Annals of Leisure Research

Volume 13, Number 3, 2010

Special Conference Edition

Edited by Ian Patterson

Contents

Australian Family Leisure: Modelling parent and youth data

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ABSTRACT • The purpose of this study was to test a recently developed broad structural model which examines the relationships between family leisure involvement, family functioning, family communication, family leisure satisfaction, and satisfaction with family life among a large sample of families from Australia (n = 1014). Participating families provided responses to family variables from both a parent (n = 902) and an adolescent child (n = 810) in the household. Structural equation modelling was employed and the fit indices from the parent and youth structural equation models were quite similar to each other, with both exhibiting a reasonable fit of the data. This study provides some insight into Australian family leisure perspectives and assists in providing a more global view of family leisure constructs. Implications, limitations, and recommendations are discussed.

Introduction

The growth in the number of family leisure research studies across the globe signals an increased interest in, and concern for, the role of leisure within the family. Such research, conducted using both qualitative and quantitative approaches within various frameworks, continues to shape current knowledge and catalyses future research efforts to better understand family leisure. One specific line of study has utilised the Core and Balance Model of Family Leisure Functioning (Zabriskie & McCormick, 2001) as a theoretical framework for examining diverse family samples, primarily in the US. These studies have examined the relationship of family leisure to a variety of variables including family functioning, family communication, family leisure satisfaction, and satisfaction with family life and have done so from a multiple of perspectives within families, including parents, adolescent children, and young adults. Until recently (Poff, Zabriskie, & Townsend, 2010) small sample sizes have precluded more advanced quantitative statistical approaches.

Family leisure has also received significant attention among Australian researchers (Garton, Harvey, & Price, 2004; Harrington, 2001, 2006a, 2006b; Harington & Bell, 2001) and appears to be an essential component of family life among Australian families as well. Relatively small samples and the limited ability of large governmental agencies to collect data on family variables have also prohibited the collection of extensive studies on family leisure and related variables in Australia. Therefore, the purpose of this study was to use data from a large sample of families in Australia to test a recently developed structural model (Poff et al., 2010) which evaluates relationships between family leisure involvement, family functioning, family communication, family leisure satisfaction, and satisfaction with family life.

Literature review

Family leisure

Scholars have examined relationships between family leisure and family outcomes for many years (Holman & Epperson, 1989; Orthner & Mancini, 1991). Hawks (1991: 424) summarised six decades of family leisure research by concluding that 'family strength or cohesiveness is related to the family's use of leisure time'. Scholars have also consistently criticised the body of family leisure research as lacking adequate theory. The development and testing of the Core and Balance Model of Family Leisure Functioning was in direct response to this criticism in family leisure research (Zabriskie, 2000; Zabriskie & McCormick, 2001).

The Core and Balance Model is grounded in family systems theory and asserts that participation in different kinds of family leisure activities influ-

ences aspects of family functioning in different ways. According to family systems theory, in order to function effectively, families must meet both the need for stability in interaction, structure, and relationships, as well as the need for novelty in experience, input, and challenge (Klein & White, 1996). The Core and Balance Model suggests that there are two basic categories of family leisure: core and balance, which families use to meet needs for both stability and change, and which in the end help to facilitate outcomes of family cohesion and adaptability which are the main 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: 168). Balanced family leisure consists of '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: 168). Just as family systems theory (Olson, 1986) holds that both family cohesion and adaptability are necessary for healthy family functioning, research (Freeman & Zabriskie, 2003, Zabriskie & McCormick, 2001) has found that both core and balance family leisure are essential and that regular participation in both categories is related to higher levels of reported family functioning than does high or low participation in either component.

Family outcomes

Family functioning Utilising the Core and Balance Model as a theoretical framework, researchers have consistently reported direct relationships between family leisure and family functioning. Such results come from different perspectives within families such as parents, adolescent children, and young adult children, as well as from a variety of different family structures including traditional families (Zabriskie, 2000), families with transracial adoptive children (Zabriskie & Freeman, 2004), families with a child with a developmental disability (Dodd, Zabriskie, Widmer, & Eggett, 2009), and single parent families (Hornberger, 2007; Smith, Taylor, Hill, & Zabriskie, 2004). The use of a consistent framework has also facilitated studies of a variety of other family variables as well.

