

Assessing Hierarchical Leisure Constraints Theory after Two Decades

Geoffrey Godbey
The Pennsylvania State University

Duane W. Crawford
Texas Tech University

Xiangyou Sharon Shen
The Pennsylvania State University

Abstract

This article assesses the status of hierarchical leisure constraints theory (Crawford & Godbey, 1987; Crawford, Jackson, & Godbey, 1991) regarding many issues. Such issues include clarification and elaboration of some aspects of the original model, a review of studies which have used or examined the model and the extent to which they are confirmatory, critiques of the original model by various authors, and avenues for further research. Conclusions drawn include that the model is cross culturally relevant, that the model may examine forms of behavior other than leisure, and that, while research to date has been largely confirmatory, there is a high potential for the theory to be expanded in order to advance leisure constraints research to the next level.

KEYWORDS: Hierarchical leisure constraints theory, Leisure constraints, Review of constraints research, Empirical validation

Introduction

The hierarchical leisure constraints models first presented about two decades ago by Crawford and Godbey (1987) and Crawford, Jackson, and Godbey (1991), and subsequently expanded by Jackson, Crawford, and Godbey (1993), have been widely adopted as an important lens through which to view leisure behavior. These models, taken together, actually comprise what should be more properly denoted as a theory of hierarchical leisure constraints, given that each model essentially

About the authors: Geoffrey Godbey, Department of Recreation, Park & Tourism Management, The Pennsylvania State University, University Park, PA 16802

Duane W. Crawford, Department of Human Development and Family Studies, Texas Tech University Lubbock, TX 79409

Xiangyou Sharon Shen, Department of Recreation, Park & Tourism Management, The Pennsylvania State University, University Park, PA 16802

Correspondence concerning this article should be addressed to Geoffrey Godbey, The Pennsylvania State University, Department of Recreation, Park & Tourism Management, 813 Ford Building, University Park, PA 16802. Phone: 814-863-8985. Fax: 814-867-1751. Electronic mail may be sent to g7g@psu.edu.

posits a new set of testable theoretical propositions or predictions. Although each of these three models may be discussed as a discrete conceptualization, they are really three observable indicators of the development of a more abstract theoretical orientation that takes constraints to leisure behavior as its subject. We use the terms "model" and "theory" interchangeably in this presentation, while recognizing that, technically, only theories may be empirically tested; models, given that they typically take the form of metaphors or analogies, cannot be directly tested. We recognize that other conceptualizations of the nature and function of leisure constraints have been developed over the past two decades, and that these formulations often take divergent views of the factors that may deter leisure pursuits. In this presentation, however, we focus on the 1991 iteration of hierarchical leisure constraints theory (Crawford, Jackson, & Godbey, 1991), which proposed that constraints to leisure behavior are arrayed in a hierarchical fashion.

When viewed as three principal components of leisure constraints theory, these models represent stages of theorizing that constituted both a significant departure from existing ways of thinking about leisure "barriers" as well as a cluster of interrelated ideas that came together fairly quickly, in the space of a few years. These ideas continue to attract attention and commentary. More importantly, however, constraints theory has served as the platform for a significant body of research over the past two decades. Thus, we think it a good time to pause and consider the current state of this line of inquiry, the manner by which it arrived at this point, and in what ways it might profitably proceed over the next two decades. To recapitulate active research lineages is an inherently perilous enterprise given that we may be disagreeably surprised by the findings of research still in progress, but this nonetheless strikes us as an opportune time to: (a) elaborate on and clarify aspects of the original model, (b) briefly review studies using the model and the extent to which they confirm predictions derived from the model, both in North America and cross-culturally, (c) examine criticisms of the model, and (d) suggest some possible avenues for future research.

Attributes of the Theory

The original 1987 model introduced a levels-of-analysis dimension to contemporary thinking about the factors that promote and deter the pursuit of leisure activities (Crawford & Godbey, 1987). In doing so, we introduced the theoretical constructs of intrapersonal, interpersonal, and structural constraints, which corresponded to individual, interpersonal (i.e., dyadic or greater), and contextual analytic levels. The original model was concerned with describing and explaining the relationship between constraints and leisure activity preferences and subsequent leisure involvement such that constraints were seen as antecedent factors that condition activity preferences (intrapersonal), related to both preferences and participation (interpersonal), or intervene in the preference-participation relationship. The 1991 hierarchical model extended the initial theory by linking the three constraints factors hierarchically, the factors being arrayed from most proximal (intrapersonal) to most distal (structural) (Crawford, Jackson, & Godbey, 1991). The 1993 model suggested that eventual leisure behavior was dependent upon the successful negotiation of these constraints levels in a sequential manner (Jackson,

Crawford, & Godbey, 1993). Thus, the principal components of constraints theory remained stable over this span, with the changes in the models reflecting the changes in how we viewed the interconnections among the factors and, thus, the processes inherent in the theory.

Empirical Research on the Hierarchical Leisure Constraints Theory

Since its inception, the hierarchical leisure constraints model (Crawford et al., 1991) has received extensive attention (Jackson, 2005; Jackson & Scott, 1999) and inspired numerous research efforts, many of which either (a) adopted the model as the primary guiding theoretical framework (e.g., Burns & Graefe, 2007; Elkins, 2004; Gilbert & Hudson, 2000; Han, 2004; Nyaupane, Morais, & Graefe, 2004; Nyaupane & Andereck, 2008; Oh, 2005; Pennington-Gray & Kerstetter, 2002; Young, Ross, & Barcelona, 2003; Raymore, Godbey, & Crawford, 1994; Walker, Jackson, & Deng, 2007), or (b) subjected the model to empirical validation (e.g., Raymore, Godbey, Crawford, & Von Eye, 1993; Alexandris, Grouios, Tsobatzoudis, & Bliatsou, 2001; Hawkins, Peng, Hsieh, & Eklund, 1999). We will review the main empirical findings of two decades surrounding the hierarchical leisure constraints model, including its three-dimensional conception of leisure constraints, the three propositions associated with the model, and related predictions derived from them.

