

Parent-Adolescent Communication (PAC)

IV. SCORING

Items from the two subscales are intermingled on the final version of the scale. Although this may complicate the scoring process slightly, it is intended to reduce response bias of respondents. The total score is basically a sum score, but it is necessary to distinguish items from the two subscales as responses to the second subscale, Problems in Family Communication need to be flipped in point value. This can be accomplished in three different ways: change every 5 to a 1 and 4 to a 2 on these 10 items; subtract each response value from 6 and use the resulting difference or add the point value of all the items on this subscale and subtract this total from 60. These items are 2, 4, 5, 10, 11, 12, 15, 18, 19 and 20.

Once the values of the responses on the second subscale have been flipped, these new values can be added to the responses on the first subscale for a sum total scale score. Note the items on the first subscale which do not get flipped are 1, 3, 6, 7, 8, 9, 13, 14, 16, and 17.

Although this total scale score will generally be used, for some applications it may be preferable to use the scores from each subscale separately. Norms for the total scale score based on the sample from the current study are tabled in the next section.

V. NORMS

Table VI lists the norms for total scale scores that have been developed. Although the scale items are common, the responses vary considerably among family members. Although some comparisons were quite similar, such as male and female adolescent responses regarding each parent, some of the intergroup differences were substantial enough to suggest the need for reporting different norms. In order to reflect these differences, Table VI reports norms for four different subdivisions: 1) fathers reporting an interaction with the teens, 2) mothers' reports, 3) adolescents' reports regarding their mothers, and 4) adolescents' reports about interactions with their fathers.

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TABLE VI: TOTAL SCORE NORMS FOR PARENT-ADOLESCENT COMMUNICATION

REPORTED IN PERCENTILES BY SCORE (POSSIBLE RANGE 20-100)

<u>Raw Score</u>	<u>Fathers</u>	<u>Mothers</u>	<u>Adolescents re: their mothers</u>	<u>Adolescents re: their fathers</u>
96	99	99		
94	98	97		
93	96	96		
92	96	95	99	99
90	95	92	98	99
88	92	87	98	99
86	90	82	96	98
84	86	77	94	96
82	82	72	93	95
80	78	65	91	93
78	73	58	87	92
76	65	53	83	89
74	56	45	79	85
72	48	40	75	82
70	40	34	70	78
68	33	27	65	73
66	27	22	57	67
64	22	16	53	61
62	18	12	43	53
60	14	9	37	46
58	11	7	28	38
56	8		23	30
54	5		19	25
52			16	19
50			12	17
48			9	14
			7	10

Mean	72.55	75.47	66.56	63.74
Standard Deviation	10.74	11.12	12.10	12.02
Range	60	55	65	67
Skew	-.146	-.259	-.076	-.047
Kurtosis	-.104	-.361	-.002	.137
n	496	502	417	417

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PARENT-ADOLESCENT COMMUNICATION

Parent Form

Howard L. Barnes & David H. Olson

RESPONSE CHOICES				
1	2	3	4	5
Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree

1. I can discuss my beliefs with my child without feeling restrained or embarrassed.
2. Sometimes I have trouble believing everything my child tells me.
3. My child is always a good listener.
4. I am sometimes afraid to ask my child for what I want.
5. My child has a tendency to say things to me which would be better left unsaid.
6. My child can tell how I'm feeling without asking.
7. I am very satisfied with how my child and I talk together.
8. If I were in trouble, I could tell my child.
9. I openly show affection to my child.
10. When we are having a problem, I often give my child the silent treatment.
11. I am careful about what I say to my child.
12. When talking with my child, I have a tendency to say things that would be better left unsaid.
13. When I ask questions, I get honest answers from my child.
14. My child tries to understand my point of view.
15. There are topics I avoid discussing with my child.
16. I find it easy to discuss problems with my child.
17. It is very easy for me to express all my true feelings to my child.
18. My child nags/bothers me.
19. My child insults me when s/he is angry with me.
20. I don't think I can tell my child how I really feel about some things.

