

## Modeling Family Leisure and Related Family Constructs: A National Study of U.S. Parent and Youth Perspectives

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### Abstract

The purpose of this study was to begin the development of a broad model that could examine the structural relationships between family leisure involvement, family functioning, family communication, family leisure satisfaction, and satisfaction with family life among a large sample of families ( $n = 898$ ) from the United States. Findings from both parent and youth perspectives were consistent with previous studies that examined the same variables individually and provided a possible picture of how these family variables might relate to one another in the broader context of family leisure. Slight differences between the parent and youth models added further insight and reemphasized the value related to examining family variables from different perspectives within families. Implications, limitations, and recommendations were discussed.

*KEYWORDS: Family leisure involvement, family functioning, family communication, family leisure satisfaction, satisfaction with family life, core and balance family leisure*

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The past decade has seen a resurgence of interest in family leisure and a dramatic increase in family leisure research. The Core and Balance Model of Family Leisure Functioning (Zabriskie & McCormick, 2001) has provided a useful theoretical framework for examining family leisure among diverse family samples including traditional families (Zabriskie & McCormick, 2001), adoptive families (Freeman & Zabriskie, 2003), single-parent families (Hornberger, 2007; Smith, Taylor, Hill, & Zabriskie, 2004), families with a child with a disability (Dodd, Zabriskie, Widmer, & Eggett 2009), families with a child with symptoms of eating disorders (Baker, 2004), nonresident father's families (Swinton, Freeman, Zabriskie, & Fields, 2008), Samoan families (Fotu, 2007), and Mexican-American families (Christenson, Zabriskie, Eggett, & Freeman 2006). Findings have consistently supported the tenets of the model from different perspectives within the family including parents, young adults, and young adolescents and have provided considerable insight into the relationship of family leisure and family functioning. Researchers have also utilized the Core and Balance framework to examine the contribution of family leisure to a variety of related constructs including family communication (Smith, Freeman, & Zabriskie, 2009), family leisure satisfaction (Agate, Zabriskie, Agate, & Poff, 2009; Johnson, Zabriskie, & Hill, 2006), and satisfaction with family life (Zabriskie & McCormick, 2003). Researchers have not, however, been able to access large enough samples of families to simultaneously examine the relationship between family leisure and these related constructs. Therefore, the purpose of this study was to begin the process of developing and testing of a broad structural equation model that examines the structural relationships between family leisure involvement, family functioning, family communication, family leisure satisfaction, and satisfaction with family life among a large sample of families from the United States.

### Literature Review

#### *Family Leisure*

Researchers have reported significant relationships between family leisure involvement and positive family outcomes for many years (Holman & Epperson, 1989; Orthner & Mancini, 1991). Hawks (1991) concluded that six decades of family leisure research had consistently reported family cohesiveness or strength to be related to family leisure activity. Although the relationship between family leisure and positive family outcomes such as aspects of family functioning was fairly well established in this early body of research, there were also consistent criticisms. Orthner and Mancini claimed that family leisure research had lacked the use of an adequate theoretical framework and that most findings were limited to "the idiosyncrasies of the investigation at hand" (p. 299). Holman and Epperson indicated that theory had been underused by researchers in the family leisure area, and argued that "research that is descriptive and explanatory without being a clear step to creating testable theoretical propositions is of negligible value" (p. 291). In response to such criticisms the Core and Balance Model of Family Leisure Functioning was developed and tested. (Zabriskie, 2000; Zabriskie & McCormick, 2001).

*Core and Balance Model of Family Leisure Functioning.* The Core and Balance Model of Family Leisure Functioning is grounded in family systems theory and indicates that involvement in different patterns of family leisure contribute to family functioning in different ways. Iso-Ahola (1984) indicated that people have a tendency to look for both stability and change, structure and variety, and familiarity and novelty in their leisure. That is, individuals tend to meet needs for both stability and change through their leisure behavior. Freeman & Zabriskie (2003) explained that the interplay and balance between stability and change plays a much greater role when considering the needs of a family as a whole. They clarified that the balance of these needs is an underlying concept of family systems theory which indicates that families continually seek a dynamic state of homeostasis. In other words, families must both meet the need for stability in interactions, structure, and relationships, as well as the need for novelty in experience, input, and challenge, in order to function effectively (Klein & White, 1996).

The Core and Balance Model indicates that there are two basic categories or patterns of family leisure, core and balance, which families utilize to meet needs for both stability and change, and ultimately facilitate outcomes of family cohesion and adaptability which are primary components of family functioning. Core family leisure includes "common, everyday, low-cost, relatively accessible, often home-based activities that many families do frequently" (Zabriskie & McCormick, 2003, p. 168). This may include family activities such as playing board games together, making and eating dinner together, shooting hoops in the driveway or just hanging out in the yard. Such activities provide a safe, consistent, and typically positive context in which family relationships can be enriched and feelings of family closeness increased. Balance family leisure, on the other hand is "depicted by activities that are generally less common, less frequent, more out of the ordinary, and usually not home-based thus providing novel experiences" (Zabriskie & McCormick, 2003, p. 168). This may include family activities such as vacations, camping, fishing, special events, and trips to sporting events or theme parks. They tend to be more out of the ordinary and "include elements of unpredictability or novelty, which require family members to negotiate and adapt to new input and experiences that stand apart from everyday life" (Freeman & Zabriskie, 2003, p. 77).

Core family leisure involvement tends to facilitate feelings of closeness, personal relatedness, family identity and bonding. Balance family leisure involvement provides the input necessary for families to be challenged, to develop, to adapt, to progress as a working unit and helps foster the adaptive skills necessary to navigate the challenges of family life in today's society. Family systems theory (Olson, 1986) holds that these two constructs, family cohesion and family adaptability, are the primary components of family functioning. Similarly, findings (Freeman & Zabriskie, 2003, Zabriskie & McCormick, 2001) related to the Core and Balance Model suggest that both categories are essential, and that families who regularly participate in both core and balance types of family leisure activities report higher levels of family functioning than those who participate in high or low amounts of either category.

### *Family Functioning*

Researchers who have utilized the Core and Balance Model as a theoretical framework have consistently reported direct relationships between family leisure involvement and family functioning. Zabriskie and McCormick (2001) reported significant correlations between family leisure involvement and aspects of family functioning from the perspective of young adults who had recently left the home to attend college. Zabriskie (2000) reported direct relationships between the same variables among a broad sample of traditional families. Findings were consistent when measured from a parent perspective, a young adolescent perspective, or an overall family perspective.

In a known group study, researchers (Zabriskie & Freeman, 2004) tested the relationship among families with transracial adoptive children. They hypothesized that not only would there be significant correlations between family leisure and family functioning variables, but that since the literature indicated that intact adoptive families report higher levels of family functioning when compared to typical biological families, according to the model they should also report higher levels of family leisure involvement. Findings indicated positive relationships between family leisure variables and family functioning variables from parent, youth, and family perspectives. Furthermore they reported that when considering other sociodemographic characteristics such as age, gender, race, family size, religion, history of divorce, and annual family income, family leisure involvement was the only significant predictor of family functioning. They also reported higher family cohesion, adaptability, and overall family functioning, as well as higher core, balance, and total family leisure involvement among the adoptive sample. Other studies have reported similar findings when examining samples of families that included a child with a developmental disability, (Dodd et al., 2009) and single parent families (Hornberger, 2007; Smith, Taylor, Hill, & Zabriskie, 2004). In general, when examining a variety of different types of families from multiple views including parent, young adult, young adolescent, and family perspectives, family leisure researchers have consistently reported direct relationships between family leisure and family cohesion, adaptability, and overall family functioning.

### *Family Communication*

Family communication is another construct commonly considered in family leisure research. Several scholars (Bandoroff & Scherer, 1994; Huff, Widmer, McCoy, & Hill, 2003; Kugath, 1997) have consistently reported improvements in family communication after joint involvement in various outdoor recreation programs among small samples of families. Orthner and Mancini (1991) explained that family leisure experiences were essential in providing opportunities for, as well as being a facilitating mechanism for communication between family members. Shaw and Dawson (2001) reported that parents in their study "consciously and deliberately" (p. 223) planned and facilitated family leisure in an effort to enhance family communication.

Furthermore, one of the most commonly used family systems models (Olson, 1993) considers communication to be the critical facilitative dimension which allows families to move back and forth along family cohesion and adaptability

continua. Zabriskie & McCormick (2001) argued that family leisure is both facilitative of, and provides a relaxed and positive context for family communication, and therefore, tends to be an antecedent to healthy family communication. Based on this knowledge, Smith, Freeman, and Zabriskie (2009) examined family communication within the Core and Balance family leisure framework from a youth perspective. They reported direct relationships between both core and balance family leisure and family communication. They also used path analyses to report that family communication significantly mediated the relationship between core family leisure and family adaptability, and between balance family leisure and family cohesion. Authors recommended that future research also include a parent perspective, as well as access a larger sample which would allow scholars "to further test the structural paths and the theoretical directionality of relationships between family leisure, family communication, family functioning and other related family variables with more advanced statistical procedures such as structural equation modeling" (p. 88).

#### *Family Leisure Satisfaction*

Another variable related to leisure participation or involvement which is often correlated with positive outcome variables such as life satisfaction or quality of life is leisure satisfaction. When examining individuals, Russell (1987) reported that it was the satisfaction with the involvement in leisure activities that influenced life satisfaction rather than the frequency of the involvement. In a similar study (1990) when considering other variables including religiosity, marital status, education, gender, age, health, income, and leisure participation, the only significant and direct predictor of quality of life was leisure satisfaction.

