

## INDIVIDUALS' INTERPRETATION OF CONSTRAINTS: A NEW PERSPECTIVE ON EXISTING THEORY

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**Abstract:** The travel decision-making process is influenced by a number of factors. One of the most important yet infrequently studied factors is "perceived constraints." Nearly a decade ago Crawford, Jackson and Godbey (1991) developed a framework to guide constraints research. Numerous authors have utilized this framework but results have suggested that individuals' perceptions of constraints differ based on study setting and method of data collection (e.g., questionnaire vs. interview). Hence, the purpose of this study was to use a multi-method approach (both quantitative and qualitative) to assess perceived constraints to visitation among a sample of Pennsylvania residents. Results indicated that individuals' are not consistent in their response to constraint questions and that their interpretation of a constraining item varies. The information presented in this paper will challenge traditional notions about constraints.

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### Why Study Constraints?

As consumers go through the decision-making process they are influenced by a number of factors. According to Norman (1995), one of the most important yet infrequently studied factors is "perceived constraints." Constraints, according to Jackson (1988), are "a subset of reasons for not engaging in a particular behavior." Further, he suggested that the value of leisure constraints research may be summarized into two main areas: improving the understanding of participation by classifying non-participants, describing their characteristics and documenting their constraints; and improving constraints measurement techniques. Constraints research can also provide benefits such as policy development and program planning to recreation practitioners (Searle & Jackson, 1985b). Norman (1995) concluded that incorporating perceived constraints into market segmentation/tourism research offers researchers and practitioners a better understanding of the complex nature of the travel decision process.

### What is a Constraint?

Constraints are factors that inhibit or prohibit individuals' participation and enjoyment in leisure (Jackson, 1991). Norman (1995) defined travel constraints as constraints, inhibitors, obstacles, or restraining factors, perceived or real, that influence an individual's preference for and participation in a leisure activity. Dishman (1994) stated that perceived constraints might have a stronger influence on leisure activity participation than true constraints. Jackson (1988), in a survey of past research on leisure constraints, found that all researchers agreed in principle that constraints inhibit people's ability to participate in leisure activities. However, individuals do overcome and cope with constraints when participating in leisure activities (Mannell & Kleiber, 1997). In fact, some researchers believe that leisure participation is dependent not on the absence of constraints but on negotiation through them (Jackson, Crawford, & Godbey, 1993).

### Constraints and Travel

Constraints are important factors in the travel decision making process (Tian, Crompton, & Witt, 1996; Um & Crompton, 1992). McIntosh and Goeldner (1990) listed constraints to travel as cost, lack of time, health limitations, family stage, lack of interest, fear and safety. If the motivation to travel is sufficiently strong, they argued, any of the above constraints may be overcome and travel will take place. However, the perception of or actual travel constraints will affect the destination selection process (McIntosh & Goeldner, 1990). Um and Crompton (1992), in their study of perceived inhibitors and facilitators in pleasure travel destination decisions, indicated that travel decision making is constraints driven rather than benefits driven. Norman (1995), in his research of perceived constraints as a basis for travel market segmentation, identified groups of respondents that were considered relatively "high level constrained" but continued to participate at an unconstrained level. Similarly, interview respondents in Kay and Jackson's (1991) study reported that perceived constraints did not reduce their level of participation.

### The Hierarchical Constraint Model

In 1991 Crawford et al. proposed that individuals negotiate their way through three types of constraints (i.e., structural, intrapersonal and interpersonal). These constraints are hierarchical in nature, with intrapersonal constraints (e.g., stress, depression, anxiety, perceived self-skill) being the first and most difficult level of constraints to negotiate. At the second level, represented by interpersonal constraints (e.g., constraints resulting from interrelationships such as finding a suitable activity partner), constraints intercede between preference and participation in leisure activities. If this type of constraint is overcome, structural constraints (e.g., family life-cycle stage, family financial resources, season, climate, work scheduling, availability of opportunity) begin to be encountered. This model is hierarchical in terms of the order in which constraints are encountered, but also with respect to level of importance.

Empirical verification of the hierarchical constraints model by Crawford et al. (1991) is lacking, however (Alexandris & Carroll, 1997). Hawkins, Peng, Hsieh and Eklund (1999) conducted a replication and extension of their work and verified that the constraint categories can be replicated and extended with subtle distinctions. Six years earlier, Raymore, Godbey, Crawford and von Eye (1993) documented that the three categories of constraints did exist when studied with an adolescent population.

