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Development of the Serious Leisure Inventory and Measure

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In this investigation, the serious leisure inventory and measure (SLIM) was developed from convenience and target samples. The multidimensional framework of serious leisure contains six qualities from which 18 operations were employed. With the use of a q-sort, an expert panel, and confirmatory factor analysis, the 72 item SLIM demonstrated acceptable fit, reliability and equivalence across samples. Mean differences and correlation patterns found between samples demonstrated preliminary evidence for the predictive ability of the new measure. The SLIM short form (54 items) demonstrated good model fit and construct validity. Future replications are needed to adequately address the psychometric complexities of the SLIM within the network of interrelated leisure constructs.

KEYWORDS: *Serious leisure, scale development, confirmatory factor analysis.*

Introduction

For more than 30 years, Stebbins (e.g., 1982, 1992, 2001a) has explored the nature of serious leisure in a broad framework of interdisciplinary components. From this inductive research, six distinguishing qualities have emerged. We derived the SLIM from adherence to these six qualities as conceptualized by Stebbins (2001d) in which 18 dimensions were identified: perseverance, significant personal effort, a career course in the pursuit

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(progress & contingencies), identity with the pursuit, a unique ethos, and the durable outcomes of personal enrichment, self actualization, self expression (abilities & individuality), enhanced self image, self gratification (satisfaction & enjoyment), re-creation, financial return, group attraction, group accomplishments, and group maintenance.

Stebbins' (2001d) original research in serious leisure involved the ethnographic study of amateur scientists, comedians, athletes, singers, thespians and more. Continued research in serious leisure has addressed masters swimming (Hastings, Kurth, Schloder, & Cyr, 1995), bass fishing (Yoder, 1997), adult amateur ice skating (McQuarrie & Jackson, 1996), dog sports (Baldwin & Norris, 1999), motorsport events (Harrington, Cuskelly, & Auld, 2000), and soccer fandom (Jones, 2000), among others. Recent scholarship has addressed the serious leisure perspective and post-compulsory education (Jones & Symon, 2001), computer gaming (Bryce & Rutter, 2003), college football fandom (Gibson, Willming, & Holdnak, 2002), Civil War re-enacting (Hunt, 2004), adventure tours (Kane & Zink, 2004), sport tourism (Green & Jones, 2005), museum volunteering (Orr, 2006), and quilting (Stalp, 2006), among others. The qualitative approach to assessing one or more of the distinguishing qualities of serious leisure has provided a conceptual structure for understanding this form of leisure, but is ill-suited for developing a comprehensive psychometric approach to quantifying the dimensions of the framework. Lacking a measurement tool has hampered our knowledge of serious leisure, our understanding of contexts in which it may occur, and our ability to effectively and collectively distinguish serious from casual participation.

Thus, to address these issues, the authors propose and test the SLIM using data from convenience and target samples. We contend that future research will benefit from a uniform approach to studying the construct. Rather than highlighting only certain components of the serious leisure model, a sufficiently encompassing yet parsimonious approach can advance our knowledge of serious leisure beyond what can be achieved using exploratory/qualitative methods.

Conceptual Framework

Serious Leisure is defined as "the systematic pursuit of an amateur, hobbyist, or volunteer activity sufficiently substantial and interesting for the participant to find a career there in the acquisition and expression of a combination of its special skills, knowledge, and experience" (Stebbins, 1992, p. 3). In contrast, casual leisure is an "immediately, intrinsically rewarding, relatively short-lived pleasurable activity requiring little or no special training to enjoy it" (Stebbins, 1997, p. 17). Three types of participants compose the serious leisure perspective: amateurs, hobbyists and volunteers.

Serious Leisure Qualities

Perseverance. The occasional need to persevere through adversity distinguishes serious from casual pursuits. Stebbins (1981b, 2001d) found that participants occasionally had to persevere through obstacles such as fatigue,

anxiety, injury, freezing cold, stage fright and embarrassment. Thus, perseverance may be conceived as persistence in a goal-directed behavior over time.

Leisure career. The second quality, leisure career, is defined as a personal course, or passage, in a leisure role "shaped by its own special contingencies, turning points, and stages of achievement or involvement" (Stebbins, 2001d, p. 9). These stages reflect a continuum of changing patterns related to skills, knowledge, and abilities. Stebbins (1992) indicated that contingencies reflect unintended/chance happenings that affect progress or decline in the career, whereas turning points are those moments which influence the "nature or direction" of a career (p. 70). Several inquires have focused on the leisure career as it pertains to constraints and career stages (McQuarrie & Jackson, 1996), skill development in kayaking (Kane & Zink, 2004), career motivations for masters swimmers (Hastings et al., 1995) and parallels in work careers (McQuarrie & Jackson, 2002).

Significant effort. The third quality pertains to the exertion of significant personal effort to obtain and develop special knowledge, skills or abilities. Depending on the activity, one may allocate significant effort to acquire all three. Consequently, a serious career is shaped by the effort and energies devoted to the pursuit, an implication that squares neatly with the need to persevere (Stebbins, 1982).

Durable outcomes. Durable outcomes, the fourth quality, were derived from explorations of the costs and benefits associated with serious leisure lifestyles. Stebbins (1992) documented such costs as disappointments, dislikes and interpersonal tensions (see also Goff et al, 1997) but focused primarily on the classification of outcomes. These include seven personal outcomes: enrichment, self-actualization, self-expression, enhanced self-image, self-gratification, re-creation and in some cases, financial return. The remaining three are social outcomes: senses of group attraction, group accomplishment and group maintenance (2001d). The durable outcomes represent a realization of an agreeable or desired outcome, anticipated or not, that is more appealing and desirable than the previously existing state or condition (adapted from Driver, Brown, & Peterson, 1991; Stebbins, 2001d).

Individual outcomes. It is implicit in the definitions of the outcomes that each reflects a specific pursuit, as opposed to global operations in broader contexts. Personal enrichment, a process of increasing one's intellectual or spiritual resources, is found in the accumulation of cherished and valued experiences resulting from serious participation (Stebbins, 1992). Self-actualization comprises the full use and realization of one's talents, capacities and potential (Csikszentmihalyi & Kleiber, 1990). This implies that unique skills, abilities and knowledge are developed and applied in serious pursuits (Stebbins 2001d; see also Baldwin & Norris, 1999). Participants not only apply, but express, their skills, knowledge and abilities. The expression of abilities is one component of the self expression outcome; the other pertains to the expression of one's individuality. In a study of master swimmers, Hastings et al. (1995) assessed skill acquisition and technique as indicators of self-actualization and self-expression.