When considering couple leisure involvement, a long history of studies have consistently reported strong relationships between joint leisure and marital satisfaction (Holman, 1981; Holman & Jacquart, 1988; Miller, 1976; Orthner, 1975; Smith, Snyder, & Monsma, 1988). Similar findings have been reported in different cultures as well (Ahn, 1982; Bell, 1975; Palisi, 1984). More recently, researchers (Johnson, Zabriskie, & Hill, 2006) used the Core & Balance framework to attempt to clarify previous findings. They examined couple leisure involvement, leisure time, and leisure satisfaction as they related to marital satisfaction. They found that it was not the level or amount of couple leisure involvement or satisfaction with the amount of time couples spent together, but satisfaction with joint leisure, particularly with core joint leisure, that contributed to marital satisfaction.

Recently, Agate et al. (2009) were perhaps the first to examine leisure satisfaction among families. They utilized the Core and Balance framework to examine the contribution of family leisure satisfaction to satisfaction with family life when controlling for sociodemographic variables and family leisure involvement. They found that a family's satisfaction with their leisure involvement together was clearly the best predictor of overall satisfaction with family life among a sample of approximately 900 families in the U.S., even when accounting for family income, marital status, age, history of divorce, and family leisure involvement. They also reported that satisfaction with core family leisure involvement was the single greatest predictor of satisfaction with family life and it explained up to twice

as much variance as balance family leisure satisfaction from a parent, youth, and family perspective. The authors concluded that satisfaction with family leisure involvement, particularly when based in and around the home, was the single best predictor of satisfaction with family life among families in their sample.

#### *Satisfaction with Family Life*

Life satisfaction, marital satisfaction, and family satisfaction are common dependent or outcome variables that have received increased attention in the social sciences in the last decade (Zabriskie & McCormick, 2003). Most definitions of life satisfaction were derived from Shin and Johnson (1978) who explained the construct as a judgmental process in which individuals assess the quality of their lives based on their own set of criteria. Pavot and Deiner (1993) elaborated and defined life satisfaction as "a conscious cognitive judgment of one's life in which the criteria for judgment are up to the person" (p. 64). Similarly, family satisfaction can be defined as a conscious cognitive judgment of one's family life in which the criteria for judgment are up to the person.

As family leisure scholars moved from marital studies only and began to examine the role of family leisure among the family as a whole, several scholars (Mactavish & Schleien, 1998; Scholl, McAvoy, Rynders & Smith, 2003; Shaw & Dawson, 2001) identified family satisfaction as an outcome related to participation in family leisure. Zabriskie and McCormick (2003) used the Core and Balance framework and also reported a positive relationship between family leisure involvement and satisfaction with family life from a parent's perspective, but not from a child's perspective. Furthermore, they argued that family leisure is likely to be an antecedent to satisfaction with family life. Subsequently, Agate and colleagues (2009) used the same framework and reported (as noted above) that both core and balance family leisure satisfaction were significant predictors of satisfaction with family life.

The use of the Core and Balance framework has presented the opportunity for researchers to consistently examine family leisure and related constructs such as family functioning, family communication, family leisure satisfaction, and satisfaction with family life, across samples and perspectives thus facilitating clear steps "to creating testable theoretical propositions" (Holman & Epperson, 1989, p. 291). Family leisure researchers have not, however, been able to access large enough samples of families to afford the use of more sophisticated analyses to examine directional relationships of all of these family constructs at the same time. Therefore, the purpose of this study was to begin the development of a broad model that could examine the structural relationships between family leisure involvement, family functioning, family communication, family leisure satisfaction, and satisfaction with family life among a large sample of families in the United States. Directionality of relationships between family variables in the model was based on findings from previous work within the core and balance framework. Considering the exploratory nature of this study and the lack of explanatory significance of sociodemographic variables in previous works, only primary research variables were included in this initial stage of model development.

## Methods

### *Sample*

Data were collected in cooperation with an online survey sampling company which draws subjects from a representative multi-source internet panel of 2.2 million households willing to participate in online research based on the researcher's sample criteria. The research questionnaire for this study was completed by a national sample of families residing in U.S. households containing at least one child (11-15 years old). Initial responses included 1026 families; after initial screening the remaining sample consisted of 898 families. Each responding family was required to submit two completed responses: one from a parent and one from a child between the ages of 11 and 15 years. The majority of parent respondents were female (75.5%) and ranged from 22 to 60 years of age with a mean age of 41.96 ( $SD = 7.13$ ). Youth respondents were more evenly split in terms of gender (male = 51.1%) and ranged from 11 to 15 years with a mean age of 13.00 ( $SD = 1.42$ ).

A slight majority of respondents (58.6%) lived in urban/suburban areas (population > 50,000). Approximately 80% of the parents were married, 4% were single/never married, 10.7% were separated/divorced/widowed, and 5.5% lived with a domestic partner. A history of divorce was reported by 36.9% of respondents. Ethnic majority of the parents was white (86.7%) with minority represented by Hispanic (.7%), Pacific Islander (.1%), Native American (1.4%), Asian (1.6%), Black (4.5%) and other (6.6%). Youth ethnic majority was also white (84.3%) with minority represented by Hispanic (5%), Pacific Islander (.7%), Native American (1.3%), Asian (1.9%), and Black (6.8%). The average family size was 4.47 people with a reported range from 2 to 15 family members. The households were located in the following census regions: Northeast (20.4%), Midwest (27.5%), South (36%), and West (16%). Annual income ranged from less than \$20,000 to over \$150,000 with a median income of \$50,000-\$59,999.

When the sample was compared to current census data for the U.S., parent gender was more female while the youth gender was the same (51.2% male) (U.S. Census Bureau, 2008). In terms of ethnicity the current sample was only slightly more white, with 81.1% of all residents in the U.S. being white compared to 86.7% in this study. In terms of census regions the current sample was quite similar to census data (Northeast 19.1%, Midwest 22.9%, South 35.6%, and West 22.5%) with slightly more respondents from the Midwest and slightly less from the West reflected. The current sample was also reflective of annual income with the real median income for all households in 2007 being \$50,233 (DeNavas-Walt, Proctor, & Smith (2008). Furthermore, marital status was also similar with the census data indicating 78.1% married compared to 80% in the sample (U.S. Census Bureau, 2007). Overall, the current sample was generally reflective of the U.S. population based on 2007 reports of Census information.

### *Instrumentation*

The research questionnaire included six sections a) the Family Leisure Activity Profile (FLAP) used to measure family leisure involvement (Zabriskie & McCormick, 2001), b) the Family Leisure Satisfaction Scale (FLSS) which is embedded

in the FLAP, c) The Family Adaptability and Cohesion Scales (FACES II) (Olson, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1992), d) the Family Communication Scale (FCS) (Olson, Gorall, & Tiesel, 2004), e) the Satisfaction with Family Life Scale (SWFL) (Zabriskie & McCormick, 2003), and f) relevant sociodemographic questions.

*Core and Balance Family Leisure Involvement.* The Family Leisure Activity Profile (FLAP) measures core and balance family leisure involvement based on the Core and Balance Model of Family Leisure Functioning (Zabriskie, 2000). Eight questions refer to core family leisure activities and eight refer to balance activities. Each question asks if the respondent participates in the activity category with family members. If yes, respondents complete ordinal scales of frequency and duration for each activity category.

Core and Balance family leisure involvement scores were calculated by multiplying duration and frequency for each item then summing the ordinal index scores of questions 1-8 for core and summing the index scores of questions 9-16 for balance. The total family leisure involvement score was calculated by summing the core and balance index scores (Zabriskie & McCormick, 2001). Acceptable psychometric properties have been reported for the FLAP with evidence of construct validity, content validity, inter-rater reliability, and test-retest reliability for core ( $r = .74$ ), balance ( $r = .78$ ), and total family leisure involvement ( $r = .78$ ) (Zabriskie, 2001).

*Core and Balance Leisure Satisfaction.* The Family Leisure Satisfaction Scale (FLSS) measures satisfaction with family leisure involvement based on the Core and Balance Model and is embedded in the FLAP. Following each of the 16 family leisure involvement items is a satisfaction with family leisure involvement item. Responses were rated on a Likert-type scale with scores ranging from 1 (very dissatisfied) to 5 (very satisfied). Family leisure satisfaction scores were calculated by summing items 1 through 8 for a satisfaction with core family leisure involvement score and summing items 9 through 16 for a satisfaction with balance family leisure involvement score. Acceptable psychometric properties have been reported for the use of the scale including a Cronbach Alpha coefficient of .90 (Agate et al., 2009). In the current study internal consistencies were within an acceptable range for the parent sample for both satisfaction with core ( $\alpha = .84$ ) and balance family leisure ( $\alpha = .85$ ), as well as for the youth sample in both satisfaction with core ( $\alpha = .85$ ) and balance ( $\alpha = .84$ ) family leisure involvement.

