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An Examination of Family Communication Within the Core and Balance Model of Family Leisure Functioning

The purpose of this study was to examine family communication within the core and balance model of family leisure functioning. The study was conducted from a youth perspective of family leisure and family functioning. The sample consisted of youth (N = 95) aged 11 – 17 from 25 different states in the United States. Path analyses indicated that family communication mediated a positive relationship between family leisure variables and family functioning variables. Implications and recommendations are discussed. The addition of communication in the Core and Balance Model is recommended.

A widely accepted definition of family functioning is informed by The Circumplex Model of Marital and Family Functioning. According to this family systems framework, healthy family functioning is characterized by balanced levels of cohesion and flexibility (Olson, 2000). Cohesion reflects the emotional bonding a family shares, and flexibility is the ability to cope with change. Communication, a third dimension of the model, is theorized to facilitate changes in cohesion and flexibility, though it is not utilized by Olson to determine family functioning. Galvin and Brommel (1982) defined communication as "a symbolic, transactional process, or the process of creating and sharing meanings" (p. 6). Moreover, Olson, Russell, and Sprenkle (1983) defined positive communication as sending clear and congruent messages, expressing empathy, providing supportive comments, and demonstrating effective problem-solving skills. Further, according to Olson and Gorall (2003), a family that has positive family communication will be better able to alter their cohesion and flexibility to meet developmental and situational demands that arise, whereas family systems with poor communication tend to have lower functioning in regard to cohesion and flexibility.

Positive family communication skills have also been found to result in an array of positive family outcomes such as less serious forms and lower rates of delinquency in adolescents (Clark & Shields, 1997), the development of conflict resolution (Koerner & Fitzpatrick, 1997), children's resiliency to adverse environmental influences (Fitzpatrick & Koerner, 1996), and the enactment of family rituals (Baxter & Clark, 1996). Furthermore, positive family communication skills have been found to mitigate the potential negative effects of television on children (Krcmar, 1998).

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On the other hand, poor family communication skills have been found to result in a number of concerns for individuals, including shyness (Huang, 1999), communication apprehension (Elwood & Schrader, 1998; Hsu, 1998), unwillingness to communicate (Avtgis, 2000), the development of reticence (Kelly et al., 2002), and delinquent behavior in adolescents (Clark & Shields).

Building on the work of Olson, Portner, and Bell (1982) Zabriskie and McCormick (2001) developed the core and balance model of family leisure functioning in order to explain the relationship between family leisure involvement and family functioning. The core and balance model of family leisure functioning is grounded in systems theory and informed by the circumplex model emphasis on families' need for stability and change and negotiating separateness versus togetherness. Research using the core and balance model has consistently found a positive relationship between family leisure involvement and family functioning (Christensen, 2004; Freeman & Zabriskie, 2003; Smith, Taylor, Hill, & Zabriskie, 2004; Zabriskie & McCormick, 2001). These studies determined that core and balance family leisure activity patterns were related differently to critical aspects of family functioning (i.e., cohesion and flexibility). Although family communication is a part of the circumplex model, it has not been specifically studied in the context of the core and balance model. On the basis of the facilitative role of communication in the circumplex model and the direct relationship between family leisure involvement and family cohesion and flexibility in the core and balance model, it is likely that family communication plays a significant role in the relationship between family leisure and family functioning. Therefore, the purpose of this study was to investigate the role of family communication within a core and balance framework.

REVIEW OF LITERATURE

Communication and Family Functioning

The Circumplex Model of Marital and Family Systems depicts family functioning along the dimensions of family cohesion (defined as togetherness) and flexibility (defined as the ability to cope with change) and defines it as an optimal balance between the two. Cohesion is separated into four different levels ranging from disengaged (very low), to separated, to connected, and ending at enmeshed (very high). Both disengaged and enmeshed levels of cohesion indicate an unbalanced relationship. Flexibility has four levels that range from rigid (very low), to structured, to flexible, and ending at chaotic (very high). Both rigid and chaotic levels of flexibility are unbalanced (Olson, 2000). A third dimension, communication, is said to facilitate modifications in cohesion and flexibility but is not portrayed in the model (Olson & Gorall, 2003).