The Dimensionality of Leisure Constraints and Measurement Issues

The hierarchical model posits that leisure constraints exist at three levels: intrapersonal, interpersonal, and structural which must be navigated sequentially for participation to take place or continue/progress. Aside from numerous studies that identified, explicitly or implicitly, types of constraints corresponding to the three levels, several researchers have attempted to directly test whether the three levels of constraints form distinct categories or constructs. Raymore et al. (1993), for instance, validated the three-dimensional construct structure using confirmatory factor analysis. Their results provided preliminary supporting evidence for the existence of the three subscales. Likewise, Hawkins et al. (1999), Hubbard and Mannell (2001), and Nyaupane et al. (2004) replicated the three-dimensional model, although with different sets of items.

The dimensionality issue, however, is far more complex than it appears at first glance, for a number of reasons. For one, observations of the interactions¹ among factors on the three levels have given rise to the question as to whether the three dimensions of constraints can be viewed as distinct categories. Auster (2001), for instance, challenged locating intrapersonal constraints within the individual because many of them had a source in or were influenced by society (see also Philipp, 1995). Similarly, Shaw and Henderson (2005) suggested that the ethic

¹ The other term "overlap" is also frequently used in this type of discussion, but given the empirical evidence on which these discussions were based, we think interaction would be a more accurate term: perceptions about the three categories of constraints may affect one another or the causes underlying them may overlap. In other words, causal factors of constraints at a given level (e.g., an intrapersonal constraints) are located at a different level (e.g., constraining social norms—a societal level factor), but the constraint categories themselves are conceptually unambiguous.

of care and lack of sense of entitlement—intrapersonal level factors—prompted women to prioritize care-related activities over leisure, which in turn led to, at least partly, the lack of time for leisure activities—a structural constraint. Other researchers (e.g., Gilbert & Hudson, 2000; Scott & Munson, 1994) also noted possible interactions between intrapersonal, interpersonal, and structural constraints. These arguments seem to suggest an intertwining relationship between the three dimensions, which challenges the linear hierarchical proposition associated with the model. We will review this issue in more detail in the next section. Here, we would respond to questions regarding dimensionality using this type of evidence by maintaining that it is important to keep in mind that conceptually distinct constructs *can* be correlated (much as factors may be correlated in a factor analytic solution). In fact, it is implausible to contend that there are any relevant variables (or factors) connected with social life that would be entirely unrelated. Good examples of this include height and weight, temperature and the number of people swimming or the number of ice-cream cones consumed, etc., all of them being distinctive but correlated concepts. In our case, quantitative studies do find correlations among the three dimensions of constraints (e.g., Raymore et al., 1993 reported modest to high correlations: $r = 0.42-0.695$, indicating approximately 16% ~ 49% shared variance), but this fact should not be a priori interpreted as evidence of a lack of distinctiveness of constructs (though it can be in some cases). Rather, it may suggest that the constructs are theoretically related, either through interactive processes or common underlying causes, which are exactly what the above-mentioned studies suggested.

On a related note, low reliabilities in terms of internal consistency have been reported for each of the three sub-scales (e.g., $\alpha = 0.42-0.55$ in Hubbard & Mannell, 2001), suggesting dubious homogeneity within each category. We concur with Hubbard and Mannell that possible constraints within each category of the hierarchical model are likely to be heterogeneous and do not necessarily strongly correlate with each other (i.e., the content domain of each category may be broad). For example, it is unrealistic to expect an intrapersonal constraint due to a “lack of (perceived) self-skill” to highly correlate with an intrapersonal constraint resulting from a negative subjective evaluation of the appropriateness of the leisure activity (e.g., “I’m strong and flexible and I think I can be a very good boxer, but I won’t do it because it is not an appropriate activity for women”), or expect structural constraints such as “lack of time” to correlate with the availability of recreational areas (Nyaupane et al., 2004). Therefore, low to moderate internal consistencies should be expected if the three categories are to be operationalized strictly as three dimensions of a construct. Following from this notion are two implications: (a) in item selection during the instrument construction using the hierarchical model as a framework, high internal consistency reliabilities should not be blindly pursued at the cost of content validity (e.g., throw out whichever item that does not fit with the rest) in order to achieve acceptable reliabilities and/or model fit; and (b) it may be profitable to develop second-order factors within the three-dimensional framework and explore the sub-dimensions within each of the three categories. We are glad to see that efforts in the latter direction have already started (e.g., Nyaupane & Andereck, 2008; Walker et al., 2007).

