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Affection, Social Contact, and Geographic Distance Between Adult Children and Their Parents

This study investigates the following questions: whether greater affection between adult children and their parents leads to more social contact, whether frequent social contact leads to greater affection, or whether each of these mutually influences the other. Using nationally representative data collected in 1990 by the American Association of Retired Persons, we examine predictors of each dimension of solidarity and then estimate a causal model that tests the indirect and reciprocal influence among these dimensions. After finding a reciprocal influence between contact and affection in the mother-child relationship, but not in the father-child relationship, we conclude that the motivations for contact are different in adult-child relations with mothers compared to those with fathers. These differences are important for understanding the consequences of family disruption for intergenerational solidarity in adulthood. Also, parallels are drawn between parent-child relationships and voluntary friendships.

Over the last decade, research on family relations has increasingly taken a multidimensional approach to studying adult intergenerational rela-

tionships, focusing on frequency of visits and phone calls, helping behavior, geographic distance between generations, and, more recently, the affection that one generation has for another. Each dimension of family relations is further interconnected with the others in ways that affect the well-being of both generations. For example, geographic mobility increases physical distance between generations, impeding the exchange of social and instrumental support (Dewit, Wister, & Burch, 1988; Litwak & Kulis, 1987). Additionally, because the dimensions are interconnected, the social forces that influence one dimension of the family relationships will indirectly influence the others. Changes in family structure, such as the increase in divorce and remarriage, may thus alter the functioning of intergenerational relationships by reshaping access to family members (Furstenberg, 1981, 1988). Therefore, a more accurate knowledge concerning parent-child relationships can be gained by considering the interrelated and mutually reinforcing dimensions as a system. In this article, we consider the mutual impact of affection, contact, and distance.

A question arising in discussions about parent-child relations in later life is: Does greater affection lead to more frequent visiting, does more frequent visiting lead to greater affection, or does each of these mutually influence the other? Despite its theoretical plausibility and relevance to a more accurate interpretation of parent-child interactions in adult life, this question has remained

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unanswered. We address this question by examining three dimensions considered key to understanding the nature of adult parent-child relationships: affection, frequency of social contact, and geographic distance. First, we investigate each dimension of solidarity independently and then we develop a causal model to understand the interconnections among these dimensions, specifically how they mediate and reciprocally influence each other.

BACKGROUND

The literature on intergenerational family relations is generally sanguine about the state of intergenerational relationships in the contemporary family. Studies find that despite fears of mass alienation and abandonment, the vast majority of parents visit or speak once a week or more with at least one child (Shanas, 1979) and most live within an hour of one child (Lawton, Silverstein, & Bengtson, in press). Also, aging parents can and do rely on their children to provide caregiving and other forms of assistance (Brody & Schoonover, 1986).

In spite of the generally optimistic tone of these conclusions, there are substantial sources of variation in the quality of intergenerational relations. For instance, while the level of affection between parents and children is generally high, it is weakened in the case of parental divorce, especially between divorced fathers and their children (Cooney & Uhlenberg, 1990; Lawton, 1990). In addition, there are gender differences in the way family bonds are maintained, with daughters and mothers more active in maintaining relationships than sons and fathers (Hagestad, 1986; Spitze & Logan, 1990). Other forces that differentiate the relative strength of various aspects of intergenerational attachments include socioeconomic status (Kulis, 1991), race (Mutran, 1985), and age of both child and parent (Umberson, 1992).

The studies mentioned above have added substantially to our knowledge about the patterns and dynamics of intergenerational relations, but have generally not considered the multiple dimensions of intergenerational solidarity as a system of interrelated constructs. Theoretical specifications of the causal links among the dimensions of solidarity have been tested in research by Bengtson and others (see Atkinson, Kivett, & Campbell, 1986; Bengtson & Roberts, 1991; Roberts & Bengtson, 1990). Unlike these previous studies, we include sociodemographic factors, thereby placing the parent-child relationship in a life-course and soci-

etal context. Further, because such studies have stayed with unidirectional causal models, they have not tested the possibility that the dimensions may be reciprocally related and mutually reinforcing, an issue we explore here.

THEORETICAL MODEL

Homans' Model of Social Exchange

In this analysis, we test the proposition that intergenerational affection and social contact mutually reinforce each other, such that frequent contact between adult children and their parents increases their emotional intimacy, and emotional intimacy increases their frequency of contact. In developing the model, we draw from the theory and research of George Homans (1950), who proposed that positive sentiment increases the propensity of people to interact, and that the familiarity gained through interaction increases positive sentiment among them. Those who share common experiences are likely to develop a collective identity and a sense of shared meanings and purposes that build empathy in the relationship; simultaneously, positive sentiments gained from such an association serve as symbolic rewards for maintaining or increasing the ongoing interaction. Every study we have seen in the literature on aging that examines Homans' exchange theory does so from a more utilitarian approach, for example, helping behavior. None has examined the particular aspect of Homans' theory that focuses on affection and contact.

