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RESEARCH NOTE

UNDERSTANDING CONSTRAINTS AND THEIR IMPACT ON SCHOOL EXCURSION TOURISM

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School excursion tourism is a relatively underresearched and poorly understood segment of the tourism industry despite its strong economic potential. This article draws on the leisure constraints theory to examine barriers to overnight school excursions in Australia. A self-completed online survey by 1,314 school excursion decision makers measured the importance of these constraints to overnight school excursions, together with information on the schools' characteristics. The results reveal a four-factor structure instead of a three-factor structure, with structural constraints divided into destination and school-based structural factors. Intrapersonal and interpersonal constraints were also found to be important in undertaking overnight school excursions. Our analysis also revealed that constraints differ based on school characteristics, reconfirming that the school market is not a homogenous one. The article concludes with recommendations for destination and attraction managers interested in increasing school excursion visitations.

Key words: Constraints; School excursions; Barriers; Educational tourism

Introduction

School excursions remain an underresearched area of tourism scholarship. Consisting of day trips and overnight excursions to destinations for the purpose of education, this form of travel is often overlooked in official tourism statistics (Cooper, 1999). However, the school excursion tourism market is nontrivial, with European data revealing that an estimated 70 million students make 100 million day trips and 15–20 million overnight trips a year (Ritchie & Coughlan, 2004). Revell (2002) adds that school children in the UK spend around 2 days on average on field trips each year. Longitudinal research conducted in Australia shows that school excursions to the National Capital in the decade to 2010 grew around 60%, with the economic impact increasing 10-fold during this same period from

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AUD$10 million to AUD$100 million (Keating, Inbakaran, & Dale, 2011).

Despite the economic potential of school excursion tourism, there is still much to learn about this important tourism market regarding its scale, its specific nature, and the needs of travelers (Larsen & Jenssen, 2004; Ritchie, Carr, & Cooper, 2008). This article will contribute to our understanding of school excursion tourism by presenting results from a national study of Australian school teachers undertaken to examine (1) the nature of constraints affecting overnight school excursions and (2) how the impact of these constraints vary according to school type and decision-makers' characteristics.

Resolving these issues will provide important insights into this emerging travel segment and will offer valuable guidance for schools wanting to better understand the issues influencing decisions about school excursion travel. The findings will also assist tourism marketers to develop better, more targeted activities and communications. To this end, Cooper (1999) asserts that the "school travel market demands a particular approach in terms of products and promotion, and has its own very different market characteristics and influences" (p. 89).

Brief Literature Review

Leisure constraint theory focuses on identifying and understanding the barriers that limit participation in particular leisure activities. Research on constraints in tourism can enhance our understanding of particular phenomena and shed new light on aspects of leisure participation, motivation, and satisfaction. Constraints can also act as a device for focusing attention on identifying strategies for overcoming these barriers (Jackson & Scott, 1999).

Research on leisure constraints has existed as a distinct subfield of tourism scholarship for more than three decades. However, Jackson (2005) asserts that the origins of this field can be traced back much further, at least to the origins of the North American parks and recreation movement of the 19th century. Two important assumptions guided the early academic research into leisure constraints: 1) constraints are immovable, static obstacles to participation and 2) constraints act to block or limit participation in leisure activities. These two assumptions were challenged in the late 1980s, when Crawford and Godbey (1987) argued that the operation of constraints can only be understood within the broad context of the preference–participation relationship. In this way, constraints act to mediate (and moderate) preferences for an activity and participation. They proposed three categories or types of constraints: structural, intrapersonal, and interpersonal.

Structural constraints are defined as the factors that intervene between leisure and participation. They represent constraints as they are commonly conceptualized. Examples of structural barriers include family life cycle stage, family financial resources, season, climate, the scheduling of work time, and the availability of opportunity and knowledge of that availability.

Intrapersonal barriers involve individual psychological states and attributes that interact with leisure preferences rather than intervening between preferences and participation. These intrapersonal constraints predispose people to define certain leisure activities and services as appropriate or inappropriate, interesting or uninteresting, and so on. Examples of intrapersonal barriers include stress, reference group attitudes, prior socialization into specific leisure activities, and perceived self-skill.