Self-image is defined as one's conception of oneself or of one's role. This conception is enhanced as a result of serious leisure participation. Stebbins (2001d) further indicated that one's self-image is enhanced through the expression of unique skills, abilities and knowledge. Shamir (1988) also suggested that "acting in accordance with one's commitments is expected to lead to satisfaction in the sense of self-expression—maintaining and presenting a valued self-image" (p. 248; see also Yair, 1992).

Self-gratification, or the satisfaction of one's own desires, pertains to depths of satisfaction that may be at once fun, but also profound and fulfilling (Stebbins, 2001). A serious leisure activity may, at times, be fun and enjoyable, but so may a casual leisure activity (Stebbins, 1982). The distinguishing characteristic is the depth of satisfaction/fulfillment found in serious leisure that is otherwise absent in casual leisure. Stebbins noted that at times, serious leisure may be no fun at all and that the rewards for participation are not necessarily immediate, but routinely delayed as was confirmed by Raisborough (1999) in a sample of Sea Cadet Corps volunteers.

Re-creation is the process of forming anew or creating one's self again; that is, the serious leisure participant retains a sense of renewal, regeneration or reinvigoration through participation (Stebbins, 2001d). Hastings et al. (1995) also assessed the component of re-creation as indicated by tensions release.

Financial return is simply remuneration for products or expertise resulting from serious leisure participation. Stebbins (2001d) noted that "financial return has by far been the weakest reward" among outcomes (p. 14). As noted by Kane and Zink (2004) and Green and Jones (2005), variations in manifestations of the six qualities reflect the multitude of contexts in which serous participation may occur. In contrast, enrichment and self-gratification respectively were ranked as the most profound outcomes with self-actualization ranked third in importance among those interviewed (Stebbins, 2001d). These findings were derived from weighted analyses in which study participants nominated outcomes among ten of the dimensions outlined here.

Group outcomes. The social reward of group attraction is defined as participation in, and association with, the social world of a serious leisure activity. Employing Unruh's (1979) conceptualization of social worlds, Stebbins (2001d) suggested that group attraction outcomes are derived from associating with other serious leisure participants or with clients in the case of volunteering. For group accomplishments, outcomes are derived from group efforts in completing a serious project or goal and provide for the participant a sense of helping, being needed and being altruistic. The same provisions are reflected in group maintenance, which pertains to efforts on behalf of the serious leisure participant to ensure that the serious leisure group is maintained, continues to develop, and remains a cohesive unit. Stakes in cohesion and solidarity for Buchanan (1985) allowed for satisfactions to be derived from "interaction within the group and from the feeling of belonging that results from the interaction" (p. 407). The social aspects of serious

leisure have been addressed as "comradeship" (Hunt, 2004), "sociability" (Hastings et al, 1995), and "family time and friendships" (Gibson et al, 2002), among others.

Unique ethos. The fifth quality of serious leisure, unique ethos, implies the existence of distinguishing ideals, values, sentiments, or guiding beliefs that are shared by members of a serious leisure social world (Stebbins, 2001d). Stebbins (1982) found that in a serious social world, "amateurs, hobbyists, and volunteers tend to develop subcultures composed of special beliefs, values, moral principles, norms and performance standards" (p. 257).

Identification with pursuit. The sixth quality of serious leisure is the strong identification of the participant with the chosen pursuit. Of the pursuits studied, Stebbins (1982) found that serious participants were "inclined to speak proudly, excitedly, and frequently about them to other people, and to present themselves in terms of them when conversing with new acquaintances" (p. 257). Thus, identity with a pursuit is a distinguishing character or condition of sameness of an individual with a pursuit and that the individual's perception of his or her involvement in and enactment of a leisure role is recognized by the self and by others (Stebbins, 2001d). For Yair (1992), commitment to a leisure pursuit was "an anchor for one's identity" (p. 259) and for Gillespie et al (2002) the serious leisure career is "time, resource, and therefore identity intensive" (p. 286) (See also Stalp, 2006).

With the aforementioned six qualities as a framework, the purpose of this investigation was to develop and test an instrument quantifying serious leisure as conceptualized by Stebbins (2001d).[1]

Methods

Item Pool Generation

Upon assessment of related existing measures (e.g. Jones & Crandall, 1986, Yair, 1992; Brewer, Raalte, & Linder, 1993), the authors developed definitions and operations for each dimension from which six to ten items were created. Particular attention was devoted to the creation of homogeneous item sets (Little, Lindenberge, & Nesselroade, 1999), while still addressing the breadth of the dimensions.

Q-Sort

According to Stephenson (1953), a Q-sort may involve having individuals with knowledge of the construct (serious leisure) sort the items to the definitions from which they were derived. Forty graduate students in the field of leisure and recreation participated in the Q-sort. We provided each graduate student with two documents: one containing the pool of items, ran-

[1] List of serious leisure dimensions and operations available upon request.

domly ordered, and a document with the definitions/operationalizations for each dimension of serious leisure. The task of the graduate students was to match each item with the definition from which it was created. The frequency of items matched to their specified definitions served to identify potentially heterogeneous and homogeneous items as addressed by Little et al (1999). Those items with high (80%-100%) consensus (matched to the specified definition) were retained; all others were eliminated. Of the 182 items in the initial pool, 120 were retained and refined in keeping with Little et al. (1999). The Q-sort aided in determining which indicators yielded a simple factor structure.

Expert Panel

After generation of the 120 item pool, we assembled a panel of five experts to critique both the definitions and the items reflecting them. The experts are from universities in the United States, Canada and Australia, and included the author of the serious leisure construct. Another member is noted for his research and scholarship in recreation specialization and its measurement. Another author is known for her scholarship in serious leisure and its quantification. We chose one expert for his scholarship in the social psychology of leisure behavior. We chose the psychometrician for his breadth of knowledge on survey design, statistical analyses and expertise in the area of instrument development and confirmatory factor analysis.

Expert Review

We contacted the experts by email and all communication with them was conducted in this manner. None of the recommended authors declined participation. We asked the experts to perform two main tasks: review and critique each definition and the items determining them. We provided the experts the definitions, and items, and allotted them two weeks to complete the critique. They provided feedback by inserting comments and recommendations into the document from which follow up emails provided additional clarifications. The authors discussed the feedback and made revisions based on those recommendations.