Family communication Family communication has long been considered an essential component of healthy family functioning (Olson, 1993). Orthner and Mancini (1991) reported that family leisure experiences were critical in facilitating family communication. Shaw and Dawson (2001) as well as Harrington and Bell (2001) reported that parents utilised family leisure as a vehicle to promote family communication. Zabriskie and McCormick (2001) argued from the Core and Balance framework that family leisure was an ante-

cedent to, and likely facilitated, healthy family communication. Recently researchers (Smith, Freeman, & Zabriskie, 2009: 88) examined the mediating role of family communication in the relationship between family leisure and family functioning, concluding that family leisure must be acknowledged as 'a primary context in which family communication occurs within the family'.

Family leisure satisfaction Another research focus beyond family leisure participation is the quality of family leisure involvement. While examining marital variables, Johnson, Zabriskie, and Hill (2006) found that it was not the amount of couple leisure involvement but the satisfaction with couple leisure which was the greatest predictor of marital satisfaction. Agate, Zabriskie, Agate, and Poff (2009) reported that satisfaction with family leisure, particularly core family leisure, was by far the best predictor of satisfaction with family life even when controlling for family income, marital status, age, history of divorce, and family leisure participation.

Satisfaction with family life The overall quality of family life, and more specifically satisfaction with family life, has also been linked to family leisure (Mactavish & Schleien, 1998; Scholl, McAvoy, Rynders, & Smith, 2003; Shaw & Dawson, 2001). Zabriskie and McCormick (2003) reported a positive relationship between family leisure involvement and satisfaction with family life, and Agate et al. (2009) reported that both core and balance family leisure satisfaction were significant predictors of satisfaction with family life.

The repeated use of the Core and Balance framework, with varied samples and perspectives, has fostered opportunities for 'creating testable theoretical propositions' (Holman & Epperson, 1989: 291) and has allowed researchers to compare findings regarding each of the above family variables across different studies. Difficulties in accessing large family samples, however, have limited family leisure researchers from harnessing advanced statistical analyses that can simultaneously examine the structural relationships between several family-related constructs.

Australian family leisure research Family leisure scholars in Australia have also focused considerable attention on families and report similar findings suggesting that family leisure is highly valued among Australian families (Garton et al., 2004; Harrington, 2001, 2006a, 2006b; Harington & Bell, 2001). They perceive family leisure as essential and see it as a stage to enact several parental roles. Harrington (2001: 364–365) observed that families: a) value the time spent in family leisure irrespective of the location or choice of leisure activity; b) use family leisure as a means to share 'values, interests and a sense

of family' created by ancestors in hopes of providing future guidance for their children; c) need time for parents to participate in leisure individually and as couples; and d) make their children's needs a priority. Harrington's (2006b) analysis of fathers and family leisure indicated a desire to: a) be involved with their children and help influence their lives; b) create memories and values; and c) foster relationships through sport or other leisure activities. Harrington and Bell (2001: 29) concluded that 'Leisure activity was valued as a means to facilitate family interaction. It was the activity that created the avenue for communication among family members.'

Based on the conclusions from Zabriskie and McCormick (2001), Garton et al. (2004) examined family functioning and its potential link to Australian adolescent leisure behavior. They reported that 'the satisfaction of the adolescent's leisure needs is related to the type of perceived family environment' (p. 18). Harrington and Bell (2001: 2) also found that 'in Australia, the home is an important and valued environment for family leisure' which is similar to the value placed on core family leisure in US samples. Not only have findings been quite similar among Australian family leisure studies, so have the limitations. The majority of the research has been qualitative in nature with relatively small sample sizes. Difficulties in accessing samples of families with differing structures have been previously noted (Azar, Naughton, & Joseph, 2009; Jenkins, 2006; Jenkins & Lyons, 2006) as has the challenge of finding larger samples. Harrington and Bell claimed (2001: 27) that 'it is difficult to obtain information on the leisure patterns of Australian families because government agencies and most academic research collect data on individuals, not family units'.