Interpersonal barriers or constraints are the result of interpersonal interactions or the relationship between individuals' characteristics. Barriers of this sort may interact with both a preference for, and subsequent participation in, companionate leisure activities. In a family context, for example, these may occur when spouses differ in terms of their leisure preferences. An individual may experience an interpersonal leisure barrier if he or she is unable to locate a suitable partner with whom to engage in a particular activity.

Crawford, Jackson, and Godbey (1991) proposed a hierarchical model (Fig. 1) to describe the relationship between these different types of constraints, contending that constraints should be organized into a hierarchy ranging from proximal (intrapersonal) to distal (structural). This approach reflects the dynamic nature of how people negotiate through a series of constraints to decide whether or not to participate in a particular leisure activity. It has been argued that understanding the constraining and facilitating factors associated with tourism

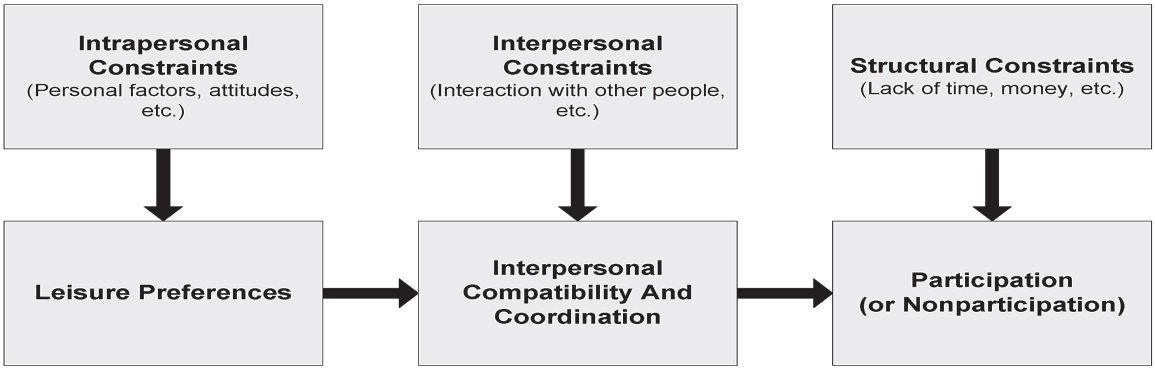

Figure 1. A hierarchical model of leisure constraints. Source: Crawford et al. (1991).

activities provides valuable insights into participation rates and leisure demand (Gilbert & Hudson, 2000; Williams & Basford, 1992).

Though several studies have examined the role of constraints in the field of tourism (Hinch, Jackson, Hudson, & Walker, 2005; Hudson & Gilbert, 1999; Nyaupane, Morais, & Graefe, 2004; Pennington-Gray & Kerstetter, 2002; Virden, Nyaupane, & Walker, 2006), the role of constraints in school excursion tourism is still not well understood. Furthermore, the two previous studies that have examined these constraints in the context of school excursion tourism (Coughlan, Ritchie, Tsang, & Wells, 1999; Ritchie & Coughlan, 2004) only examined a limited number of constraints. This article will add to the literature in the area of constraints by considering a more comprehensive list of issues, as well as by examining the relative importance of these issues for different types of schools and respondents.

Methods

In order to identify and examine constraints to overnight school excursions and whether these constraints vary across schools, a quantitative online survey was sent to schools throughout Australia. The 24 items used to operationalize the constraints were generated from previous studies (Coughlan et al., 1999; Coughlan, Wells, & Ritchie, 2003; Ritchie & Coughlan, 2004) and interviews with key stakeholders including teachers, school excursion marketing and travel companies, and destinations and attractions across Australia. To identify the importance of these constraints, respondents were asked to rate the importance of the 24 constraints on a 4-point Likert scale (1 = not important, 2 = somewhat important, 3 = important, and 4 = very important) as they applied to overnight school excursions. The survey also included questions about school and respondent characteristics, including location, student and staff numbers, excursion coordinator details, school type, and school-years catered for at the school. This information will be used to better understand how the constraints vary across school types and decision makers.