Moreover, a second level of nuance is present in the homogeneity issue, namely the great variety of constraints related to the differing nature of leisure activities (e.g., sports vs. art appreciation; outdoor vs. home-based recreation, etc.), various characteristics of study population (e.g., age, gender, physical or mental ability, family life cycle, ethnicity, etc.), and different stages of participation (e.g., starting a new leisure activity, pursuing higher or desired levels of specialization or quality of experience, etc.). Many researchers have recognized this issue and some of them advocated for an activity-, population-, or domain-specific approach (c.f., Clayton, 2002; Hawkins et al., 1999; Hultsman, 1993; Jackson, 1994, 2005; Jackson & Dunn, 1991; Jackson & Rucks, 1995; Jackson & Scott, 1999; Mannell & Loucks-Atkinson, 2005; Nadirova & Jackson, 2000; Nyaupane et al., 2004; Searle & Brayley, 1992). Indeed, the common strategy has been each research group identifying the categories of constraints specific to certain research context and/or customizing the instrument development to its own needs (e.g., Alexandris & Carroll, 1997a; Arab-Moghaddam, Henderson, & Sheikholeslani, 2007; Backman, 1991; Backman & Crompton, 1989, 1990; Brown, Brown, & Hansen, 2001; Dunlop, 2006; Frederick & Shaw, 1995; Gilber & Hudson, 2000; Harrington, 1991; Henderson & Ainsworth, 2000; Henderson, Bedini, Hecht, & Shuler, 1995; Hultsman, 1995; James, 2000; Lee & Tideswell, 2005; Lu, 2006; McCarville & Smale, 1993; Norman, 1995; Petrick, Backman, Bixler, & Norman, 2001; Philipp, 1995; Scott & Munson, 1994; Stodolska, 1998; Tian, Crompton, & Witt, 1996; Tsai & Fung, 2005; Williams & Fidgeon, 2002; Wright & Goodale, 1991; Wright & Backman, 2001; Xiong, 2007; Zhang, 2007). As a result, there has been a lack of standardized instruments for measuring constraints (Hubbard & Mannell, 2001). We acknowledge the merit of a localized approach in helping such research remain sensitive to the perceptions and experiences of research subjects and stay grounded to the phenomenon under investigation. Two cautions, however, should be observed. First, the advantages of this approach should not be used as a justification for data-driven research with no proper theoretical basis, from which follows our second point. Localized piece-meal research practices which do not refer to a common theoretical framework or make use of findings from existing studies (especially from a different sub-field) may add difficulties to cross-study comparisons, which in turn hinders the transfer and accumulation of knowledge in this field. To help avoid both, we second the suggestion made by Hubbard and Mannell (2001) that "it may be useful to develop a pool of constraint items that researchers can draw on when tailoring constraints scales to meet their needs" (p. 161). Equally importantly, we believe that the hierarchical leisure constraints model (Crawford & Godbey, 1987; Crawford et al., 1991, and its important expansion, the constraint negation theory by Jackson et al., 1993), can serve as a useful heuristic framework for systematic investigation of constraints and related issues. Researchers may use the framework as a good starting point for developing a comprehensive list of constraints items while staying sensitive to the nature and characteristics of participants and leisure activities (see also Auster, 2001; McQuarrie & Jackson, 1996). This approach has been successfully implemented in many empirical studies (e.g., Elkins, 2004; Han, 2004; Hubbard & Mannell, 2001; Kohlleppel, 2002; Nyaupane & Andereck, 2008; Nyaupane et al., 2004; Oh, 2005; Raymore, Godbey, & Crawford, 1994; Walker et al., 2007).

As a side note, for researchers who are interested in the comparability of a leisure constraint measurement across multiple populations (such as in cross-cultural studies) or borrowing/testing constraint instruments designed for a different study population, we recommend careful distinctions at three levels in a logical sequence. First, researchers may want to test the comparability of the content or types of constraints across groups. If multi-group analysis, also known as multi-sample or measurement/factorial invariance analysis, is used for testing, then in structural equation modeling or SEM terms this level of validation involves testing the configural invariance or equal factor structures, i.e., the number of factors and pattern of indicator-factor loadings are identical across groups. Second, if the first level of comparability is confirmed, researcher may proceed to validate the comparability of meanings of the constraint construct and sub-dimensions. In SEM terms, this level of validation involves testing the metric invariance or equal factor loadings, i.e., whether the measures have the same meaning and structure for different groups of respondents. Third, given the equivalence in construct meaning, researchers may continue to examine the comparability of means if it is desired. In SEM terms, this step involves testing equality at the mean level for indicators and/or latent variables, i.e., whether people from different groups score the same on each constraint item and summated/global indices (Brown, 2006). We believe these distinctions will add much conceptual clarity to discussions concerning the constraint construct/measurement heterogeneity issue, which, as our review reveals, are yet to be more explicit about which aspect of the question is being discussed.

Three Propositions of the Hierarchical Leisure Constraints Model

Crawford et al. (1991) posited three explicit propositions: (a) leisure constraints are arrayed in a sequential hierarchical fashion (i.e., individuals encounter and negotiate through intrapersonal, interpersonal, and structural constraints in a sequential manner), (b) this array reflects a hierarchy of importance (the three levels are arranged from the most proximal, powerful, to the most distal), and (c) this rank-ordering also denotes a hierarchy of social privilege (resulted from the correlation between perceived constraints and social classes defined by income, education, gender, race, etc.). Here we will briefly review empirical studies that have tested the hypotheses derived from these propositions, which have received various degrees of attention.

A Sequential Hierarchy: Empirical findings

The first proposition, which posited the existence of a sequential hierarchy of leisure constraints, has been examined frequently and intensively. Following the principle of meta-modeling, Raymore et al. (1993) developed statistical procedures for testing the sequential hierarchy proposition. Their results provided supporting evidence for the proposition. The procedures they designed were replicated by several subsequent studies (e.g., Gilbert & Hudson, 2000; Hawkins et al., 1999; Walker et al., 2007), but mixed findings were reported. Gilbert and Hudson for instance, did find that individuals needed to overcome intrapersonal constraints in order to form a leisure preference for skiing before encountering structural constraints,

but it appeared that people did not necessarily confront interpersonal constraints, which created doubt that this type of constraint existed at all for skiers. Walker et al. and Hawkins et al. reported opposite findings using the same procedures: the former found supporting evidence for a hierarchical model with two samples of college students from Canada and Mainland China; the latter failed to replicate Raymore et al.'s finding with a sample of adults with mental retardation.

We suggest these inconsistent findings be interpreted with great caution. In particular, it may be worthwhile to examine the generalizability of the underlying assumption of the Raymore et al. (1993) procedure, which states "fewer subjects advance as their position along the hierarchy increases" (p. 109). While it appears to hold in the research context of Raymore et al. and Walker et al. (2007), it is possible that this assumption does not apply to some circumstances for reasons related to the characteristics of the study sample. For example, in Gilbert and Hudson's (2000) ski constraints study conducted in the United Kingdom, 55% of their respondents indicated prior experience in skiing, a figure "remarkably high" (p. 915) compared to the same percentage (less than 17%, Mintel, 1996, in Gilbert & Hudson) for the UK general population. It is reasonable to suspect that the majority of these respondents might have already successfully negotiated through intrapersonal (and even inter-personal) constraints and already formed a preference for skiing, which constituted a preexisting condition that would not support the assumption derived by Raymore et al.