Rather than using Homans' postulates for voluntary friendships and social relationships, in this article we apply Homans' theories to examine affection and social contact specifically in the relationship between adult children and their parents. Cross-sectional associations between affection and interaction within intergenerational relationships have generally been interpreted in a causal ordering such that affection motivates interaction (Bengtson & Roberts, 1991). However, there is evidence that the causality may flow in the reverse direction as well. A study by Chapman and Neal (1990) using an experimental design found that adolescents who spent time helping older adults developed a more positive view toward the older generation, suggesting that familiarity gained through interaction increases empathy. Field and Minkler (1988) provided further evidence of dynamicism in the intergenerational relationship, finding that affection and frequency of

contact vary over time. If emotional and associational aspects of intergenerational relations reciprocally affect each other, then simple one-way causal models are incomplete and fundamentally misspecified, leading to a truncated understanding of parent-child relations across the life course.

Other Variables in the Model

The term *solidarity* refers to a higher order concept that encompasses the multiple, complex, and sometimes contradictory ways that parents and children are socially connected to each other (see Bengtson & Roberts, 1991). We have already discussed affection and association as two key dimensions of solidarity in parent-child relationships. To these we add geographic distance, a dimension of structural solidarity that enables face-to-face interaction and exchanges of instrumental support between the generations (Dewit et al., 1988). Geographic proximity should also encourage emotional intimacy insofar as it facilitates social contact and increases opportunities for shared experiences (Connidis & Davies, 1990).

While this analysis focuses on the relationships among the dimensions of intergenerational solidarity, it also incorporates the individual, familial, and social structural characteristics that directly affect each dimension of solidarity between family members. Individual characteristics considered include age and gender. Adult children mature into autonomous, stable self-identities after the tumultuous years of self-definition in young adulthood and enter roles more similar to their parents, allowing a better mutual understanding (Bengtson & Black, 1973). Therefore, we expect that older children will have closer relations with their parents than will younger adult children. Gender is important to consider because of socialization that obligates women more than men to maintain social relations in the family (Hagestad, 1986), so mothers and daughters are expected to be more involved with kinkeeping than fathers and sons.

Family members' relationships with each other are also influenced by the position they hold within the family structure; for example, whether they are married, divorced, widowed, or never married, or whether the younger generations have their own children or not. Adult children who are married and who are parents themselves are likely to have a better understanding of their own parents and to consequently have better relations with them than do unmarried or divorced chil-

dren. Parental marital status may also structure intergenerational solidarity. Whereas widowed parents may live closer to their children than married parents, enabling more contact with their children (Litwak & Longino, 1987), divorced parents, particularly fathers, may have weaker ties with their children as manifested in both greater physical and emotional distance (Cooney & Uhlenberg, 1990; Furstenberg, 1988).

Family solidarity is continuous across generations (Hagestad, 1985), such that the strength of solidarity within one intergenerational dyad reflects solidarity that is transmitted from the previous generation (Cherlin & Furstenberg, 1986). Therefore we consider the influence of the grandparent on the respondent as a measure of intergenerational solidarity between the respondent and parent.

Social structural factors of race, education, and income bestow benefits and impose constraints upon an individual in the context of family intergenerational linkages. Black families tend to exhibit stronger ties to mothers than nonblack families (Mutran, 1985; Stack, 1974), so we anticipate that adult black children will have greater contact and more affection with their mothers (but not necessarily with their fathers) than do adult nonblack children. Socioeconomic factors may also influence intergenerational family solidarity. Those with higher incomes might have the financial resources needed to sustain contact with family, or alternatively, they may use those resources to maintain dispersed nonfamilial social networks (see Fischer, 1982), reducing involvement with family. The more highly educated adult children are likely to live further away (Crimmins & Ingegneri, 1990) because college is a major reason for moving out and away from home (Goldscheider & DaVanzo, 1989), which in turn may reduce quantity of contact and, ultimately, affection. Homeowners are less likely to move than renters, and therefore may be associated with a more proximate residence to parents.

To summarize, this study first analyzes unidirectional models of family solidarity. Then it tests a reciprocal model, such that frequency of contact and level of affection between adult children and their parents are hypothesized to mutually affect one another. These endogenous factors are further influenced by parents' marital status, sex, age, race, measures of socioeconomic status, the influence of grandparents, and geographic distance.

DATA, MEASURES, AND METHODS

Sample

The data for this analysis are from a nationally representative study of 1,500 adults (18 years and over) carried out in 1990 by the American Association of Retired Persons (AARP) for the purpose of investigating intergenerational relationships. Interviews were carried out by telephone; the average length was 35 minutes. The refusal rate for eligible households was approximately 32%. For details concerning the sample and procedures, see Bengtson and Harootyan (in press).

The respondent is the adult child. We consider only respondents who reported at least one surviving non-coresident biological parent. There are 872 respondents with living mothers and 712 respondents with living fathers. Because the unit of analysis is the parent-child relationship, 549 children with two surviving parents are represented in both analytic groups.