The expert review process resulted in the generation of 21 additional items although no definitions were augmented as a result. The reviewers recommended that additional items be created for the multidimensional operationalizations of self-expression, self-gratification, and personal career in the pursuit. For self expression, additional items reflected the expression of self, not only the expression of skills. For gratification, new items indicated enjoyment of the activity, as well as satisfaction with the pursuit. For the personal career dimension, additional items reflected contingencies in a career, not only progress in the pursuit. We revised the instrument to reflect these changes from which a pool of 141 items was to be tested.

The expert panel contributed to the establishment of the types of validity addressed in the initial phases of instrument development. First, the panel

aided in establishing face validity, which according to Anastasi (1988) indicates that the items appear to be capturing the essence of the appropriate construct. The panel also provided feedback on issues related to content validity to ensure that that the important content domain is covered with the indicators (Anastasi, 1988).

Instrumentation

The likert-type items developed for the SLIM utilized a nine point response scale ("Completely Agree", "Mostly Agree", "Moderately Agree", "Slightly Agree", "Neither Agree nor Disagree", "Slightly Disagree", "Moderately Disagree", "Mostly Disagree", "Completely Disagree"). The researchers chose the nine point response scale to ensure that respondents had multiple options (four, plus a "neutral" option) for agreement (serious orientation). To achieve symmetry, we developed multiple options for those in disagreement (casual orientation). Providing multiple items for agreement increased the variation in response options for those likely to score high/low on any given variable.

Participants

Sample 1: Convenience/students. We drew two samples to develop the SLIM. For sample 1, a convenience sample to examine the dimensionality and reliability of the instrument. Data collection involved the use of self administered internet surveys in both samples. The convenience sample consisted of 415 university students enrolled in leisure skill/activity classes at a mid sized institution in the Southeastern United States. Instructors provided students extra credit options as incentive to complete the questionnaire.

Sample 2: Targeted pursuits. To cross validate the instrument and demonstrate its reliability, the second sample targeted three specific pursuits. The inference is that the nature of participation within the pursuit has the potential to be "serious". Further, one might expect preliminary evidence of predictive ability to be reflected in orientation differences between convenience and target samples. Given that the convenience/students sample contained self-nominated activities such as rock climbing, horseback riding, music, fishing, writing, running, hunting and a number of mainstream sports, the target samples provided greater homogeneity of activity types. The minimization of variation in activity types provided an opportunity to assess the psychometric properties of the instrument across samples.

Three specific pursuits composed the targeted sample: the United States Adventure Racing Association (USARA), the All American Trail Running Association (AATRA) and Paddling.Net. The USARA, the nationally recognized governing body for adventure racing, claims a membership of approximately 15,000. Adventure racing may contain any of the following events: paddle sport (canoe and/or kayak racing), mountain biking, rappelling rock faces, orienteering/navigating natural expanses, and running and/or hiking. The AATRA membership includes several hundred runners. Paddling.Net is

an internet service that expedites the buying and selling of canoes, kayaks, related equipment and information, from which Paddling.Net claims 50,000 members. We contacted the directors of each organization and with their compliance, the organizations disseminated the link containing the questionnaire by electronic newsletters (USARA & Paddling.Net) and by posting the link on the AATRA homepage. Of the 485 who responded, there were 111 adventure racers, 99 trail runners and 275 paddlers. There were no follow up newsletters or postings of the link.

Data Analysis

In the convenience/students sample, we asked respondents to nominate three of their most favored free time pursuits. From these, one was selected by the respondent that was, in comparison to the others, more seriously pursued. The researchers screened these pursuits according to the framework of activity types within casual leisure (Stebbins 2001b). Examples of casual leisure activities identified and eliminated from analysis, include napping, watching TV, socializing, and consuming alcohol. A dichotomous conceptualization of the serious/casual leisure framework would indicate that the remaining activities (n = 265) have the potential for serious pursuance. Data screening of both samples involved calculations for leverage (Tabachnick & Fidell, 2001), kurtosis, and skewness in order to assess assumptions of normality and to identify/eliminate outliers. Those who completed less than 50% of the questionnaire and who completed fewer than 50% of the items composing any factor were eliminated. We factor analyzed the data from convenience/students (n = 256) and targeted pursuits (n = 276: 55 adventure racers, 46 trail runners, 175 paddlers) samples.

The researchers employed factor analysis in order to represent the structure of the covariances among measured variables within a common factor model of serious leisure. According to Fabrigar, Wegener, MacCallum, & Strahan (1999), for situations "in which a researcher has relatively little theoretical or empirical basis to make strong assumptions about how many common factors exist" (p. 277), EFA is the most sensible approach. However, EFA is unlikely to identify highly correlated factors in a model. Should there be "sufficient theoretical and empirical basis for a researcher to specify the model" (p. 277), CFA is an appropriate approach. Since CFA can provide structure for, and distinctions among, highly correlated factors, CFA was employed in the development of the SLIM.

Confirmation of Factor Structure

A factor structure is confirmed by fit indices. According to Hu and Bentler (1998), fit refers to the ability of a model to reproduce the covariances among the indicators; therefore the index is a quantification of the extent to which the covariances in the data are accounted for by the model. Cutoff values for fit indices should be applied cautiously since most indices are

affected by the number factors, number of indicators per factor and total number of indicators (see Kenny & McCoach, 2003; Marsh, Hau, & Wen, 2004).

For Hu and Bentler (1998), there is a minimal set of fit indices that should be reported and interpreted when conducting confirmatory factor analysis (CFA). These fit indices ought to include measures of absolute and incremental fit. Absolute fit indices, which measure the difference between the observed covariances and model implied covariances, include the model chi square, the root mean square error of approximation (RMSEA) (Steiger, 1990), and the standardized root mean square residual (SRMR). An absolute fit index value approaching .09 is considered good model fit and a value approaching .05 is considered excellent model fit.

In addition to reporting absolute fit indices, relative fit indices, derived from null models, should be reported (Kline, 2005). A relative fit index is the quantification of the extent to which a model substantially differs from a null model that specifies covariances of zero among the indicators. Recommended relative fit indices to be reported include the Comparative Fit Index (CFI; Bentler, 1990), and the Non-Normed Fixed Index (NNFI; Tucker & Lewis, 1973). For relative fit indices, values may range from zero to one with .90 being acceptable model fit and .95 being good fit (Hu & Bentler, 1998).

A lack of fit is caused by those items having covariances that are different from the model implied covariances; an indication that the factors do not account for the covariances among the items. Harm to model fit may be caused by (1) unusually high or low covariances between specific items within a factor (2) factoral complexity, that is, an unusually high covariances between an item and items indicating other factors, and (3) items sharing too similar wording and interpretation, indicating redundancy in the model (Kline, 2005).