Parent-Adolescent Communication and the Circumplex Model

Howard L. Barnes and David H. Olson

University of Minnesota, St. Paul

BARNES, HOWARD L., and OLSON, DAVID H. *Parent-Adolescent Communication and the Circumplex Model*. CHILD DEVELOPMENT, 1985, 56, 438-447. This study tested the relationship between parent-adolescent communication and the Circumplex Model of Marital and Family Systems. While most studies of the Circumplex Model have focused on problem families, this study used fathers, mothers, and adolescents from 426 "normal" families. Family scores were developed and used to help describe the type of family system. Because of generational differences in terms of how parents and adolescents perceived their communication, separate analysis was done for each group. It was hypothesized that Balanced families (Circumplex Model) would have more positive parent-adolescent communication than Extreme families. This hypothesis was clearly supported for the parents but not for the adolescents. In contrast to the conflicting findings using individual level analysis (parents and adolescents), the findings at the family level using discriminant analysis indicated a linear relationship between parent-adolescent communication and the Circumplex dimensions (cohesion, adaptability) and family satisfaction. Families with good parent-adolescent communication perceived themselves in terms of the Circumplex Model as higher on family cohesion, family adaptability, and family satisfaction.

While there has been some research done on the relationship of parent-adolescent communication to the social and cognitive development of children (Cooper, Grotevant, Moore, & Condon, 1982; Grotevant & Cooper, 1983; Steinberg & Hill, 1978), there has been little focus on parent-adolescent communication and its relationship to family functioning. This study attempts to describe the nature of parent-adolescent communication, as perceived by parents and their adolescent children, in different types of family systems. A hypothesis relating types of family functioning and parent-adolescent communication is also tested with normal families.

Evidence of the importance of communication as a major dimension of family life is its inclusion in several conceptual models of family interaction. Olson et al. (Olson, Russell, & Sprenkle, 1983; Olson, Sprenkle, & Russell, 1979) view communication as one of three major dimensions in their Circumplex Model of Marital and Family Systems. They consider communication a "facilitating dimension" in that it facilitates movement of families on the other two dimensions of cohesion and adaptability. Epstein, Bishop, and Levin (1978) included communication and affective responsiveness as two of the six major dimensions of family functioning in their de-

velopment of the McMaster Model of Family Functioning. Although Lewis, Beavers, Gossett, and Phillips (1976) labeled a dimension as "affect," that is conceptually an important component of communication.

Changes in intergenerational patterns of communication have been linked to changes in the physical maturity of male adolescents (Steinberg & Hill, 1978). Steinberg (1981) examined the impact of these changes on family relations and found significant differences in the way early and late adolescents interact with their parents. The Grotevant and Cooper (1983) and Steinberg (1981) studies found that mother-adolescent communication patterns differed substantially from father-adolescent communication.

Communication within the context of the family appears to be particularly important during the adolescent years. Family communication affects adolescent identity formation and role-taking ability (Cooper et al., 1982). Cooper et al. suggest that adolescents who experience the support of their families may feel freer to explore identity issues. Holstein (1972) and Stanley (1978) found that discussions between parents and children significantly facilitated the development of higher levels of moral reasoning in adolescents. Grotevant and Cooper (1983) studied the role

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of communication in the process of adolescent individuation from the family. They noted the importance of communication to helping family members strike a balance between separateness from and connectedness to each other. Their work clearly links family communication and balancing cohesion (separateness versus connectedness) from the Circumplex Model.

This study will test a hypothesis derived from the Circumplex Model that Balanced families will have more effective parent-adolescent communication than Extreme families. While there is considerable support for the idea that Balanced families function more adequately compared to Extreme families (Olson, Russell, & Sprenkle, 1980), most of this research has been done with problem families. Only recently has a national data set on "normal" families been collected by Olson (Olson, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1983) that provided some evidence to challenge this hypothesis. That study found a linear relationship between family cohesion and family adaptability and other family variables (i.e., communication and satisfaction). The present study will utilize a subset of these cross-sectional data to focus on families with adolescents (adolescent and launching stages) and test the linear versus curvilinear hypotheses with "normal" families.

Communication and the Circumplex Model

The Circumplex Model of Marital and Family Systems (Olson, Russell, & Sprenkle, 1980, 1983) provides a typology for classifying families. The model is comprised of two curvilinear dimensions—family cohesion (the emotional bonding between family members) and family adaptability (the ability of the family system to reorganize in response to situational and developmental stresses). Optimal family functioning is characterized by a balance (two central levels) on both cohesion and adaptability. This is represented by a central location on both dimensions of the model (see Fig. 1). The four levels of cohesion and four levels of adaptability make it possible to identify 16 types of marital and family systems.