Although the lack of access to larger family samples has been a limitation, a recent study obtained a large national US sample and examined the structural relationships between family leisure involvement, family functioning, family communication, family leisure satisfaction, and satisfaction with family life (Poff et al., 2010). Findings confirmed and clarified relationships between all family variables and provided broad structural models from both a parent and a youth perspective that can serve as a guiding framework and baseline for future studies. Authors recommended that similar studies with large samples of families from other English- and non-English-speaking countries be conducted. Therefore, the purpose of this study was to use data from a large sample size of families in Australia to test the structural models from both a parent and a youth perspective so as to evaluate relationships between family leisure involvement, family functioning, family communication, family leisure satisfaction, and satisfaction with family life.

Methods

Sample

Data for this study were collected via an online survey. The service of an online survey sampling company, which maintains internet research panels, was utilised to access and invite Australian families to participate in this study. The study's questionnaire was completed by a sample of families (n = 1014) residing in Australian households containing at least one child (11–15 years old). Each participating family completed a two-part survey: one portion by a parent and one portion by a child between the ages of 11 and 15 years.

A majority of parent respondents were female (75.3%) and ranged from 27 to 68 years of age with a mean age of 42.17 (*SD* = 6.76), a median of 42, and a mode of 40. Youth respondents (male = 51.1%) ranged from 11 to 15 years with a mean age of 13.1 (*SD* = 1.36), a median of 13, and a mode of 14. Approximately 61.6% of the parents were married (not separated), 10% were in a civil union (not separated), 7.3% were single/never married or never joined in a civil union, 8.3% were separated, 16.3% were divorced, and 1.2% indicated they were widowed or a bereaved civil union partner. The average family size was 4.52 people with a reported range from 1 to 16 family members.

Annual income in Australian dollars was reported as follows: less than $25 000 (15.4%), $25 000–$50 999 (36%), $51 000–$75 999 (21.6%), $76 000–$100 999 (14.8%), $101 000–$125 999 (5.8%), $126 000–$150 000 (3.6%), and over $150 000 (2.8%). The median annual income was $25 000–$50 999. The ethnic majority of the parents was white (95.7%) with the remainder of the sample represented by Asian (2%), Pacific Islander (1.2%), Aboriginal (1%), and Torres Strait Islander (.1%). The reported youth ethnic majority was white (94.4%) with the remaining sample represented by Asian (2.5%), Pacific Islander (.9%), Aboriginal (1.9%), and Torres Strait Islander (.4%).

The respondents were from households in the following territories or states: Australian Capital Territory (1.7%), New South Wales (31.8%), Northern Territory (.1%), Queensland (21.8%), South Australia (9%), Tasmania (3.3%), Victoria (22.4%), and Western Australia (9.9%). Respondents (60.1%) reporting living in urban/suburban areas (population > 1 000 000).

Using the most recent census data (Australian Bureau of Statistics [ABS], Table B05, 2007), the Australian marital status was calculated for those 25 years old and above as: married (59.1%), never married (20.3%), separated (3.1%), divorced (9.9%), and widowed (7.1%). This is quite similar to the marital status in the current study's sample: married (61.6%), civil union not married (10%), never married (7.3%), separated (8.3%), divorced (16.3%), and widowed (1.2%), particularly when you combine the two not married categories. Further, the median family income (ABS, Table B02, 2007) of

A\$1171 weekly or approximately \$60 000 annually was slightly higher than the median category of \$25 000–\$50 999 for the current sample.

A Picture of the Nation (ABS, 2009) reported the population distribution percentages by state as follows: Australia Capital Territory (1.6%), New South Wales (32.9%), Northern Territory (1.0%), Queensland (19.8%), South Australia (7.6%), Tasmania (2.4%), Victoria (24.8%), and Western Australia (9.9%) which was almost an exact match to the geographical representation of the current sample (see above). Overall, the sample for this study was surprisingly reflective of the Australian population based on 2007, 2008, and 2009 reports of Census information.

Instrumentation

The questionnaire consisted of six sections: a) the Family Leisure Activity Profile (Zabriskie & McCormick, 2001), b) the Family Leisure Satisfaction Scale, c) The Family Adaptability and Cohesion Scales II (Olson et al., 1992), d) the Family Communication Scale (Olson, Gorall, & Tiesel, 2004), e) the Satisfaction with Family Life Scale (Zabriskie & McCormick, 2003), and f) sociodemographic questions.