*Family Functioning, Cohesion, and Adaptability.* The Family Adaptability and Cohesion Scales (FACES II) is a 30 item scale which provides a measure of family cohesion, family adaptability, and an overall indicator of family functioning. Respondents answer 14 questions that contribute to family adaptability and 16 questions that refer to family cohesion on a five-point Likert-type scale (from 1 = almost never to 5 = almost always). Scores for family cohesion and family adaptability are calculated based on a scoring formula that accounts for reverse coded questions. After obtaining total cohesion and total adaptability scores, corresponding 1 – 8 values are assigned based on the linear scoring interpretation of Olson et al. (1992). They are then averaged to obtain an indicator of overall family functioning. Acceptable psychometric properties have been consistently reported



for the use of the scale including Cronbach Alpha coefficients of .78 and .79 for adaptability and .86 and .88 for cohesion (Olson et al.). Internal consistencies for the current study were also acceptable for adaptability (parent  $\alpha = .77$ ; youth  $\alpha = .82$ ) and cohesion (parent  $\alpha = .77$ ; youth  $\alpha = .77$ )

*Communication.* The Family Communication Scale (FCS) has 10 items which require responses on a five-point Likert-type scale with one describing the family “not at all” and five describing the family “very well”. Olson et al. (2004) reported an acceptable level of internal consistency ( $\alpha = .88$ ). Internal consistency for the current study were also acceptable for the parent ( $\alpha = .94$ ) and youth samples ( $\alpha = .95$ ).

*Satisfaction with Family Life.* The Satisfaction with Family Life Scale (SWFL) asks respondents to answer five questions using a seven point Likert-type scale (with scores ranging from 1 = strongly disagree to 7 = strongly agree) to indicate the level which they agree or disagree with the statement. Scores are calculated by summing all items which produces a satisfaction with family life score with a range of 5 to 35. The scale has demonstrated acceptable psychometric properties including evidence of construct validity, internal consistency ( $\alpha = .93$ ), and test-retest reliability ( $r = .89$ ) (Zabriskie, 2000; Zabriskie & McCormick, 2003). Internal consistency ratings for the current study were also acceptable for the parent ( $\alpha = .93$ ) and youth samples ( $\alpha = .94$ ).

Sociodemographic questions were used to identify underlying characteristics of the sample. They included state of residence, urban or rural residence, marital status of the parent, history of divorce of the parent, age of the parent and youth, ethnicity of the parent and youth, gender of the parent and youth, family income, and family size. These variables were used to compare this sample to the overall US population, but were not included in the tested models.

### *Data Screening*

The data were initially screened for inconsistencies such as implausible responses, reported children’s ages outside of the specified range of 11-15, and other inconsistencies in family structure. This initial screening resulted in ( $n = 898$ ) U.S. households. Parent and youth data, as separate groups, were subsequently screened for missing data, univariate outliers, multivariate outliers, multicollinearity, and singularity. The screening identified 51 parent and 68 youth cases as multivariate outliers by calculating Mahalanobis Distances (Tabachnick & Fidell, 1996). It was deemed appropriate to remove the 51 parent and 68 youth cases identified as multivariate outliers to help control for multivariate non-normality. The remaining sample size from the original 898 households for analysis was ( $n = 824$ ) parents and ( $n = 808$ ) youth. The means and standard deviations of the research variables for the parent and youth samples are presented (see Table 1). The correlations between study variables from both the parent and youth perspectives are also presented (see Tables 2 & 3).

Due to the exploratory nature of this study and to the sheer number of variables and complexities that would be involved in modeling dyadic data (Card, Selig, & Little, 2008) in this initial phase of broad model construction, data were separated and treated as two different perspectives of family variables. Although

*Table 1. Means and Standard Deviations of the Parent and Youth Data*

Variable Meaning	Variable Name	Parents (N=824)		Youth (N=808)	
		M	SD	M	SD
Core leisure involvement	core	44.33	15.64	42.64	17.03
Balance leisure involvement	balance	51.81	25.11	53.12	25.42
Family cohesion	cohesion	63.21	9.49	60.01	10.24
Family adaptability	adapt	47.14	6.57	44.02	7.79
Communication variable 1	COMM1	3.67	0.94	3.61	0.98
Communication variable 2	COMM2	3.55	0.96	3.57	1.01
Communication variable 3	COMM3	4.17	0.94	3.96	1.02
Communication variable 4	COMM4	4.09	0.89	3.84	0.94
Communication variable 5	COMM5	3.56	0.96	3.39	1.02
Communication variable 6	COMM6	3.99	0.91	3.74	0.98
Communication variable 7	COMM7	4.10	0.89	3.90	0.94
Communication variable 8	COMM8	3.92	0.92	3.72	0.97
Communication variable 9	COMM9	3.00	1.11	2.98	1.15
Communication variable 10	COMM10	3.91	0.92	3.79	0.97
Core leisure satisfaction 1	CB1SAT	3.90	0.92	3.95	0.73
Core leisure satisfaction 2	CB2SAT	3.99	0.78	4.01	0.70
Core leisure satisfaction 3	CB3SAT	3.78	0.91	3.83	0.86
Core leisure satisfaction 4	CB4SAT	3.65	0.87	3.69	0.82
Core leisure satisfaction 5	CB5SAT	3.75	0.93	3.75	0.80
Core leisure satisfaction 6	CB6SAT	3.49	1.01	3.71	0.87
Core leisure satisfaction 7	CB7SAT	4.00	0.81	3.71	0.76
Core leisure satisfaction 8	CB8SAT	3.62	1.10	3.70	0.91
Balance leisure satisfaction 1	CB9SAT	3.96	0.76	3.90	0.75
Balance leisure satisfaction 2	CB10SAT	3.79	0.89	3.74	0.86
Balance leisure satisfaction 3	CB11SAT	3.52	0.87	3.59	0.89
Balance leisure satisfaction 4	CB12SAT	3.81	0.89	3.76	0.92
Balance leisure satisfaction 5	CB13SAT	3.60	0.97	3.59	0.96
Balance leisure satisfaction 6	CB14SAT	3.40	0.92	3.36	0.90
Balance leisure satisfaction 7	CB15SAT	3.41	0.81	3.30	0.86
Balance leisure satisfaction 8	CB16SAT	3.78	1.03	3.85	0.90
Satisfaction w/family life 1	S_A_1	4.88	1.52	5.00	1.57
Satisfaction w/family life 2	S_A_2	4.88	1.60	4.97	1.58
Satisfaction w/family life 3	S_A_3	5.24	1.51	5.32	1.45
Satisfaction w/family life 4	S_A_4	5.29	1.53	5.25	1.49
Satisfaction w/family life 5	S_A_5	4.53	1.82	4.79	1.69

Table 2. Sample Correlations: Parent

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	-	0.43	0.32	0.25	0.25	0.27	0.28	0.21	0.25	0.28	0.22	0.25	0.16	0.21	0.23	0.27	0.30	0.32
2		-	0.28	0.21	0.22	0.20	0.18	0.24	0.22	0.20	0.21	0.20	0.13	0.20	0.14	0.17	0.17	0.17
3			-	0.69	0.73	0.66	0.70	0.71	0.65	0.72	0.66	0.71	0.45	0.67	0.49	0.46	0.41	0.32
4				-	0.63	0.61	0.55	0.60	0.61	0.62	0.57	0.62	0.43	0.63	0.36	0.40	0.36	0.28
5					-	0.77	0.62	0.68	0.70	0.66	0.58	0.66	0.52	0.61	0.40	0.41	0.38	0.33
6						-	0.60	0.63	0.71	0.64	0.59	0.68	0.54	0.60	0.38	0.39	0.37	0.31
7							-	0.67	0.57	0.65	0.59	0.64	0.38	0.62	0.37	0.35	0.32	0.28
8								-	0.66	0.70	0.68	0.69	0.43	0.70	0.38	0.36	0.33	0.26
9									-	0.70	0.60	0.68	0.62	0.61	0.37	0.36	0.34	0.28
10										-	0.69	0.70	0.47	0.68	0.40	0.40	0.32	0.28
11											-	0.71	0.39	0.69	0.33	0.30	0.27	0.22
12												-	0.54	0.69	0.38	0.36	0.34	0.24
13													-	0.45	0.27	0.23	0.23	0.24
14														-	0.34	0.35	0.34	0.28
15															-	0.61	0.48	0.40
16																-	0.63	0.46
17																	-	0.53
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Note. 1. Core family leisure involvement 2. Balance family leisure involvement 3. Family cohesion 4. Family adaptability 5-14. Communication variables 15-22. Core leisure satisfaction 23-30. Balance leisure satisfaction 31-35. Satisfaction with family life. Table continues.