The Lagrange Multiplier (LM) function within CFA provides an effective tool for identifying sources of misfit (Kline, 2005). The LM is a modification index expressed as a chi-square statistic; an estimation of "the amount by which the overall model chi-square statistic would decrease" if item pairs causing misfit were modeled or removed (p. 148). The LM function provides empirical identification of items causing harm to model fit.

Cross Validation

A primary purpose of the second sample was to confirm the psychometric properties of the measure in homogenous contexts. According to Noar (2003), it is essential to confirm the structure of a scale in a new set of individuals. Cross validation may reveal the appropriate uses of a scale, generate alternative versions of a scale, and possibly advance theory in a specific area. In order to cross validate the instrument, tests of Measurement Equivalence (ME) were conducted on the 67 items measured in both samples. According to Vandenberg and Lance (2000), "violations of measure-

ment equivalence assumptions are as threatening to substantive interpretations as is an inability to demonstrate reliability and validity" (p. 6).

Components of ME, in their recommended order of testing, include the omnibus test of matrix equivalence, and tests of configural and metric equivalence (Vandenberg & Lance, 2000). The omnibus test examines the equality of all covariance matrices across samples. This is seldom tested and rarely achieved, but if so, no further testing of equivalence would be necessary. Configural equivalence addresses the equality of factor structures across samples. Thus, a psychometrically sound instrument would effectively reflect the same factor structure across samples. Metric equivalence is an examination of the equality of factor loadings across samples.

In addition to confirming the factor structure, the targeted pursuits sample served as a test of 18 items developed from appraisals of the convenience/students sample items (n = 67). These items augment the factors with three or fewer items (personal enrichment, self-gratification-enjoyment, recreation & unique ethos) for the goal of obtaining 4 items per factor as recommended by Kline (2005) as the "best" number of indicators for factor identification and modeling (p. 314). The psychometric properties of the 72 item measure were examined by testing for evidences of construct validity, which according to Byrne (1998), includes convergent and discriminant validity. Convergent validity examines the extent to which independent measures reflect agreement (convergence) in quantifications of the same construct, and discriminant validity examines the extent to which independent measures reflect disagreement (divergence) in quantifications of the constructs. Evidences of convergent validity are demonstrated by the strength of factor loadings and estimates of the average variance explained (AVE) (Fornell & Larcker, 1981). Evidences of discriminant validity include significant differences found between highly correlated factors that may effectively represent the same construct in the model.

Finally, we assessed a 2nd order model by having the 18 factors load on the six qualities of serious leisure. The third quality, leisure career (progress & contingencies) and the fourth quality (durable outcomes, 12 factors) were designated 2nd order factors as outlined by Stebbins (2001d). In all, six CFA models were analyzed in this study: first, the convenience/students sample of self-nominated pursuits (67 items), then for cross validation, the 2nd sample of targeted pursuits (67 items). Model testing for the complete items include the 72 item SLIM (4 per factor) and Short form (54 items) CFAs. Last, we examined the 2nd order analyses for the SLIM and Short form models.

Results

Model Testing

We tested the six models of serious leisure using CFA in EQS (version 6.1). The goal of sample 1 model testing was to empirically identify, and ultimately retain, four items per factor that performed best in the model.

For the convenience/students model CFA, resultant Lagrange Multiplier (LM) calculations, and inspection of factor loadings, correlations and reliability estimates provided empirical support for the retention of items to four or less per factor. Of the 141 items tested, we retained 67 items for performing best in the model. Kline (2005) suggested that three item factors would sufficiently indicate the latent variable although 4 items would be "best" (p. 314) for SEM models. Therefore, we retained 4 item factors to ensure the "best" in future causal investigations.

See Table 1 for the 67 items retained from the convenience/student model. A summary of the fit indices for the convenience/student model (CFI = .93) and targeted pursuits model (CFI = .92) is reported in Table 2. These values indicate that the 18 factor model fits the data well in these samples.

We then analyzed the 67 items retested in the targeted pursuits model for equivalence across samples. In keeping with Vandenberg and Lance (2000), visual inspection of model fit indices revealed small differences between the two samples (e.g., CFIs = .93 & .92). This reflects the equality of the factor structure across samples. The test for metric equivalence revealed that only six of the 67 item factor loadings were significantly different at $p \leq .01$. We set alpha at .01 to reduce the Type I error rate for 67 comparisons with sample sizes of over 200. Inspection of the loadings for those 6 items that differed across samples reveals generally large loadings in both samples and relatively small differences, with the possible exception Self-Actualization Item 1. This item loading was lower in the targeted pursuits sample (.49 versus .73). Thus, the evidence does not support complete metric equivalence but there is strong and substantial evidence of partial metric equivalence; an indication that items were similarly interpreted across samples.[2]

In order to obtain a 72 item (four per factor) measure (Kline, 2005), we then analyzed the 67 items tested for equivalence with the 18 additional items developed for the targeted pursuits questionnaire. Resultant LM calculations and visual inspection of factor loadings, correlations and reliability estimates provided empirical support for the retention of 72 items which performed best in the model. The 72 item Serious Leisure Inventory & Measure (SLIM) model fit indices, summarized in Table 2, indicate acceptable fit. See Table 1 for the list of items composing the SLIM.

Short Form

In order to obtain a 54 item (3 per factor) SLIM Short Form, we analyzed the SLIM model CFA and retained the best performing items. Selection of 3 items per factor, from the SLIM, composes the SLIM Short Form. As reported in Table 2, The 54 item SLIM Short Form model fit indices indicate good fit. See Table 1 for the list of items composing the SLIM Short Form

[2]Factor loadings available upon request.

TABLE 1
72 Item Serious Leisure Inventory and Measure (SLIM)