These 16 types can be grouped into three more general types: Balanced, Mid-Range, and Extreme. Balanced families fall in the central area of both dimensions and thus represent the optimal family type. These families are viewed as being more free to change levels of cohesion and adaptability to meet

their needs. While these families are typically located at the central region of the model, they are able to experience the extremes for short periods of time. They may also temporarily reorganize to extreme levels on cohesion and/or adaptability during periods of high stress. Mid-range families are characterized by mid-range levels on one dimension and extreme (high or low) levels on the other. Extreme families are those exhibiting extremely high or low levels on both cohesion and adaptability. These families are viewed as more limited in their potential range of family organization and resources with which to cope with the challenges of family life.

The authors of the Circumplex Model maintain that communication is the mechanism families utilize to share their changing preferences, needs, and feelings. Communication is viewed as the facilitating dimension of the Circumplex Model, the dynamic component considered critical in aiding the movement of families on the other two dimensions. While positive communication facilitates movement to different levels of family organization, a lack of communication skills or negative communication is believed to inhibit the family system's ability to change levels of cohesion and adaptability.

Thus, the authors hypothesize that Balanced families will tend to have more positive communication skills than Extreme families. This paper will test the relationship between the type of family system and the nature of the communication in "normal" families with adolescents using both individual and family scores.

Method

Sample.—The sample consists of 426 "normal" families drawn from across the nation. In each of these 426 families, data were collected from both parents and one adolescent. This is a subgroup of a larger randomly stratified sample of 1,140 intact families from across the family life cycle (Olson, McCubbin, et al., 1983). This subgroup consists of all the families from that survey who were at the adolescent or launching stage of the family life cycle and had an adolescent child who participated in the study.

Data for the entire cross-sectional sample of 1,140 families were collected by 150 group leaders. Families were required to come to a group meeting to complete the questionnaires. To maximize independence and honesty in responses, family members were separated while taking the survey. Other than

