

Discrepancies in Reports of Support Exchanges Between Aging Parents and Their Middle-Aged Children

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Objectives. This study investigated predictors of discrepancies in reports of 5 types of support that aging parents and their middle-aged children exchanged with one another. Predictors included structural factors, including needs and resources and dyadic characteristics, and psychological factors, including family obligation and investment in the relationship.

Methods. Participants included 337 dyads of parents (aged 59–96 years) and their children (aged 40–60 years). Multilevel models assessed the level of discrepancies between dyadic members and examined predictors accounting for the discrepancies. We considered downward (from parent to child) and upward (from child to parent) directions in support exchanges.

Results. For upward support from adult children to their parents, children reported that they gave more than their aging parents reported receiving. For downward support from parents to children, the results differed depending on the type of support. Discrepancies between parents' and children's reports were associated with parents' feelings of obligation toward children and children's ratings of the importance of parent–child relationship.

Discussion. These results suggest the importance of considering multiple perspectives and the direction of exchanges between generations. Discrepancies in reports of support reflect both self-enhancement and family context and may be an important source of misunderstanding and conflict between generations.

Key Words: Discrepancy—Dyadic reports—Intergenerational exchanges—Social support.

AGROWING literature suggests that parents do not stop providing assistance to their adult children when they reach maturity or when they establish their own households (Hogan & Eggebeen, 1995; Schoeni & Ross, 2005). Instead, exchanges of various types of support are common and continue over the life course of both parents and children (Spitze & Logan, 1992). Continuing support may play a particularly important role in midlife and old age. Older parents who begin to have difficulties in everyday functioning may benefit from emotional and practical help from their children (Krause, 1986; Silverstein & Bengtson, 1994), whereas their middle-aged children may still welcome support and advice from parents, and, on occasion, financial help (Cooney & Uhlenberg, 1992; Suito, Pillemer, & Sechrist, 2006).

Much of the literature on intergenerational exchanges has relied on reports from a single family member, either a middle-aged adult or aging parent (Bianchi, Evans, Hotz, McGarry, & Seltzer, 2007). Assessments of multiple perspectives may provide a more comprehensive picture of intergenerational exchanges and their implications for the well-being of family members (Freedman, Wolf, Soldo, & Stephen, 1991). Multiple informants, however, often do not agree when reporting on their intergenerational support exchanges (Klein Ikkink, van Tilburg, & Knipscheer, 1999;

Rossi & Rossi, 1990). Although the observed discrepancies in these reports may be regarded as random error, discrepant reports of the same events are a meaningful feature of family relationships and interactions (Cox & Paley, 1997). In particular, differences in perspectives on how much support is given and received could become a source of strain in the relationship and jeopardize future exchanges. Only a few papers, however, have systematically examined factors that might account for these discrepancies (Lin, 2008; Mandemakers & Dykstra, 2008; Shapiro, 2004).

The present study examined predictors of discrepancies in reports of support exchanged between middle-aged adults and their parents. We obtained independent reports of support exchanged from middle-aged adults (aged 40–60 years) and their parents (aged 59–96 years). We considered total support as well as exchanges of five specific types of support (emotional, practical assistance, listening to talk about one's day, advice, and financial). We investigated reports on both downward exchanges (support given by parent and received by child) and upward exchanges (support received by parent and given by child). The study focused on two questions: (a) What is the level and direction of discrepancy in parents' and children's reports about support exchanges? and (b) What predictors explain discrepancies in reports about the frequency of support exchanges?

DISCREPANCIES IN REPORTS OF SUPPORT EXCHANGES BETWEEN PARENTS AND THEIR ADULT CHILDREN

Our view of discrepancies is drawn from the social psychological literature on self-enhancement (Krueger, 1998; Taylor & Brown, 1988) and from a family systems perspective that posits that structural and psychological features of family relationships will contribute to discrepancies (Cox & Paley, 1997). Self-enhancement theory suggests that people will generally view their own actions in a more positive light than others' actions. As applied to exchanges between parents and children, self-enhancement theory suggests that each generation would report more support given and less support received than the other generation. We do not know, however, if the discrepancies are due to distortions in the reports of one or both persons, but only that the direction of discrepancies is consistent with self-enhancement. These trends toward self-enhancement, however, may be modified by specific family contexts and relationships.