Cohesion in the family system is defined by Olson (2000) as "the emotional bonding that family members have toward one another" (p. 145). Cohesion focuses on how the members of the family system balance their separateness versus their togetherness or how family members balance the importance of independence with the mutuality of being a member of a family system.

Olson (2000) defined flexibility in the family system as the "amount of change in its leadership, role relationships and relationship rules" (p. 147). Flexibility focuses on how family systems balance stability versus change or refers to the family system's need to appropriately change, to be flexible, or to adapt and learn from different experiences and situations. Olson's model indicates that a family system will have poor family functioning if they have too little or too much flexibility or cohesion for extended amounts of time.

Family communication. Family communication is the third dimension in the circumplex model (Olson, 2000). The symbols in communication come through both verbal (i.e., spoken words) and nonverbal (e.g., facial expressions, eye contact, gesture, movement, body posture, appearance, spatial distance) behaviors (Galvin & Brommel, 1982). Family communication is defined by Olson, Gorall, and Tiesel (2004) as the act of making information, ideas, thoughts, and feelings known among members of a family unit. Communication is said to be the facilitative dimension in the circumplex model and helps a family alter their cohesion and flexibility to meet developmental and situational demands that arise (Olson & Gorall, 2003). Olson stated that family systems with poor communication tend to be lower functioning, whereas family systems with good communication tend to be higher functioning.

Several studies support Olson's (2000) proposition that communication is a facilitator of family functioning (Anderson, 1986; Barnes & Olson, 1985; Masselam, Marcus, & Stunkard, 1990; Schrodt, 2005). Anderson determined that couples with balanced cohesion and flexibility had higher positive communication scores. Barnes and Olson reported from a parent and family perspective that families with higher family functioning (i.e., cohesion and flexibility) scores had better parent-adolescent communication than those with lower family functioning. Likewise, Masselam et al. found that those adolescents who had poorer family communication also had poor family functioning. Finally, Schrodt found that aspects of family communication were positively related to both cohesion and flexibility.

Overall, it appears that researchers have determined that positive communication helps families function better in that it promotes cohesion and flexibility, hallmarks of optimal family functioning from a systems perspective, in the face of various circumstances and changes in family life. In today's busy society, however, opportunities and optimal contexts for family communication to regularly occur appear to be increasingly limited. As Zabriskie and McCormick (2001) stated, "besides family crisis, shared family leisure may be one of the few experiences that bring family members together for any significant amount of time today" (p. 287).

Leisure and Family Functioning

For many years, researchers have consistently reported a positive relationship between family recreation and family functioning (Hawks, 1991; Holman & Epperson, 1984; Orthner & Mancini, 1991). Recent literature has looked specifically at the relationship between family leisure and family functioning as defined by Olson's circumplex model, including measures of family cohesion and flexibility (Christensen, 2004; Freeman & Zabriskie, 2003; Smith et al., 2004; Zabriskie & McCormick, 2001). These studies reported positive correlations between family leisure participation and family functioning. Furthermore, they found that core and balance family leisure involvement were related differently to both aspects of family functioning.

Core and balance model. The core and balance model of family leisure functioning is based on the premise that family leisure involvement meets ongoing needs for balanced levels of stability and change in the family system as posited by the circumflex model (Olson, 2000). Zabriskie and McCormick (2001) defined the two kinds of family leisure patterns central to the model as core and balance. Core family leisure activities are those that are easily accessible, common, often home based, and low in cost. Core activities might include playing a game of catch, playing board games, or preparing and eating dinner as a family. Balance family leisure activities, in contrast, suggest variety. They are activities that are novel and are participated in less frequently. These activities might include family vacations, traveling, outdoor activities, or going to a cultural event. Iso-Ahola (1984) stated that individuals seek structure and variety, stability and change, and familiarity and novelty in their leisure behaviors. Similar to individuals, families also seek to balance these needs through their leisure behavior (Zabriskie & McCormick, 2001).