Dependent Variables

Because respondents are asked about mothers and fathers separately, there are two parent-child analyses of three dependent variables each. While we perform separate analyses for relations with mothers and relations with fathers, ours is not strictly a stratified-sample approach with common dependent variables. Because "mother" and "father" models consider solidarity of the child with different individuals, dependent variables in each are qualitatively distinct, despite similar measures.

Affection is measured by questions that ask, "How close do you feel to your father/mother?" Because the number of responses for the "not very close" category is sparse (3% and 11% for mothers and fathers, respectively), we collapse the variable into two categories of (1 = very close, 0 = somewhat/not very close). Seventy-two percent report being "very close" to their mother, and 56% state they are "very close" to their father. Frequency of contact is measured as the reported number of visits and phone calls with each parent, as rated in 11 categories. The variable is scored on a scale of 0 (never) to 10 (daily or more). Sixty-eight percent of all respondents report at least weekly contact with mothers; 20% state that they have daily contact with mothers. Contact with fathers is somewhat less frequent. Fifty-seven percent report at least weekly contact, 12% daily. Geographic proximity is measured by a dichotomous variable

designating whether or not the child lives within 1 hour travelling time of each parent (1 = yes, 0 = no). Over half the respondents live within an hour of either parent (55% and 59% with mothers and fathers, respectively).

Independent Variables

Independent variables measuring family structure, and structural and individual factors are operationalized as follows (reference categories appear in parentheses). Parents' marital status is measured with two dummy variables: unmarried, remarried (married). The parent is considered unmarried if he or she is not living with the biological parent of the opposite sex and has not remarried. Sixty-nine percent of all unmarried mothers and 32% of unmarried fathers are widowed. The parent is considered remarried if married to someone other than the biological parent of the opposite sex. Married respondents and the handful of widowed respondents are compared to the never-married and divorced/separated. Respondents with children are compared to those with none. The influence of grandparents on the respondent during childhood, a measure unique to the AARP study, is assessed by asking about the grandparent(s) with whom the respondent had the most, if any, contact. The measure is a 4-point scale based on the question, "In general, would you say these grandparents' influence on you was (1) very important, (2) somewhat important, (3) not very important, or (4) not at all important?"

Structural factors include education, income, homeownership, and race. Education is coded 10 for less than high school diploma, 12 for high school diploma, 13 for some college and/or technical school, and 16 for college degree or more; income is measured as yearly household income categories and recoded to category midpoints and then logged. Homeownership is dichotomous (nonhomeowners). Race is denoted by blacks (nonblacks); sample size prevents greater detail. Sex is a dichotomous variable (males = 1). Age is treated as a continuous variable, with respondents assigned values corresponding to the midpoints of the reported age category: 21, 29.5, 39.5, 47.5, 52.5, 57.5, 62.5, 67.5, 72.5. Descriptive statistics for all measures are shown in Table 1.

Methods

There are two steps to this analysis of intergenerational solidarity, testing recursive and nonrecur-

TABLE 1. SAMPLE CHARACTERISTICS FOR PARENT-CHILD DYADS

Independent Variables	Mother-Child Dyad	Father-Child Dyad
Parents' marital status		
Married (%)	53	66
Remarried (%)	11	16
Unmarried (%)	36	18
Respondent's marital status		
Married (%)	70	67
Separated/divorced (%)	12	10
Widowed (%)	2	0
Never married (%)	16	23
Has children (%)	68	62
Homeowners (%)	58	55
Income, logged (mean)	3.42	3.44
Education (mean)	13.89	13.91
Race		
Blacks (%)	7	7
All others (%)	93	93
Age (mean)	35.69	32.90
Sex		
Females (%)	59	60
Males (%)	41	40
Grandparent influence (mean)	3.12	3.13
Number of cases	872	712

sive models, respectively. In the first step we estimate regression equations separately for relations with mothers and relations with fathers, independently predicting the three solidarity variables of distance, contact, and affection. These regressions help provide an empirical foundation for constructing the nonrecursive models. They also serve as replications to previous studies, thereby providing greater confidence in the reciprocal models that are derived from them. The dichotomous variables of affection and distance will be analyzed using logistic regression, while the variable for frequency of contact is continuous and thus analyzed using ordinary least squares (OLS) multiple regression.

In the second step, we estimate (again separately for child-mother and child-father relations) a causal model to test the relationships among the dimensions of solidarity, including the indirect role of geographic distance and the reciprocal relationship between contact and affection. Figure 1 shows a conceptual diagram of the causal model. LISREL VII is used to estimate the structural parameters of the model using a maximum likelihood procedure (Jöreskog & Sörbom, 1989), with the reciprocal paths estimated using two-stage least squares (see Duncan, 1975). In the empirical model, paths from the exogenous variables (i.e., gammas) are either freely estimated or restricted based on relationships observed in the equations

of the first analytical step. Paths that are not statistically significant at the .05 level are dropped and then the model is reestimated in an iterative process that results in the "best" set of gamma coefficients for each type of parent-child relationship. The paths among the endogenous (or solidarity) variables (i.e., betas) are proposed based on theoretical considerations discussed earlier in this article. Thus, models for child-mother and for child-father relations have different specifications in their paths from exogenous variables but have the same specification in their paths between solidarity variables. In both groups, restriction of some paths to zero provides the identifying condition necessary to estimate a model with two paths and correlated error between affection and contact.