FLAP. The Family Leisure Activity Profile measures participation in core and balance family leisure activities based on the Core and Balance Model of Family Leisure Functioning (Zabriskie, 2000). Core family leisure activities and balance activities are both assessed by eight items. Each item assesses whether or not the respondent participates in the activity category with family members. If yes, respondents complete ordinal scales of frequency and duration for each activity category. Family leisure involvement scores were calculated by multiplying each item's frequency and duration and then summing the ordinal index scores of questions 1 to 8 for core and questions 9 to 16 for balance. 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).

FLSS. The Family Leisure Satisfaction Scale measures satisfaction with core and balance family leisure involvement and is embedded in the FLAP. Responses were rated on a Likert-type scale with scores ranging from 1 (very dissatisfied) to 5 (very satisfied). Acceptable psychometric properties have been reported for the use of the scale including a Cronbach Alpha coefficient of .90 (Agate et al., 2009). Internal consistencies for the current study were acceptable for the parent sample for satisfaction with core ($\alpha = .86$) and balance family leisure ($\alpha = .86$), as well as for the youth sample for satisfaction with core ($\alpha = .85$) and balance ($\alpha = .86$) family leisure involvement.

FACES II. The Family Adaptability and Cohesion Scales is a 30-item scale which provides measures of family cohesion and adaptability. Respondents answer 14 questions contributing to family adaptability and 16 questions refering to family cohesion on a 5-point Likert-type scale (from 1 = almost never to 5 = almost always). Cohesion and adaptability scores are derived from a scoring formula accounting for reverse coded questions. 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., 1992). Internal consistencies for this study included adaptability (parent α = .76; youth α = .86) and cohesion (parent α = .70; youth α = .82)

FCS. The Family Communication Scale includes 10 items requiring responses on a 5-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 (α = .88). Internal consistency for the current study was also acceptable for the parent (α = .97) and youth samples (α = .97).

SWFL. The Satisfaction with Family Life Scale includes five questions with a 7-point Likert-type scale (with scores ranging from 1 = strongly disagree to 7 = strongly agree) which indicate the level which respondents agree or disagree with the statement. Acceptable psychometric properties have been reported including evidence of construct validity, internal consistency (α = .93), and test-retest reliability (r = .89) (Zabriskie, 2000; Zabriskie & McCormick, 2003). Internal consistency for the current study was also acceptable for the parent (α = .93) and youth samples (α = .93).

Sociodemographic questions were used to identify underlying characteristics of the sample. They included state or territory of residence, urban or rural residence, marital status 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.

Data screening

Inconsistencies in the data, such as implausible responses, reported children's ages outside of the specified range of 11 to 15, and other inconsistencies in family structure, were screened prior to analysis. Parent and youth data, as separate groups, were then screened for conditions such as: missing data, multivariate outliers, multicollinearity, and singularity. Mahalanobis Distances were used to screen for multivariate outliers. A p-value of p < .001 with a critical value of χ^2 (35), the number of variables in each model, was used to determine the critical value for the Mahalanobis Distance of 66.619

(Tabachnick & Fidell, 1996). Upon completion of the data screening, 64 parent and 79 youth cases identified as multivariate outliers were eliminated to help control for multivariate non-normality. The remaining sample size, after all data screening, for analysis was n = 902 for parents and n = 810 for youth. The research variables for the parent and youth samples with their respective means and standard deviations are presented (see Table 1).

Analysis

Structural equation models for parent and youth data were created and analysed using the Analysis of Moment Structures program, AMOS 6.0. Each model included 35 observed variables, six latent or unobserved variables, five disturbance terms, and 35 error terms (see Figure 1). Byrne (2001: 36) instructed that to properly identify models, 'every latent variable [must] 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.' Therefore the parameter for Communication variable 1 (COMM1), Satisfaction with family life 2 (SA2), Core leisure satisfaction 2 (CB2SAT), and Balance leisure satisfaction 4 (CB12SAT) were each constrained to 1.0 based on their reliability (Byrne, 2001). In addition, core and cohesion parameters and each error term in the model were also constrained to 1.0.