Aside from empirical verifications, many researchers also provide valuable findings and insights that can help deepen our understanding in this regard. In a study about constraints encountered by adult amateur ice skaters, McQuarrie and Jackson (1996) suggested that "disentangling structural and antecedent constraints is problematic" (p. 475) and a simultaneous interaction model (Henderson & Bialeschki, 1993), an expanded model derived from Crawford et al.'s (1991) original hierarchical model, might represent ice skaters' experience with constraints better than a linear and hierarchical model. Similar ideas have been raised by other researchers, such as the three categories of constraints interacting in the form of feedback loops (Gilbert & Hudson, 2000), lack of interest as a rationalization of anticipated (structural or interpersonal) constraints (Davies & Prentice, 1995, in Gilbert & Hudson, 2000; see also Jackson et al., 1993), perceived accessibility problems (structural constraints) influencing attitudes toward leisure facilities (intrapersonal constraints, Scott & Munson, 1994), a hierarchy within each category (Nadirova & Jackson, 2000), and constraints occurring in a cyclical pattern (Dominguez, 2003), to name but a few. While recommending prudence in categorizing an observed pattern as a persistent, generalizable model or a case-sensitive local phenomenon, we believe that all these ideas add to a progressively comprehensive and sophisticated understanding of leisure constraints, which warns against a rigid interpretation of the sequential hierarchy proposition by Crawford et al. (1991). In particular, we note that despite the hierarchical nature of the conceptual model, the actual constraints faced by a given individual do not have to start with intrapersonal constraints. Rather, the constraints an individual faces can take any form depending on where he or she stands, including his or her (relevant) attitudes, interests or stage/level of participation, related knowledge and

skills, location or accessibility of facilities, social network, cultural background and so on. Moreover, the constraints will keep evolving as the above parameters change.

On the other hand, we recognize that interactions exist between *factors* on the three levels. Without negating the notion of sequentially *encountering* constraints, the *formation* of a *constraint* may involve *factors* from any conceivable domains/levels via the process of internalization or negotiation. The distinction between causes of constraints and constraints per se, however, should be clearly maintained to avoid conceptual confusion and/or overly broad definitions of constraints. As a brief example, the sense of “guilt” expressed by older women about participating in sports taking time away from other more socially approved activities (Heuser, 2005) may interfere with their full enjoyment of the leisure activity. Despite the social *factors* (e.g., expectations from the society) that shaped such a sense of guilt, this *constraint* unambiguously took place at the intrapersonal level because the effect of social factors would not be materialized until they were perceived by the individual as hindering factors. We further suggest that it will be valuable for researchers to go beyond simply describing or classifying leisure constraints to the more challenging process of understanding how they are formed (i.e., the underlying causes of leisure constraints). We believe the important value of the previously mentioned alternative arguments is not to disconfirm the hierarchical leisure constraint theory, but rather to point out the potential and direction for expanding on the current model, i.e., exploring the antecedent part of each type of constraints, aside from the large amount of research on the subsequent process of encountering constraints—negotiation and related processes such as motivation (e. g., Carroll & Alexandris, 1997; Jackson et al., 1993; Frederick & Shaw, 1995; Henderson et al., 1995; Hubbard & Mannell, 2001; Little, 2002; Livengood & Stodolska, 2004; McQuarrie & Jackson, 2002; Oh, 2005; Scott, 1991; Scott & Jackson, 1996; Son et al., 2008). These findings remind researchers to keep track of the sources or forces that give rise to or help shape the constraints people experience, be it gender roles, peer expectation, cultural norms, racial discrimination/prejudice, lack of leisure facilities or any other factors rooted in our socio-cultural context. Taking these factors into account means moving beyond measuring the surface level of perceptions and delving deeply into a broad network of personal-social-cultural factors that contribute to the formation of these perceptions (see also Shaw & Henderson, 2005). Particularly, we want to point out that certain constraints may be persistent (e.g., lack of leisure resources at the societal level or perceived social norms that interfere with personal leisure participation or enjoyment, see also Iso-Ahola & Mannell, 1985). The influence of this type of constraint is profound and far-reaching and its removal or elimination often calls for both efforts to negotiate on the part of individual (e.g., modify behavior in various ways, Henderson et al., 1995; Jackson & Rucks, 1995; Samdahl & Jekubovich, 1997) and facilitation on the part of society, community, institution, or other agencies. We are glad to see research in this direction has already started (e.g., Crawford & Stodolska, 2008).

A Hierarchy of Importance: Empirical Findings

We want to reiterate that the hierarchy proposition should not be interpreted too literally such that it is thought to prescribe the actual perceived importance or intensity of each constraint for (potential) leisure participants. Rather, we intend to discuss the importance of each type of constraint in terms of its role in the process of constraint negotiation and relation to leisure participation/nonparticipation (e.g., intrapersonal constraints are the most powerful because, without overcoming them, the desire or preference for a leisure activity will not even come into being or will disappear or diminish if it exists).

It would be naïve, however, to expect that all individuals—in all social, cultural, and historical contexts—would experience the same set of constraints and perceive each of them to have the same importance or strength. The heterogeneity issue we discussed earlier has sufficiently illustrated the great diversity in people's leisure constraint perceptions. As Jackson and Scott (1999) noted, although a common core of constraints tends to emerge regardless of the stage of leisure pursuit (e.g., beginning a new activity, ceasing participation in a former activity, participating at a desired level in terms of frequency, quality of enjoyment, or specialization), the relative strength and importance of items and dimensions vary significantly (e.g., Hultsman, 1993; Jackson, 1993; Jackson & Dunn, 1991; Jackson & Rucks, 1995; Searle & Brayley, 1992; Xiong, 2007). The perceived importance of each type of leisure constraint can also vary depending on the characteristics and/or situations of individuals. For instance, Hawkins et al. (1999) suggested that, for adults with mental retardation, interpersonal constraints may be of increased importance due to the unique social-relationship networks typically associated with them.