Prior research has found discrepancies between parent and child reports about contact and exchanges of assistance (Giarrusso, Stallings, & Bengtson, 1995; Rossi & Rossi, 1990; Shapiro, 2004). Many of these studies on discrepancies, however, only assessed whether each person reported giving help or not but did not take into account the amount or frequency of support or the degree of discrepancy in support (Lin, 2008; Roan, Hermalin, & Ofstedal, 1996; Rossi & Rossi, 1990; Shapiro, 2004).

Another limitation of prior work is a focus on one direction of exchange, mainly support given by children to an aging parent (Lin, 2008; Roan et al., 1996). We know that support between generations flows in both directions (Spitze & Logan, 1992; Zarit & Eggebeen, 2002). Support exchanges between parents and children can have different meanings and consequences depending on the direction of help. In upward exchanges, most studies have found that middle-aged children tend to report giving more support to parents than their parents reported receiving, especially instrumental support (Klein Ikkink et al., 1999; Lin, 2008; Mandemakers & Dykstra, 2008; Roan et al., 1996; Rossi & Rossi, 1990; Shapiro, 2004). For downward exchanges, prior studies have shown mixed results. Mandemakers and Dykstra found that parents report giving more support than children report receiving, regardless of the type of support. In contrast, Shapiro reported that children tended to report giving and receiving more instrumental support (e.g., housework, help with errands) than parents reported, and parents tended to report giving and receiving more emotional support than children reported. Thus, in explaining discrepancies, Shapiro emphasized the type of support exchanged (instrumental or emotional support), rather than the direction of exchanges.

The first objective of this study was to look at whether there are discrepancies in reports of specific types of exchanges at the dyadic level, both for upward and downward exchanges. Drawing from family systems theory that

suggests each person in a family has a different perspective on events and processes, we hypothesized that there would be significant discrepancies in reports of support given and received by parents and their adult children. Based on self-enhancement theory, we expected that both parents and children will report giving more support than the other person reports receiving. As some prior empirical work has found that the amount and direction of discrepancies vary depending on type of support (Shapiro, 2004), we also explored individual types of support as well as overall support. Certain types of support (e.g., financial) may have more saliency in the family relationship and may be more likely to produce discrepancies between giver and receiver.

POSSIBLE SOURCES OF DISCREPANCIES IN PARENTS' AND CHILDREN'S REPORTS

Although studies have reported discrepancies in reports of support exchanges between generations (Giarrusso et al., 1995; Rossi & Rossi, 1990), relatively few studies have examined predictors of discrepancies in reports of support exchanges in a multivariate framework. Lin (2008) and Shapiro (2004) focused on structural characteristics (e.g., income and health) as predictors of discrepancies. Mandemakers and Dykstra (2008) is the only prior study examining psychological factors (e.g., obligation, relationship quality, and dissatisfaction with support) as predictors of discrepancies between generations. In the present study, we focused on four dimensions of the parent-child relationship to examine discrepant reports of exchanges between middle-aged children and aging parents. These factors include structural factors (e.g., individuals' needs and resources and dyadic characteristics) and psychological factors (e.g., filial and parental obligation and investment in the relationship). We selected these factors based on prior findings and because they potentially affect how people view these exchanges.