According to the core and balance model, core family leisure activities address familiarity and stability in a family by regularly providing family leisure experiences that foster feelings of family closeness or cohesion. In other words, families who frequently participate in core leisure activities have opportunities to bond or foster relationships and, as a result, feel closer overall as a family. Conversely, balance family leisure patterns address novelty and change in a family by providing novel experiences that challenge families to negotiate and adapt to new input and to work together in a leisure context. The novelty and "newness" of balance activities provide an opportunity for families to experience change in a relatively comfortable setting, which leads to the development of adaptive skills and greater family flexibility overall. Core family leisure activities, therefore, are primarily related to the cohesion dimension of the circumplex model and balance family leisure activities are primarily related to the flexibility dimension (see Figure 1; Zabriskie & McCormick, 2001).

Researchers have consistently reported direct relationships between core and balance family leisure involvement and family cohesion and flexibility among racially and structurally diverse families (Christensen, 2004; Freeman & Zabriskie, 2003; Smith et al., 2004; Zabriskie & McCormick, 2001). Such consistent findings empirically support family leisure involvement as a "valuable, practical, and cost effective behavioral approach to help foster increased family cohesion and adaptability" (Zabriskie & Freeman, 2004, p. 75). Family communication, however, has not been examined within the core and balance line of research.

Communication in leisure research. Although the relationship between family functioning and family leisure has been investigated, little research has examined family communication and leisure. Scholars have hypothesized that outdoor recreation will improve family communication, and empirical support for this premise has been reported with small samples in studies that have examined family adventure programs (Bandoroff & Scherer, 1994; Huff, Widmer, McCoy, & Hill, 2003; Kugath, 1997).

For example, Bandoroff and Scherer (1994) found that families with at-risk adolescents who participated in a 21-day survival program reported improved communication within the family. Kugath (1997) discovered that fathers in families who participated in an 8-hr intensive family adventure program, including rock climbing and white water rafting, had significant increases in their family communication scores. Similarly, families in Huff et al.'s (2003) study improved their level of parent-adolescent communication after a challenging family outdoor recreation experience.

The Core and Balance Model indicates that as families participate in more family leisure activities, they report higher perceptions of family cohesion and flexibility. On the other hand, the circumplex model holds that it is a family's level of communication that facilitates changes in family cohesion and flexibility. Considering the extant literature and both models, it seems that as family leisure participation increases, it is likely that family communication would also increase and develop, which would therefore mediate the direct relationship between family leisure involvement and family functioning. Therefore, the purpose of this study was to investigate the role of family communication within a core and balance framework. Specifically, we wanted to determine if family communication mediated the relationship between types of family leisure involvement and family functioning (i.e., cohesion and flexibility) and tested four hypotheses: (a) There is a positive relationship between core and balance family leisure involvement and family cohesion and flexibility, (b) there is a positive relationship between core and balance family leisure involvement and family communication, (c) there is a positive relationship between family communication and family cohesion and flexibility, and (d) family communication is a significant mediator of the relationship between core and balance family leisure involvement and family cohesion and flexibility.

METHOD

Sample and Procedures

Past research focused on family leisure has often overlooked the perspectives of different family members, including those of children. Several

FIGURE 1. CORE AND BALANCE MODEL OF FAMILY LEISURE FUNCTIONING (ZABRISKIE & MCCORMICK, 2001).



Core and Balance Model of Family Leisure Functioning

researchers have noted that including a youth perspective on family leisure involvement is critical to better understanding family dynamics and activities beyond the parental perspective (Mactavish & Schleien, 1998; Shaw, 1997; Zabriskie & McCormick, 2003). Therefore, to gain a more complete understanding of youth perspectives on family leisure, family communication, and family functioning, this study examined a youth sample aged 11 - 17 (M = 13.86, SD = 1.45).

A convenience sample was obtained via e-mailed invitations to different family and youth agencies and organizations (e.g., community recreation centers, family life education centers) inviting their constituents to participate in the study. Respondents were given a URL address for an online questionnaire; it included both parental and youth consent and confidentiality information. Participation was voluntary and no incentives were given to the youth for participating in the study. The online questionnaire was structured such that no incomplete questionnaires could be submitted. There were a total of 104 questionnaires submitted, and 95 were deemed usable. Unusable questionnaires were primarily the result of providing responses to the Family Leisure Activity Profile (FLAP) that were mathematically not possible. For example, a family could not participate in several different leisure activities daily for 12 hr each. Completed questionnaires were e-mailed to the principal investigator and stored in an online database. We also contacted organizations from different geographical locations across the United States to gather data from more than one geographical region in the United States.