With the above notion in mind, the proposition's validity is a less ambiguous issue. Our review suggests that there is evidence supporting this proposition. Alexandris and colleagues, for instance, investigated the relationship between constraints and commitment to recreational sport participation and found that intrapersonal constraints were the most powerful predictors of commitment (Alexandris et al., 2001). In a study about the influence of constraints on motivation, they found intrapersonal constraints might act as de-motivating forces for the individual, though no relationships were found between motivation and the other two types of constraints (Alexandris, Tsozbatzoudis, & Grouios, 2002), providing partial support for the hierarchy of importance proposition by Crawford et al. (1991). Samdahl and Jekubovich (1997) used the hierarchical model as an "ex post facto guide" (p. 432) for interpreting the constraints people encountered in everyday life routines and found confirmatory evidence for the proposition of a hierarchy of importance.

A Hierarchy of Social Privilege: Empirical Findings

Crawford et al. (1991) predicted that social class, typically operationalized as income and education, has a powerful influence on people's perception and experience of constraints, which in turn impacts their leisure participation. Although this proposition has not been directly or explicitly discussed in existing published studies, related empirical evidence abounds in numerous examinations of the rela-

tionship between demographic variables (e.g., gender, income, education, ethnic background) and perceived constraints (for a review see Jackson, 2005).

It is widely recognized that close relationships exist between sociodemographic variables and the prevalence and extent of constraints (e.g., Jackson & Henderson, 1995; Scott & Munson, 1994; Shaw & Henderson, 2005). Macarville and Smale (1993), for instance, investigated perceived constraints to leisure participation in five activity domains (covering physical activity and exercise, arts and entertainment, hobbies, social activities, and home-based entertainment). They found that constraints were often not evenly distributed among the total population, with people with lower income likely to report more constraints (e.g. perceived age appropriateness, health, and language difficulty, costs, lack of companions, information, accessibility/availability) than affluent respondents. Alexandris and Carroll (1997b) found that the perception of constraints, including individual/psychological, interest/negative past experiences, lack of partners, time, lack of knowledge, accessibility/financial, were significantly higher among less-educated individuals. These findings are in line with the results of Raymore et al. (1994). They investigated the relationship between socioeconomic status (SES, operationalized as perceived household income and parents' education level) and perceptions of leisure constraints and found that SES was negatively related to intrapersonal constraints, though no significant relationships were found between SES and the other two types of constraints.

In sum, although the distribution of constraints along socio-economic ladders reported in existing studies does not fit completely with the specific predictions made by Crawford et al. (1991), the evidence generally supports the proposition that a hierarchy of social privilege exists in the experience of leisure constraints. Moreover, a common finding emerged from existing literature, that is females are typically more constrained than males in their leisure lives, especially by intrapersonal constraints. (e.g., Culp, 1998; Frederick & Shaw, 1995; Harrington, 1991; Henderson, 1991; Henderson & Ainsworth, 2000; Henderson et al., 1995; James, 2000, for a review see Shaw & Henderson, 2005). Given the network of social equality issues intrinsically related to gender, we view these findings as providing indirect support for the hierarchical social privilege proposition (Crawford et al., 1991).

Critiques of the Theory

While constraints theory has been subject to differing interpretations, we believe its initial conception of constraints was unambiguous. The following are issues surrounding the conceptualization of constraints and our thinking on these issues.

Are the Hierarchical Leisure Constraints Models Culture Bound?

Some researchers have argued that the typology of constraints ignores culture and is, therefore, culture bound. Chick and Dong (2005), for example, wrote that:

The model of hierarchical constraints, developed by Crawford, Jackson and Godbey, seems to have gained some ascendancy among constraints classification systems... To an anthropologist, however, these three constraint categories seem too individualistically oriented... Moreover, we feel culture, as a construct with a significant history in social science thought, can usefully be separated out from Crawford and Godbey's (1987) classification scheme wherein it seems to be inconspicuously spread among their three categories. (pp. 170-171)

We reject this argument on two grounds. First, and at the risk of being redundant, to support such a claim will require empirical evidence (i.e., empirical disconfirmation), but we see little evidence of generalized, systematic disconfirmation in the relevant research literature. Second, we believe that the intrapersonal constraints level adequately incorporates such macro level differences. For example, in 1987 we wrote that:

Intrapersonal constraints involve individual psychological states and attributes which interact with leisure preferences rather than intervening between preferences and participation. Examples of intrapersonal barriers include stress, depression, anxiety, religiosity, kin and non-kin reference group attitudes, prior socialization into specific leisure activities, perceived self-skill, and subjective evaluations of the appropriateness and availability of various leisure activities. (p. 122)

All of these examples and many others that we did not list (given that we were not attempting to develop an exhaustive inventory of such constraints) make sense only if viewed as being culture-dependent (e.g., reference group attitudes, socialization, perceptions of appropriateness). Intrapersonal constraints, as previously defined, are primarily concerned with subjective perceptions or assessments of appropriateness and relevance of participation in a given leisure activity by the individual in question. The bases for determining such appropriateness and relevance may be psychological, cultural, and/or the result of genetic predisposition. This mix of factors may vary in intensity or priority within different countries, religions, by personality, by gender, political freedom, ethnicity, physiological attribute, and so forth. The critical question is whether or not the individual in question comes to the conclusion that the leisure activity in question is one in which he or she could appropriately participate, enjoy, and/or experience success.

Rather than culture being "inconspicuously spread out" among all three constraint categories, we believe it is more accurate to say culture determines the very operational definitions of each category. Interpersonal constraints, for example, must be operationalized within a specific culture. In one culture, religion may play a central role in determining who one can participate in a leisure activity. In another, it may play no role. In one culture, "lack of facilities" may prevent adult males from playing soccer; in another, they will play in the street. While our constraint categories are conceived at an individual level, they are understood to be profoundly shaped by culture.