Needs and Resources of Aging Parents and Middle-Aged Children

Needs and resources are the main determinants of the amount of intergenerational support (Davey, Janke, & Savla, 2004; Eggebeen & Davey, 1998), and they may also lead to different perceptions of intergenerational exchanges between generations. When one generation has fewer economic and social resources than the other, the imbalance may affect perceptions of support exchanges between generations (Giarrusso et al., 1995; Lin, 2008; Shapiro, 2004). Prior studies have shown that aging parents who have a greater need for assistance may underestimate the amount of help received to protect their self-concepts from a feeling of dependency (Lyons, Zarit, Sayer, & Whitlatch, 2002; Walker, Pratt, Martell, & Martin, 1991; Zweibel & Lydens, 1990). Conversely, as children are called upon to give more help to aging parents, it may seem that they are providing more assistance than they actually are. Given norms about

filial obligation, some adult children with limited resources (e.g., time and money) or competing demands (e.g., children with special needs) may overestimate how much they actually give as a way of avoiding feelings of guilt about not giving more (Lin, 2008).

Following the work of Lin (2008) and Shapiro (2004), we estimated needs and resources from social structural characteristics of both parties, including age, education, income, health, and marital status. Persons with more education, higher income, and who are in better health will potentially be able to give more assistance and help, whereas those with lower levels of education, income, and health will have greater needs for support from their parent or child. Similarly, having a spouse indicates another resource, whereas not having a spouse would be associated with potentially greater needs for assistance or fewer resources for providing help. Finally age in the older generation is likely to be associated with greater needs and lower resources.

The Parent–Child Dyadic Characteristics: Gender and Proximity

When a parent and child are the same gender, their perceptions of intergenerational exchanges may be more similar (Davey et al., 2004; Shapiro, 2004). A parent and child of the same gender tend to spend more time with one another either in person or by telephone or e-mail, and this may be particularly true of mothers and daughters (Coward & Dwyer, 1990; Fingerman, 2001; Rossi & Rossi, 1990). This increased time may lead to greater congruence in reports of intergenerational exchanges (Burton & Blair, 1991). In addition, proximity of parents and children and sharing the same household can provide more opportunities for shared perceptions of exchanges (Shapiro, 2004). We would expect reports of coresident dyads and of dyads who live in closer proximity but do not live together to have greater congruence in their reports. The exception may be financial support, which can become blurred in a shared household.

Norms of Family Obligation

Norms of family obligation are culturally defined rights and duties that specify the ways in which family members are expected to behave toward each other (Gans & Silverstein, 2006; Rossi & Rossi, 1990). When parental or filial obligations are strong, individuals are more likely to present a culturally desirable response to questions about exchanges of support. Thus, they may report that they are receiving more from or giving more to their dyadic partner. Using data from the Netherlands Kinship Panel Study, Mandemakers and Dykstra (2008) showed that parents' family obligations were a strong predictor of discrepancies for both upward and downward exchanges, whereas children's filial obligations were not associated with discrepancies for either direction. Given that norms of family obligation can change over the adult life span, across historical time, and

across cultures (Gans & Silverstein, 2006; Rossi & Rossi, 1990), use of a data set from the United States, focusing on specific life stages, (e.g., offspring in midlife and parents in old age) may bring different results. Specifically, because we focused on parent–child dyads in later years, we expected that children's filial obligation toward aging parents would also show a significant effect on discrepancies.

Investment in the Relationship

The investment or importance that parents and their children place on their relationship may affect perceptions of support given and received. Investment represents a psychological dimension drawn from role centrality theory that holds that events in roles that are more salient are more likely to affect self-esteem (Gurin, Veroff, & Feld, 1960; Martire, Stephens, & Townsend, 2000). Likewise, events in central roles may be perceived in a more self-enhancing way. Thus, we would expect that higher ratings of the importance of the relationship would be associated with greater discrepancies in reported support.