The resulting 95 participants came from 25 different states. The sample included 56% females and 44% males. Most of the youth's parents were Caucasian (98%) with the other 2% being Hispanic. Household incomes ranged from less than \$10,000 to over \$150,000 and about half (48%) had an annual household income less than \$70,000.

Instrumentation

Three instruments were used for this study to operationalize the constructs of interest: the Family Adaptability and Cohesion Evaluation Scales (FACES II; Olson et al., 1982), the Family Communication Scale (FCS; Olson et al., 2004), and the FLAP (Zabriskie & McCormick, 2001). *Family functioning*. To assess family functioning, we chose FACES II over FACES III because of its better validity and reliability (Olson et al., 1992). The empirical evidence suggests the use of linear scoring and interpretation of scores collected with FACES II (Kinsman & Wildman, 2001). Therefore, the FACES II instrument was utilized in this study, and Olson et al.'s (1992) linear scoring and interpretation procedures were followed.

The FACES II contains 16 cohesion items and 14 flexibility items. The scale was designed to measure family dynamics; therefore, scale items focus on system characteristics of all the family members currently living in the home. The instrument asks the respondent to indicate how frequently, on a scale from 1 (almost never) to 5 (almost always), the described behavior occurred in her or his family. Cohesion items included statements such as "family members feel very close to each other," "it is easier to discuss problems with people outside the family than with other family members," and "family members know each other's close friends." Flexibility items included statements such as "it is hard to know what the rules are in our family," "in our family, everyone shares responsibilities," and "when problems arise, we compromise." Cohesion and flexibility scores were calculated on the basis of a formula that adds and subtracts item scores for each dimension based on its positive or negative reference. This calculation provides total perceived family cohesion and flexibility scores.

Olson et al. (1992) reported acceptable levels of internal consistency for two national samples ($\alpha = .88$ and $\alpha = .86$ for cohesion and $\alpha = .78$ and $\alpha = .79$ for flexibility). For this sample of youth, internal consistency was also tested and deemed acceptable ($\alpha = .85$ for cohesion and $\alpha = .83$ for flexibility).

Family communication. The FCS (Olson et al., 2004) consists of 10 statements that measure different aspects of family communication. The 10 items were measured on a 5-point Likert-type scale, with 1 describing the family *not at all* and 5 describing the family *very well.* The scale included statements such as "family members express their true feelings to each other," "family members express affection to each other," and "family members can calmly discuss problems with other." The FCS measures positive

aspects of family communication focusing on a free flowing exchange of information, both factual and emotional. The FCS "assesses the degree to which family members feel unconstrained and satisfied with the communication in their family" (Olson et al., 2004, p. 3). The total score indicated how functional family communication was within the family with a higher score indicating higher functioning. Olson et al. (2004) reported an acceptable level of internal consistency in a national sample for the scale ($\alpha = .88$); internal consistency for this sample was also acceptable ($\alpha = .92$).

Family leisure. The FLAP measures involvement in family leisure activities on the basis of the core and balance model of family leisure functioning (Zabriskie, 2000). Respondents identify leisure activities done with family members across 16 activity categories. Eight categories of activities are representative of core family leisure patterns (e.g., family dinners, home-based TV/videos, games, yard activities) and eight categories are representative of balance family leisure patterns (e.g., community-based events, outdoor activities, water-based activities, adventure activities, tourism). Each question asks if the respondent participates in the activity category with family members. Specific activity examples were included to help delineate between categories. If the answer was yes, respondents were asked to complete ordinal scales of estimated frequency ("about how often?") and duration ("for about how long?") for each activity category.

Scores for the FLAP were calculated by first multiplying the ordinal indicators of frequency and duration of participation in each category, and then summing the core categories to provide a core family leisure index and summing the balance categories to provide a balance family leisure index. Multiplicative indices were chosen over the use of either ordinally scaled frequency or duration variables to provide a better measure of overall family leisure involvement. Specifically, the use of the frequency variable alone would underweight those activities that were done infrequently but for longer durations and would overweight activities that tend to be done quite frequently for short amounts of time. On the other hand, the use of the duration variable alone would overweight those activities that were done infrequently but for longer durations and would underweight activities that were done quite frequently for short amounts of time. The product of both ordinal variables provides a more meaningful index representing both frequency and duration of family leisure involvement. The FLAP has demonstrated acceptable psychometric properties including evidence of construct validity, content validity, interrater reliability, and test-retest reliability for core (r = .74), balance (r = .78), and total family leisure involvement (r = .78; Zabriskie & McCormick, 2001).