Table 2. Sample Correlations: Parent

	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
1	0.31	0.26	0.26	0.19	0.11	0.11	0.17	0.13	0.11	0.02	-0.02	0.13	0.17	0.21	0.19	0.17	0.13
2	0.22	0.21	0.22	0.06	0.18	0.20	0.29	0.30	0.35	0.24	0.10	0.36	0.22	0.24	0.24	0.19	0.17
3	0.40	0.37	0.35	0.24	0.38	0.33	0.29	0.32	0.31	0.22	0.19	0.34	0.61	0.61	0.60	0.58	0.52
4	0.34	0.30	0.26	0.22	0.33	0.33	0.28	0.29	0.28	0.23	0.19	0.30	0.49	0.53	0.52	0.50	0.45
5	0.38	0.34	0.28	0.21	0.33	0.33	0.31	0.32	0.28	0.21	0.10	0.30	0.56	0.58	0.57	0.52	0.51
6	0.34	0.33	0.27	0.23	0.35	0.30	0.28	0.29	0.27	0.21	0.15	0.25	0.50	0.51	0.52	0.49	0.45
7	0.27	0.25	0.26	0.19	0.30	0.24	0.16	0.23	0.18	0.14	0.10	0.23	0.43	0.45	0.45	0.46	0.40
8	0.31	0.26	0.26	0.22	0.35	0.28	0.23	0.29	0.23	0.16	0.13	0.29	0.47	0.48	0.52	0.50	0.43
9	0.36	0.29	0.22	0.21	0.28	0.25	0.27	0.28	0.23	0.17	0.12	0.23	0.47	0.47	0.48	0.45	0.42
10	0.32	0.26	0.24	0.19	0.29	0.24	0.22	0.25	0.17	0.12	0.12	0.21	0.46	0.47	0.49	0.46	0.42
11	0.27	0.23	0.21	0.16	0.29	0.22	0.19	0.25	0.19	0.14	0.14	0.21	0.37	0.40	0.43	0.41	0.34
12	0.34	0.29	0.23	0.17	0.33	0.27	0.24	0.29	0.22	0.15	0.13	0.25	0.46	0.46	0.49	0.45	0.40
13	0.24	0.24	0.18	0.15	0.20	0.20	0.22	0.23	0.21	0.15	0.08	0.16	0.37	0.35	0.34	0.32	0.29
14	0.29	0.25	0.21	0.18	0.33	0.29	0.21	0.27	0.21	0.18	0.14	0.26	0.43	0.46	0.46	0.44	0.41
15	0.46	0.34	0.34	0.26	0.43	0.35	0.32	0.40	0.29	0.19	0.18	0.32	0.51	0.49	0.50	0.46	0.42
16	0.56	0.40	0.37	0.23	0.43	0.40	0.32	0.39	0.31	0.19	0.15	0.33	0.49	0.46	0.47	0.43	0.39
17	0.57	0.52	0.37	0.28	0.48	0.45	0.41	0.45	0.36	0.23	0.16	0.38	0.41	0.40	0.40	0.36	0.34
18	0.48	0.41	0.37	0.26	0.37	0.36	0.35	0.41	0.29	0.24	0.22	0.34	0.34	0.33	0.32	0.28	0.28
19	-	0.61	0.40	0.27	0.47	0.47	0.44	0.48	0.41	0.33	0.22	0.40	0.44	0.44	0.46	0.39	0.36
20		-	0.40	0.27	0.37	0.45	0.49	0.44	0.45	0.31	0.20	0.41	0.37	0.39	0.39	0.35	0.29
21			-	0.31	0.36	0.43	0.36	0.38	0.35	0.30	0.28	0.37	0.34	0.38	0.33	0.33	0.28
22				-	0.38	0.38	0.37	0.37	0.32	0.22	0.18	0.31	0.27	0.30	0.29	0.25	0.27
23					-	0.56	0.43	0.55	0.38	0.33	0.26	0.40	0.38	0.40	0.40	0.38	0.37
24						-	0.48	0.58	0.43	0.30	0.26	0.46	0.38	0.42	0.38	0.34	0.34
25							-	0.51	0.46	0.36	0.29	0.42	0.35	0.37	0.38	0.30	0.31
26								-	0.52	0.38	0.26	0.56	0.41	0.43	0.44	0.37	0.35
27									-	0.50	0.33	0.50	0.39	0.38	0.38	0.33	0.31
28										-	0.55	0.39	0.32	0.30	0.30	0.24	0.25
29											-	0.25	0.23	0.23	0.21	0.20	0.21
30												-	0.40	0.43	0.43	0.38	0.38
31													-	0.83	0.77	0.71	0.65
32														-	0.84	0.75	0.69
33															-	0.82	0.69
34																-	0.68
35																	-

Note. 1. Core family leisure involvement 2. Balance family leisure involvement 3. Family cohesion 4. Family adaptability 5-14. Communication variables 15-22. Core leisure satisfaction 23-30. Balance leisure satisfaction 31-35. Satisfaction with family life.

the majority of family leisure literature has historically come from a parent only perspective (Hawks, 1991; Holman & Epperson, 1989; Orthner & Mancini, 1991) it was deemed useful to heed recommendations to examine structural relationships from parent and youth perspectives (Smith et al., 2009) in this broad model phase in hopes that it would lead to more complex dyadic data analysis of specific components in future work.

### *Analysis*

The Analysis of Moment Structures program, AMOS 6.0 (Arbuckle, 2005), was used to create and analyze the structural equation models for parent and youth data. Each structural equation model included 35 observed variables, six latent or unobserved variables, five disturbance terms, and 35 error terms (see Figure 1). To properly identify models, Byrne (2001) instructed "that every latent variable have its scale determined... This scaling requisite is satisfied by constraining to some non-zero value (typically 1.0), one factor loading in each set of loadings designed to measure the same factor," (p. 36). This constraining process is often somewhat random, but constraining the variable with the greatest reliability is preferred (Byrne, 2001). The following four parameters (regression weights) were constrained to 1.0 based on their reliability: Communication 1 (COMM1), Satisfaction with family life 2 (SA2), Core leisure satisfaction 2 (CB2SAT), and Balance leisure satisfaction 4 (CB12SAT). Parameters for core, cohesion, and all error terms were also constrained to 1.0.

The maximum likelihood (ML) approach was utilized in calculating estimates in this study. Hu and Bentler's (1999) recommendation to utilize the standardized root mean residual (SRMR) in combination with one of seven specific indices was the guiding principle in evaluating model fit. This study used the SRMR and the comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square of approximation (RMSEA) for evaluating fit. Some variation exists among authors regarding which values indicate good model fit. Hu and Bentler (1999) proposed SRMR values near .08; Kline (2004) suggested values less than .10; Schumacker and Lomax (2004) considered values less than .05; and Byrne also recognized values less than .05 as demonstrating "a well-fitting model," (2006, p. 99). CFI and TLI can range from zero to one, with values close to .95 being considered better (Hu & Bentler, 1999). Values less than .05 for the RMSEA are generally accepted as indicating good fit. Byrne (2001) indicated that values up to .08 represent reasonable fit.

In order to test the structural relationships between the family leisure constructs, a theoretical model was created and tested separately with both the parent and youth data. Although other approaches such as dyadic analysis or testing for causal invariance provide greater detail regarding comparisons between measurement and structural models, this study focused on establishing baseline models which is a preparatory step for comparative analyses (Byrne, 2001).

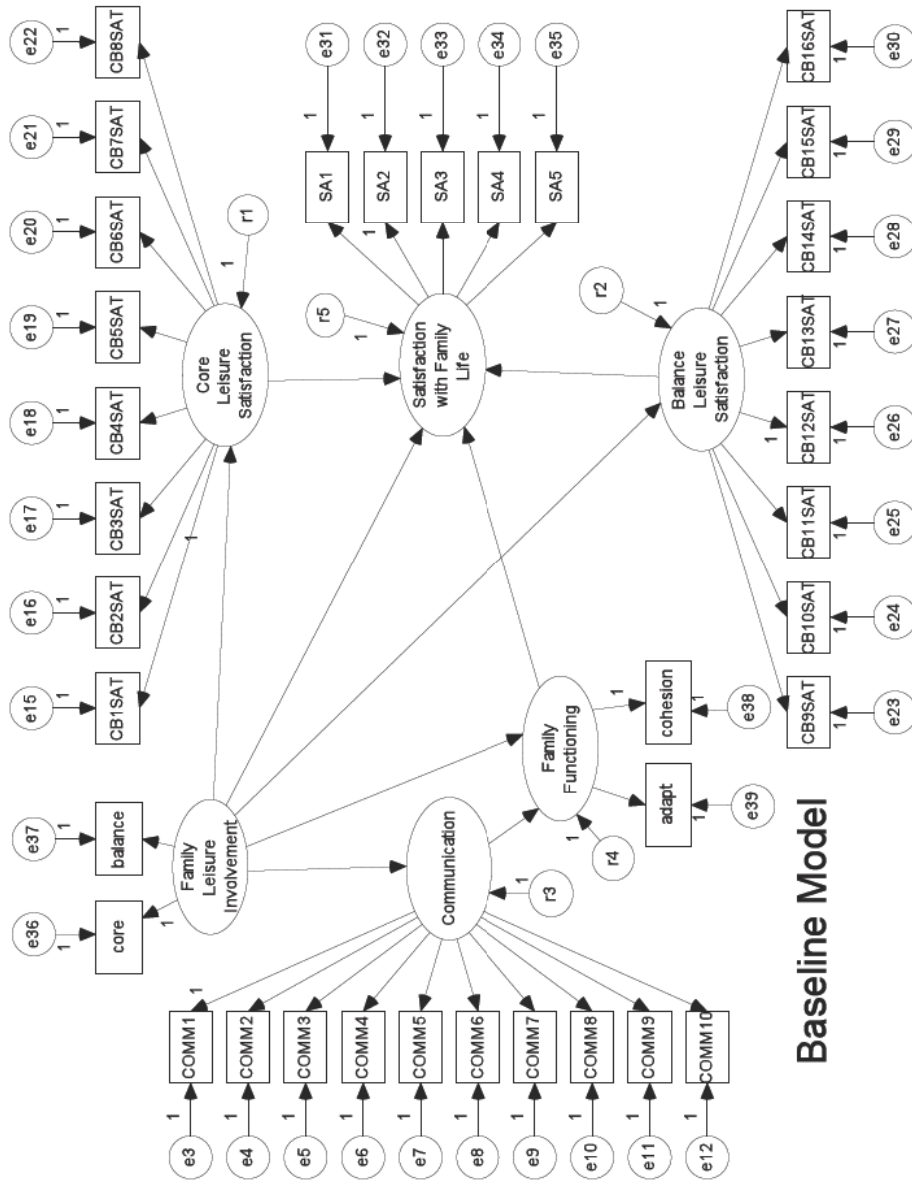


FIGURE 1: BASELINE STRUCTURAL EQUATION MODEL FOR PARENT AND YOUTH DATA

## Results

The baseline, or hypothesized model, was first tested with the parent data and demonstrated a reasonable fit between the model and data (see Table 4 for fit indices). Through a review of the model's regression weights one structural path, Family Leisure Involvement → Satisfaction with Family Life, was identified as being statistically nonsignificant at  $p < .05$ . Bryne (2001) explained that nonsignificant parameters should be removed from the model. It is important to note that respecifying the hypothesized model (making changes) moves the analysis from a confirmatory to an exploratory nature. Byrne (2001) noted the varied viewpoints regarding post hoc modeling and its appropriateness or inappropriateness. Recognizing the exploratory intent of the study, the theoretical appropriateness, and the statistical nonsignificance of this path, it was removed. The modified model was subsequently tested with no change in the fit indices. The data were classified as having a reasonable fit with the final parent structural equation model (see Figure 2).