The concept of investment in the relationship is related to the generational stake hypothesis (Bengtson & Kuypers, 1971; Giarrusso, Feng, & Bengtson, 2005). Parents value their relationships with children more highly than do their children and thus may overreport both the help they give to and receive from children. Studies based on this hypothesis, however, have assumed that each generation has a different stake in the relationship, rather than directly measuring that stake (Bianchi et al., 2007; Giarrusso et al., 1995). In the current study, we used a direct measure of the importance of the relationship to each generation to provide a better test of the hypothesis (Fingerman, Chen, Hay, Cichy, & Lefkowitz, 2006). We expected that individuals who view the relationship as more important would report more support they are providing and receiving. Because parents are typically more invested in the tie than offspring, we expected parents to show this pattern more than offspring.

In sum, this study examined the level and direction of discrepancies in reports of support exchanges between middle-aged children and aging parents at the dyadic level, both for upward and downward flow. We also examined predictors of the discrepancies in the reports about exchanges. Based on the previous literature, as well as self-enhancement and family systems perspectives, we expected that parents' and children's needs and resources, dyadic characteristics, norms of family obligation, and investment in the relationship would explain discrepancies in their reports of support exchanges.

METHOD

Sample

This analysis is based on data from "The Family Exchanges Study" (Fingerman, Miller, Birditt, & Zarit, 2009). The first

Table 1. Parents' and Children's Individual and Dyadic Characteristics

	G1 (N = 337)			G2 (N = 280)			G1-G2 dyad (N = 337)		
	M	SD	Range	M	SD	Range	M	SD	Range
Age	76.07***	6.32	59–96	49.80	4.81	40–60			
Education (years)	12.71	2.49	0–17	14.20***	2.03	9–17			
Income ^a	3.01	1.31	1–6	4.50***	1.37	1–6			
(Re)married ^b	0.47	0.50	0–1	0.73***	0.45	0–1			
Self-rated health ^c	3.08	1.12	1–5	3.54***	1.00	1–5			
Parental or filial obligation ^d	3.78	0.60	1–5	3.94***	0.51	2.5–5			
Relationship importance ^e	4.75***	0.97	1–6	4.30	0.87	1–6			
Father–son ^f							0.12	0.33	0–1
Father–daughter ^g							0.18	0.39	0–1
Mother–son ^h							0.29	0.45	0–1
Mother–daughter ⁱ							0.41	0.49	0–1
Coresidence ^j							0.12	0.32	0–1
Distance (mile)							248.01	641.51	0–4,000

Notes: Mean values in italics are significantly higher than G1's or G2's ones.

^a Rated from 1 (*less than \$10,000*) to 6 (*more than \$100,000*).

^b 1 = *married or remarried*, 0 = *not-married*.

^c Rated from 1 (*poor*) to 5 (*excellent*).

^d Mean of 6 items rated from 1 (*never*) to 5 (*always*).

^e Rated from 1 (*less than among the 20 most important*) to 6 (*most important person in your life*); G2s rated importance of relationship with each parent separately (N = 337).

^f 1 = *father–son dyads*.

^g 1 = *father–daughter dyads*.

^h 1 = *mother–son dyads*.

ⁱ 1 = *mother–daughter dyads*.

^j 1 = *shared household*, 0 = *independent household*.

Paired sample *t*-test; **p* < .05; ***p* < .01; ****p* < .001.

step in the sampling plan was to recruit respondents aged 40–60 years who had at least one living parent and one or more biological children older than 18 years. Potential respondents were randomly selected from phone lists from Genesys Corporation as well as from random digit dialing from the Philadelphia Primary Metropolitan Statistical Area (five counties in southeastern Pennsylvania and four counties in New Jersey; [Pennsylvania State Data Center, 2001](#)) and stratified by gender and age (40–50 and 51–60 years). People living in Philadelphia county, high-density minority neighborhoods, and lower income households were oversampled, which resulted in 37% minority participants. Interviews were conducted from January through August 2008. Of the 845 eligible targets, 633 (75%) were interviewed.

The target (middle-aged) participants completed 1-hr-long computer-assisted telephone interview (CATI) and received \$25 for their time. The CATI software allowed for random order of administration of sections of the interview. The target participants completed a series of questions for each living parent, including exchanges of support, beliefs on relationship with parents, and other demographic information.