It should be noted that because this model includes only observed (rather than latent) variables, each dimension of solidarity is treated as if it were perfectly measured. This is appropriate because multiple indicator models of affection have shown single, subjective indicators to be highly reliable (Gronvold, 1988) and because distance and contact are directly measurable. Further, because knowledge from the first-stage regressions is used to specify the exogenous paths of the model, it is not appropriate to discuss goodness-of-fit statistics. Rather, our focus is on the structural relationships between solidarity variables, specifically the reciprocal relationship between affection and contact and the causal pathways that link exogenous variables to the dimensions of solidarity.

RESULTS FOR THE NONRECURSIVE MODELS

Affectional Solidarity: Feelings of Closeness

The large majority, approximately 80%, of respondents say their relationship with their parents is an emotionally close one, though the father-child relationship is somewhat less close than the mother-child relationship. The results of the logistic regression predicting feelings of emotional closeness are shown in Table 2. A pattern of weakened intergenerational solidarity exists among children whose parents who are no longer married to each other, particularly among children with unmarried fathers. Black children report closer relations with their mothers than do nonblacks; however, race has no influence on emotional closeness to fathers. Homeowners, however, report a closer feeling to fathers than do renters, though education and income have no effect. Finally, the perceived

TABLE 2. LOGISTIC REGRESSION OF AFFECTUAL SOLIDARITY: FEELINGS OF CLOSENESS BETWEEN THE GENERATIONS

Independent Variables	Feelings of Closeness	
	To Mother	To Father
Parents' marital status ^a		
Remarried	-0.65**	-1.61**
Unmarried	-0.28	-1.75**
Respondent's marital status		
Never married	-0.08	-0.03
Separated/divorced	0.02	0.39
Has children (none)	-0.24	0.04
Blacks (nonblacks)	1.49**	0.35
Homeowner (renter)	0.22	0.54**
Income	0.13	-0.00
Education	0.00	-0.05
Male (female)	-0.21	0.07
Age	-0.00	-0.00
Grandparent influence	0.24**	0.22**
Intercept	0.25	-0.49
-2 log L chi-square	40.31	120.19
df	12	12
Number of cases	872	712

^aOmitted category for parents' and respondent's marital status is married. Omitted categories for other variables are noted in parentheses.

** $p < .01$.

influence of grandparents while growing up has a positive effect on emotional closeness between parents and adult children. As seen below, this measure of intergenerational affect has no effect on geographic distance or contact.

Associational Solidarity: Frequency of Contact

The OLS results for frequency of contact are found in Table 3. Because of the importance of distance in previous studies, an additional model controlling for distance appears in this table. As in the model for affection, parents' marital status is a salient predictor. Parental marital disruption reduces the amount of contact between the generations. Once again, those whose mothers are remarried, or whose fathers are no longer married to their mothers, report fewer contacts than those whose parents are still married to each other. The effect is more apparent for the father-child than for the mother-child relationship. In the child's generation, being never married or having children tends to lessen the quantity of contact.

Frequency of contact is also subject to socioeconomic structuring. Having less income seems to motivate more contact with fathers, and homeowners tend to have more contact with either parent, though the effect is attenuated by controlling for distance in the mother-child relationship. Controlling for distance also modifies the effect of education on contact, rendering it insignificant in the mother-child relationship, but in the father-child relationship having greater education is associated with more social contact. Sons report less contact than daughters with mothers only when distance is controlled. This result character-

TABLE 3. ORDINARY LEAST SQUARES REGRESSION OF ASSOCIATIONAL SOLIDARITY: FREQUENCY OF CONTACTS PER YEAR (UNSTANDARDIZED B COEFFICIENTS)

	Frequency of Contact			
	With Mothers		With Fathers	
Parents' marital status ^a				
Remarried	-.44*	-.74**	-1.24**	-1.82**
Unmarried	.03	.02	-2.32**	-2.67**
Respondent's marital status				
Never married	-.39*	-.58*	-.38	-.42
Separated/divorced	.09	.05	.14	-.00
Has children (none)	-.16**	-.14*	-.19**	-.14
Black (nonblacks)	.41	.37	.47	.38
Homeowners (renters)	.25	.62**	.55**	.98**
Income	-.08	-.17	-.25*	-.32*
Education	.01	-.09**	.14**	.01
Male (females)	-.38**	.28	-.19	-.11
Age	-.01	-.02	.00	.01
Grandparent influence	.08	.09	-.01	.07
Lives within 1 hour	2.31**		2.58**	
Intercept	6.97**	10.01**	5.30**	8.90**
R ²	.31	.05	.42	.20
Cases	872	872	712	712

^aOmitted category for parents' and respondent's marital status is married. Omitted categories for other variables are noted in parentheses.