The baseline model was tested with the youth data and demonstrated a reasonable fit between the model and data (see Table 4). Examination of the regression weights revealed two statistically nonsignificant ( $p < .05$ ) structural paths: a) Core Leisure Satisfaction → Satisfaction with Family Life and b) Balance Leisure Satisfaction → Satisfaction with Family Life. With similar considerations taken into account when modifying the baseline parent model, these two paths were removed from the model one at a time creating an intermediate model which was tested after the removal of each path. The fit indices remained unchanged with the removal of these two statistically nonsignificant structural paths. A reasonable fit of the data was maintained in the final youth structural equation model (see Figure 3).

The data for the parent model indicated that family leisure involvement explained 34% of variance (see bolded regression weights in Figure 2) in family communication and together with communication contributed to the explanation of family functioning (91%). Furthermore, family leisure involvement contributed to the explanation of variance in both core (93%) and balance (68%) leisure satisfaction. Finally, family functioning and core and balance leisure satisfaction explained 62% of variance in satisfaction with family life.

The data in the youth model demonstrated a similar fit to the data in the parent model with the exception of the structural paths from family leisure involvement to satisfaction with family life, and from core and balance leisure satisfaction to satisfaction with family life. Therefore, family leisure involvement contributed to the explanation of variance (see bolded regression weights in Figure 3) in family communication (36%) and together with communication contributed to the explanation of family functioning (96%). Furthermore, family leisure involvement contributed to the explanation of variance in both core (90%) and balance (77%) leisure satisfaction. Finally, family functioning and family leisure involvement contributed to the explanation of variance in satisfaction with family life (63%).

Table 3. Sample Correlations: Youth

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	-	0.46	0.39	0.31	0.33	0.30	0.31	0.30	0.27	0.33	0.28	0.31	0.15	0.32	0.24	0.28	0.29	0.31
2		-	0.28	0.18	0.21	0.19	0.21	0.20	0.21	0.21	0.22	0.21	0.10	0.24	0.11	0.14	0.14	0.15
3			-	0.64	0.72	0.68	0.72	0.69	0.62	0.72	0.68	0.71	0.39	0.70	0.47	0.46	0.39	0.35
4				-	0.67	0.66	0.57	0.66	0.66	0.67	0.59	0.67	0.46	0.66	0.38	0.40	0.35	0.35
5					-	0.81	0.68	0.71	0.73	0.70	0.66	0.72	0.47	0.70	0.45	0.42	0.41	0.33
6						-	0.69	0.71	0.72	0.69	0.66	0.76	0.48	0.66	0.41	0.39	0.38	0.31
7							-	0.73	0.61	0.68	0.68	0.69	0.36	0.69	0.39	0.36	0.32	0.26
8								-	0.68	0.71	0.71	0.71	0.37	0.74	0.37	0.37	0.31	0.28
9									-	0.70	0.64	0.72	0.56	0.65	0.37	0.34	0.31	0.31
10										-	0.72	0.73	0.42	0.72	0.42	0.37	0.31	0.31
11											-	0.73	0.38	0.74	0.41	0.37	0.29	0.29
12												-	0.49	0.74	0.40	0.39	0.34	0.32
13													-	0.46	0.26	0.23	0.20	0.21
14														-	0.42	0.37	0.31	0.29
15															-	0.65	0.49	0.40
16																-	0.58	0.44
17																	-	0.48
18																		-
19																		
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Note. 1. Core family leisure involvement 2. Balance family leisure involvement 3. Family cohesion 4. Family adaptability 5-14. Communication variables 15-22. Core leisure satisfaction 23-30. Balance leisure satisfaction 31-35. Satisfaction with family life. Table continues.



Table 3. Sample Correlations: Youth

	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
1	0.26	0.24	0.25	0.20	0.20	0.18	0.17	0.18	0.17	0.08	0.02	0.21	0.25	0.29	0.27	0.22	0.22
2	0.18	0.17	0.19	0.08	0.22	0.20	0.23	0.24	0.27	0.18	0.10	0.34	0.24	0.25	0.24	0.20	0.14
3	0.36	0.34	0.32	0.26	0.37	0.34	0.27	0.35	0.31	0.21	0.18	0.33	0.61	0.65	0.65	0.57	0.52
4	0.37	0.33	0.29	0.24	0.33	0.33	0.25	0.29	0.27	0.22	0.19	0.26	0.54	0.59	0.56	0.54	0.49
5	0.35	0.34	0.32	0.29	0.38	0.36	0.26	0.33	0.30	0.21	0.17	0.32	0.63	0.68	0.66	0.56	0.53
6	0.33	0.31	0.27	0.25	0.34	0.34	0.26	0.30	0.27	0.21	0.18	0.26	0.59	0.64	0.63	0.55	0.50
7	0.28	0.24	0.25	0.18	0.29	0.26	0.18	0.26	0.19	0.12	0.12	0.24	0.54	0.57	0.60	0.52	0.44
8	0.33	0.30	0.26	0.18	0.33	0.28	0.22	0.27	0.23	0.16	0.13	0.26	0.51	0.54	0.57	0.51	0.41
9	0.33	0.31	0.27	0.22	0.34	0.29	0.26	0.30	0.26	0.18	0.18	0.25	0.52	0.56	0.53	0.47	0.46
10	0.32	0.31	0.30	0.27	0.31	0.30	0.22	0.28	0.26	0.15	0.15	0.25	0.51	0.56	0.56	0.51	0.43
11	0.29	0.30	0.29	0.25	0.31	0.29	0.21	0.28	0.23	0.16	0.16	0.26	0.50	0.54	0.54	0.47	0.41
12	0.35	0.30	0.29	0.22	0.34	0.32	0.24	0.32	0.27	0.17	0.15	0.26	0.56	0.58	0.58	0.52	0.44
13	0.22	0.23	0.14	0.17	0.21	0.18	0.15	0.21	0.12	0.12	0.12	0.18	0.35	0.38	0.36	0.32	0.33
14	0.32	0.30	0.27	0.22	0.34	0.31	0.23	0.29	0.22	0.18	0.15	0.30	0.51	0.57	0.57	0.50	0.45
15	0.47	0.45	0.40	0.33	0.49	0.42	0.33	0.37	0.33	0.25	0.20	0.34	0.47	0.49	0.48	0.44	0.39
16	0.54	0.44	0.41	0.30	0.48	0.41	0.35	0.38	0.39	0.26	0.23	0.33	0.43	0.45	0.44	0.40	0.34
17	0.53	0.54	0.42	0.25	0.47	0.51	0.44	0.46	0.39	0.31	0.23	0.43	0.40	0.39	0.39	0.33	0.33
18	0.54	0.44	0.40	0.27	0.41	0.41	0.33	0.38	0.33	0.27	0.23	0.33	0.34	0.36	0.29	0.29	0.27
19	-	0.51	0.41	0.26	0.46	0.43	0.40	0.43	0.40	0.34	0.29	0.39	0.38	0.38	0.35	0.34	0.30
20		-	0.45	0.25	0.40	0.48	0.42	0.43	0.39	0.30	0.23	0.36	0.33	0.35	0.33	0.29	0.26
21			-	0.34	0.38	0.45	0.42	0.38	0.37	0.33	0.29	0.37	0.33	0.33	0.31	0.27	0.27
22				-	0.30	0.29	0.24	0.21	0.20	0.17	0.17	0.27	0.26	0.29	0.27	0.20	0.20
23					-	0.54	0.42	0.47	0.32	0.24	0.20	0.44	0.38	0.39	0.36	0.36	0.30
24						-	0.47	0.57	0.41	0.32	0.24	0.49	0.34	0.35	0.35	0.29	0.27
25							-	0.45	0.38	0.37	0.28	0.40	0.31	0.31	0.32	0.24	0.26
26								-	0.45	0.29	0.23	0.57	0.38	0.37	0.36	0.31	0.29
27									-	0.47	0.36	0.43	0.27	0.31	0.29	0.25	0.27
28										-	0.58	0.31	0.22	0.28	0.22	0.19	0.21
29											-	0.29	0.19	0.23	0.21	0.22	0.18
30												-	0.35	0.34	0.32	0.32	0.27
31													-	0.86	0.81	0.72	0.68
32														-	0.87	0.77	0.71
33															-	0.80	0.71
34																-	0.71
35																	-

Note. 1. Core family leisure involvement 2. Balance family leisure involvement 3. Family cohesion 4. Family adaptability 5-14. Communication variables 15-22. Core leisure satisfaction 23-30. Balance leisure satisfaction 31-35. Satisfaction with family life.

