governments.

Barriers that confine one's capability to participate in leisure

and recreational activities, to spend more time doing these activities, to take advantage of leisure services, or to reach a desired level of satisfaction, have been defined as 'constraints to leisure' (Jackson, 1988). In order to encourage people to initiate or continue their leisure activities, knowledge about these limitations is needed. For the current study, researchers investigated the types of active golfers' constraints to golfing activities. Specifically, the influences on these constraints from golfers' demographics (age), socio-economic status (income), and identity salience in golfing activity were explored.

## Literature Review

### *Leisure Constraints in Golf*

Previous researchers have categorized leisure constraints in several ways. Crawford, Jackson, and Godbey (1991) proposed three types of constraints: intrapersonal, interpersonal, and structural constraints. Intrapersonal constraints are individual attributes, beliefs, or perceptions that hinder individuals' participation in leisure activities (Crawford & Godbey, 1987; Mannell & Kleiber, 1997). Examples of intrapersonal constraints include negative perceptions toward physical activities and lack of interest. More externally, interpersonal constraints are barriers that arise from interactions or relationships with others when participating in a leisure activity (Crawford & Godbey, 1987; Mannell & Kleiber, 1997). Finally, structural constraints are barriers such as lack of time, money, opportunities or facilities that stand in the way of leisure participation (Crawford & Godbey, 1987; Mannell & Kleiber, 1997).

As alternative categorizations of leisure constraints, Kay and Jackson's (1991) study dealt with the most frequently reported barriers, financial and time constraints while Jackson (1993) and Hultsman (1995) categorized constraints into six categories: social isolation, accessibility, personal reasons, costs, time commitments, and facilities. In addition, Jackson and Rucks (1995) employed eight specific constraints: commitments and time, lack of skills, problems with interpersonal relations, health and physical fitness, geographic accessibility, cost/lack of money, facilities, and other.

Despite the fact that researchers have suggested several different sets of leisure constraints, the basic thrust remains that overall, these constraints "limit people's participation in leisure activities, people's use of leisure services, or people's enjoyment of current activities" (Jackson & Scott, 1999, p. 301). In playing golf as a leisure or sport activity, it is expected that golfers would confront a myriad of these leisure constraints. For example, Petrick, Backman, Bixler, and Norman (2001) suggested that green fees cost, tee-time availability, and lack of time could be primary constraints for golfers. Similarly, time constraints were one of the key influencing factors in selecting a golf vacation package (Geissler, 2005). Because leisure and sport managers can benefit from the analysis of leisure constraints in developing management or marketing strategies to attract leisure participants (Jackson,

1994), golf course managers should identify which constraints most influence golfers' leisure behaviors. Thus, the current study explored the importance (or magnitude) of each leisure constraint in playing golf.

#### *Golfers' Socio-Demographic Characteristics and Perceived Constraints*

Certain socio-demographic characteristics are known to influence various leisure behaviors and perceptions; for example, perceptions concerning leisure constraints (Alexandris & Carroll, 1997). Among individual characteristics, socio-economic status (income) and demographic characteristics (e.g., age, gender) are known to influence the level of perceived leisure constraints (e.g., Brown, Brown, Miller, & Hansen, 2001; Scott & Munson, 1994; Searle & Jackson, 1985; Shores, Scott, & Floyd, 2007). For example, leisure participants with low incomes experienced greater or frequent constraints in visiting parks (Scott & Munson, 1994) and in considering a new recreation activity (Searle & Jackson, 1985). In comparison to male counterparts, female leisure participants perceive greater time-related constraints in enjoying their leisure activities (Alexandris & Carroll, 1997; Gunthorpe & Lyons, 2004; Talbot, 1979). Younger individuals perceive more financial constraints than do older individuals in their leisure activities (Jackson, 1993).

As for golfers' income levels, it is expected that lower-income golfers might perceive stronger constraints than higher-income golfers. It is also possible that the types of constraints perceived might be different based on golfers' income levels. For example, golfers higher in income might be less concerned about cost (or expenditure) relative to other constraints, than golfers with lower incomes. Similarly, when considering a golfer's age, it is expected that older golfers, especially retirees, might have more time to play golf. These suppositions led us to choose age and income level as potential factors influencing golfers' perceived constraints.