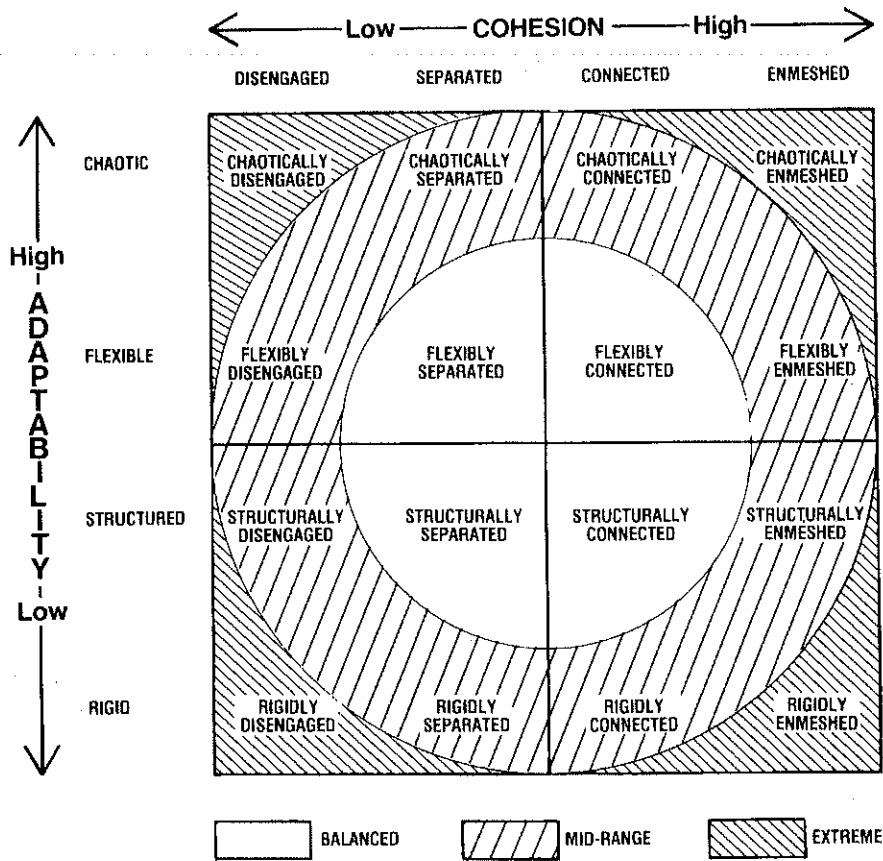


FIG. 1.—Circumplex Model: Sixteen types of marital and family systems

being intact families, no other criteria were used for excluding families from this sample. These families appeared to be rather “normal” and without serious problems. The vast majority of the parents had never been divorced (96%), and only 8% had ever received individual, marital, or family therapy.

The parents in the 426 families had been married an average of 22 years. Husbands were on the average 46 years of age (range 31–63), wives 43 years of age (range 31–61), and the age of the oldest child in the family was 19 years. The average family included three or four children. The adolescent participant in this study was not consistently of a particular ordinal position. The majority were firstborn (60%), but ordinal position ranged all the way to thirteenth child in the family. The adolescent participants ranged from 12 to 20 years of age, with a mean age of 16.4 years.

Data were collected from 214 male and 212 female adolescents. They were generally good students; 78% reported getting mostly A's and B's. Only 15% reported any dislike of

school. About half (51%) of the teens reported working at part-time jobs, with half of these being only summer jobs. Almost 21% reported being employed on the family farm or in some other family-owned business. For a more complete description of the sample and sampling methods, see Olson, McCubbin, et al., 1983.

The largest group of families lived in cities with more than 25,000 population, with some families from small cities (14%), rural areas (14%), and farms (13%). Average annual family income fell in the \$25,000–\$35,000 range. About 83% of the husbands had full-time employment and 13% held part-time jobs in addition to their full-time employment. The largest occupational group consisted of managers and professionals. The largest group of women, 35%, considered themselves to be primarily housewives. About 31% of the husbands and 18% of the wives had at least four years of college.

Research instruments.—The Parent-Adolescent Communication Scale (Barnes &

Olson, 1982) is composed of two scales—one that measures the degree of openness in family communication, and one that assesses the extent of problems in family communication. Each scale is comprised of 10 items. These scales were developed using a factor analysis of the data from the earlier national study (Olson, McCubbin, et al., 1983). The factor analysis defined two main factors. Alpha reliabilities for each subscale are .87 and .78. A separate study showed test-retest reliability to be .78 and .77 for the openness scale and the problems scale.

The Open Family Communication Scale (Factor 1) includes items such as, "My [mother/father, child] tries to understand my point of view," "It is easy for me to express all my true feelings to my [mother/father/child]," and "My [mother/father, child] is always a good listener." The factor loadings of items on this scale ranged from .71 to .48.

The Problems in Family Communication Scale (Factor 2) consists of items such as "My [mother/father/child] has a tendency to say things to me which would be better left unsaid," "I don't think I can tell my [mother/father/child] how I really feel about some things," and "When we are having a problem, I often give my [mother/father/child] the silent treatment." The factor loadings of items on this scale ranged from .60 to .26. Respondents used a five-point Likert scale to indicate the extent of their agreement with the items.

The scores for items on the problems subscale are reversed in value. Thus, a high score indicates a lack of perceived problems in the communication (see Fig. 2). This conversion provides an additive total scale score, where a higher total score signifies better parent-adolescent communication.

The only difference between the parent and adolescent forms of the scale is the referent of each question. Adolescents answer the items twice, once as they pertain to their mother and again as they pertain to their father. Parents respond to the items once to describe how they communicate with their adolescent.

The Family Adaptability and Cohesion Evaluation Scales, Version II (FACES II) (Olson, Portner, & Bell, 1982), was used to assess family type according to the Circumplex Model. This instrument includes a scale to assess family cohesion (16 items) and a scale to measure family adaptability (14 items). The reported alpha reliabilities of these self-report scales are .87 (cohesion) and .78 (adaptability). This instrument also uses a five-point Likert response scale to assess the extent to which the respondent feels the item statements are applicable to his or her family.