Analysis

Subscale scores on each instrument were computed for family cohesion and family flexibility as well as family core and balance leisure involvement. Core and balance, as well as flexibility and cohesion, were specifically examined to fully understand the dynamics of the role that communication plays in the core and balance model. Zero-order correlations were calculated to check for multicollinearity and significant relationships among the research variables. Multiple regression equations were calculated as part of the path analyses and to investigate the relationships among the variables.

Path analysis was undertaken using a threestep process. The first step tested Hypothesis 1 by regressing the family functioning variables of family cohesion and flexibility on the core and balance family leisure variables. The second step tested Hypothesis 2 by regressing family communication, the hypothesized mediator, on the family leisure variables. If the family leisure variables were significantly related to both the family functioning variables and the family communication, the family functioning variables were then regressed on both the family leisure variables and the family communication at the same time. This third step tested both Hypotheses 3 and 4. Family communication mediated the relationship between the family leisure variables and the family functioning variables if family communication was a significant predictor in the model and the family leisure variables were no longer significant predictors.

RESULTS

For these youth, family cohesion scores ranged from 29 to 76 (M = 57.77, SD = 10.495) and family flexibility scores ranged from 20 to 64 (M = 45.99, SD = 9.533). Their core family leisure scores ranged from 4 to 107 (M = 40.19, SD = 17.309) and balance family leisure scores

	Core	Balance	Cohesion	Flexibility	Communication
Core	_	.554*	.556*	.457*	.493*
Balance		_	.363*	.469*	.438*
Cohesion			_	.639*	.761*
Flexibility				_	.731*
Communication					—

Table 1. Zero-Order Correlations (n = 95)

**p* < .01.

ranged from 0 to 187 (M = 64.46, SD = 33.862). The sample means were found to be similar to past samples using similar instrumentation (Freeman & Zabriskie, 2003; Zabriskie, 2000). In addition, their family communication scores ranged from a possible low of 10 to a possible high of 50 (M = 35.19, SD = 8.866).

Zero-Order Correlations

Zero-order correlations were calculated to check for significant relationships among the research variables and multicollinearity. No sociodemographic variables were significantly correlated with research variables at the univariate level. All research variables were significantly correlated (see Table 1). The highest correlation among independent variables was .493; therefore, multicollinearity was not a concern.

Path Analyses

The results of the zero-order correlations guided the multiple regression analyses. Multiple regression analyses were computed to investigate the relationships between correlated variables at the multivariate level. The demographic variables of age and gender were not significantly related to the dependent variables in the multiple regression analyses (see Tables 2 and 3) and, as a group, did not increase explained variance. They were, therefore, removed.

Ordinary least squares regressions indicated that family communication did not mediate the direct relationship between core family leisure and family cohesion or the relationship between balance family leisure and family flexibility, as the family leisure variables remained significant predictors in the models. When family flexibility was the dependent variable (DV), core family leisure ($\beta = .47$, p < .001) explained a significant portion of the variance in the univariate case; however, in the presence of family communica-

tion, core family leisure ($\beta = .12, p = .155$) no longer explained a significant portion of the variance in family flexibility, although family communication did (β = .68, p < .001; see Table 2). When family cohesion was the DV, balance family leisure ($\beta = .37, p < .001$) explained a significant portion of the variance in the univariate case; however, in the presence of family communication, balance family leisure $(\beta = .03, p = .728)$ no longer explained a significant portion of the variance in family cohesion, although family communication did ($\beta = .77$, p < .001; see Table 3). Therefore, family communication significantly mediated the relationship between youth perceptions of core family leisure involvement and family flexibility and the relationship between balance family leisure involvement and family cohesion.