#### *Leisure Identity Salience (LIS)*

According to social identity theory, an individual's identity salience with an object or group is a predictor of their subsequent activities (Tajfel & Turner, 1979). This has been shown to include athletic participation (Santee & Jackson, 1979) and fitness activities (Laverie, 1998). In the context of leisure, leisure identity salience (LIS) is known to correlate positively with the level of effort and skill involved in a leisure activity, time invested (Shamir, 1992), as well as motivations to participate in a fitness activity (Laverie, 1998). In terms of the relationship between leisure constraints and involvement level in a leisure activity, Kay and Jackson (1991) claimed that active participants (high identity salience) perceive stronger constraints (or barriers) than non-participants. If we extend this logic, it is expected that more highly identified golfers would perceive greater constraints in playing golf than less identified golfers. For example, since more highly identified golfers are eager to and actually play more golf rounds than less identified golfers, highly identified golfers are more likely to frequently confront barriers to playing golf.

Through this review, it is clearly appropriate to explore the constraints facing golf participants in order to replicate or refute previous leisure research findings in an alternative context.

Additionally, as the above research illustrates, it is important to consider factors that can influence participants' perceptions of leisure constraints. Specifically, socio-demographic and LIS influences have found support in previous study and are applicable to this present investigation. Identifying the influences of these factors on golfers' leisure constraints can be valuable to practitioners in their marketing and management decisions.

#### *Research Purpose*

In summary, the primary purpose of the current study was to investigate (a) the relative importance and strength of constraints to playing golf and (b) the relationships of the constraints with golfers' age, income level, and identity salience as a golfer. In addition, the study aimed to explore the influence of LIS as a golfer on perceived constraints after accounting for golfers' age and income level.

### **Method**

#### *Sample and Procedure*

The data were collected from 156 golfers at three different public courses in a Southeastern state. Initially, 200 surveys were distributed, of which 164 were returned (82%). Of 164 returned, eight surveys were returned either incomplete or not answered clearly by respondents. Thus, the final data set included 156 surveys. A convenience sampling method was used to collect the data. All participants voluntarily took part in this study and responded to a paper-and-pencil questionnaire.

The average age of the respondents was about 38 years old ( $M = 37.88$ ,  $SD = 14.19$ ). The majority of the respondents were male ( $n = 127$ ; 81.4%) and White/Caucasian Americans ( $n = 100$ ; 64.1%). The average reported household income was \$66,350 ( $SD = \$40,583$ ). The participants played golf an average of 5.35 rounds per month ( $SD = 5.33$ ), with a median of 4 rounds per month, and have played golf for about 10 years ( $SD = 10.47$ ), with a median of 6 years. Each golfer reported annually spending \$1,573 for golf-related activities ( $SD = 1,907$ ) with a median of \$1,000.

#### *Measures*

The questionnaire included 23 items that assessed perceived leisure constraints in golf (16 items) and leisure identity salience in golf (7 items) as well as demographic questions.

*Leisure Constraints in Golf.* Leisure constraints were measured using a 16 item measure adapted from Jackson's (1993) study (see Table 1). Respondents were asked to rate the extent to which each of the 16 barriers were limiting how much golf they would play if they would like to play more. The responses were measured on a 5-point scale (5 being very much a barrier). This scale was intended to measure golfers' perceived constraints in six areas. Those areas were social isolation (3 items), access (3 items), personal reasons (3 items), cost (2 items), time (3 items), and facilities (2 items). The Cronbach alpha scores for the six subscales were more than acceptable, ranging from .74 to .87.

*Leisure Identity Salience in Golf.* Participants' identity salience in golfing activities was measured with a 7-item measure adapted from the scales developed by Shamir (1993) and Hoelter (1983).

**Table 1. Constraints in Golf: Items and Reliability Scores**

Dimension	Item	Alpha
Social isolation		.83
	SI 1. Do not know where to learn golf.	
	SI 2. Do not know where to take part.	
	SI 3. Difficult to find others.	
Accessibility		.80
	AC 1. Cost of transportation.	
	AC 2. Lack of transportation.	
	AC 3. No opportunity near home.	
Personal reasons		.87
	PR 1. No physical abilities to play golf.	
	PR 2. Physically unable to take part in golf.	
	PR 3. Not at ease in social situations.	
Cost		.79
	CO 1. Cost of equipment.	
	CO 2. Green fees and other charges.	
Time		.74
	TI 1. Too busy with my work.	
	TI 2. Too busy with my family.	
	TI 3. Too busy with other leisure activities.	
Facilities		.74
	FA 1. Overcrowded golf courses/club house.	
	FA 2. Poorly maintained facilities/areas.	