* $p < 0.05$. ** $p < .01$.

izes the mother-daughter bond as the most active type of intergenerational relationship. There are no differences in contact with respect to race or age for either parent.

Structural Solidarity: Geographic Proximity

The logistic regression equations predicting the likelihood of living within 1 hour of mothers and fathers are shown in Table 4. The variables for family structure are among the most salient predictors of how close children live to their parents. Respondents who have remarried parents are much less likely to live within an hour of that parent than those whose parents are still married to each other. The effect of parents' marital status is especially pronounced in the father-child relationship, where respondents are more likely to live more than an hour away from unmarried fathers, but not from unmarried mothers. Also the coefficients for father's marital status are much larger than those for the mother. While the marital status of the adult child is not significant, having children of her or his own increases the likelihood of living near the older generation.

Socioeconomic status impacts on the likelihood of living close to parents. Homeowners are more likely than nonhomeowners to live within an hour of their parents. Presumably, the decision

to purchase a home includes attempting to locate near to at least one set of parents. As expected, children with greater education are less likely to live within an hour of the parents.

The coefficient for age indicates that older persons are less likely than younger persons to live near their parents, suggesting that parent-child association is influenced by social roles that are structured by position in the life course. The likelihood of living within an hour of parents is unaffected by gender and race.

Intergenerational Solidarity: Summary of Its Parts

The results presented above highlight the most important predictors of intergenerational solidarity. The most consistent predictors across the various aspects of solidarity are those related to family structure, specifically the parents' marital status. Relations with remarried mothers, and with remarried or unmarried fathers are generally weaker than relations with married parents. Black children report greater feelings of closeness with mothers than do nonblacks. Also as expected, mothers and daughters engage in substantially more frequent contact than do fathers and sons. The influence grandparents had on the respondents while growing up had an effect only on the closeness, indicating that sentiments are transferred within families, across generations.

Certain factors external to the family relationship structure the pattern of intergenerational solidarity. Greater education and older age are associated with a lower frequency of contact and an increased likelihood of living more than an hour away from the other generation. More highly educated people may search a larger geographic area for appropriate employment and older persons may simply have had more exposure to opportunities for moving. Conversely, an adult child who owns his or her home also presents evidence of stronger solidarity.

With these findings in mind, we now turn to developing and testing a model of reciprocal influence between intergenerational affection and association.

CAUSAL MODEL OF INTERGENERATIONAL SOLIDARITY

This portion of the analysis tests the reciprocal, or nonrecursive, relationship between affection and contact in adult child-parent relationships. The

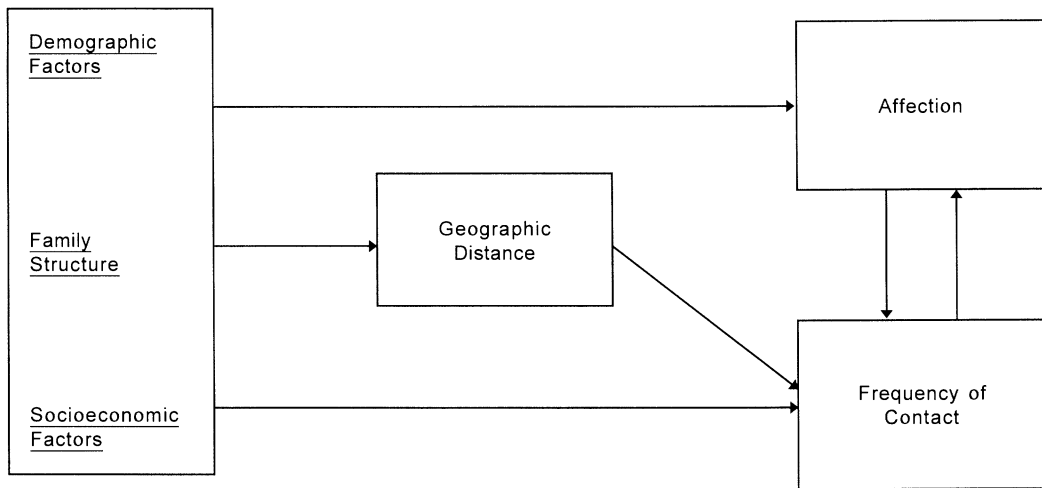
TABLE 4. LOGISTIC REGRESSION OF STRUCTURAL SOLIDARITY: GEOGRAPHIC DISTANCE

Independent Variables	Lives within 1 Hour from	
	Mother	Father
Parents' marital status ^a		
Remarried	-0.58*	-1.00**
Unmarried	-0.04	-0.58*
Respondent's marital status		
Never married	-0.07	-0.18
Separated/divorced	-0.07	-0.26
Has children (none)	-0.58**	0.65**
Blacks (nonblacks)	-0.16	-0.22
Homeowner (renter)	0.69**	0.71**
Income	-0.14	0.11
Education	-0.17**	-0.21**
Male (female)	0.23	0.16
Age	-0.02**	-0.03**
Grandparent influence	-0.04	0.15
Intercept	3.10**	3.47**
Number of cases	872	712
-2 log L chi-square	78.02	91.50
df	12	12

^aOmitted category for parents' and respondent's marital status is married. Omitted categories for other variables are noted in parentheses.