*Table 4. Comparison of the Fit Indices for the Parent and Youth Structural Equation Models*

Model	$\chi^2$	DF	SRMR	RMSEA	TLI	CFI
Parent Baseline <sub>0</sub>	2319.42	551	.0499	.062	.900	.91
Parent Final <sub>1</sub>	2323.42	551	.0499	.062	.900	.91
Youth Baseline <sub>0</sub>	2114.17	551	.0463	.060	.910	.92
Youth Intermediate <sub>1</sub>	2114.17	552	.0463	.060	.910	.92
Youth Final <sub>2</sub>	2114.49	553	.0463	.060	.910	.92

*Note.* Parent Baseline Model <sub>0</sub> represents hypothesized parent model; Parent Final Model <sub>1</sub> represents Parent Baseline Model <sub>0</sub> with removed structural path from Family Leisure Involvement → Satisfaction with Family Life; Youth Baseline Model <sub>0</sub> represents hypothesized youth model; Youth Intermediate <sub>1</sub> represents Youth Baseline Model <sub>0</sub> with removed structural path from Core Leisure Satisfaction → Satisfaction with Family Life; Youth Final <sub>2</sub> = represents Youth Intermediate <sub>1</sub> with removed structural path from Balance Leisure Satisfaction → Satisfaction with Family Life

## Discussion

The purpose of this study was to begin the development of a broad model that could simultaneously examine the structural relationships between family leisure involvement and several related family constructs previously examined separately from a Core and Balance Family Leisure framework among a large sample of families in the United States. Findings presented structural equation models of family variables from both parent and youth perspectives, which provide an initial step in broad model construction and adds additional insight into relationships between research variables. Significant structural paths in each model were consistent with previous research that examined relationships individually. Findings also provide a response to criticism of early family leisure research (Holman & Epperson, 1989; Orthner & Mancini, 1991) and give direction for future study.

### *Family Leisure Relationships*

Among the most important contributions of this study was the ability to examine family leisure and several related family variables at the same time. While previous work within the Core and Balance framework has individually reported relationships between family leisure involvement and variables such as family functioning (Dodd et al., 2009; Freeman & Zabriskie, 2003; Hornberger, 2007; Zabriskie & McCormick, 2001), family communication (Smith, Freeman, & Zabriskie, 2009), family leisure satisfaction (Agate et al., 2009; Johnson, Zabriskie, & Hill, 2006), and satisfaction with family life (Zabriskie & McCormick, 2003), findings from this study are among the first to report the structural relationships between them all and provide a possible picture of how these family variables might relate to one another. Findings from both the parent and youth models were consistent with previous studies and provide further support and insight into the bigger picture of family leisure.

Similar to previous work, findings indicated a direct structural relationship from family leisure involvement to family functioning from both the parent and

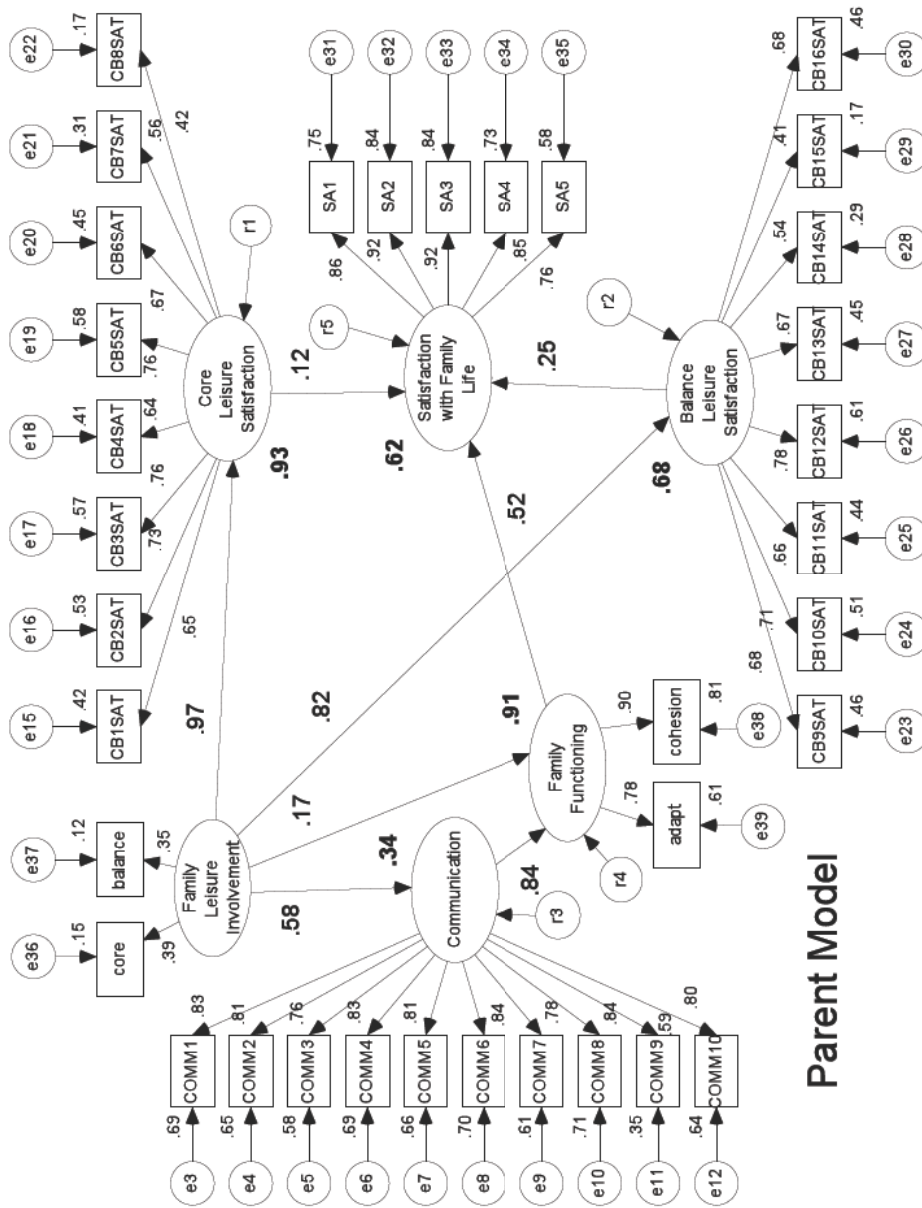


FIGURE 2: FINAL PARENT STRUCTURAL EQUATION MODEL (STANDARDIZED ESTIMATES)  $P < .001$

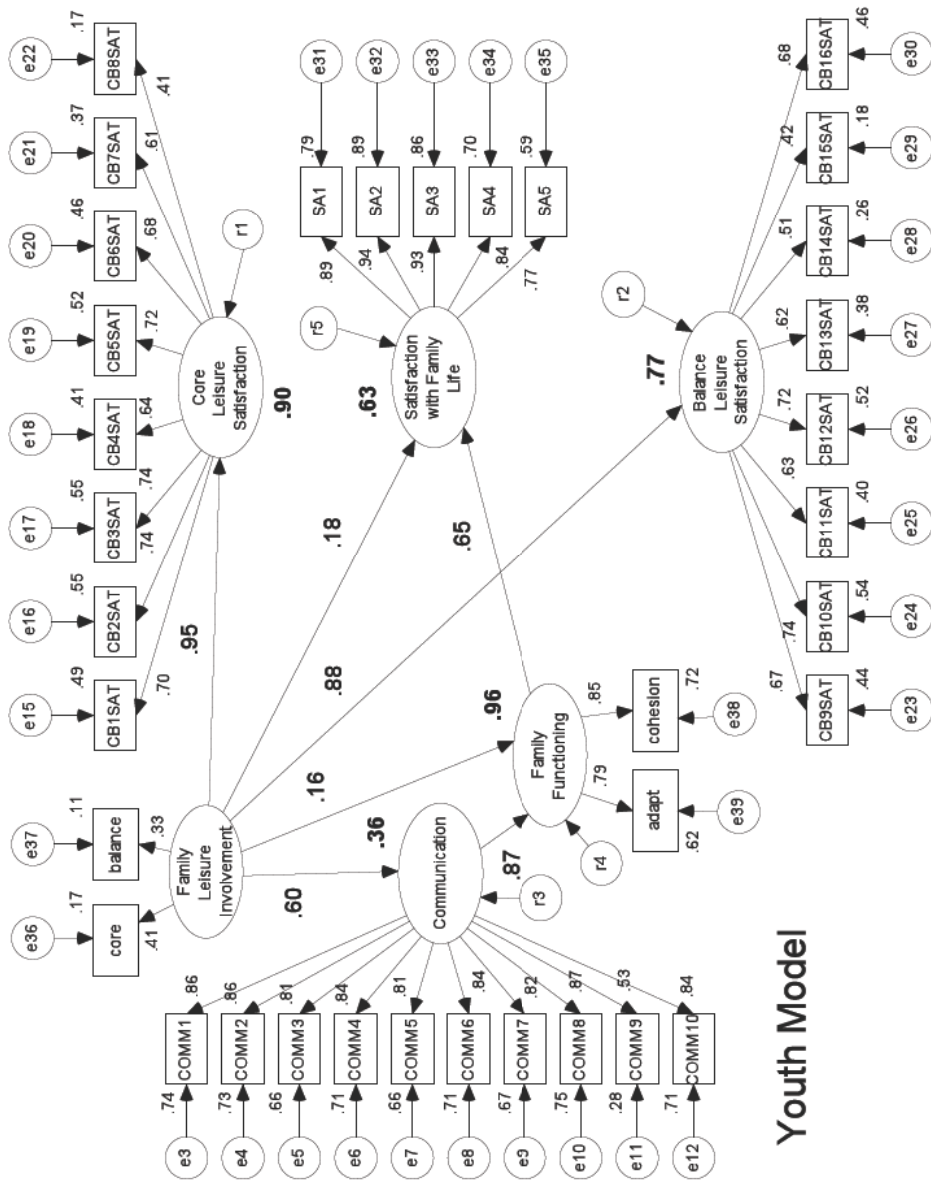


FIGURE 3: FINAL YOUTH STRUCTURAL EQUATION MODEL (STANDARDIZED ESTIMATES)  $P < .001$

youth perspective in this sample. Findings also indicated a direct relationship from family leisure involvement to family communication and then on to family functioning. These two structural relationships explained 91% (parent) and 96% (youth) of the variance in family functioning for families in this sample. In other words, based on these findings it appears that involvement in leisure activities with family members is not only directly related to higher family functioning, but is likely to foster more and perhaps better communication among family members which in turn also influences perceptions of family functioning. Such findings provide additional support for Smith et al.'s (2009) work and do so from a much broader sample with both a parent and youth perspective. Findings are also consistent with the tenants of Olsen's (1993) Circumplex Model of Marital and Family Systems which identifies communication among family members as the facilitative component that allows families to move along the family functioning continuum. Current findings, however, add additional insight by suggesting that family leisure involvement is one specific family behavior that may facilitate the kind and amount of family communication that can influence family functioning and contribute to satisfaction with family life.