Other scales used in one of the analyses were a Family Satisfaction Scale, which assessed satisfaction related to cohesion and adaptability on the Circumplex Model. A

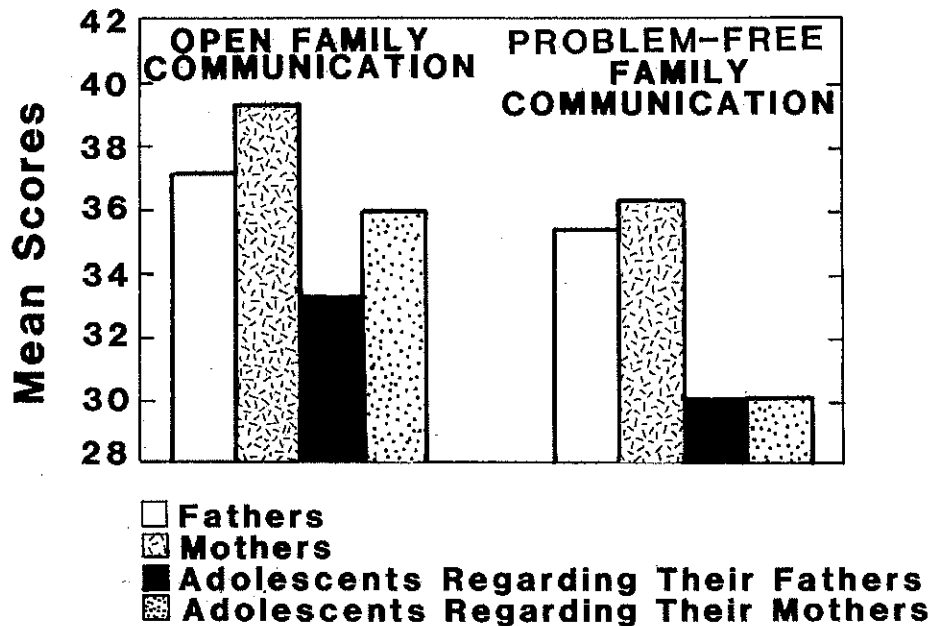


FIG. 2.—Parent-adolescent communication

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Quality of Life Satisfaction Scale was also used to assess satisfaction with various domains of a person's life. Other instruments used in one analysis included FILE (Family Inventory of Life Events), which is a stress scale, and a Family Strengths Scale with two subscales of Family Pride and Family Accord. F-COPES, a scale to measure coping strategies adopted by families, contained five subscales related to acquiring social support for the family, reframing incidents to give them a more positive interpretation, seeking spiritual support, mobilizing the family to acquire and accept help, and passive appraisal, which assesses the family's tendency to adopt a fatalistic attitude. For additional information on the reliability and validity of these scales, see Olson, McCubbin, Barnes, Larsen, Muxen, and Wilson (1982).

Analysis.—This paper focuses on the nature of intergenerational communication by examining the perceptions of three family members: mothers, fathers, and adolescents. The data will be analyzed in several ways. Initially, groups of family members will be aggregated to compare the responses of fathers, mothers, and adolescents as total groups. Second, perceptions about communication will be examined for within-family differences by comparing the responses of the mother, father, and adolescent within each of the families. Finally, a family level analysis will be used to look at the relationship between family level of organization (as determined by the Circumplex Model) and patterns of communication.

The aggregate comparisons used *t* tests and paired *t* tests to examine within-family differences (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975). Chi-square analysis was used to test the relationship between parent-adolescent communication and the type of family system. Step-wise discriminant analysis was used to compare families high and low on parent-adolescent communication.

Before reporting on the results, some discussion of the problems related to family level research seems appropriate. One of the challenges in family research is how to examine issues at the family as opposed to the individual level. This is particularly pertinent to studies such as this one, which examines family issues by assessing the perceptions of multiple individuals in the family (Olson, 1977).

Frequently, rather low levels of agreement are found between the reports of members within a given family. For example, in this study, correlations of responses on cohe-

sion, adaptability, and communication were, respectively, .46, .32, and .30 between spouses; .46, .31, and .32 between fathers and their adolescents; and .39, .21, and .34 between mothers and their adolescent children. Considering that these persons were responding to a common referent (i.e., their family), these seem to reflect a rather low level of agreement.