Dimension	Items
Perseverance	1. If I encounter obstacles in _____, I persist until I overcome them.
	2.[a,b] If I encounter a difficult task in _____, I will persevere until it is completed.
	3. By persevering, I have overcome adversity in _____.
	4. I overcome difficulties in _____ by being persistent.
Effort	1.[a,b] I put forth substantial effort to improve my skills in _____.
	2. I try hard to become more competent in _____.
	3. I practice to improve my skills in _____.
	4. I am willing to exert considerable effort to be more proficient at _____.
Career Progress	1. I have improved at _____ since I began participating.
	2. Since I began _____, I have improved.
	3. I feel that I have made progress in _____.
	4.[a,b] I have progressed in _____ since beginning.
Career Contingencies	1.[a,b] I know of specific instances related to _____ which have shaped my involvement in it.
	2. For me, there are certain _____ related events that have influenced my _____ involvement.
	3. There are defining moments within _____ that have significantly shaped my involvement in it.
	4. There have been certain high or low points for me in _____ that have defined how involved I am in _____.
Personal Enrichment	1. I have been enriched by _____.
	2. _____ has added richness to my life.
	3.[a,b] Being involved in _____ has added richness to my life.
	4.[a] My _____ experiences have added richness to my life.
Self-Actualization	1. I make full use of my talent when _____.
	2. I reach my potential in _____.
	3. _____ has enabled me to realize my potentials.
	4.[b] I am realizing my fullest potential in _____.
Self-Express Abilities	1.[b] _____ allows me to express my knowledge and expertise.
	2. _____ is a way to display my skills and abilities.
	3. I demonstrate my skills and abilities when _____.
	4. My knowledge of _____ is evident when participating.
Self-Express Individual	1. _____ for me is an expression of myself.
	2. My individuality is expressed in _____.
	3.[b] Who I am is expressed through participation in _____.
	4. _____ allows me to express who I am.
Self-Image	1.[b] My view of myself has improved as a result of _____.
	2. My image of self has improved since I began _____.
	3. _____ has enhanced my self image.
	4. _____ has improved how I think about myself.
Self-Grat-Satisfaction	1. _____ provides me with a profound sense of satisfaction.
	2. My _____ experiences are deeply gratifying.
	3.[b] I find deep satisfaction in _____.
	4. _____ is intensely gratifying to me.

TABLE 1
(*Continued*)

Dimension		Items
Self-Grat-Enjoy	1.[b]	I find enjoyment in _____.
	2.	_____ is enjoyable to me.
	3.	_____ is fun to me.
	4.[a]	I enjoy _____.
Re-creation	1.	I feel renewed after _____ time.
	2.	I feel revitalized after _____ time.
	3.[b]	I feel invigorated after participating in _____.
	4.[a]	_____ is invigorating to me.
Financial Return	1.	Financially, I have benefited from my _____ involvement.
	2.	I have received financial payment as a result of my _____ efforts.
	3.[b]	I have been paid money as result of my skills and abilities in _____.
	4.	I have received monetary compensation for my _____ expertise.
Group Attraction	1.[b]	I associate with other people that are _____ participants.
	2.	I enjoy interacting with other _____ enthusiasts.
	3.	I value interacting with others that are also involved in _____.
	4.	I prefer associating with others that are devoted to _____.
Group Accomplishments	1.	A sense of group accomplishment is important to me in _____.
	2.[b]	My _____ group's accomplishments are very important to me.
	3.	Having helped my _____ group accomplish something makes me feel important.
	4.	I feel important when I am a part of my _____ group's accomplishments.
Group Maintenance	1.	The development of my _____ group is important to me.
	2.	I contribute to the unification of my _____ group.
	3.[b]	I find value in ensuring the cohesiveness of my _____ group.
	4.	It is important that I perform duties which unify my _____ group.
Unique Ethos	1.	I share many of the sentiments of my fellow _____ devotees.
	2.	Other _____ enthusiasts and I share many of the same ideals.
	3.	I share many of my _____ group's ideals.
	4.[a,b]	I share in the sentiments that are common among _____ enthusiasts.
Identity	1.	Others that know me understand that _____ is a part of who I am.
	2.	I am often recognized as one devoted to _____.
	3.[b]	Others identify me as one dedicated to _____.
	4.	Others recognize that I identify with _____.

[a]Items not included in tests of equivalence.
[b]Items not included in the 54 item short form.

TABLE 2
Fit Indices for Serious Leisure Models

Model	χ^2	df	SRMR[a]	RMSEA[a]	NNFI[b]	CFI[b]
1. Convenience/Students (67 items)	2875.9	1991	0.05	0.04	0.92	0.93
2. Targeted Pursuits (67 items)	3092.9	1991	0.05	0.05	0.91	0.92
3. SLIM (72 items)	3580.5	2331	0.06	0.04	0.91	0.91
4. Short Form (54 items)	1755.1	1224	0.05	0.04	0.94	0.95
5. SLIM 2nd order 6 Qualities	5849.6	2455	0.11	0.06	0.83	0.83
6. Short Form 2nd order 6 Qualities	3341.8	1348	0.10	0.06	0.84	0.85

Note: The Satorra-Bentler scaled maximum likelihood was applied to reconfigure the reliance on multivariate normality (Fouladi, 2000 & McDonald & Ho, 2002).
[a]Standardized root mean square (SRMR), root mean square error of approximation (RMSEA) (Steiger, 1990): Values $\leq$.05 indicate excellent fit.
[b]Non-normed fit index (NNFI), Comparative Fit Index (CFI) (Bentler, 1990): Values $\geq$.95 indicate good fit and values $\geq$.98 indicate excellent fit.

and Footnote 2 for factor loadings and reliability coefficients. In order to assess differences in measurement between the SLIM and its short form, we compared factor correlations between models. There were no significant differences at the $p \leq .01$ level, thus the sameness in factor correlations indicates that serious behavior is measured equally well with the SLIM and SLIM short form.[3]

Comparison of Factor Means

The targeted pursuits sample provided the opportunity to compare factor means with the self-nominated activities contained in the convenience/students sample. We did this to provide preliminary evidence of predictive validity where an instrument is used to estimate some important form of behavior (Nunnally, 1967). Although not an ideal criterion, the target sample likely includes more serious enthusiasts than the student sample. By inference, we expected factor means to be higher (scale reflected to indicate higher "Agreement" w/items) in the targeted pursuits sample, excepting financial return. Of the 18 factor means compared, 16 were significantly different at the $p \leq .05$ level; the self expression of abilities and group accomplishments factors did not differ across samples. Although students reported higher financial return, the targeted samples most notably indicated greater effort, progress, enrichment and gratification, among other factors. Factor differences across samples and pursuits by inference demonstrate preliminary evidence for the predictive ability of the SLIM. See Figure 1 for graph of factor means across samples.

[3]Factor correlations available upon request.