* $p < 0.05$. ** $p < .01$.

FIGURE 1. CONCEPTUAL CAUSAL MODEL OF INTERGENERATIONAL SOLIDARITY WITH NONRECURSIVE EFFECTS



model, presented in Figure 1, is estimated as a system of three equations. In addition to proposing that contact and affection are mutually reinforcing, we additionally expect that geographic distance is related to affection only indirectly through association. Because distance has been shown to be the most important factor in facilitating contact, we restrict its direct path to affection to zero.

Except for affection, all variables used in the causal model are defined in the same units as they are in the single-equation models. Affection is represented by its three original categories: "not very close" (1), "somewhat close" (2), and "very close" (3). Although the assumptions of OLS regression—that the dependent variable be measured on an interval scale and be normally distributed—make it necessary in the recursive models to collapse affection into a dichotomy, structural equation modelling allows us to circumvent those assumptions by substituting, where appropriate, polychoric correlations in the matrix used to estimate parameters. Jöreskog and Sörbom (1989) recommend the use of polychoric over product-moment correlations where ordinal and binary data represent underlying continuous distributions because they correct the imprecision in the ordinal indicator. Because it is reasonable to assume that the underlying distributions for our measures of affection and distance are continuous, we use polychoric correlations to approximate the "true" correlations involving these two dimensions of solidarity. Thus, a mixed correlation matrix (consisting of polychoric and product-

moment correlations) is used to estimate parameters in the causal model.

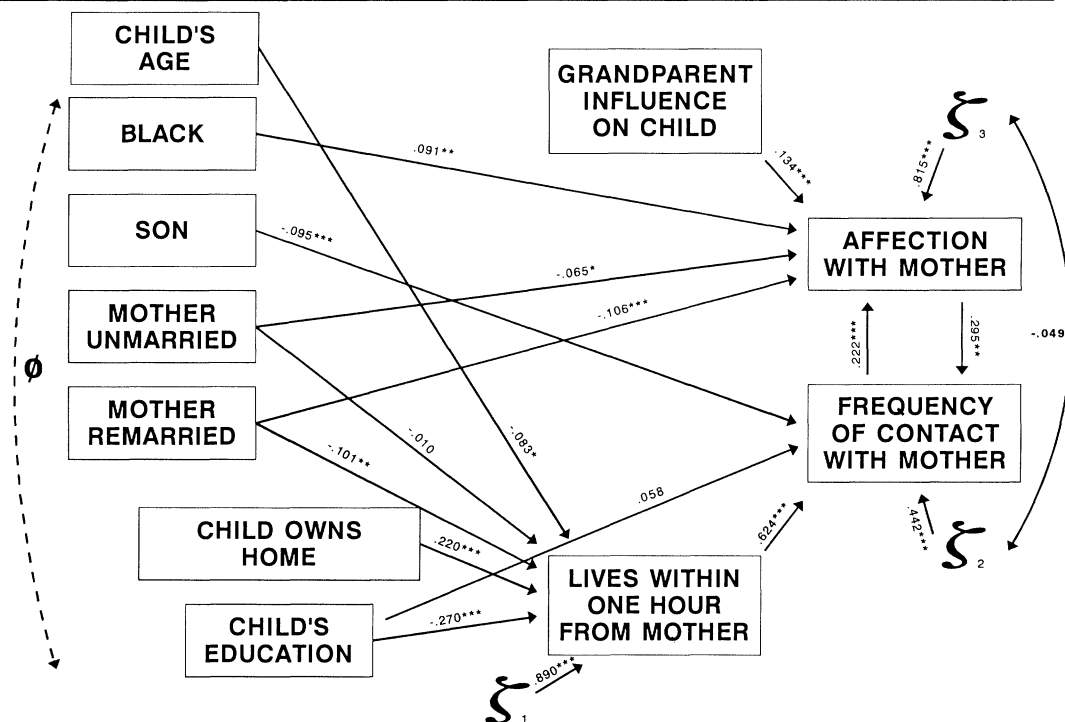
RESULTS FOR THE NONRECURSIVE MODELS OF INTERGENERATIONAL SOLIDARITY

The parameter estimates for relations with mothers are shown in Figure 2. The coefficient of the path leading from contact to affection is statistically significant, as is the coefficient of the path leading from affection to contact. In other words, greater contact is associated with greater affection, and greater affection is associated with greater contact, as predicted by Homans' theory. In the adult child-mother relationship, social interaction and positive sentiment mutually reinforce each other.