Out of 10,051 publicly listed Australian schools, 8,841 had a recorded email address. A randomly selected sample of 800 schools was taken from this sample frame for a pilot online survey (400) and a paper survey (400). After refinement of the survey based on the feedback from the pilot testing, and confirmation that the online survey results did not differ statistically from the offline survey results, an invitation email was sent to the remaining email addresses. Only 7,841 were found to be valid addresses (with no repeat addresses). An invitation email was then sent to these addresses with an explanation of the research and a link to the survey for the principal or most relevant teacher to complete. A number of these emails were undeliverable (645), leaving a final sample size of 7,196. A total of 1,134 responses were received following an initial invitation and a follow-up invitation one week after the initial email. This represents a response rate of 16%. Allowing for a 3% margin of error, a 95% confidence level, and the target population of 7,196 surveyed in this research, we exceeded the

minimum required sample size of 939 for statistical validity.

Data Analysis and Results

Descriptive statistics, factors analysis, correlation analysis, and analysis of variance (ANOVA) were used to understand and examine the data. Descriptive statistics were used initially to explore the constraints, school and respondent characteristics. It is important to note that when asked if they could take as many overnight school excursions as they would like, 73% of the respondents answered "no," confirming that the majority of respondents were restricted in some way.

Our analysis shows that the primary constraints are financial (e.g., funding and cost of travel with mean scores of 3.8 and 3.7 out of 4.0, respectively). Of secondary importance is distance to travel and travel logistics, still rating over 3 out of 4. These findings confirm previous studies into destination choices and constraints in the context of school excursions (Coughlan et al., 1999; Coughlan & Wells, 1999; Coughlan et al., 2003; Howard, 2000; Ritchie & Coughlan, 2004), and other constraint-related research in general (Crawford et al., 1991; Jackson & Scott, 1999; Jackson & Searle, 1985) that discusses cost and travel logistics as major constraints to leisure. A comparison to previous studies (Coughlan et al., 1999; Coughlan et al., 2003) into school excursion behavior in Australia shows that many constraints have increased in importance, and some of the new constraints listed in this study have a high importance. Many are similar in mean such as cost of travel (3.9), distance to travel (3.4), and relevance to school curriculum (3.0). Some of the "new" constraints include legal issues (2.6), access to risk assessments (2.56), and student behavior (2.47). Perceptions of safety in an era of global security and terrorism are affecting school excursion trips, with anecdotal evidence suggesting a drop by as much as 30% at attractions with additional security measures in response to international terrorism (Ritchie et al., 2008).

Evaluation of Constraints

A principal component factor analysis was then conducted to determine whether an underlying pattern of relationships among the 24 constraints could be observed. Table 1 presents the rotated solution (Varimax) for factors with eigenvalues greater than 1.0. All factor loadings exceeded the benchmark of 0.4, and the Barlett's test of sphericity (χ^2 = 12068.819, $p < 0.05$) and the Kaiser-Meyer-Olkin measure of sampling accuracy (KMO = 0.933) both exceeded the accepted benchmarks required to determine the factorability of the matrix as a whole.

The analysis identified four factors that accounted for almost 60% of the variance in the data. Examination of these four factors reveals that the constraints loaded in line with Crawford et al.'s (1999) hierarchical constraint model. Factor 1 (Structural–Destination) includes structural constraints relating to the destination or product such as facilities, accommodation, and attractions. According to the literature, these determine if a location is suitable for a school group to visit (Thornton, Shaw, & Williams, 1997).

Factor 2 (Intrapersonal) contains predominantly intrapersonal constraints. This group is influenced by reference group attitudes and perceived self-skill. Constraints include previous experiences, lack of knowledge, and student behavior. Two constraints from the first factor also had moderate cross-loadings on factor 2. This is not surprising as the constraints, legal issues/checks, and access to risk assessments also have an intrapersonal dimension as they require a degree of human skill to interpret the information provided by the destination.