All items were measured using a 5-point Likert scale, ranging from 1 as “strongly disagree” to 5 as “strongly agree”. An example item reads: “Golf allows me to express myself.” The scale had a Cronbach’s alpha reliability of .94.

*Personal Information.* Survey participants were asked to provide their socio-economic characteristics including age, gender, ethnic background, and household income. In addition, they also provided golf-related information such as frequency of participation, years of golf experience, and money spent on golfing activities.

*Data Analyses*

Descriptive statistics were used to report demographic and golf-related information. Correlational analyses were conducted to

explore the relationships among the variables in this study. Three separate analysis of variances (ANOVAs) were carried out to investigate the influences of golfers’ age, income level, and golfer LIS on perceived constraints. Results from the ANOVA tests could be utilized to segment the recreational golfer market. Well-defined market segmentations, identified with relevant segmentation bases, can help golf course managers to develop better marketing and management plans. Further, such analyses could help leisure policy makers in accommodating recreational golfers’ needs. A subsequent multivariate analysis of covariance (MANCOVA) was conducted to explore the influence of LIS on perceived constraints in playing golf after controlling for golfers’ age and income level.

**Results**

*Descriptive and Correlational Analyses*

The results of the descriptive statistics revealed that cost was the biggest constraint in playing golf ( $M = 3.00, SD = 1.18$ ), followed by time ( $M = 2.86, SD = 0.98$ ), facilities ( $M = 2.54, SD = 1.07$ ), social isolation ( $M = 2.40, SD = 1.05$ ), access ( $M = 2.31, SD = 1.10$ ), and personal reasons ( $M = 2.22, SD = 1.20$ ). The results of the item specific analyses indicated that ‘green fees and other charges’ ( $M = 3.19, SD = 1.29$ ) was the most important constraint, followed by ‘I am too busy with my work’ ( $M = 3.04, SD = 1.24$ ), ‘I am too busy with my family’ ( $M = 2.97, SD = 1.23$ ), ‘cost of equipment’ ( $M = 2.80, SD = 1.30$ ), and ‘facilities/areas are poorly maintained’ ( $M = 2.63, SD = 1.20$ ).

Table 2 reports the means, standard deviations, and correlation coefficients among all variables used in this study. Among the six constraints, the highest correlation was found between access and personal reasons ( $r = .73, p < .001$ ) and the lowest, but significant, correlation was found between social isolation and time ( $r = .33, p < .01$ ). As for socio-demographic variables, Age was negatively and significantly correlated with time ( $r = -.24$ ) while income level had a significant negative correlation with access ( $r = -.22$ ), personal reasons ( $r = -.22$ ), and cost ( $r = -.25$ ). However, gender

**Table 2. Means, SDs and Correlations among Variables**

Variables	1	2	3	4	5	6	7	8	9	10
<i>Constraints</i>										
1. Soc-isolation	--	.65 <sup>c</sup>	.57 <sup>c</sup>	.45 <sup>c</sup>	.33 <sup>c</sup>	.44 <sup>c</sup>	.21 <sup>a</sup>	-.10	.13	-.14
2. Access		--	.73 <sup>c</sup>	.58 <sup>c</sup>	.37 <sup>c</sup>	.68 <sup>c</sup>	.34 <sup>c</sup>	-.04	.07	-.22 <sup>b</sup>
3. Personal			--	.56 <sup>c</sup>	.36 <sup>c</sup>	.50 <sup>c</sup>	.26 <sup>c</sup>	.00	.09	-.22 <sup>b</sup>
4. Cost				--	.42 <sup>c</sup>	.50 <sup>c</sup>	.07	-.07	.00	-.25 <sup>b</sup>
5. Time					--	.41 <sup>c</sup>	.04	-.24 <sup>b</sup>	.02	.01
6. Facilities						--	.31 <sup>c</sup>	.04	.09	-.13
<i>LIS</i>										
7. LIS							--	-.12	-.11	.00
<i>Demographic</i>										
8. Age								--	-.08	.26 <sup>c</sup>
9. Gender									--	-.14
10. Income										--
<i>M</i>	2.40	2.31	2.22	3.00	2.86	2.54	2.67	37.88	1.19	66.35
<i>SD</i>	1.05	1.10	1.20	1.18	0.98	1.07	1.01	14.19	0.39	40.58

Note:  $p^a < .05, p^b < .01, p^c < .001$

was found to have no correlation with any constraints. In terms of the relationships between LIS and constraints, LIS had significant positive correlations with access ( $r = .34$ ), facilities ( $r = .31$ ), personal reasons ( $r = .26$ ), and social isolation ( $r = .21$ ), but not with cost and time.