The reciprocal causal model for relations with fathers (Figure 3) shows that while contact positively influences affection, the influence of affection on contact is not statistically significant. In other words, while more frequent contact with fathers increases affection, the emotional relationship does not have a bearing on how frequently they interact.

While exogenous variables in the causal model predict solidarity dimensions similarly to the predictions in the single-equation regression models, there are some differences between them. In the mother-child relationship, the effect of having unmarried or even remarried mothers on parent-child association is not statistically significant when affection is controlled. Apparently, one consequence of parental divorce and other marital

FIGURE 2. NONRECURSIVE CAUSAL MODEL OF INTERGENERATIONAL AFFECTION AND CONTACT: MOTHER-CHILD RELATIONSHIP



∅: All exogenous variables are free to correlate

Note: Adjusted goodness-of-fit index = .986. $\chi^2 = 12.10$, 12df, $p < .437$. Coefficients are unstandardized and based on polychoric correlation matrix.

* $p < .05$. ** $p < .01$. *** $p < .001$.

disruptions may be a lower frequency of contact because of the diminished feelings of closeness that the disruption engenders. But in the father-child relationship, a child with an unmarried or remarried father reports less affection and frequency of contact, even after controlling for the reciprocal influence and the effect of distance. The effect of marital disruption in the father-child relationship, therefore, both directly and indirectly reduces closeness and contact. Another effect disentangled by the reciprocal model is that sons now report less contact than daughters do with fathers as well as mothers.

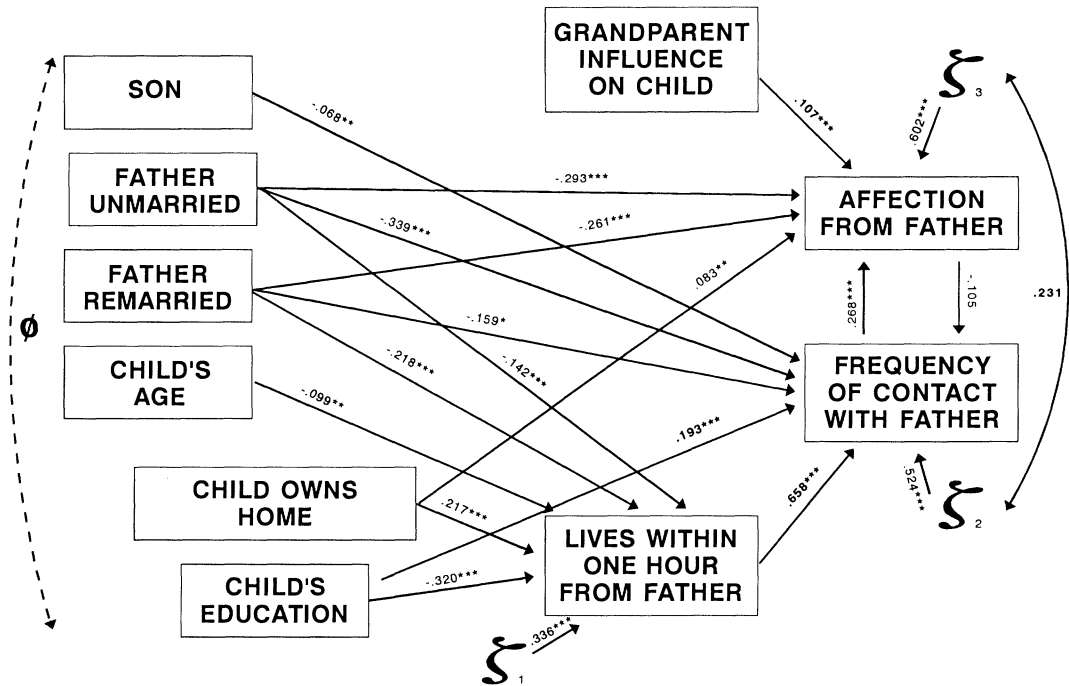
An important distinction between the father-child and mother-child relationship is that the former is more sensitive to a variety of factors that have little or no effect on the latter. The father's marital status impacts all dimensions of solidarity, but the mother's marital status has a direct effect primarily on affection, though remarried mothers tend to live further away from children than do married parents. Homeowning children report less

distance and greater affection with their fathers, but only decreased distance with mothers.

DISCUSSION AND CONCLUSION

We hypothesized that feelings of affection and frequency of contact are reciprocally linked; that is, the more parents and children see each other, the greater affection they will have for each other, and vice versa. In the case of the mother-child relationship, there indeed seems to be a reciprocal set of effects, presenting support for Homans' theory that contact and affection act to reinforce each other. Reciprocal effects were not, however, observed in the father-child relationship. Both parent-child dyads respond similarly to social contact, once it has been initiated, but greater affection does not act to increase contact for fathers as it does for mothers. This result indicates that the motivations for interaction between adult children and their mothers and fathers are different. Mothers may view frequency of interaction as a

FIGURE 3. NONRECURSIVE CAUSAL MODEL OF INTERGENERATIONAL AFFECTION AND CONTACT: FATHER-CHILD RELATIONSHIP



\emptyset : All exogenous variables are free to correlate.