Perhaps part of the reason for Chick and Dong's (2005) assertion is that they did not deal with the entire definition of intrapersonal constraints in their critique of the model, identifying intrapersonal constraints as only "intrapersonal constraints (e.g., psychological issues, such as stress or depression; 'I wouldn't be caught dead doing that'", p. 170). This abbreviated version of the definition leaves out important examples mentioned in our 1987 article which are clearly centrally influenced by culture, such as kin and non-kin reference group attitudes, religiosity, prior socialization into specific leisure activities, etc. We respect the view put forth by Chick and Dong that:

To an anthropologist, however, these three constraint categories seem too individualistically oriented. Human beings, after all, are highly social animals and our social groups have systems of laws, rules, norms and so on—cultures to be more precise—that guide both intrapersonal and interpersonal relationships. (p. 170)

We concur that culture shapes constraints and believe our definitions incorporate such concerns. Further, we can distinguish between more or less voluntarily internalized cultural norms and imposed cultural norms. Imposed cultural norms, such as the requirement of a fundamentalist Christian sect that everyone go to church on Sunday morning, may constitute a structural constraint. That is, one might enjoy hiking in the woods on a Sunday morning, have friends who want to hike in the woods that morning, but encounter the structural constraint of the normative requirement of church attendance. In terms of interpersonal constraints, one might want to hike in the woods but be limited by the church in their choice of companions to others who were members of the same church. Norms which are more or less voluntarily internalized may, nonetheless, often serve as intrapersonal constraints, shaping desire to participate (e.g., "people like me don't hike in the woods on Sunday morning because I am a faithful Christian and I want to go to church. Therefore, I don't want to go hiking on Sunday morning").

In an attempt to explore the link between cultures and individuals, Walker and colleagues suggested that self-construal can be included in leisure research as a new important intervening variable in ethnic/racial leisure research (Walker, Deng, & Dieser, 2005). We acknowledge the value of such a proposition which, as one of our reviewers pointed out, taps into the process of how social norms get translated into individual values or beliefs, which in turn give rise to perceptions of constraints. When examined in cross-cultural contexts, this type of research illustrates the extent to which constraint-related psychological constructs operate differently and how the strength and specific forms of various intra, inter, and structural constraints may vary across cultures. On the other hand, we note that individualism vs. collectivism, which was used to define the concept of self-construal in Walker et al. (2008), is only one of many dimensions along which individual level of constructs can be examined. Depending on the nature and characteristics of the leisure experiences of interest, differing sets of social norms and individual beliefs will become relevant in discussions of leisure constraints (see also Caldwell, 2005). That being said, we think that the value of self-construal (Walker, 2007; Walker et al., 2007; Walker et al., 2008) as a new construct is argu-

able. The inventory of “self” concepts—such as self esteem, self appraisal, self efficacy, self image, and so forth—is vast, and to denote the concept of “self construal” as somehow unique seems arbitrary and in need of further justification.

Would Removing All Constraints to Leisure be Possible and Desirable?

We would argue that it is not possible for all constraints to be removed and, even if possible, would not be desirable. To the extent that intrapersonal and interpersonal constraints for a given leisure activity are minimized, the demand to participate increases. This, in turn, however, will likely increase structural constraints, such as crowding, waiting in line, financial cost, and other structural constraints. Since constraints are not absolute, do they imply that an individual can overcome them through sheer will? We view this as false. At the margins, while an individual living in a dangerous inner city neighborhood might jog at night in an area where other joggers had recently been attacked, the decision to do so would be foolhardy. In many cases, the severity of constraint is such that rational thinking requires giving in to the constraint, even if it is not absolute. “It is important to remember, however, that barriers are influences upon, not determinants of, leisure behavior, and it is the relative strength of barriers vis-à-vis preference which most likely predicts leisure behavior” (Crawford & Godbey, 1987, p. 124). Like the margins of the bell curve, the chances of participation head toward impossibility as the constraint increases in magnitude.

Over time we have come to think of these levels more as “factors” or “influences” than as “constraints” proper, one reason being that the model is, in our estimation, capable of subsuming traditional social exchange theory. If this analysis is pursued, constraints may be recast as exchange theory’s “costs” but the parallel concept of “rewards” is not explicitly located within the model. One way to view leisure behavior is as a series of exchange considerations (costs vs. rewards) involving the relative “profitability” indices which are constantly being mentally calculated as people consider alternate courses of action (leisure behavior). Sometimes, unfortunately, our predictions regarding the extent to which we will find a particular activity rewarding are wrong (e.g., the fishing trip where it rains every day, the trip to the movies where the people behind you talk all the way through the film). A more nontraditional view – the interdependence theory framework of Thibaut and Kelley (1959), the original developers of what unfortunately became known as exchange theory—emphasizes the interpersonal coordination required to participate in many of the activities that people ordinarily undertake. It was the original impetus for the interpersonal level in the model, underscoring the complex nature of aligning individual’s preferences as well as their subsequent joint leisure participation.

We know that free will/prejudice is still in operation, and there can be multiple constraints at each level in operation at any given point in time. For example, on the intrapersonal level, I may enjoy playing basketball but am simply too tired this evening. As another example, wives’ pursuit of companionate leisure that they dislike but their husbands enjoy is a powerful antecedent of marital unhappiness (Crawford, Houts, Huston, & George, 2002). In this instance, a wife’s disinclination to undertake the activity (e.g., tennis) is countered by her desire to

pursue an activity with her husband (and perhaps darker motives as well, such as a radical asymmetry in marital power). As such, she has set aside her intrapersonal preference against tennis in favor of her desire (or perhaps compulsion) to pursue leisure with her spouse (an interpersonal factor). Conversely, even if she enjoys tennis she may be disinclined to undertake it if, for example, the couple has argued the last few times they have played tennis together, another interpersonal disincentive. Thus, multifactor solutions will be the norm, and we have always seen the three levels as clusters of (occasionally countervailing) influences (i.e., in a multifactorial way).

Do Hierarchical Leisure Constraints Models “Start” with Intrapersonal Constraints?