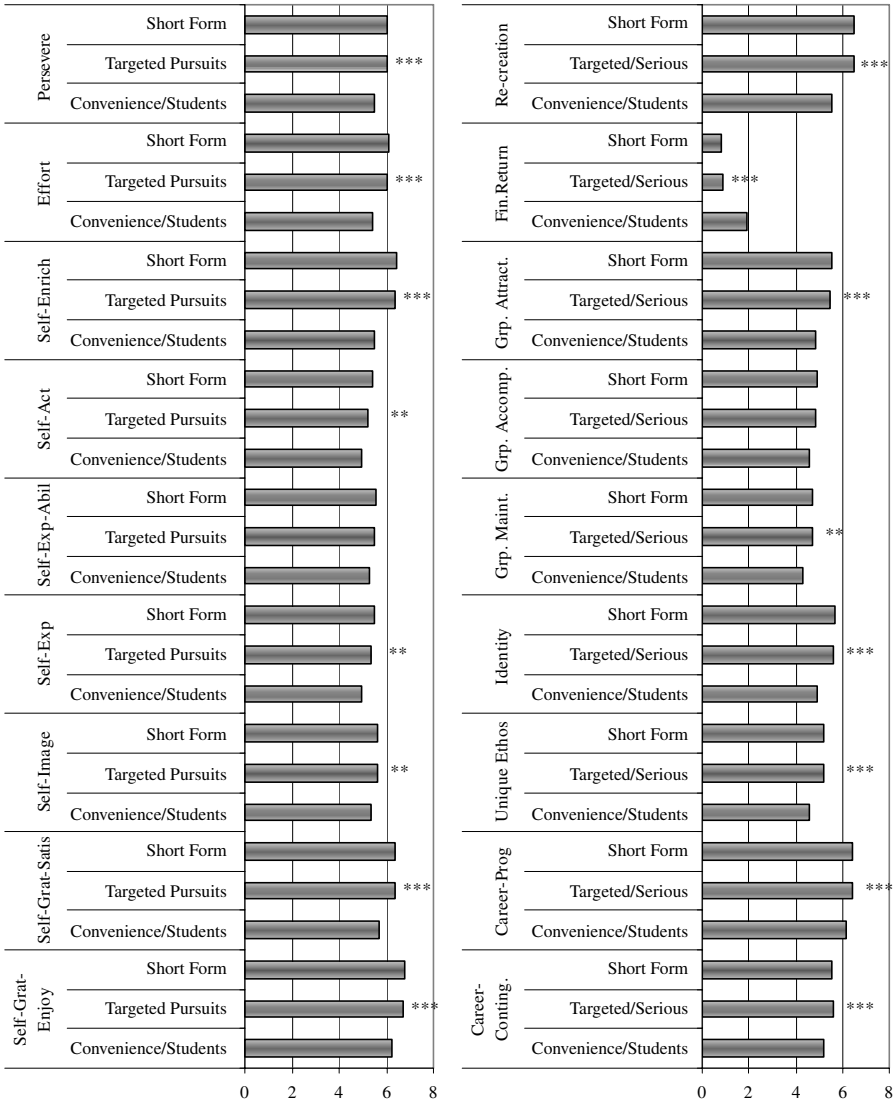

Figure 1. Factor means across samples and for SLIM short form.

Significant mean differences are depicted between Convenience/Students and Targeted Pursuits Samples (larger values indicate greater agreement).
* $p < .05$. ** $p < .01$. *** $p < .001$

Construct Validity Testing

For convergent validity, Fornell and Larcker (1981) recommended that item loadings exceed .707 and .5 for average variance explained (AVE) estimates. Overall, the loadings and AVE values provide evidence in support of the SLIM's convergent validity (See Footnote 2). Item loadings short of the recommendation include 7 for the 72 item SLIM and 5 for the Short form. Excepting self-actualization (AVE = .45 for both SLIM and Short form), all average estimates were above the recommended threshold; an indication that the factors are capturing more than 50 percent of the variation in the indicators. We tested discriminant validity by individually constraining the factor correlations to equal 1.0 in order to expose differences in the model chi squares. For the Short form, all factor correlations were significantly different at the $p \leq .01$ level. For the SLIM, only factors group accomplishments and group maintenance did not differ at the $p \leq .01$ level (See Footnote 3). Overall, these indicators of construct validity demonstrate that our scale is quantifying distinct components of the serious leisure framework.

2nd Order Model

We conducted a 2nd order analysis by having the 18 factors load on the 6 qualities of serious leisure. We designated the third quality, leisure career (progress & contingencies) and the fourth quality (durable outcomes), as 2nd order factors (Stebbins, 2001d). A summary of the fit indices for the SLIM 2nd order model (CFI = .83) and Short form 2nd order model (CFI = .85) is reported in Table 2. Comparing these fit indices with the 1st order models of the SLIM (CFI = .91) and Short form (CFI = .95) indicate that the 2nd order models fit the data only moderately well at best. Inspection of 2nd order factor loadings reveal that the third quality of progress and contingencies had loadings greater than .75 in the SLIM and Short form. For the fourth quality, self-gratification enjoyment had generally low loadings whereas self-expression abilities and self-expression individuality had high loadings in the SLIM and Short form. Although these findings provide moderate support for the six qualities 2nd order model, more data are required to expose a succinct structure that spans contexts.

Results Summary

Findings indicate that the SLIM performed within the acceptable ranges of psychometric test development, especially for a multifactor rating instrument with many item level indicators and many factors (Marsh et al., 2004). Configural equivalence from two samples (CFIs = .93 & .92) revealed that the relations among the items retained form across samples; an indication of construct validity. Convergent validity was demonstrated by the strength of AVE values and loadings. Discriminant validity was evidenced by the number of significant differences from 1 among factor correlations. Establishing

strong and substantial evidence of partial metric equivalence (sameness in factor loadings) is a reflection that the items predict equally well across samples. Given that 16 of 18 factor means significantly differed across samples/pursuits, support for the predictive ability of the SLIM was evidenced. These tests reveal that, overall, the SLIM performed well in assessments of multiple leisure contexts.

Conclusion

Discussion

The purpose of this investigation was to test and develop an instrument measuring the construct of serious leisure as conceptualized by Stebbins (1982, 1992, 2001d). Test results provided strong support for the reliability and validity of the SLIM as a comprehensive assessment of the 18 first order factors identified here. The researchers developed items with a q-sort, expert panel, and cross validated to demonstrate acceptable fit, reliability and equivalence across samples. It is our contention that the 18 first-order factors represent a comprehensive assessment of the construct. However, future research is needed to accurately identify the higher order structure. Future data from multiple samples may reveal a succinct structural model and provide guidance in discerning what qualifies as serious leisure. This discussion may partially rest on the acquisition of demonstrable skills over the course of the leisure career as an important qualifier for distinguishing those contexts which are conducive to serious participation. For example, ardent fans of sports, music or Star Trek may be "serious" and knowledgeable about their respective pursuits, yet skill acquisition may remain noticeably absent.