Factor 3 (Interpersonal) contains constraints that occur as a result of human interaction. Staff willingness, staff shortages, and timetabling are constraints that result from being unable to locate a suitable partner with which to engage in a particular activity, as described in the hierarchical model (Crawford et al., 1991).

Factor 4 (Structural–School) is—as the group name would suggest—structural, although it relates more to constraints of the school and students such as funding, cost, and distance to travel. These groups closely match the description of structural constraints in the literature. These constraints are intervening factors between leisure preferences and participation and are the most challenging constraints for researchers to investigate (Jackson, 2005).

The factor analysis supports the extant literature; however, the structural constraints have been divided into constraints relating to the destination

Table 1
Items and Rotated Factors

Constraint	Factor 1: Structural–Destination	Factor 2: Intrapersonal	Factor 3: Interpersonal	Factor 4: Structural–School
Eigenvalues	4.429	4.134	3.113	2.694
Variance explained	18.454	17.223	12.971	11.223
Funding				0.823
Cost of travel				0.845
Distance to travel				0.675
Travel logistics				0.628
Previous experiences		0.621		
Access to online booking		0.714		
Lack of knowledge/ info		0.747		
Access to booking agents		0.787		
Student behavior		0.584		
Inadequate training		0.617		
Staff willingness			0.648	
Staff shortages			0.776	
Timetabling			0.630	
Lack of time			0.721	
Planning logistics			0.465	
Availability of transport	0.445			
Cultural constraints	0.466			
Legal issues/checks	0.544	0.430		
Access to risk assessments	0.547	0.474		
Limited attractions	0.598			
Relevance to school curriculum	0.708			
Facilities for the disabled	0.748			
Appropriate accommodation	0.753			
Access to medical facilities	0.809			

(factor 1) and the participant or school (factor 4). This finding is important as it highlights the need to distinguish between the structural factors that influence the attractiveness of a destination vis-à-vis the capacity of a school to undertake an excursion. This is consistent with recent research that alludes to the existence of "subdimensions" within structural constraints, specifically place attributes, cost, and lack of time (Nyaupane & Andereck, 2008).

It is interesting for destination marketers and managers to note that structural constraints based on the destination (factor 1) such as facilities, accommodations, and relevance to school curriculum account for the largest amount of the variance (over 18%). Destinations can help schools negotiate these constraints to increase the likelihood of a school visitation.

However, these results do not indicate whether participants experience these constraint groups in a particular order (i.e., hierarchical or otherwise). Participants were not asked to indicate at which point in their planning of an overnight excursion they encountered these constraints, and this would be an interesting area for future research. While Crawford et al. (1991) suggest that constraints are encountered first at the intrapersonal level and then interpersonal followed by structural constraints, the empirical evidence is mixed. Raymore, Godbey, Crawford, and von Eye's (1993) study with 12th graders found constraints existed in hierarchical order; however, studies of adults with intellectual disability and a study of the ski market (Gilbert & Hudson, 2000; Hawkins, Peng, Hsieh, & Eklund, 1999) did not support the hierarchical model proposed. It has been suggested that hierarchy might depend on the population studied and types of leisure activities (Nyaupane & Andereck, 2008).

Examination of Factors

Ritchie and Coughlan (2004) argue that schools are not a homogeneous market, and therefore submarkets need to be identified and targeted. To better understand the school excursion market, the

constraint factor groups (1, 2, 3, and 4) were examined using ANOVA to determine how the importance of these groups varied by school and decision maker characteristics. This analysis examined the relationship between the variable means (such as location) and each of the factors. Significant differences were found for all four factor groups with school characteristics of state or territory, school location, and grades. There was only one school characteristic that showed a significant difference between the groups and factor 1—a school's location by state or territory. Western Australian schools demonstrated a significantly higher level of constraint for factor 1 than Victorian schools with a mean difference of 0.385. The mean difference is significant at the 0.05 level. This may relate to the availability of overnight excursion destinations with appropriate facilities and accommodation within Western Australia, as it is a sparsely populated state compared to Victoria, which offers many areas within easy traveling distance for schools based in that area.