DISCUSSION

The basic premise of the Core and Balance Model was supported in that core family leisure

Table 2. Mediation Path Analysis Multiple Regressions for Flexibility (n = 95)

В	SE B	β
.252	.051	.457*
	.209	
	24.503*	
.786	.076	.731*
	.534	
	106.450*	
.718	.087	.668*
.070	.044	.127
	.546	
	55.325*	
	.252 .786 .718	.252 .051 .209 24.503* .786 .076 .534 106.450* .718 .087 .070 .044 .546

*p < .01.

*p < .01.

	В	SE B	β
Balance			
Balance	.113	.030	.363*
R^2		.132	
F		14.156*	
Family communication			
Family communication	.901	.080	.761*
R^2		.580	
F		128.280*	
Balance and Family Communication	1		
Family communication	.882	.089	.745*
Balance	.011	.023	.037
R^2		.581	
F		63.735*	

Table 3. Mediation Path Analysis Multiple Regressions for Cohesion (n = 95)

activities were significantly related to family cohesion and balance family leisure activities were related to family flexibility (see Figure 2). The path analysis suggests that from a youth perspective, core family leisure activities had a direct influence on family cohesion and indirectly influenced family flexibility through family communication. Likewise, balance family leisure activities had a direct influence on family flexibility and indirectly affected family cohesion through the medium of family communication. Current findings provide additional insight into the interrelationship between core and balance family leisure involvement and their overall contribution to both aspects of family functioning. These findings are consistent with the theoretical tenets of both the Core and Balance Model (Zabriskie, 2000) and the Circumplex model (Olson & Gorall, 2003) as well as indicate that family communication plays a significant role in the relationship between family leisure and family functioning.

The multiple regression analysis indicated a positive relationship between core family leisure and family cohesion for the youth that was stronger than the relationship between core family leisure and family flexibility. These findings support previous research (Freeman & Zabriskie, 2003; Smith et al., 2004; Zabriskie & McCormick, 2001) that also found core family leisure to have a stronger relationship to family cohesion than family flexibility. Such findings strengthen the assertion of the Core and Balance Model that core family leisure activities primarily lend to outcomes of family cohesion.

Both core and balance family leisure patterns were equally related to family flexibility from

FIGURE 2. YOUTH SAMPLE PATHS (n = 95).



the youths' perspective. This too is consistent with previous research (Freeman & Zabriskie, 2003; Smith et al., 2004; Zabriskie & McCormick, 2001) that found both core and balance to be similarly related to family flexibility. The current findings, therefore, support the theoretical argument that the interrelationship between core and balance family leisure involvement is essential for both outcomes (Freeman & Zabriskie).

Overall, these findings indicate that core family leisure involvement had a stronger relationship to family functioning than balance family leisure involvement from a youth perspective. This is heartening for family structures that often struggle with time and money issues like lower income and single-parent families that must rely on easily accessible, low cost activities (Weitoft, Hjern, Haglund, & Rosen, 2003). This provides further support to (Freeman and Zabriskie's, 2003) claim that core family leisure activities are "essential to higher family functioning and may make a more valuable contribution to family life" (p. 90). Similarly, Shaw and Dawson (2001) found that parents valued participating in family leisure as a way to help foster family cohesion. The importance that the parents in their study placed on simply spending time with their children suggests that core kinds of family leisure activities are important for families. This further supports the relationship between core family leisure involvement and family cohesion found in the current study.

Perhaps one of the most significant contributions from this study is that both aspects of family leisure involvement were predictive of family communication. Previous research (Bandoroff & Scherer, 1994; Huff et al., 2003; Kugath, 1997) has reported improvements in family communication after joint participation in various challenging outdoor recreation programs (balance) among small samples of families. Scholars have not, however, examined the contribution of all kinds of family leisure involvement to family communication nor have they examined broader samples of families. Although it has been theorized and research has been called for (Zabriskie, 2000), this is among the first to empirically identify the significant relationship between both types of family leisure involvement and family communication, and it did so from a youth perspective in a broader sample of families than previous work. More specifically, findings identified family leisure involvement as a valuable behavioral characteristic that plays a significant role

in the family communication and family functioning relationship. Additionally, the mediating effects of communication shed further light on the family leisure and family functioning line of study. Therefore, the relationship between family communication and family leisure must be acknowledged as an essential factor and considered in future efforts to understand healthy functioning families.