As reported, the results indicate that perceived constraints in golfing activities are correlated with LIS, golfers' age, and economic status (income level), but not with golfers' gender. To further explore the effect of LIS, age, and income level on constraints, three separate analysis of variance (ANOVA) tests were conducted. Gender was not included in the further analysis due to (a) lack of correlations with other variables examined and (b) the small sample size of female golfers in this study. For each of three independent variables, a 40-40 split was chosen to reduce errors associated with a median split method (Cacioppo, Petty, & Morris, 1983). The respondents who occupied the upper 40% in LIS, age, and income level were classified as the 'highly identified', 'older', and 'high income' golfers, respectively, while those in the lower 40% of the distribution were classified as the 'less identified', 'younger', and 'low income' golfers. The remaining 20% of the respondents were excluded from analyses.

*ANOVA: Influence of Golfers' Age, Income Level, and LIS*

Three separate ANOVA tests were conducted to test the effects of golfers' age, income level, and identity salience as a golfer on perceived constraints in playing golf (see Table 3). For golfers' age, and income level, 40-40 splits (the top 40% vs. the bottom 40%) were used to define younger ( $M = 24.52$  years old;  $n = 64$ ) and older ( $M = 51.45$  years old;  $n = 67$ ) groups as well as low ( $M = \$34,510$ ;  $n = 63$ ) and high ( $M = \$100,300$ ;  $n = 64$ ) income groups. A 40-40 split produced high LIS (highly identified,  $M = 3.65$ ;  $n = 63$ ) and low LIS (less identified,  $M = 1.70$ ;  $n = 62$ ) groups.

As shown in Table 3, ANOVA on each of the six constraints indicated that the effect of LIS is significant for social isolation,  $F(1, 123) = 4.26, p = .041$ , access  $F(1, 123) = 15.65, p < .001$ , personal reasons,  $F(1, 123) = 9.06, p = .003$ , and facilities,  $F(1,$

$123) = 8.60, p = .004$ , with the highly identified golfers more strongly expressing their concerns about these four types of constraints. Regarding the effect of golfers' age, younger golfers considered time as a greater constraint than did older golfers,  $F(1, 129) = 9.98, p = .002$ . The ANOVA also revealed a significant difference between lower and higher income groups on personal reasons,  $F(1, 125) = 6.94, p = .009$ , and cost,  $F(1, 125) = 4.30, p = .04$ , with the lower income golfers more strongly concerned about personal reasons and cost as constraints.

*MANCOVA: Unique Influence of LIS*

A multiple analysis of covariance (MANCOVA) was conducted to explore the effect of LIS on perceived constraints while controlling the effects of golfers' age and income. Reported LIS was included as between-subjects factors, six constraints were the dependent variables, and participants' age and income level were included as covariates. Results are summarized in Table 4.

	Test	Value	F	df	p	$\eta^2$
Multivariate	Wilks' $\lambda$	.79	5.03	6, 116	.000	.207
<i>Univariate test of between-subjects effects of LIS on Constraints</i>						
Social isolation			3.87	1	n.s.	.031
Access			16.46	1	.000	.120
Personal reasons			9.88	1	.002	.075
Cost			0.01	1	n.s.	.000
Time			0.06	1	n.s.	.000
Facilities			9.54	1	.002	.073

With the use of the Wilks'  $\lambda$  criterion, the effect of LIS on the mean vector involving six dependent variables (six constraints) combined, was found to be significant after controlling for the