### Study Objectives

Numerous authors (see Backman & Wright, 1990; Dunn, 1990; Jackson, 1993; Kay & Jackson, 1991; Scott & Jackson, 1991; Searle & Jackson, 1985a, 1985b) have utilized the framework presented by Crawford et al. (1991) but results have suggested that individuals' perceptions of constraints differ based on study setting and method of data collection (e.g., questionnaire vs. interview). Hence, the purpose of this study was to use a multi-method approach, quantitative and qualitative, to assess perceived constraints to visitation among a sample of residents of southwestern Pennsylvania.

### Methodology

The data for this study came from a much larger study focused on awareness of area tourist attractions, attitudes towards tourism, information seeking and travel behavior regarding area sites and attractions, and constraints to visitation. In order to address the issue of perceived constraints, individuals were asked to indicate to what extent they agreed that the following constrained their visitation to area sites and attractions: lack of interest, lack of information, being physically unable, overcrowding at area sites and attractions, lack of things for kids to do, lack

of time, cost, lack of companion, lack of transportation, or the fact that they had visited before.

A total of 1,844 phone interviews were completed with residents of southwestern Pennsylvania. Telephone interviews were conducted between 4pm and 9pm on weekdays, and between 10am and 9pm on weekends. Upon completion of the phone interview/survey individuals were invited to participate in a follow-up mail-back survey seeking more detailed information about their perceptions of southwestern Pennsylvania and the factors influencing their visitation patterns within the area. A total of 1,378 individuals (75%) agreed to complete the follow-up survey. Six hundred sixteen completed follow-up surveys were received for a final response rate of approximately 45%.

On both the surveys (phone and mail-back), respondents were asked to indicate to what extent they agreed with the 10 constraint items. On the phone survey they did this using a 5-point Likert type scale ranging from 1 = strongly disagree to 5 = strongly agree. The response format on the mail-back survey was modified to 1= agree and 2=disagree. If respondents agreed that an item was constraining they were asked to explain why. On the phone survey, the constraint items were randomly listed to limit the influence of placement bias.

### Results

The constraint items respondents most strongly agreed with were: "Not enough time," "Too expensive" and "Not enough information" (Table 1). It is worth noting, however, that respondents did not perceive any of the items to be highly constraining. The mean scores on the 10 constraint items ranged from 1.51 (disagree) to 2.98 (neutral) (Table 1).

**Table 1. Response to the constraint items: The phone survey**

| CONSTRAINTS                   | Mean | (S.D.) |
|-------------------------------|------|--------|
| Not enough time               | 2.98 | (1.51) |
| Too expensive                 | 2.54 | (1.28) |
| Not enough information        | 2.52 | (1.43) |
| Visited them before           | 2.17 | (1.29) |
| Overcrowded                   | 2.15 | (1.24) |
| Not enough for children to do | 2.00 | (1.08) |
| No people to go with          | 1.96 | (1.33) |
| Not interested                | 1.76 | (1.14) |
| Physically unable             | 1.53 | (1.11) |
| No transportation             | 1.51 | (1.04) |

*Note: 5 point Likert Scale: 1= strongly disagree and 5 = strongly agree*

In the follow-up mail survey, participants were again asked to indicate their level of agreement with the 10 constraint items. If they agreed that an item was constraining they were asked to indicate why. Little more than two-thirds

(39%) of the respondents agreed they did not have "time" to visit area sites and attractions. And, almost one-fourth were constrained by "not enough information" (Table 2).

**Table 2. Response to the constraint items: The follow-up survey**

| CONSTRAINTS                   | Agree  | Disagree |
|-------------------------------|--------|----------|
| Not enough time               | 38.70% | 61.30%   |
| Not enough information        | 24.90% | 75.10%   |
| Too expensive                 | 13.30% | 86.70%   |
| No people to go with          | 11.00% | 89.00%   |
| Physically unable             | 7.60%  | 92.40%   |
| Not interested                | 5.10%  | 94.90%   |
| Visited them before           | 4.90%  | 95.10%   |
| No transportation             | 4.80%  | 95.20%   |
| Overcrowded                   | 3.80%  | 96.20%   |
| Not enough for children to do | 3.70%  | 96.30%   |

*Note: This was a dichotomous variable in the mail survey.*

In order to compare the results of the phone and mail surveys, responses to the strongly agree (5) and agree (4) categories on the phone survey were combined. This allowed the researchers to determine whether the percentage of respondents who agreed that an item was constraining was consistent across methods (i.e., phone survey vs. mail-back survey).