Note: Adjusted goodness-of-fit index = .975. $\chi^2 = 15.03$, $10df$, $p < .131$. Coefficients are unstandardized and based on polychoric correlation matrix.

* $p < .05$. ** $p < .01$. *** $p < .001$.

test of the quality of the relationship, and therefore seek to reinforce or affirm it through contact; such a pattern of actions are consistent with the role of kinkeeper traditionally adopted by female family members. The strength of the association between affection and contact with fathers derives largely from the process by which familiarity breeds fondness. However, fondness for fathers, unlike for mothers, does not translate into greater familiarity. Father-child interaction may be motivated more by instrumental or obligatory concerns and based less on personal affinity. It is possible that the decision to socialize with adult children tends not to be made by the father, but is one to which he adheres more or less agreeably, while reaping the benefits of the contact.

Another difference to note between mother-child and father-child relationships is in the pattern of exogenous variables that explain intergenerational solidarity when other solidarity variables are controlled. Parental marital disruption (primarily divorce) results in significantly less frequency of contact with mothers in the indepen-

dently estimated equation, but not in the causal model (with affection controlled). Parental divorce suppresses contact with mothers only indirectly because of lower affection with the mother following her divorce. Yet in the father-child relationship the variable for parental divorce significantly diminishes frequency of contact directly, even with affection controlled, suggesting that social structural forces rather than negative sentiment may create social distance between divorced fathers and their children. With regard to emotional distance in relations with fathers, divorce not only directly reduces affection (as it did in relations with mothers) but also indirectly reduces affection through lower contact. These contrasts between mothers and fathers offer more evidence for a growing literature that documents greater damage to the attachment between fathers and children of divorce.

While the data allow us to make inferences about the social-psychological process of maintaining family solidarity across generations, several limitations of the study should be noted. First, each

dimension of solidarity is measured with only one indicator. Multiple indicators are needed to assess the reliability of measurement and to analyze the dimensions of solidarity as latent constructs. Second, the measures of solidarity are somewhat crude, in several instances having only two and three categories. Indicators with additional scale points would reflect the measured dimensions with more precision. Finally, it should be noted that the data we have analyzed are cross-sectional. Replication and extension of the analysis using longitudinal data would further test the causal specification by affording the opportunity to examine temporal changes in solidarity.

Results here support the hypothesis that contact and affection between adult children and their parents are causally related, creating the possibility that adult intergenerational relationships may be improved by promoting social contact. Nevertheless, increased contact frequently does not yield increased affection in all social relationships, notably marriages that end in divorce. We suggest that Homans' theory implicitly assumes that people have the opportunity to exit a relationship that is no longer mutually satisfying, a central defining feature of friendship relations (Fischer, 1982; Laumann, 1973) but not necessarily of traditional kinship relations. In a more traditional framework, parents and their adult children are said to be bound to each other by long-term normative obligations. If the parent-child relationship is unique in its primordial attachment, the relationship may be actively maintained over long periods of social discomfort and stress.

The patterns for the structural, exogenous variables are also instructive. Having realistic expectations about a family member with certain traits facilitates harmonious relations. Further, because distance is a key factor in making social contacts feasible, families contemplating moves might well consider the consequences of settling at an inconvenient distance. Homans theorized this model to apply to any social relationship, not specifically intrafamilial ones, so these results suggest that the parent-child relationship in adult life functions similarly but not identically to voluntary friendships. The literature on friendships presents other similarities with parent-child relationships; for example, friendship bonds also endure geographic distance and infrequent contact (Blieszner, 1989). Indeed, friendship and family structures may be converging insofar as the decision to affiliate with family members has increasingly become a matter of choice and taste, and

less a matter of duty. Therefore, one aspect of successful aging for both generations may include recreating the intergenerational relationship from an authoritarian hierarchy to something more like a friendship. We suggest that just as many friendships have developed into "fictive kin," so have many parent-child relationships developed into "fictive kith."

Allan and Adams (1989) consider "the importance of structural as well as more personal characteristics for understanding the patterning of friendship in old age" (p. 51); a conclusion reached in this study is that both of these characteristics are also pertinent for understanding parent-child relationships in later life. That distance, contact, and affection between adult children and their parents are causally interrelated also implies that social forces that disrupt one aspect of solidarity in the family also tend to inhibit other aspects as well. The impact of social disruptions, such as divorce, reverberates through the family system and multiplicatively weakens intergenerational relations. Given the historic rise in the prevalence of divorced families, our results may signal that adult intergenerational family relations will be less cohesive in the future than they are at present.

NOTE

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