The breadth of the framework has presented important caveats in the scoring and interpretation of the SLIM. First, the SLIM is not a simple additive index of 18 factors that reflect "seriousness" in a pursuit. Rather, scoring is driven by both theory and context. For example, Stebbins (2001d) noted that among the few amateurs and volunteers who were actually paid, the remunerations were "too small to contribute significantly to their livelihood;" thus "financial return has by far been the weakest reward" (p. 14). Therefore, a score low on financial return would not reflect a lack of seriousness. Such values might reflect, however, a growing interest in using an activity as a springboard for a livelihood (i.e., finding "devotee work," Stebbins, 2004). Also, one would not expect participants who pursue their activity in solitude to necessarily score high on group related variables (i.e. group accomplishments). Kane and Zink (2004), and Green and Jones (2005) noted that the six qualities of serious leisure manifest differently across contexts providing support for our findings.

Complexities in measurement indicate that the fourth quality, durable outcomes, need not be considered an additive reflection of seriousness. We propose that these 10 outcomes (12 factors) compose an inventory from which resultant factor scores may be explored. The remaining five qualities (six factors) may be treated as additive indices of a serious orientation. Thus,

the SLIM is composed of five qualities (six factors) reflecting a serious orientation and an inventory of outcomes (12 factors) that is scored separately, not as an additive indication of seriousness, but as an assessment of the fourth quality durable outcomes (Stebbins, 2001d).

Although few scholars have applied comparable psychometrics to the construct, our findings were consistent with previous assessments. Kane and Zink (2004) observed the importance of "training and skills advancement" (p. 337) for kayakers. Baldwin and Norris (1999) noted that careers and the progressive development of skills were observed in dog sports. For the fourth quality, durable outcomes, our findings support previous investigations of self-actualization and self-expression (Jones & Symon, 2001), self-image enhancement (Jones, 2000), renewal as tension release (Hastings et al. 1995), social roles (Bryce & Rutter, 2003), and financial return (Gillespie et al., 2002; Stalp, 2006). Our findings also supported previous inquiries (Jones, 2000; Kane & Zink, 2004; Gillespie et al. 2002) into strong identification, and the existence of leisure social worlds and their pervading ethos (e.g., Baldwin & Norris, 1999).

Implications

For the individual, Stebbins (2001c) suggested that a serious orientation can serve to alleviate a sense of "ennui and listlessness rooted in the unsettling realization that one's life is unfolding in a way largely, if not entirely, devoid of any significant excitement" (p. 53) Iso-Ahola and Weissinger (1987) also found that the accumulation of leisure skills is an effective tool in alleviating boredom (see also Iso-Ahola & Crowely, 1991). Stebbins maintained that a profound lifestyle awaits anyone who is routinely involved in a serious career, and that these lifestyles may directly or indirectly benefit the wider community (Jones & Symon, 2001; Gibson et al. 2002), despite familial tensions and conflicts (Goff, Fick, & Opplinger, 1997). Ultimately, for Hunt (2004), serious leisure in a postmodern culture is considered a "search for meaning and identity" through which "individuals may establish a sense of community, belonging and a coherent life-style" (p. 402). The SLIM can serve to broaden our understanding of the potentially health improving properties of serious leisure choices.

For the body of leisure knowledge, there is no existing measure that uniformly explores the dimensions of serious leisure. The SLIM may serve to confirm previous research, and provide insights into causal direction. An improved ability to potentially distinguish "casual" from "serious" behavior may provide a standardized approach to practical application. Yoder (1997) noted that commodity agents benefit most from commodity intensive leisure activities, and through marketing, may have great influence on the leisure activity itself. SLIM assessments may provide event organizers, clubs, specialized publics, and commodity producers with useful information in the organization, promotion and experience of the activity (Bryce & Rutter, 2003).

An ability to predict those likely to continue a serious career may provide useful insights for those that structure and implement specific programs.

Recommendations for Future Research

Certainly, the most immediate goal is continued refinement and testing of the SLIM to achieve a more reduced measure. Yair (1992) noted the need for focused inquiries to unravel the causal connections in models of commitment and serious leisure. Perhaps future research will classify and compare types of leisure (for example, physically active vs. passive/cerebral participation) as well as types of serious participation (devotees, participants, and dabblers) (Stebbins, 1992). Hastings et al. (1995) noted that future research ought to include comparisons of "adults pursuing similar careers in either other sports or types of leisure activities" (p. 115) so as to broaden our ability to generalize from multiple perspectives. Yoder (1997) suggested that additional research could be undertaken to compare commodity intensive serious leisure with pursuits that are less so. The SLIM can aid in classifying and comparing types of serious leisure and provide structure to activity specific contexts.

Raisborough (1999), and Bryce and Rutter (2003), encouraged further research of the gender specific motivations and behaviors surrounding pursuits. McQuarrie and Jackson (1996) also noted that "there are rich opportunities for further exploration of the linkages between serious leisure and leisure constraints" (p. 476; McQuarrie & Jackson, 2002). Given that a leisure career may take years, if not an entire lifetime, Yair (1992) advocated longitudinal methods in future serious leisure research. Gibson et al. (2002) suggested that "adopting a lifecourse perspective might enable us to better understand how a serious leisure career is contextualized within the life journey of individuals" (p. 419). The ability to trace the leisure and leisure-to-work careers of novice pursuers, seasoned amateurs and established professionals may yield practical insights.

Given that qualitative inquires have framed the construct, continued testing of the SLIM in conjunction with existing measures and ethnographic investigations enhances our ability to thoroughly examine the multidimensional complexities. These efforts may provide a standardized approach to the study of the nomological network of interrelated constructs encompassing serious leisure, commitment, recreation specialization and involvement.

References

Anastasia, A. (1988). *Psychological Testing.* New York: Macmillan.

Baldwin, C. K., & Norris, P. A. (1999). Exploring the dimensions of serious leisure: "Love me—love my dog!". *Journal of Leisure Research, 31,* 1-17.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107,* 238-246.

Brewer, B., Van Raalte, J., & Linder, D. (1993). Athletic Identity: Hercules' Muscles or Achilles Heel? *International Journal of Sport Psychology, 24,* 237-254.

Bryce, J., & Rutter, J. (2003). Gender dynamics and the social and spatial organization of computer gaming. *Leisure Studies, 22,* 1-15.

Buchanan, T. (1985). Commitment and leisure behavior: A theoretical perspective. *Leisure Sciences, 7,* 401-420.

Byrne, B. M. (1998). *Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming.* Mahwah, NJ: Erlbaum Associates.

Csikszentmihalyi, M., & Kleiber, D. A. (1991). Leisure and self-actualization. In B. L. Driver & P. J. Brown (Eds.). *Benefits of leisure* (pp. 91-102). State College, PA: Venture Publishing.