	Age			Income			LIS		
	Younger	Older	F (1,129)	Low	High	F(1, 125)	Low	High	F(1, 123)
Social isolation	2.54 (1.14)	2.21 (0.90)	2.84	2.48 (1.06)	2.34 (1.08)	0.53	2.19 (0.89)	2.58 (1.19)	4.26 <sup>a</sup>
Access	2.31 (1.16)	2.16 (0.97)	0.59	2.53 (1.16)	2.19 (1.02)	3.01	1.88 (0.90)	2.61 (1.15)	15.65 <sup>c</sup>
Personal reasons	2.23 (1.32)	2.06 (1.05)	0.62	2.49 (1.28)	1.94 (1.03)	6.94 <sup>b</sup>	1.91 (1.08)	2.54 (1.23)	9.06 <sup>b</sup>
Cost	3.12 (1.27)	2.75 (1.05)	3.33	3.18 (1.15)	2.77 (1.07)	4.30 <sup>a</sup>	2.98 (1.26)	3.02 (1.22)	0.02
Time	3.07 (0.93)	2.55 (0.96)	9.98 <sup>b</sup>	2.98 (0.92)	2.92 (0.94)	0.14	2.85 (0.99)	2.88 (1.04)	0.04
Facilities	2.48 (1.12)	2.43 (1.01)	0.08	2.63 (1.05)	2.46 (1.03)	0.89	2.29 (1.01)	2.84 (1.09)	8.60 <sup>b</sup>

*Note 1:* Standard deviations are in parentheses.  
*Note 2:*  $p^a < .05, p^b < .01, p^c < .001$

combined effects of covariates, Wilks'  $\lambda = .79$ ,  $F(6, 116) = 5.03$ ,  $p < .001$ . The results indicates that there are statistically significant differences among LIS groups in terms of their perceived leisure constraints in golf, after adjustment for golfers' age and income level.

The Univariate ANOVA tests revealed significant differences for three of the six dependent variables. The univariate test revealed significant group differences in (a) access,  $F = 16.46$  at  $p < .001$ , (b) personal reasons,  $F = 9.88$ ,  $p = .002$ , and (c) facilities,  $F = 9.54$ ,  $p = .002$ . This meant that golfers who highly identify themselves to golf (high LIS group) tended to perceive those three constraints as bigger constraints than those who less strongly identify themselves to golf even after accounting for golfers' age and income level. For the covariate effects, golfers' income levels had significant effects on access, personal reasons, cost, and facilities, while age had a significant effect on one dependent variable, namely time.

### Discussion

The current study aimed to investigate the types of perceived constraints in golfing activities for active golfers. In addition, the perceived strengths of the constraints were examined in relation to golfers' demographic and socio-economic status (i.e., age, income level) and their identity salience as golfers.

The results of the descriptive statistics showed that cost was the biggest constraint to the golfers, followed by time, facilities, social isolation, access, and personal reasons. It is clear that most golfers tend to think of golf as a prohibitively expensive leisure activity. As the number of golf courses increases, the managers of golf courses should strive to provide and promote competitive green fees in order to attract more golfers. In addition, various special discounts for green fees can help more golfers overcome this cost constraint. In order to remove some of the other golfers' constraints, golf course managers should consider such practices as maintaining golf courses properly (facilities), hiring more golf instructors (personal reasons), and establishing efficient booking systems (time) based on their targeted golfers' needs and perceptions. Such activities can allow golf course managers to expand their customer base while promoting the sport of golf as a participant sport.

Findings also revealed that there are significant and positive relationships between constraints in golf and the level of LIS. This means that golfers who highly identified themselves with golf are more likely to perceive stronger constraints in their golfing activities. On the other hand, golfers who are less identified as a golfer are likely to consider constraints as weaker barriers. This finding is consistent with Kay and Jackson's (1991) suggestion that leisure participants more frequently report constraints than did non-participants in a leisure activity. As highly identified golfers actually play more golf (golf rounds) and are more eager to play more golf than less identified golfers, highly identified golfers are likely to be exposed to constraints more frequently (Kay & Jackson, 1991). As Crawford et al. (1991) asserted, leisure constraints not only influence whether individuals participate or opt to not participate in a leisure activity, but also affect active participants' choice whether or not to specialize themselves into a leisure activity. Findings from the current study suggest that constraints are strongly perceived by more highly identified

golfers than less highly identified golfers. Specifically, in terms of correlations, golfers' LIS was strongly associated with Social Isolation, access, personal reasons, and facilities. It should be noted that golf course managers or leisure policy makers cannot remove all the constraints or barriers for golfers. However, some of the barriers can be mitigated. For example, a golf course manager could actively promote their golf course's availability of instructional programs to remove constraints related to personal reasons ("do not know where to learn golf"), or established buddy program (i.e., a service that provides golf partners) for club members to remove constraints related to social isolation ("difficulty to find others").