Estimates in this study were calculated using the maximum likelihood (ML) approach. As suggested by Hu and Bentler (1999), model fit was evaluated using the standardised root mean residual (SRMR) along with other fit indices. This study used the comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square of approximation (RMSEA). Authors have varied in stating which fit values represent 'good' model fit. For SRMR values near .08 were suggested by Hu and Bentler (1999); values less than .10 by Kline (2004); values less than .05 by Schumacker and Lomax (2004); and values less than .05 demonstrate 'a well-fitting model' Byrne (2006: 99). Values close to .95 for the two fit indices, CFI and TLI, are considered good (Hu & Bentler, 1999). Good fit, in terms of RMSEA, is widely accepted for values less than .05. RMSEA 'values less than .05 indicate good fit and values as high as .08 represent reasonable errors of approximation in the population' (Bryne, 2001: 85).

Results

Parent and youth data were tested separately in two structural equation models originally developed using a large sample of families from the US (Poff et al., 2010). The parent model was tested with the Australian parent data (see Figure 1) with a resulting overall assessment of a 'reasonable' fit between data

Table 1. Parent and youth data descriptive statistics

Variable meaning	Variable name	Parents (N = 902)		Youth (N = 810)	
		M	SD	M	SD
Core leisure involvement	core	41.57	16.66	39.39	17.05
Balance leisure involvement	balance	46.39	25.96	48.28	27.74
Family cohesion	cohesion	59.37	9.03	56.75	9.07
Family adaptability	adapt	46.71	6.84	45.22	8.04
Communication variable 1	comm1	3.35	1.10	3.21	1.07
Communication variable 2	comm2	3.20	1.09	3.20	1.07
Communication variable 3	comm3	3.52	1.17	3.38	1.11
Communication variable 4	comm4	3.53	1.08	3.32	1.07
Communication variable 5	comm5	3.17	1.13	3.10	1.12
Communication variable 6	comm6	3.39	1.17	3.25	1.11
Communication variable 7	comm7	3.51	1.10	3.36	1.08
Communication variable 8	comm8	3.36	1.09	3.24	1.08
Communication variable 9	comm9	2.66	1.20	2.74	1.17
Communication variable 10	comm10	3.41	1.11	3.32	1.09
Core leisure satisfaction 1	cb1sat	3.91	.88	3.94	.73
Core leisure satisfaction 2	cb2sat	4.00	.81	3.99	.71
Core leisure satisfaction 3	cb3sat	3.73	.92	3.77	.82
Core leisure satisfaction 4	cb4sat	3.67	.92	3.71	.79
Core leisure satisfaction 5	cb5sat	3.76	.91	3.75	.80
Core leisure satisfaction 6	cb6sat	3.45	.99	3.77	.82
Core leisure satisfaction 7	cb7sat	3.83	.87	3.63	.77
Core leisure satisfaction 8	cb8sat	3.70	.92	3.78	.84
Balance leisure satisfaction 1	cb9sat	3.96	.74	3.91	.75
Balance leisure satisfaction 2	cb10sat	3.71	.81	3.73	.86
Balance leisure satisfaction 3	cb11sat	3.47	.86	3.63	.84
Balance leisure satisfaction 4	cb12sat	3.74	.87	3.70	.90
Balance leisure satisfaction 5	cb13sat	3.65	.96	3.66	.94
Balance leisure satisfaction 6	cb14sat	3.40	.85	3.40	.87
Balance leisure satisfaction 7	cb15sat	3.38	.79	3.34	.78
Balance leisure satisfaction 8	cb16sat	3.77	.98	3.78	.93
Satisfaction w/family life 1	s_a_1	4.59	1.57	4.90	1.43
Satisfaction w/family life 2	s_a_2	4.65	1.59	4.97	1.43
Satisfaction w/family life 3	s_a_3	4.93	1.57	5.21	1.41
Satisfaction w/family life 4	s_a_4	4.88	1.59	5.08	1.38
Satisfaction w/family life 5	s_a_5	4.35	1.74	4.75	1.55