Jessop (1981) noted several suggestions that have been offered regarding this issue. From her work, lower levels of agreement might be expected when "threatening" or problematic topics are the focus of questions, when the reporters are involved in the interaction, or when family power or control issues are the subject of inquiry. She found higher agreement related to reports of family closeness or affective components of family life. Other studies have reported generally low to moderate levels of agreement between parents and their children on their reports of family life (Kandel, Lesser, Roberts, & Weiss, 1968; Larson, 1974; Nieme, 1968).

To what degree such differing reports represent different realities of each family member and to what degree they represent measurement error is open to discussion (Olson, 1977; Thompson & Williams, 1982). For this study we will assume that such discrepancies are not measurement error but reflect actual perceptual differences between family members. The existence of such discrepancies presents a considerable methodological challenge. One of the crucial questions is how to reconcile the varying reports of family members into some kind of unified score that might represent the family as a unit without obliterating distinctions between them.

In the final analysis of this study, a family mean score was used to determine family placement on the Circumplex Model. Due to the differing norms for parents and adolescents, *z* scores were used instead of raw scores in computing the family mean scores. While reliance on a mean score may obscure important differences, especially in families with very discrepant perceptions between family members, it does place each family on a scale relative to other families.

Results

The analysis of the Parent-Adolescent Communication Scale data revealed substantial generational differences. As a group, mothers reported better communication with their children than did fathers. Adolescents

expressed having difficulty communicating with both parents. At the aggregate level, the perceptions varied considerably between fathers, mothers, and adolescents (see Fig. 2). Recall that the scores on the problems scale are reversed such that a high score indicates a lack of communication problems.

Several analyses were completed to test for differences attributable to the sex of the adolescent. The findings clearly demonstrated no sex differences between adolescent males and adolescent females in how they perceived their communication with their mothers and fathers, or how parents of either sex perceived their communication with male or female adolescents.

When the focus of the analysis moved from the aggregate (group) level to the intrafamily level (Table 1), mothers consistently reported more positive communication with their adolescents than fathers did. This difference was attributable to higher levels of openness reported by mothers in their parent-child interactions. The adolescent responses also indicated more positive interactions with their mothers than with their fathers in terms of a greater degree of openness in the mother-child relationship. The teens reported about equal levels of problems in trying to communicate with each of their parents.

Compared to the adolescent reports, both parents reported significantly more openness and fewer problems in communicating with their children. Clearly adolescents viewed

their intrafamily communication with greater negativism.

The last group of analyses focused on the relationship between the Circumplex Model and parent-adolescent communication. The parents' and adolescents' responses were examined separately using chi-square to describe the relationship between parent-adolescent communication and the Circumplex Model. The communication scores were divided into three groups of low, medium, and high scores with approximately the same number of persons in each group.

The scores on FACES II were also divided into three groups according to the three major family types: Balanced, Mid-Range, and Extreme. A family mean score was used to determine the location of the family on the Circumplex Model so that all members of a particular family had the same family type for this analysis. One problem using family mean scores is that families with very discrepant scores end up being misclassified as a Balanced type because of the averaging procedure. Another more serious problem is classifying these normal families as Extreme on the Circumplex Model, since this is a characteristic more frequently found in problem families.

The major hypothesis was that Balanced family types will have more positive communication (higher scores) than Extreme family types. The parents' responses on the combined communication scale and each separate

TABLE 1
PAIRED *t* TESTS COMPARING FAMILY MEMBERS' RESPONSES ON THE PARENT-ADOLESCENT COMMUNICATION SCALE

RESPONDENT	OPENNESS SCALE		PROBLEM SCALE		PARENT-ADOLESCENT COMMUNICATION	
	Group Mean	<i>t</i> Value	Group Mean	<i>t</i> Value	Group Mean	<i>t</i> Value
Mothers regarding their adolescent...	39.32		36.27		75.63	
Fathers regarding their adolescent...	37.23	5.07**	35.42	1.87	72.62	3.90**
Adolescents regarding their mothers...	36.03		30.56		66.58	
Adolescents regarding their fathers...	33.35	5.08**	30.47	.20	63.82	3.28*
Mothers regarding their adolescents...	39.32		36.26		75.63	
Adolescents regarding their mothers...	36.03	6.94**	30.56	12.18**	66.58	11.08**
Fathers regarding their adolescents...	37.25		35.37		72.58	
Adolescents regarding their fathers...	33.35	8.74**	30.47	11.72**	63.82	11.55**

* *p* < .01.