It is possible that for the youth in this sample, family leisure is one of the primary contexts for positive communication with their parents. Although the youth were not directly asked if improved family communication was a reason for participating in family recreation, the significant correlation between the two suggests support for the work of Shaw and Dawson (2001). Parents in their sample stated improved family communication as one of the reasons they participated in family leisure. This relationship is also encouraging given the challenges that many parents face communicating with their children as they advance from preteens to teenagers. In today's society, opportunity for parent-child communication is often limited to family crises, youth discipline, and brief conversations in passing. Findings from this study, however, demonstrate that family recreation can be a context for parents to communicate with their teenage children in a setting that can be naturally conducive to positive interactions versus contrived or stilted settings that may make both parent and youth uncomfortable.

The current findings also contribute additional support to the circumplex model. The relationship between family functioning variables and family communication supports the findings of Masselam et al. (1990) that family communication was significantly related to family functioning. In contrast to the findings of Barnes and Olson (1985), whose youth did not show a significant relationship, although the parents did, the youth of this sample showed such a relationship. Therefore, these findings add considerable support to the assertions of Olson and others that those families with better family communication will have higher functioning in terms of their family cohesion and flexibility. This implies that a variable that influences a change in family communication may, therefore, have an influence on family functioning. Subsequently, additional research that includes variables beyond communication and family leisure can help to better explain the complexities of what contributes to family functioning.

This study was the first to examine communication and its role in the Core and Balance Model. Although research findings have consistently supported the tenets of the Core and Balance Model, current findings suggest that there is still much to discover. It is recommended that further research utilize larger representative samples and include parent perspectives. Such an approach would allow researchers 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. In addition, it is recommended that researchers examine the role of family communication in family leisure functioning among nontraditional families and ethnic minority families.

Limitations

Although findings from this study do offer considerable contributions to the current literature, it must be recognized that correlational techniques were utilized. Therefore, interpretations of the directionality of the path relationships cannot be made for certain without further study. It can be argued, however, that in order to develop or improve family communication, a family must first have a context for shared experiences, such as family leisure, that fosters interaction and communication. Furthermore, the extensive research related to both the Core and Balance Model and the circumplex model supports the direction of the theoretical paths tested in this study. The few family leisure studies that have utilized quasi-experimental designs (Huff et al., 2003; Kugath, 1997) also reported that family leisure experiences resulted in improved family communication. Therefore, it is likely that family leisure is generally an antecedent to family communication and that both are apt to interrelate and foster aspects of family functioning. This directionality, however, has not been empirically tested. In order to effectively examine causal effects of family leisure and family communication on family functioning, research must use experimental designs and extended follow-up tests over time.

Further limitations regarding the sample must be recognized. The sample for this study included respondents from only 25 states and was relatively small, cross-sectional, and collected via the Internet. The online response method may have limited a specific group of possible respondents. Additionally, over 90% of the respondent's parents were White and non-Hispanic. Future studies accessing larger, more diverse, and representative samples are recommended. The current sample was, however, sufficient to examine and report predictive relationships between behavioral family characteristics and aspects of family functioning.

Implications

The influence of core family leisure on cohesion was supported, as well as the influence of balance on flexibility. Furthermore, the influence of balance on cohesion, appeared to be mediated by family communication. The researchers, therefore, suggest the possible addition of family communication as another factor in the Core and Balance Model. The model would still depict the direct relationships between core and cohesion and between balance and flexibility but also indicate that both core and balance indirectly influence cohesion and flexibility through family communication.

The addition also has a variety of implications for families and those who work with them. Professionals working with families on communication skills must acknowledge family leisure as a primary context in which communication occurs within the family. Regular communication among distressed families, for example, is likely to either be very rare, very strained, or a result of family crisis, frustration, or anger. Therefore, the use of leisure modalities is an important component of treatment to enhance the development of communication skills in families. Furthermore, parents should keep in mind the context in which communication often takes place within the home or with family members. Parents can purposefully plan for family time that affords communication in a leisure setting (Shaw & Dawson, 2001). Core family leisure involvement in particular offers parents an unobtrusive, enjoyable venue in which family members can interact frequently for small periods of time in or around the home. Thus, under the guise of family fun, families can take small steps toward better communication and more functional interaction.

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