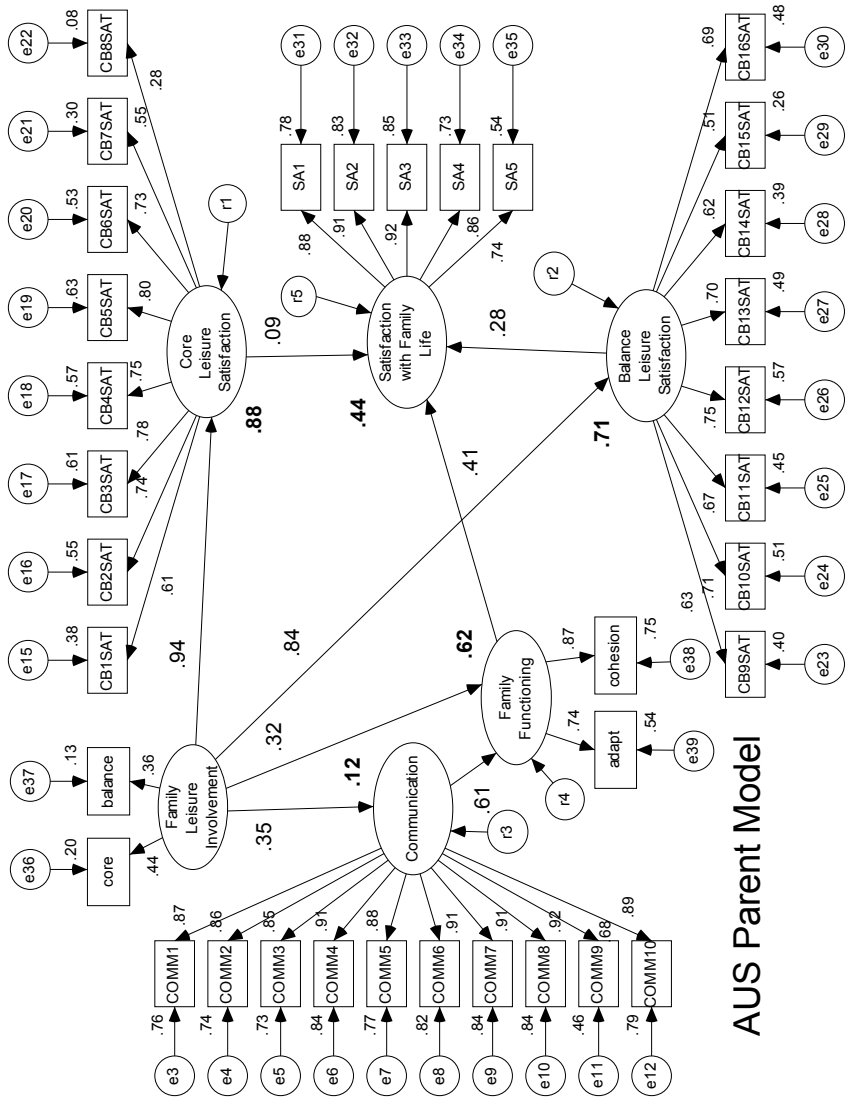*Figure 1. Australian Parent Structural Equation Model (standardised estimates)*

Table 2. Fit Indices for the Australian Parent and Youth Structural Equation Models

Model	χ^2	DF	SRMR	RMSEA	TLI	CFI
Parent Data	2295.09	552	.0487	.06	.92	.93
Youth Data	2154.93	553	.0470	.06	.93	.93

and model (see Table 2 for model fit indices). The youth model (see Figure 2) was tested with the Australian youth data and also demonstrated 'reasonable' fit between data and model (see Table 2 for model fit indices).

From the parent model, family leisure involvement appeared to account for variance in family communication (12%) and when combined with communication, family leisure involvement helped explain variance in family functioning (62%). In addition, family leisure involvement contributed in explaining core (88%) and balance (71%) leisure satisfaction variance. The whole model explained variance in satisfaction with family life (44%).