Driver, B. L., Brown, P. J. & Peterson, G. L. (1991). *Benefits of leisure.* State College, PA: Venture Publishing Inc.

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods, 4,* 272-299.

Fornell, C., & Larcker, D. (1981). Evaluation structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 28,* 39-50.

Fouladi, R. T. (2000). Performance of modified test statistics in covariance and correlation structure analysis under conditions of multivariate nonnormality. *Structural Equation Modeling, 7,* 356-410.

Gibson, H., Willming, C., & Holdnak, A. (2002). "We're Gators . . . not just Gator fans": Serious leisure and University of Florida football. *Journal of Leisure Research, 34,* 397-425.

Green, C. B., & Jones, I. (2005). Serious leisure, social identity and sport tourism. *Sport in Society, 8,* 164-181.

Goff, S. J., Fick, D. S., & Opplinger, R. A. (1997). The moderating effect of spouse support on the relation between serious leisure and spouses' perceived leisure family conflict. *Journal of Leisure Research, 29,* 47-60.

Harrington, M., Cuskelly, G., & Auld, C. (2000). Career volunteering in commodity intensive serious leisure. Motorsport events and their dependence on volunteers/amateurs. *Society and Leisure, 23,* 421-452.

Hastings, D. W., Kurth, S. B., Schloder, M., & Cyr, D. (1995). Reasons for participating in serious leisure: Comparison of Canadian and U.S. masters swimmers. *International Review for the Sociology of Sport, 30,* 101-119.

Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods, 3,* 424-453.

Hunt, S. J. (2004). Acting the part: 'living history' as a serious leisure pursuit. *Leisure Studies, 23,* 387-403.

Iso-Ahola, S., & Weissinger, E. (1987). Leisure and Boredom. *Journal of Social and Clinical Psychology, 5,* 356-364.

Iso-Ahola, S., & Wessinger, E. (1991). Adolescent Substance Abuse and Leisure Boredom. *Journal of Leisure Research 23,* 260-271.

Jones, A., & Crandall, R. (1986). Validation of a short index of Self-actualization. *Personality and Social Psychology Bulletin, 12,* 63-73.

Jones, I. (2000). A model of serious leisure identification: the case of football fandom. *Leisure Studies, 19,* 283-398.

Jones, I., & Symon, G. (2001). Lifelong learning as serious leisure: policy, practice and potential. *Leisure Studies, 20,* 269-284.

Kane, M. J., & Zink, R. (2004). Package adventure tours: markers in serious leisure careers. *Leisure Studies, 23,* 329-345.

Kenny, D. A., & McCoach, D. B. (2003). Effect of number of variables on measures of fit instructural equation modeling. *Structural Equation Modeling, 10,* 333-351.

Kline, R. B. (2005). *Principals and practice of structural equation modeling* (2nd ed.). New York: Guilford Press.

Little, T. D., Lindenberge, U., & Nesselroade, J. R. (1999). On selecting indicators for multivariate measurement and modeling with latent variables: When "good" indicators are bad and "bad" indicators are good. *Psychological Methods, 4,* 192-211.

Marsh, H. W., Hau, K., & Wen, Z. (2004). In search of golden rules: Comments on hypothesis-testing approaches to setting cutoff values for fit indexes and danger in overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling, 11,* 320-341.

McDonald, R. P., & Ho, M.-H. R. (2002). Principles and practice in reporting structural equation modeling. *Psychological Methods, 7,* 64-82.

McQuarrie, F. & Jackson, E. L. (1996). Connections between negotiations of leisure constraints and serious leisure. An exploratory study of adult amateur ice skaters. *Society and Leisure, 19,* 459-481.

McQuarrie, F. & Jackson, E. L. (2002). Transitions in Leisure Careers and Their Parallels in Work Careers: The Effect of Constraints on Choice and Action. *Journal of Career Development, 29,* 37-53.

Noar, S. M. (2003). The role of structural equation modeling in scale development. *Structural Equation Modeling, 10,* 622-647.

Nunnally, J. (1967). *Psychometric theory.* NY: McGraw-Hill.

Orr, N. (2006). Museum volunteering: Heritage as "serious leisure". *International Journal of Heritage Studies, 12,* 194-210.

Raisborough, J. (1999). Research Note: The Concept of Serious Leisure and Women's Experience of the Sea Cadet Corps. *Leisure Studies, 18,* 67-71.

Shamir, B. (1988). Commitment and leisure. *Sociological Perspectives, 31,* 238-258.

Stalp, M. C. (2006). Negotiating time and space for serious leisure: quilting in the modern U.S. home. *Journal of Leisure Research, 38,* 104-132.

Stebbins, R. A. (1982). Serious leisure: A conceptual statement. *Pacific Sociological Review, 25,* 251-272.

Stebbins, R. A. (1992). *Amateurs, professionals, and serious leisure.* Montreal: McGill-Queen's University Press.

Stebbins, R. A. (1997). Casual Leisure: A conceptual statement. *Leisure Studies, 16,* 17-25.

Stebbins, R. A. (2001a). The costs and benefits of hedonism: some consequences of taking casual leisure seriously. *Leisure Studies, 20,* 305-309.

Stebbins, R. A. (2001b, May/June). Serious Leisure. *Society, 38,* 53-57.

Stebbins, R. A. (2001c). Deviance in Leisure. In Clifton D. Bryant (Eds.), *Encyclopedia of criminology and deviant behavior* (pp. 195-199). Bristol, PA: Taylor & Francis.

Stebbins, R. A. (2001d). *New directions in the theory and research of serious leisure.* Lewiston, NY: Edwin Mellen Press.

Stebbins, R. A. (2004). *Between work and leisure: The common ground of two separate worlds.* New Brunswick, NJ: Transaction Publishers.

Stephenson, W. (1953). *The study of behavior: Q technique and its methodology.* Chicago: University of Chicago Press.

Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research, 25,* 173-180.

Tabachnick, B.G. & Fidell, L.S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn & Bacon.

Tucker, C. & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika, 38,* 1-10.

Unruh, D. R. (1979). Characteristics and types of participation in social worlds. *Symbolic Interaction, 2,* 115-127.

Vandenberg, R. J. & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods, 2,* 4-69.

Yair, G. (1992). What keeps them running? The "circle of commitment" of long distance runners. *Leisure Studies, 11,* 257-270.

Yoder, D. (1997). A model for commodity intensive serious leisure. *Journal of Leisure Research, 20,* 407-430.