Actually, the model is circular so that the starting point is where the individual or group is/are in their daily lives. If we start with an individual who wants to play squash but has moved to an isolated town that has no squash courts or any within one hundred miles, the structural constraint of lack of courts may, over time, cause the individual to experience an intrapersonal constraint, much like the parable of the fox and the grapes. That is, at some point, she will stop looking for opportunities to play squash. Also, she might switch to racquetball or another racquet sport, should such opportunities be available. In group terms, if the female were required to wear traditional religious garb in public which prevents running necessary to play squash, the relaxation of such dress codes might occur before her desire to participate has been subverted into an intrapersonal constraint. In this case, if there were courts to play on and acceptable partners with whom to play, she would play squash.

The Intra- and Interdisciplinary Relevance of Hierarchical Leisure Constraints Theory

Is the Hierarchical Leisure Constraints Model Intended to Apply to all Leisure Behavior?

After pointing out that much participation between couples involved a compromise on the part of one or both of the individuals, Samdahl and Jekubovich (1997) stated: “Leisure constraints were never intended as a universal framework for explaining all of leisure behavior, so to some extent our critique is unfair” (p. 447). Actually, we confess that we always intended the model to be a universal framework for explaining the participation or non-participation of all leisure behavior. Many other forms of knowledge, of course, are necessary. We must be careful, as Samdahl and Jekubovich correctly observe, not to assume that the fact of participation implies the complete exercise of free will, the end of prejudice, the achievement of social justice, or even enjoyment. It does mean, however, that participation in a given leisure activity has occurred and it is behavior—not free will, injustice, or enjoyment—that the model was constructed to predict and explain 21 years ago. In other words, the ultimate goal of the model is the prediction of actual *behavior*. Assorted social and mentalistic phenomena are invoked

and examined to differing extents depending on how they help understand the antecedents of leisure participation.

Again, the phenomenon of interpersonal compromise—whether between partners, friends, siblings, or parents and children—highlights the original importance we attached to the interpersonal model level. As those who study marital conflict would observe, compromise is a two-edged sword in that, although the couples may settle on an activity they are willing to pursue together, it may also be the case that neither of them originally wanted to undertake the activity that they wind up pursuing. Such conflict-of-interest situations were also at the heart of Kelley's (1979) treatise on interdependence theory, principally because demands for interpersonal coordination are maximized in such situations. Kelley's (1979) ideas were central in the development of the model and interpersonal factors were always assumed by us to be far more important than we conveyed in 1987, as reflected in Kelley's (1979) observation that:

The fact that outcomes are controlled both by each person individually and by the pair jointly reveals a basic property of the structure of outcome interdependence that characterizes close relationships . . . it means that the pair faces not only problems of "exchange," that is, of doing something for the other, but equally important, they face problems of "coordination," that is, of managing not to interfere with each other and to join together in mutually facilitative activities. (p. 23)

In other words, unless the couple undertakes an activity that one of them enjoys but one of them dislikes (see Crawford et al.'s [2002] account of the effects of such leisure on wives' marital satisfaction)—or decides to pursue their favored activities separately—compromise becomes necessary. Unfortunately, as one of our reviewers pointed out, with most studies focused on the presence of various types of interpersonal and other constraints, few researchers have explored the detailed dynamics of constraint theory at this level. The social psychological processes involved in the constraint negotiation process, including the costs reflected in compromise behavior, are yet to be examined in depth by future research efforts.

Is Hierarchical Leisure Constraints Theory Applicable Only to Leisure Behavior?

The theory, as it emerges, appears to be applicable to a variety of human behaviors. It could, for example, be used as a lens through which to understand choices about occupational preferences. For instance, a young male who wants to be a nurse may be intrapersonally constrained by "subjective evaluations of the appropriateness and availability" (Crawford & Godbey, 1987, p. 122) of opportunities for training as a nurse. Should these negative subjective evaluations be overcome, there would be the question of whether others with whom he might participate who were acceptable to him would be encountered. If this constraint were overcome, perhaps finding another male who wanted to be a nurse or some females sympathetic to his desire, the final constraints would be structural (e.g., tuition fees, transportation).

This point also begins to get at George Herbert Mead's (not entirely) rhetorical question: How does society "get inside" the individual, how is it that we come to learn social norms, behavioral expectancies? Over time, macro-level structural/cultural constraints (norms) become internalized and come to be seen by us as our own "choices" when they are actually socially conditioned (whether positively or negatively sanctioned). Thus, the model also may provide one way of approaching the question of socialization into—or away from—activities of many types beyond leisure.

Is the Concept of Leisure Constraint Too General?

Mannell and Loucks-Atkinson (2005) warned about a tendency to use the concept of leisure constraint too "loosely" among researchers (i.e., labeling any factor that influences participation as a constraint, p. 229). We concur with them and, in particular, want to point out that, while recognizing the tremendous value of conceptualizing factors preventing the formation of leisure preferences as *intrapersonal constraints*, this is a concept wherein researchers can very easily get "loose." To illustrate the point, consider that "lack of interest" has been frequently labeled as an intrapersonal constraint. When we as researchers set out to study what constraints people face in a specific leisure activity, say skiing, we label an individual who shows little interest as intrapersonally constrained. What if, however, the person is interested in snowboarding? What if the same person is surveyed multiple times by different groups of researchers, each asking about a specific activity that happens to fall outside of the person's leisure interest? Despite being labeled as intrapersonally constrained by all researchers, this individual can be perfectly healthy and happy and have his or her own regular leisure activities—only they are not on those leisure researchers' question list. The point is each and every one of us can have only a limited set of preferred leisure activities. When we are interested in certain activities, we are disinterested (or less interested) in many other activities. Researchers need to be very careful when labeling the latter as "constraints," which is easy to do as illustrated by Walker and Virden's (2005) statement that "because motivations also influence a person's leisure preferences in a certain direction, they may simultaneously *limit* or *constrain* (emphasis added by authors) them in other directions" (p. 203). Is it valid, however, to view all things that are not on our preference list as a result of constraints? If yes, how useful is such a broad concept of constraint? Is it desirable or even possible to have an inclusive preference list, which, in and of itself, equals no preference?