Family leisure involvement in the youth model accounted for variance in family communication (19%) and when combined with communication, family leisure involvement helped explain family functioning (73%). Family leisure involvement contributed to explaining core (87%) and balance (81%) of leisure satisfaction variance. The whole model explained variance in satisfaction with family life (62%).
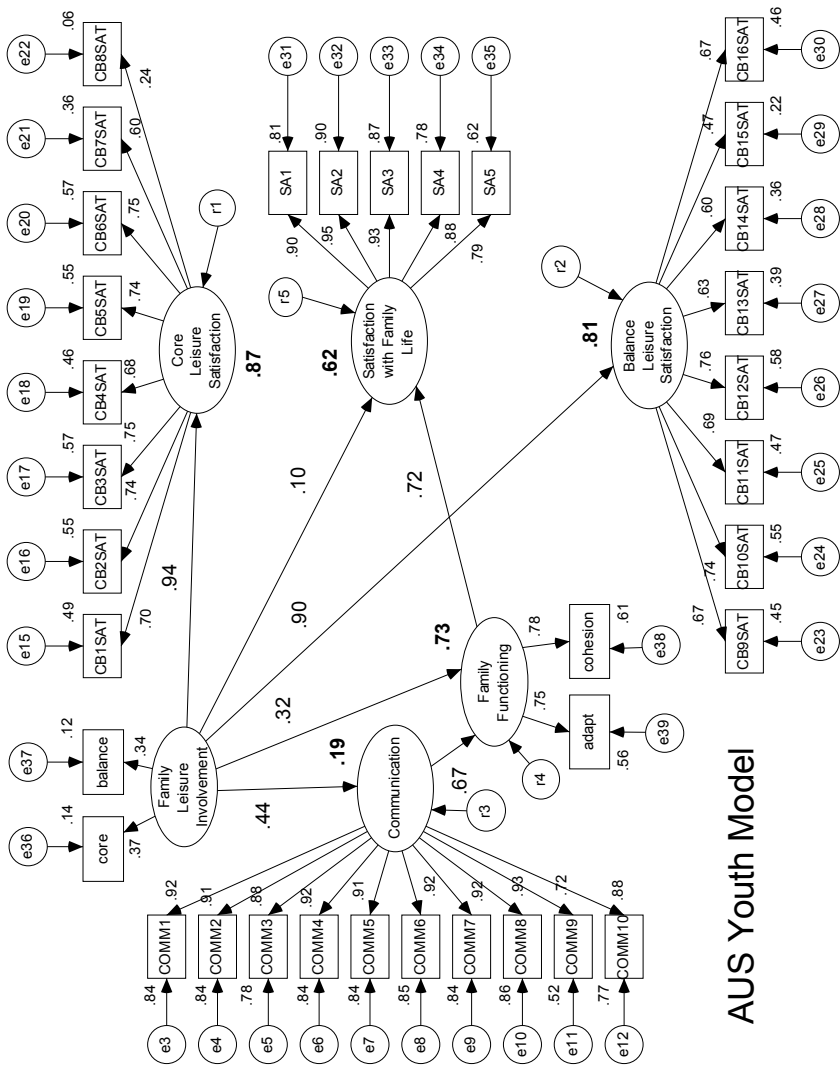
Discussion

The purpose of this study was to use data from a large sample of families living in Australia to test a recently developed broad model which aims to evaluate relationships between family leisure involvement, family functioning, family communication, family leisure satisfaction, and satisfaction with family life. Structural equation models for parent and youth perspectives of family leisure and related constructs were presented. Model fit in the parent and youth models was generally consistent with previous research. Findings provide additional support for the use of a consistent theoretical framework from an international perspective and contribute suggestions for future research.

Family leisure relationships — Australian perspectives

A key contribution of this study was introducing Australian family leisure perspectives into a model using the Core and Balance theoretical framework. Additionally, the study is among the first to analyse simultaneously structural relationships between family leisure and the other study constructs of family communication, family functioning, family leisure satisfaction, and

Figure 2. Australian Youth Structural Equation Model (Standardised Estimates)

satisfaction with family life. Although a lengthy explanation is outside the scope of this discussion, it is noteworthy to mention that the overall model fit of the Australian parent and youth data was nearly identical to the model fit (not specific regression weights) of the parent and youth models with US data. This initial indication of model stability outside of the US sample is encouraging.

Structural relationships from family leisure involvement to family communication and then to family functioning, and from family leisure involvement to family functioning, confirm the role of family leisure in communication and family functioning. These relationships explained 12% of the parent and 19% of the youth variance in communication and 62% of the parent and 73% of the youth variance in family functioning for these families. Findings are consistent with Olson's (1993) Circumplex Model related to the role communication plays in family functioning. Findings also support the research of Smith et al. (2009). Additionally, family leisure's contribution to family communication is consistent with Harrington and Bell's (2001) discussion of Australian family leisure.