Factor 3 contains interpersonal constraints that occur as a result of interaction. Staff willingness, staff shortages, and timetabling are all examples of this constraint group. These are constraints that result from being unable to locate a suitable partner with which to engage in a particular activity as described in the hierarchical model. Factor 3 showed significant differences when looking at a school's location, school-years catered for, and whether or not the school has a dedicated excursion coordinator. Urban/suburban schools considered factor 3 of far more importance than schools in a rural locations (0.273). Schools with a dedicated excursion coordinator were not as constrained by factor 3 as schools that were without a staff member to specifically plan and organize overnight school excursions (0.177). Respondents from schools who offered secondary grades only were significantly more constrained by factor 3 than schools who offered primary only (0.530) or primary plus secondary grades (0.600).

Factor 4 is a structural constraint group, as it relates to constraints of the school and students such as funding, cost, and distance to travel. There were differences based on a school's characteristics according to location, state, and whether the school was single sex or coeducational. Not surprisingly, rural schools were significantly more constrained by factor 4 than schools based in an urban/suburban locations (0.328). This confirms the studies in the literature that differences were evident depending on whether schools were traveling from country or city areas (Howard, 2000). Single-sex schools were not as constrained by factor 4 as most of the respondents to the survey who were from coeducational schools (0.868). The states of Western Australia (0.719), Queensland (0.648), Victoria (0.504), and South Australia (0.743) found the constraints of factor 4 (distance to travel and funding) of greater significance than New South Wales, which was less constrained by this factor.

Conclusions

This study found that the most significant constraints for schools are financial in nature, followed by distance to travel, and travel logistics. A significant finding of this study comes through a comparison to published studies that have shown that many previous constraints have increased in importance, and that some of the new constraints listed in this study already have a high importance. Some of the "new" constraints included legal issues, access to risk assessments, and student behavior. Factor analysis identified four groups of constraints: *Structural–Destination* (facilities, accommodation, attractions), *Intrapersonal* (previous experiences, lack of knowledge, student behavior), *Interpersonal* (staff shortages, timetabling, staff willingness), and *Structural–School* (funding, cost, distance to travel).

Finding a second structural constraint group highlights how school-specific differences influence decision making around school excursion destinations. This finding is particularly exciting as it highlights that schools are heterogeneous in the demand for excursions. In particular, school excursion planning was observed to differ according to the size, staffing, type, and school location.

A number of key recommendations relevant to destination managers, attractions, and school excursion tourism planners were identified. First, destination managers should note that structural constraints based on the destination (facilities, accommodations, and relevance to school curriculum) were the most important. These constraints are within the purview of the destination, and can

often be addressed to help schools negotiate or overcome barriers to travel. Second, destination managers should consider the significant group-level differences when planning their marketing activities. Some examples of recommended target marketing using the results from this study include the following: (1) concentrating marketing efforts on destination attributes, such as accommodation and facilities, for mature decision makers; (2) improving destination and attraction knowledge for immature decision makers; (3) assistance with planning and coordination for larger schools; and (4) providing financial support and incentives for groups traveling from farther away.

Increasing the educational and economic value of school excursions requires an understanding of the educational and tourism needs of the market, as well as the development and marketing of innovative product to meet these needs (Ritchie, 2009). This research may be of some value to those destinations that target school excursions, as well as attractions that seek to target the school visitation market. More research is required into the school excursion market, their characteristics, and needs to provide experiences that meet the needs of teachers and students.

Finally, further research is required more generally on constraints to travel and destination choice, especially in the framework of group travel rather than at the individual level. Generic destination choice models need to be adapted or reinterpreted to be more applicable to the school excursion market. For instance, an examination of "context," or situational influences on travel behavior, also need to be examined further in relation to schools, destinations, and trip characteristics.

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