** *p* < .001.

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communication scale supported the hypothesis. In all three cases effective communication was associated with the Balanced family type and low communication scores were overrepresented in the Extreme family type. The parents' responses showed significantly different distributions from the expected on the total scale (Table 2) as well as the openness ($p < .001$) and problems ($p < .001$) subscales.

The results based on the adolescents' responses were quite different from their parents'. Two sets of chi-square tests were done, focusing separately on adolescents' perceptions of communication with their mothers and with their fathers. A surprising finding on the total scale and openness subscale was that a higher proportion of the Balanced type fell in the group of low communication scores and a higher proportion of Extreme types were in the high communication scores group. Regarding communication with mothers, the results revealed significant findings on the total scale (Table 2) and on the openness subscale ($p < .001$) but not on the problems subscale ($p < .06$).

The results using the adolescents' responses about their fathers show similar yet

stronger patterns to those above. In all three analyses, there were disproportionately more Balanced types in the low-scoring group and more Extreme types in the group of high communication scores. The distribution varied substantially from the expected using the total scale (Table 2) and both subscales (openness, $p < .001$; problems, $p < .01$).

Whereas the previous analysis was at the individual level, the next analysis shifted to the family level. A step-wise discriminant analysis was conducted to determine the extent to which several variables could distinguish between a group of families who scored high on parent-adolescent communication and a group that scored low. Twelve separate scales that were considered relevant were incorporated into the analysis: family cohesion, family adaptability, family satisfaction, family stress, family coping (five subscales), family strengths (two subscales), and satisfaction with the quality of life.

The results clearly demonstrated the significant difference between these two groups of families. Table 3 indicates the univariate F ratios and means for the two groups on the five variables that discriminated significantly. Families with better parent-adolescent com-

TABLE 2
PARENT-ADOLESCENT COMMUNICATION AND THE CIRCUMPLEX MODEL
(Percentages)

	N	COMMUNICATION SCORES		
		Low	Medium	High
Parents regarding their adolescents: ^a				
Balanced.....	421	26.4	36.3	37.3
Mid-range.....	280	31.8	30.0	38.2
Extreme.....	120	51.7	25.8	22.5
Total.....	821
Adolescents regarding their mothers: ^b				
Balanced.....	173	38.7	32.9	28.3
Mid-range.....	134	34.3	26.9	38.8
Extreme.....	76	30.3	18.4	51.3
Total.....	383
Adolescents regarding their fathers: ^c				
Balanced.....	192	34.9	42.7	22.4
Mid-range.....	143	34.3	28.7	37.1
Extreme.....	80	30.0	18.8	51.3
Total.....	415

^a $\chi^2 = 29.48, p < .001$.

^b $\chi^2 = 13.14, p < .01$.

^c $\chi^2 = 26.87, p < .001$.

TABLE 3
STEP-WISE DISCRIMINANT ANALYSIS ON HIGH VERSUS LOW COMMUNICATION
GROUPS: UNIVARIATE *F* RATIOS

Variable	Low Communication Group Mean	High Communication Group Mean	<i>F</i> *
Family satisfaction	43.26	53.67	100.80
Passive appraisal (subscale of family coping)	52.78	46.86	38.08
Family cohesion	42.94	53.58	96.71
Satisfaction with quality of life.....	45.41	54.00	64.09
Family adaptability	44.79	54.53	87.29

* All are significant beyond .0001.

munication were higher in family cohesion, family adaptability, and family satisfaction. The family satisfaction scale indicates they were satisfied with the levels of cohesion and adaptability in their family. Families with good parent-adolescent communication were also satisfied with their overall quality of life. Their lower scores on passive appraisal indicated that they tended not to be fatalistic about problems but would reframe problems and see them as a challenge to overcome.