Findings showed that family leisure involvement contributed to the variables of core and balance family leisure satisfaction and family functioning; with all three variables explaining variance in the satisfaction with family life (44%) from a parent perspective. These findings relate to the role of leisure satisfaction in explaining family satisfaction and are also consistent with previous research examining life, marital, or family satisfaction (Russell, 1987, 1990; Johnson et al., 2006; Agate et al., 2009). Furthermore, the fit of the model depicting the youth perspective of family variables suggests that the slight differences between parent and youth perspectives are indeed developmental as suggested by Poff et al. (2010) and are consistent across cultures. In other words, early adolescents still tend to be influenced by the quantity of family leisure involvement while parents are much more likely to focus on the quality of family leisure as it relates to other family variables.

Structural relationships between family leisure involvement, family communication, and family functioning were noticeably different in the Australian family data when compared to the US sample (Poff et al., 2010). The amount of variance explained for family communication (12% parent, 19% youth) was lower in comparison (34% parent, 36% youth) as was the subsequent variance explained in family functioning (62% parent and 73% youth, versus 91% parent and 96% youth). While this finding clearly does not question the consistency between US and Australian samples in terms of the overall model, it does highlight the necessity of further analysis of specific variables in the Australian family dataset. One purpose of the current study was to

continue the development and to examine the consistency of this broad conceptual model of multiple family variables; consequently, detailed analyses of the smaller components, including all sociodemographic variables, were intentionally not conducted. Such a model, then, is intended to be used as a guiding framework for further detailed analysis of each of the smaller components. Based on this finding it is recommended that one of the first areas of focus in this detailed stage of analysis among Australian families should be family leisure, family communication, and the family functioning component. The inclusion of sociodemographic variables and the use of interdependent data analysis techniques are also likely to be beneficial.

Response to recommendations

Findings from this study begin to address some of the recommendations expressed in Australian family leisure research. Harrington (2006a) expressed the need to examine further family leisure from several perspectives within the family. The findings from both Australian parents and children provide additional insight into family leisure by presenting multiple perspectives. Additionally, Harrington (2006a) advised researchers to include the child's perspective of family and individual leisure. The findings of this study illustrate the youth perspective on each of the family-leisure-related constructs. Harrington and Bell (2001) also pointed out the challenge of increasing the understanding of family leisure when government and academics collect individual data instead of family data. This study's data were collected from one parent and one child from each household, in an attempt to create a more complete picture of family leisure.

Current findings also represent a replication of several previous studies using the same theoretical framework, and include at least ten that address family leisure and family functioning, one addressing family leisure and family communication, three addressing family leisure satisfaction, five addressing satisfaction with family life, and one that examined them all in the same manner. Such replication, particularly among Australian families when the majority of others were from US samples, lends additional credibility to the ongoing efforts of addressing past criticisms of family leisure research for its gross lack of the use of consistent theoretical frameworks upon which lines of study can be built that allow for the creation and testing of theoretical propositions (Holman & Epperson, 1989; Orthner & Mancini, 1991).

Limitations/recommendations

While these findings represent further progress in family leisure literature, limitations must continue to be addressed. The large Australian sample was

surprisingly reflective of the population in terms of several sociodemographic variables but cannot be defined as representative of the population as a whole particularly in terms of gender. Future studies would benefit from sampling strategies focused on demographic and socio-economic variables, including a father's perspective, to ensure a diverse and accurate portrait of families in a given population. Collecting data through an online survey is a potential source of limitation especially when considering that approximately 33 per cent of Australian households do not have home internet access (ABS, 2008). Structural equation modelling of data from a non-experimental design cannot confirm or test causality; it merely describes the strength of the relationships specified in the model by the researcher.

The sheer number of variables in the current analysis lent itself to separate analysis of the family variables. While this approach responded to Byrne's (2001) recommendation for establishing broad baseline models, it is recommended that they begin to be used as a guiding framework for future study that can examine specific aspects of such models with family level analytical techniques. Dyadic modelling (Card, Selig, & Little, 2008; Kenny, Kashy, & Cook, 2006) and hierarchal linear modelling are both approaches that will allow for a better understanding of family data.

Continued qualitative research efforts are also encouraged, particularly those that may be sensitised to theoretical frameworks such as those used in the current study. Such efforts will likely provide rich insight and begin to answer consistent questions identified in this line of study. Additional efforts, qualitative and quantitative, to study family leisure in different countries will also create a more global understanding of the complex nature of families and their leisure behaviour.

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