Findings also indicated that the level of family leisure involvement clearly contributed to satisfaction with both core and balance family leisure and perceived level of family functioning, all three of which subsequently contributed to the satisfaction with or overall quality of family life. These three structural paths explained up to 62% of the variance in satisfaction with family life from a parent perspective, which is quite substantial when considering all of the possible objective and subjective variables that are likely to influence one's perception of the quality of their family life. These findings are also consistent with previous studies among individuals (Russell, 1987, 1990), couples (Johnson, Zabriskie, & Hill, 2006), and families (Agate et al., 2009) which reported that the quality or the satisfaction with the leisure involvement was the single best predictor of life satisfaction, marital satisfaction, or family satisfaction even when considering many other variables.

Additionally, findings shed light on the work of Zabriskie and McCormick (2003) in which they examined the contributions of family leisure involvement to satisfaction with family life, but did not consider the leisure satisfaction component. They reported that multiple regression models including family leisure involvement accounted for up to 16% of the variance in satisfaction with family life. While such findings were noteworthy, this relationship may have been primarily due to the relationship of family leisure to other variables. Current findings provide strong evidence that family leisure involvement has a direct relationship to family communication, family functioning, and both core and balance family leisure satisfaction, as well as a mediating relationship with each of them that ultimately explains considerable variance in satisfaction with family life for parents in this sample. In other words, as Zabriskie and McCormick noted "it appears that the interrelationship of multiple factors is [indeed] more difficult to distinguish and understand when addressing family constructs such as satisfaction with family life" (p. 180). The current findings provide empirical evidence supportive of one possible model of how family leisure involvement may interrelate with family

communication, family functioning, and family leisure satisfaction to ultimately influence overall satisfaction with family life.

#### *Parent & Youth Perspectives*

Another noteworthy contribution from this study revolves around the slight differences in the final structural models between the parent and the youth perspectives within families in this sample. The data in the youth model demonstrated a very similar fit to the data in the parent model with the exception of the structural paths from core and balance family leisure satisfaction to satisfaction with family life. In other words it appears that for the youth in this sample, the level or amount (frequency and duration) of involvement in leisure activities with family members had a greater influence on their perceptions of family satisfaction than whether they thought it was good quality leisure involvement or not.

This difference is to be expected, particularly when considering that parents are likely to become limited in the amount of family leisure they are able to be involved in at different stages across the family life span. As family size and obligations increase, parents are likely to focus more and more on quality versus quantity only, in regards to leisure time with their families. Thus, the quality or the satisfaction with limited family leisure would tend to have a greater influence on overall satisfaction with family life. Children, on the other hand are still developmentally able to focus primarily on the quantity of family leisure which contributed to explaining their perception of family satisfaction and had direct structural relationships with each of the other family variables. Furthermore, Shaw and Dawson (2001) found that youth interviewed in their study had a more narrow focus and related satisfaction with family leisure to their own personal satisfaction with the activity at the moment which may also differ from the broader perspective of parent respondents. These differences remind us again of "the intricacies and interrelationships involved when examining family systems" (Zabriskie & McCormick, 2003, p. 181) and of the value related to examining different perspectives from within families.

#### *Response to Critique*

Finally, findings from this study signify a clear mark of progress in the family leisure line of research and contribute, along with many other authors in the last decade, to a substantial and ongoing response to general criticisms and recommendations about family leisure research. After their review of the family leisure literature, Orthner and Mancini (1991) concluded that the "quality and quantity of this research [was] still somewhat deficient" (p. 299) and that samples were small, measures of family variables were too difficult to compare, measures of leisure variables were similarly wide-ranging and difficult to compare, and that there had been little replication. The sample in the current study consisted of over eight hundred families and included responses from a parent and a child in each household. Family variables such as family communication, family functioning, and satisfaction with family life were measured with theoretically sound instruments with acceptable psychometric properties and were able to be compared with several previous works in this line of study. Leisure variables including

family leisure involvement and family leisure satisfaction were also theoretically sound and consistently measured which allowed findings to be clearly compared to previous work. Current findings also represented replication of several previous studies using the same theoretical framework including at least ten addressing family leisure and family functioning, one addressing family leisure and family communication, three addressing family leisure satisfaction, and five addressing satisfaction with family life.

Furthermore, Holman and Epperson (1989) concluded from their review of the family leisure literature that there was a desperate need for more theoretically based research and that "research that is descriptive and explanatory without being a clear step to creating testable, theoretical propositions is of negligible value" (p. 291). Orthner and Mancini (1991) had similar conclusions and stated that "the lack of theoretical frameworks being explicated and consistently used also handicaps the research by limiting the findings to the idiosyncrasies of the investigation at hand" (p. 299). Findings from the current study demonstrates significant progress in this area and represents one more step in an increasing line of family leisure studies that have utilized the Core and Balance Model of Family Leisure Functioning as a theoretical framework.

Besides providing the framework to test and refine the model itself, the Core and Balance model has provided a useful framework to examine family leisure functioning among a broad range of family types as well as to examine many other family variables beyond those in this study. Results of the current study, however, unmistakably demonstrate the usefulness of such a model which provided the necessary framework to begin the development and construction of a much broader model that considers the intricacies and interrelationships between family leisure and related family variables at the same time. Such a model has the potential to provide the foundation and framework necessary for the creation of a myriad of "testable theoretical propositions" (Holman & Epperson, 1989) that can add to our understanding of the possible contributions of family leisure to the quality of family life today.

It must also be recognized that the recent contributions to family leisure research by studies that have utilized the Core and Balance framework are merely one drop in the bucket of a flood of family leisure studies that have responded to the need for greater understanding of family leisure and related variables. Many studies using other frameworks including numerous qualitative inquiries have contributed rich detail, considerable insight, and precious direction to our efforts towards understanding family leisure and its role in what continues to be the fundamental unit of today's society, the family.

#### *Limitations / Recommendations*

While findings represent significant progress in family leisure research, limitations of the study must still be recognized. The sample was perhaps one of the largest examined in this line of study and somewhat reflective of the U.S. population; however, it was not necessarily representative of the population. The majority of parent respondents were white females, thus limiting the perspectives of families from diverse ethnic backgrounds and those from fathers in the home. Further

studies targeting more ethnically diverse families as well as fathers' perspectives on a large scale are recommended. Additionally, the online response method may have also resulted in some limitations. Approximately 18% of U.S. households do not have internet access ("One in Five," 2008). While this method facilitated the collection of data from a larger sample, smaller studies addressing similar variables that are focused on specific sub-groups of families must continue.

It should also be noted that although it is a more advanced statistical procedure, structural equation modeling is still a correlational method. Therefore, more absolute interpretations regarding the directionality of relationships cannot clearly be made without further study. This knowledge is likely to require quasi-experimental designs and longitudinal studies in which data are collected on multiple occasions over time. While such studies are time and resource intensive, particularly when examining families, a resolute empirical picture of directionality is still needed.

Another limitation relates to the nature and analysis of family data. Although examining family variables from a parent and a child perspective adds considerable insight and extends beyond much previous work, the data were still analyzed independently. It must be acknowledged, however, that the purpose of this study was exploratory in nature and that it represents an initial step in broad model construction and development rather than final model confirmation and testing. While alternate analytical methods would allow for family level analysis and provide better use of the rich interdependent family data collected, the sheer number of variables and the complexities involved in modeling dyadic and interdependent data in this initial phase of broad model construction was clearly prohibitive (Card, Selig, & Little, 2008). Current findings, however, provide support for the structural relationships in the broad conceptual models presented and address Byrnes's (2001) recommendation for establishing broad baseline models prior to comparative or dyadic analysis.

It is recommended, therefore, that these models be used as a guiding framework for further study and analysis. Initial steps should include utilizing analytical methods that facilitate family level analysis for each of the smaller components of the broad model such as family leisure, family communication, and family functioning, or family leisure, family leisure satisfaction, family functioning, and satisfaction with family life. Socio-demographic variables should also be included in this detailed stage of analysis. Dyadic modeling (Card, Selig, & Little, 2008; Kenny, Kashy, & Cook, 2006) is one approach recommended for analysis of interdependent data such as that of family variables from matched parents and children. Other analysis techniques such as hierarchical linear modeling (HLM) that would allow for nested models at different family levels are also recommended. Such an approach would allow for analysis of data collected from all family members at parent, children, and family levels, and would facilitate a more complete view of family members' experiences and perceptions.