Discussion

This study has shown some generational differences and parental differences in perceptions regarding parent-adolescent communication. Adolescents perceived significantly less openness and more problems in intergenerational communication than their parents. In all these analyses, the findings were small but in the direction expected, and they were generally significant at a high level ($p < .001$). There were no sex differences between how adolescent males and females perceived their communication with their mothers or fathers, or how the parents of either sex perceived their communication with their male or female adolescent. However, both generations reported differences in the way mothers and fathers interacted with their adolescent children.

The hypothesized relationship between parent-adolescent communication and the Circumplex Model has been supported for adults but not for adolescents. The parents' responses offer strong support for the main hypothesis that Balanced families will have higher communication scores reflecting more open and problem-free communication. However, the results for adolescents directly contradict this hypothesis. These differences between parents and adolescents are consistent with the generational discrepancies noted

above, but the question of why these differences occur remains unanswered.

Since the sample for this study consists of "normal" rather than dysfunctional families, the designation of the high-scoring families as Extreme may be somewhat misleading. Thus, a possible explanation is that the extreme group actually consists of high balanced levels rather than extreme dysfunctional levels of cohesion and adaptability. If this were so, adolescents and adults with higher levels of cohesion and adaptability would be expected to report more positive communication. If this assumption is true, then the adolescents' data (but not the parents') would support the alternative hypothesis regarding a linear relationship between the Circumplex dimensions and parent-adolescent communication.

Whereas the previous analysis focused separately on parents and adolescents, the next analysis shifted to the family level and compared families with high scores on parent-adolescent communication with families with low scores. Using step-wise discriminant analysis, families with good parent-adolescent communication had higher levels of family cohesion, family adaptability, and family satisfaction.

In contrast to the conflicting findings at the individual level (parents vs. adolescents) regarding parent-adolescent communication and the Circumplex Model, the family level analysis indicated a more linear relationship between communication and family cohesion and adaptability. Also, families with good parent-adolescent communication had higher levels of family satisfaction, which means they are satisfied with their levels of cohesion and adaptability.

The concern has been repeatedly voiced in the last several years that family research-

ers need to take into account the responses of multiple family members rather than relying on the perceptions of a single family member as "representative." This study has presented some clear evidence to support this position and to demonstrate the value of family level analysis. The low levels of agreement between family members present several challenges and problems to the family researcher. How does one account for the differences? Are they due to measurement error? Are they a problem of instrumentation, or do they represent real perceptual differences? If so, what is the real nature of life within a given family and how does one obtain an adequate family level score?

While the need to assess multiple family members is evident, the challenge of reconciling diverse responses is considerable. On an intuitive level, family mean scores are more representative of a family in the case where there is a high level of agreement between the perceptions or reports of different family members. However, it is in families where there is little perceptual agreement that the need to find a way to represent the family as a whole without obscuring what may be significant differences may be even more pressing. The family mean scores we have used here are not the final answer, but they hopefully are the beginning of a response to the complexities involved in assessing multiple family members.

Frequently the differences between members' responses may offer some of the most important insights into the family. In this instance, there are some issues of interest that have been raised by the discrepant views of parent-adolescent communication. The parents evidently think they are doing a better job communicating with their teens than is perceived by the adolescents. However, when mothers claim a greater degree of openness with their children than is indicated by fathers, the adolescents' perceptions support them.

These findings raise several important questions. To what extent do the parent-adolescent differences found here reflect different developmental levels between the generations? While adolescents are aware that they experience greater openness with their mothers, is this acknowledged between family members? Do husbands recognize that their wives have greater rapport with the children? Traditional sex roles define males as more instrumental and females as more expressive or emotionally open. Are the differences found in this study between parents re-

lated to traditional sex-role patterns, or is there some other factor that accounts for the differences? Like the Grotevant and Cooper (1982) and Steinberg (1981) studies, this study found substantial differences in patterns of parent-adolescent communication between mothers and fathers. While the Steinberg study used only male adolescents, this study and Grotevant and Cooper used both males and females. The collective results of these studies and the specific analysis of sex differences conducted for this study suggest that these communication differences are not due to the sex of the adolescent.

Finally, this study has focused on one of the basic requirements of family research—to assess and account for the responses of multiple family members. As research includes more family level analysis, it is important to note whether differences are obscured through the use of family scores. While the complexities of the issues involved in this question preclude quick or simple answers, we hope this study will contribute to a continuing recognition and dialogue on this important conceptual and methodological issue.

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