As noted in Table 3 there were differences in response to the constraint items depending on method. The largest

difference was with the constraint item, "overcrowded." Only 3.8% of the respondents to the mail-back survey agreed that it is overcrowded in area sites and attractions. Yet, more than 20% of the respondents indicated that overcrowding was a constraint when asked the same question during the phone survey. Additionally, individuals were more inclined to agree that an item was constraining when asked about it during the phone survey.

**Table3. Differences in response to the 10 constraint items by percent of respondents who agreed that the constraint existed**

|                               | Mail-back | Phone* |
|-------------------------------|-----------|--------|
| Not enough time               | 38.7%     | 48.2%  |
| Not enough information        | 24.9%     | 35.0%  |
| Too expensive                 | 13.3%     | 29.9%  |
| No people to go with          | 11.1%     | 18.3%  |
| Physically unable             | 7.6%      | 10.7%  |
| Not interested                | 5.1%      | 11.9%  |
| Visited them before           | 4.9%      | 20.6%  |
| No transportation             | 4.8%      | 8.6%   |
| Overcrowded                   | 3.8%      | 20.8%  |
| Not enough for children to do | 3.7%      | 9.8%   |

*\*In order to compare the percentage of respondents who agreed with the constraint item, the "strongly agree" and "agree" categories were combined to create an overall "agree" category.*

We also wanted to determine how individuals interpreted the constraint items. Thus, a content analysis of the open-ended responses to the top three constraint items (i.e., not enough time, not enough information, too expensive) was conducted. This was done with the responses to the constraint items in the mail survey, only. Several themes emerged. For example, in terms of the constraint item, "not

enough time," individuals interpreted this to mean work or family responsibilities as well as a substitution of activities. With respect to the constraint item, "too expensive," the open-ended responses were informative as well. Respondents interpreted expensive to mean value for money and reasonableness of charges.

**Table 4. Qualitative responses to top three open-ended constraint questions in the mail-back survey**

| <u>Constraint Items</u>          |                                         |                                                             |
|----------------------------------|-----------------------------------------|-------------------------------------------------------------|
| Not enough time                  | Not enough information                  | Too expensive                                               |
| Work                             | I have never received any information   | Entertainment fees are too expensive                        |
| Have more important things to do | I did not go get the information        | Do not have enough money                                    |
| Business travel                  | Needs to be displayed at more locations | Charges are not good value for money (unreasonable charges) |
| Public transportation takes time | Not advertised enough                   | It is expensive for a family                                |
| Family bonding                   | I do not know where to go               |                                                             |
| Too old to get around            |                                         |                                                             |

### Discussion and Implications

One important finding in this study is that people are not consistent in their response to questions regarding constraints. The fact that level of agreement with every constraint item went down when asked about it again on the mail-back survey is intriguing. Does this finding suggest that method influences response? Or, could this finding be a function of the environment in which the person was operating when responding to the surveys. For example, when on the phone the individual may have been less relaxed and as such wanted to get through the survey as quickly as possible. In addition, could this finding suggest that perception of constraints is situational? If so, researchers must begin to conduct longitudinal studies in an effort to validate our knowledge of constraints.

These study results also suggested that people do not interpret constraint questions or items similarly. For example, time to one person can mean "work time" while for another it may mean "time for travel," suggesting that quantitative scales may not be accurately assessing what is a constraint to an individual. This is problematic if program policy, marketing or program planning is being predicated on such findings.

The fact that constraints do not appear to be an overwhelming issue in this study leads to several questions. First, didn't we identify factors that were truly constraining individuals from visiting area sites and attractions? Second, have people negotiated through some of the constraints and as such do not deem them to be an issue? Or are people simply not constrained? This study focused on visitation behavior that has not been studied in any depth by travel and tourism researchers. Hence, answers to the previous questions will not be available until further research is conducted.

We also found that the most constraining factors are structural in nature. Intra- and inter-personal constraints were the least constraining. Is this true in all tourism settings? When individuals recognize a need for travel have they already negotiated through the constraints of not having the skills to travel or someone with whom they can

travel, for example? Is this negotiation based on past experience?

In summary, researchers need to carefully interpret individuals' responses to questions about constraints. To interpret "time" as something that is uncontrollable, for example, may be an invalid inference. The results of the present study suggest that researchers need to validate findings through repeating studies with similar populations; build in checks (e.g., follow-up phone calls) to the data; conduct focus groups or some other type of interview to determine whether there are constraints to travel previously not identified; and, if constraints are not an issue in the context of travel, to document if and how people have negotiated through constraints.

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