The richer, deeper understanding and specific meanings related to some of these broad family constructs afforded by continued qualitative studies are also strongly recommended. Continued progress using the Core and Balance framework is likely to benefit by following early patterns (Palisi, 1984) and conducting



similar studies among samples of families in different cultures throughout the world. Comparative studies of large U.S. samples such as the one used in this study with samples of families from other English and non-English speaking countries are likely to have both culture specific and broad implications. Continued efforts such as these will shed further light on the amount, types, and quality of family leisure that are most likely to influence family life.

### References

- Ahn, B. (1982). *A study of the relation between leisure activity patterns and marital satisfaction of urban housewives*. Unpublished doctoral dissertation, Sookinyung Women's University, Korea.
- Agate, J., Zabriskie, R., Agate, S., & Poff, R. (2009). Family leisure satisfaction and satisfaction with family life. *Journal of Leisure Research* 41 (2), 205-223.
- Arbuckle, J. L. (2005). Amos (Version 6.0). Chicago, IL: SPSS, Inc. Available from <http://www.spss.com/>.
- Baker, B. (2004). *Family differentiation, family recreation, and symptoms of eating disorders*. Unpublished master's thesis. Brigham Young University, Provo, Utah.
- Bell, R. (1975). Significant roles among a sample of Australian women. *Australian and New Zealand Journal of Sociology*, 11, 2-11.
- Bandoroff, S., & Scherer, D. G. (1994). Wilderness family therapy: An innovative treatment approach for problem youth. *Journal of Child and Family Studies*, 3(2), 175-191.
- Byrne, B. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Byrne, B. (2006). *Structural equation modeling with EQS: Basic concepts, applications, and programming* (2nd Ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- Card, N., Selig, J. & Little, T. (2008). *Modeling dyadic and interdependent data in the developmental and behavioral Sciences*. New York, NY: Routledge.
- Christenson, O., Zabriskie, R., Eggett, D., & Freeman, P. (2006). Family acculturation, family leisure involvement, and family functioning among Mexican-Americans. *Journal of Leisure Research*, 38(4), 475-495.
- DeNavas-Walt, C., Proctor, B. D., & Smith, J.C., (2008). *Income, Poverty, and Health Insurance Coverage in the United States: 2007*. U.S. Census Bureau, Current Population Reports, 60-235. U.S. Government Printing Office: Washington, DC.
- Dodd, D., Zabriskie, R., Widmer, M., & Eggett, D. (2009). Contributions of Family leisure to family functioning among families that include children with developmental disabilities. *Journal of Leisure Research* 41 (2), 261-286.
- Fotu, I. (2007). *Family leisure involvement and family functioning in Samoa*. Unpublished master's thesis. Brigham Young University, Provo, Utah.
- Freeman, P., & Zabriskie, R. (2003). Leisure and family functioning in adoptive families: Implications for therapeutic recreation. *Therapeutic Recreation Journal*, 37(1), 73-93.
- Hawks, S. (1991). Recreation in the family. In S. J. Bahr (Ed.), *Family research: A sixty year review, 1930-1990* (pp. 387-433). New York: Lexington Books.
- Holman, T. (1981). *A path analytic test of a model of early marital quality: The direct and indirect effects of premarital and marital factors*. Unpublished doctoral dissertation, Brigham Young University, Provo.

- Holman, T. & Epperson, A. (1989). Family leisure: A review of the literature with research recommendations. *Journal of Leisure Research, 16*, 277-294.
- Holman, T., & Jacquart, M. (1988). Leisure activity patterns and marital satisfaction: A further test. *Journal of Marriage and the Family, 50*, 69-77.
- Hornberger, L. (2007). *Contributions of family leisure to family functioning among single-parent families*. Unpublished master's thesis, Brigham Young University, Provo.
- Hu, L., & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55.
- Huff, C., Widmer, M., McCoy, K., & Hill, B. (2003). The influence of challenging outdoor recreation on parent-adolescent communication. *Therapeutic Recreation Journal, 32*(1), 18-37.
- Iso-Ahola, A. (1984). Social psychological foundations of leisure and resultant implications for leisure counseling. In E. T. Dowd (Ed.), *Leisure counseling: Concepts and applications* (pp. 97-125). Springfield, IL: Charles C. Thomas.
- Johnson, H., Zabriskie, R. & Hill, B. (2006). The contribution of couple leisure involvement, leisure time, and leisure satisfaction to marital satisfaction. *Marriage and Family Review 40*(1), 69-91.
- Kenny, D., Kashy, D. & Cook, W. (2006). *Dyadic data analysis*. New York, NY: Guilford Press.
- Klein, D., & White, J. (1996). *Family theories: An introduction*. Thousand Oaks, CA: Sage.
- Kline, R. (2004). *Principles and practice of structural equation modeling*. New York, NY: Guilford Press.
- Kugath, S. (1997). The effects of family participation in outdoor adventure programs. Unpublished doctoral dissertation, Indiana University, Indiana.
- Mactavish, J., & Schleien, S. (1998). Playing together growing together: Parents' perspectives on the benefits of family recreation in families that include children with a developmental disability. *Therapeutic Recreation Journal, 32*(3), 207-230.
- Miller, B. (1976). A multivariate developmental model of marital satisfaction. *Journal of Marriage and the Family, 38*, 643-657.
- Olson, D. (1986). Circumplex model VII: Validation studies and FACES II. *Family Process, 25*, 337-351.
- Olson, D. (1993). Circumplex model of marital and family systems: Assessing family systems. In F. Walsh (Ed.), *Normal family processes* (pp. 104-137). New York: Guilford Press.
- Olson, D., Gorall, D., & Tiesel, J. (2004). *Faces IV Package*. Minneapolis, MN: Life Innovations.
- Olson, D., McCubbin, H., Barnes, H., Larsen, A., Muxen, M., & Wilson, M. (1992). *Family inventories: 2nd Revision*. St. Paul, MN: University of Minnesota.
- One in five U.S. households has never used e-mail. (2008). Retrieved July 2, 2008 from [http://newsroom.parksassociates.com/article\\_display.cfm?article\\_id=5067](http://newsroom.parksassociates.com/article_display.cfm?article_id=5067)
- Orthner, D. (1975). Leisure activity patterns and marital satisfaction over the marital career. *Journal of Marriage and Family, 37*, 91-102.
- Orthner, D., & Mancini, J. (1991). Benefits of leisure for family bonding. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of leisure* (pp. 215-301). State College, PA: Venture Publishing.
- Palisi, B. (1984). Marriage companionship and marriage well-being: A comparison of metropolitan areas in three countries. *Journal of Comparative Family Studies, 15*, 43-46.
- Pavot, W., & Deiner, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment, 5*(2), 164-172.
- Russell, R. (1987). The importance of recreation satisfaction and activity participation to the life satisfaction of age-segregated retirees. *Journal of Leisure Research, 19*, 273-283.
- Russell, R. (1990) Recreation and quality of life in old age: A causal analysis. *Journal of Applied Gerontology, 9*, 77-90.

- Scholl, K., McAvoy, L., Rynders, J., & Smith, J. (2003). The influence of inclusive outdoor recreation experience on families that have a child with a disability. *Therapeutic Recreation Journal, 37*(1), 38-57.
- Schumacker, R., & Lomax, R. (2004). *A Beginner's Guide to Structural Equation Modeling*. (2nd Ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- Shaw, S., & Dawson, D. (2001). Purposive leisure: Examining parental discourses on family activities. *Leisure Sciences, 23*, 217-231.
- Shin, D., & Johnson, D. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research, 5*, 475-492.
- Smith, K., Freeman, P. & Zabriskie, R. (2009). An examination of family communication within the Core and Balance Model of Family Leisure Functioning. *Family Relation, 58*, 79-90.
- Smith, K., Snyder, T., & Monsma, B. (1988). Predicting relationship satisfaction from couple's use of leisure time. *American Journal of Family Therapy, 16*, 3-13.
- Smith, K., Taylor, S., Hill, B., & Zabriskie, R. (2004). Family functioning and leisure in single-parent families. *Abstracts from the 2004 Symposium on Leisure Research, 53*. Ashburn, VA; National Recreation and Park Association.
- Swinton, A., Freeman, P., Zabriskie, R. & Fields, P. (2008). Nonresident fathers' leisure patterns during parenting time with their children. *Fathering, 6*(3), 205-225.
- Tabachnick, B., & Fidell, L. (1996). *Using multivariate statistics* (3rd ed.). NY: HarperCollins College Publishers.
- U.S. Census Bureau (2007). *Current Population Survey, 2007 Annual Social and Economic Supplement*.
- U.S. Census Bureau (2008). *Annual Estimates of the Population by Sex, Race, and Hispanic Origin for the United States: April 1, 2000 to July 1, 2007*. (NC-EST2007-03) Tables 1-5.
- Zabriskie, R. (2000). *An examination of family and leisure behavior among families with middle school aged children*. Unpublished doctoral dissertation, Indiana University, Bloomington.
- Zabriskie, R. (2001). Family recreation: How can we make a difference? *Parks & Recreation, 68*(10), 30-42.
- Zabriskie, R., & Freeman, P. (2004). Contributions of family leisure to family functioning among transracial adoptive families. *Adoption Quarterly, 7*(3), 49-77.
- Zabriskie, R., & McCormick, B. (2001). The influences of family leisure patterns on perceptions of family functioning. *Family Relations, 50*, 281-289.
- Zabriskie, R., & McCormick, B. (2003). Parent and child perspectives of family leisure involvement and satisfaction with family life. *Journal of Leisure Research, 35*(2), 163-189.