Moreover, what about a lack of interest due to one's personal belief or attitude? As an example, in a study about constraints to hunting, Wright and Goodale (1991) found that a group of uninterested non-participants also overwhelmingly exhibited the strongest anti-hunting beliefs (e.g., "hunting should be outlawed since there is no longer a need to hunt to survive," "hunting kills defenseless animals and should not be permitted," "hunting is immoral") and a "clear preference to do other things besides hunting during leisure time" (p. 324). Can we label all these uninterested non-participants as intrapersonally constrained? It seems obvious that value judgments are at work here. An implicit shared understanding in our discussions about leisure constraints is that what we are talking about is factors that prevent people from doing, borrowing Mannell and Loucks-Atkinson's

(2005) term, “what’s ‘good’” for them. In most cases there seems to be little ambiguity about “what’s ‘good’”. The distinction can be a very fine one, however, particularly in cross-cultural research of leisure constraints (e.g., Walker et al., 2007, Walker et al., 2008). If some people’s culturally-rooted values direct them away from being interested or taking part in certain activities that leisure researchers, perhaps from a different culture, consider “good” and “healthy,” should they be persuaded or educated to forgo their cherished beliefs because these beliefs are “constraining” their leisure experience?¹ This question about cultural differences applies to individual differences as well. What if it is a person’s personality trait that gets in the way (Mannell & Loucks-Atkinson)? Should the person get rid of the trait? And how would that be done?

It is worth noting that our questioning should not be interpreted as a proposition of indiscriminately embracing all existing values/beliefs or individual differences. Rather, we recognize the contribution made by feminist research on leisure constraints for women because it has identified certain constraining attitudes/beliefs (e.g., lack of sense of entitlement) that have resulted from inequalities imposed by social reality. We want to point out, however, that more discretion is needed when applying “constraint” label and we caution against “constraintizing” all factors that happen to stand in the way of preference formation and/or participation. We admit that there is no easy solution to this question, but at least we can start by being more explicit about what standards we are using for *good* and *healthy* leisure, which should by all means be evaluated in the social-historical context of research subjects.

Recommendations for Future Research

Given the status of existing leisure constraints instruments, measurement development will be a critically important area for future research (e.g., developing a constraint item pool and investigating the second order structure of leisure constraints). The benefits of such research will be profound. It not only helps avoid repetitive resource investment in scale construction by researchers from different sub-fields, but also promotes a certain degree of measurement standardization across studies that focus on the same constructs in different contexts, which in turn will facilitate cross-study reference, comparison and knowledge accumulation. On a different note, the relatively greater numbers of studies that have examined various factors that contribute to the formation of constraints—although many have done so implicitly—have laid a solid foundation for systematic investigations of the antecedents of leisure constraints. This line of research may eventually reveal the actual causes of constraints to leisure behavior and suggest intervention programs aimed at their attenuation or elimination.

Another direction for integrative research in this field is to map the heterogeneity issue by exploring the effects of various relevant parameters (e.g., demographic/cultural background, types of activity, stages of participation, and so forth)

¹ Besides, as one of our reviewers insightfully raised, “who is to decide that some activities are better or healthier than others? Would it amount to some peoples imposing their values on others?” We concur that these questions hold important implications for cross-cultural research.

as moderators in shaping perceptions of constraints and the relationships between constraints and subsequent related negotiation processes. The scope of the empirical efforts required to analyze all the above factors at once is clearly formidable and researchers may need to focus on a single factor and conduct systematic investigations of its effects. For example, consider studies that connect constraints-related topics to life course issues. Many studies of preference establishment—involving leisure as well as other areas, such as the development of preferences for occupations (Schulenberg, 1984)—have focused on adolescence and early adulthood in the belief they are critical periods for the establishment of such preferences. In a similar vein, we would propose that the field would profit from investigations which target the other end of the life course (e.g., retirement and beyond). It is here that the model would predict that some quasi-normative constraints begin to influence individuals' intrapersonal constraints associated with maturation/aging such as changes in physical ability, health restrictions, even instability in leisure activity preferences themselves. For example, Festinger's (1957) principle of "justification" or "rationalization" proposes that people do not want to do those things that they think themselves incapable of doing. Moreover, predictions could be made that span the constraint levels, such as the possible loss of former co-participants with whom activities were undertaken (again, the interaction of intrapersonal constraints at the interpersonal level) as well as factors involving reduced income and inaccessibility of facilities (structural constraints).

Accordingly, a comprehensive accounting of the interplay between leisure constraints and leisure behavior will require that we begin to ask and answer longitudinal questions concerning changes over time in constraints themselves as well as individuals' and groups' perceptions of them. In other words, concurrent investigations concerning changes in constraints across social and historical time – for example, increased opportunities for women's pursuit of nontraditional leisure as linked to a social/cultural reassessment of sex-role norms and values—in tandem with examinations of life course issues that emphasize the experience of leisure constraints across individual time; it is important to note that the requisite statistical tools with which to determine such intra- and cross-cultural relationships already exist (e.g., hierarchical linear modeling, growth curve analysis, and so forth).

Conclusions

In this article we have presented our view of the current status of constraints theory and offered some directions for future research emphases that we see as particularly useful, although there are doubtless others that have not occurred to us. Our view is, of course, simply that: our view. We understand the conceptual critiques of the theory while, at the same time, we await its systematic empirical disconfirmation. Our review of empirical studies in this topic area to this point has led us to believe that the overall conceptualization that underpins constraints theory is valid, and that the levels-of-analysis framework is generally consistent with decision-making processes regarding a variety of behavioral choices that include leisure but extend beyond it. Thus, although we believe that the principal components of the theory—the constructs of intrapersonal, interpersonal, and

structural constraints—are appropriate and useful, we are interested to see the extent to which future research: (a) reinforces the centrality of these components; (b) suggests other ways in which they may be related; and (c) uncovers different measurable variables that represent them. The history of science reveals that theories have nearly always predated the availability of appropriate methods for testing them. Fortunately, such is not the case regarding research devoted to the antecedents and consequences of leisure constraints, the empirical pursuit of which will advance the scientific status of our field.

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