Golfers' age and income level were strongly associated with time, access, personal reasons, and cost. These results indicated that older golfers perhaps have more time to play golf than younger golfers, and concurrently that golfers with lower income experienced access, personal reasons, and cost constraints more heavily than golfers with higher income. In interpreting these results, managers should develop marketing strategies to attract more golfers by providing golfers in these specific segments with better ways to navigate these constraints.

The results of the three separate ANOVA clearly demonstrated significant main effects of golfers' age, income, and LIS on perceived constraints in golfing activities as well. Specifically, golfers who more highly identified themselves as a golfer perceived greater constraints in terms of access, personal reasons, social isolation, and facilities than did those who weakly identified themselves as a golfer. Younger golfers felt strongly about time-related constraints than did older golfers. In addition, lower-income golfers considered personal reasons and cost as stronger constraints than did higher-income golfers. As the results indicate, golf course managers, in understanding their customers, should consider golfers' socio-economic characteristics jointly with their identity salience as golfers. Such understanding should be the first step in developing better marketing strategies or more effective leisure policies.

Finally, the current study illustrated, using a MANCOVA, that the influence of LIS on constraints was significant even after controlling for golfers' age and income level. Improved booking systems, and improved facility maintenance could help address facility-related constraints. Operating a shuttle bus system and providing a buddy program could be some of the exemplary practices to remove constraints related to personal reasons and accessibility. When developing a new golf course, developers could consider potential golfers' accessibility to the new golf course as cost of transportation as these can be problematic issues for many golfers.

'Core' golfers, defined as golfers who play more than eight rounds per year, accounted for 91% of rounds played and 87% of golf-related spending (Golf 20/20, 2007). Given that all of the participants in this study are "core" golfers, findings from the current study can provide critical information to golf course managers and leisure policy makers. Constraints for core golfers should be identified and removed to accommodate core golfers' needs. In doing so, golf course managers and leisure policy makers should understand the influence of golfers' age, income level, and identity salience on these constraints.

### Limitations and Future Studies

The results should be read with several limitations. The first limitation is related to the sampling method used in this study. As indicated, a convenience sampling method was employed to explore the perceived constraints of golfers. In addition, due to the sample size, the current study could not explore the influence of golfers' additional demographic characteristics such as gender and ethnic backgrounds. According to the National Golf Foundation's (NGF) report (2006), women golfers comprised approximately 24% of all the U.S. golfers. While the proportion of the female respondents in this study was small (18.6%; 29 female respondents out of 156 total respondents) and did not yield a sufficient number to perform further gender-based statistical analysis, it was still reasonably in line with that of the current U.S. golfers' market. The recent market trends indicate that the number of female golfers has increased steadily in recent years (NGF, 2006), and it is clear that the importance of female golfers in the U.S. golf industry will be greater as (a) the growth rates of female golfers in every age category are faster than those of male golfers, and (b) the popularity of the Ladies Professional Golf Association (LPGA) is increasing (Berkley Consulting, 2004). Consequently, future studies should examine female golfers' perceived constraints in their golf-related activities. In order to ensure the generalizability of the study's findings, as well as a sufficient sample size for a gender-based analysis, further studies should include broader samples with different sampling methods.

As the focus of the current study was to explore the influence of golfers' socio-economic status and identity salience as golfers on leisure constraints in golfing activities, the relationship between leisure constraints and other related constructs such as constraints negotiation (Samdahl & Jekubovich, 1993), leisure affordances (Pierskalla & Lee, 1998), and facilitators to leisure (Raymore, 2002) were not explored. To find better ways to remove golfers' constraints, further studies should explore the causal relationships among constructs mentioned above.

In addition, the researchers suggest that golfers' constraints can be studied in conjunction with the concept of service quality (Zeithaml, Parasuraman, & Berry, 1990) because golf can be considered as a sport or leisure service. Some of the service quality dimensions are directly or indirectly related to leisure constraints. For example, Ko and Pastore (2005) suggested that such service quality (sub)dimensions as sociability, operating time, program information, facility ambience, and design were critical in recreational sports. Those service quality dimensions would be related to such constraints as time (operating time), facilities (facility ambience), and personal reasons (sociability). Given that the level of service quality influences the clients' satisfaction, purchase/usage intention, and repeat patronage (Murray & Howat, 2002; Yu, Chang, & Huang, 2006); further studies should closely examine the relationships between leisure constraints and service quality, including subsequent outcomes such as customer satisfaction and re-purchase intention.

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