From the original sample of 633 middle-aged adults, 280 (44%) had parents who also agreed to be interviewed. In 223 cases, one parent was interviewed, and in 57 cases, both parents were interviewed, which yielded a total of 337 discrete dyads nested within 280 families. We considered each parent–child dyad as a separate unit because exchanges between the middle-aged child and his or her mother and father were measured separately. The aging parents (G1)

were asked a set of questions that were identical to those for their children (G2). In no instance was the older adult interviewed with his or her child present or vice versa. The amount of missing data within the sample was quite small, but in the few instances where items were missing, we used pair-wise deletion in specific analyses. Table 1 presents individual characteristics of each parent and middle-aged child and the dyadic characteristics.

Measures

Support exchanges.—The dependent variable was the Intergenerational Support Scale ([Fingerman et al., 2009](#)), which assesses how often participants provided and received five types of support: emotional support, practical assistance, advice, financial support, and listening to talk about daily events. Four items reflect domains from the Social Support Resources Index ([Vaux, 1988; Vaux & Harrison, 1985](#)), and the fifth, listening to talks about daily events, was drawn from prior work on intergenerational ties ([Fingerman, 2000](#)). Participants rated how frequently they provided each type of support to their dyadic partner, and how frequently they received that type of support on a 8-point scale: 1 (*less than once a year or not at all*), 2 (*once a year*), 3 (*a few times a year*), 4 (*monthly*), 5 (*a few times a month*), 6 (*weekly*), 7 (*a few times a week*), and 8 (*daily*). We summed scores across the five types of support given ($\alpha = .80$ for G1 and $\alpha = .83$ for G2) and received ($\alpha = .81$ for G1 and $\alpha = .81$

Table 2. Parents' and Children's Reports of Support Exchanges

	Downward exchanges ^a		Upward exchanges ^b	
	G1's report	G2's report	G1's report	G2's report
Emotional support	4.86 (2.18)	4.68 (2.12)	4.75 (2.35)	<i>5.51 (2.00)***</i>
Practical assistance	3.39 (2.28)**	2.51 (1.82)	3.90 (2.34)	4.04 (2.09)
Listening to talk	5.71 (1.77)	5.62 (1.73)	5.59 (1.87)	<i>6.08 (1.54)***</i>
Advice	3.91 (2.04)	4.29 (2.07)**	4.11 (2.23)	4.30 (1.86)
Financial support	2.01 (1.53)	2.10 (1.37)	1.85 (1.63)	<i>2.06 (1.63)*</i>
Total support ^c	19.70 (7.27)	19.17 (6.97)	20.04 (7.96)	<i>21.97 (7.04)***</i>

Notes: Dyad $N = 337$. Values are given in $M (SD)$. Mean values in italics are significantly higher than G1's or G2's one.

^aSupport given by parents and received by children.

^bSupport received by parents and given by children.

^cSum of 5 types of support rated from 1 (*less than once a year or not at all*) to 8 (*daily*).

Paired sample t -test; * $p < .05$; ** $p < .01$; *** $p < .001$.

for G2) for ease of interpretation. We also examined each type of support separately in post hoc analyses.

Table 2 presents G1's and G2's reports on total support and each type of support in downward and upward exchanges. Paired t -tests revealed that in upward exchanges, children reported giving more total support than parents reported receiving. Reports of the total amount of downward exchanges, however, did not differ between G1 and G2.

Predictor Variables

Needs and resources.—Five variables related to needs and resources were obtained from each parent and child: age, years of education, income, self-rated health, and marital status. Participants indicated household income in 2007 on a scale ranging from 1 (*less than \$10,000*) to 6 (*more than \$100,000*). Self-rated health for the past 12 months was measured using a 5-point scale ranging from 1 (*poor*) to 5 (*excellent*). Because we assumed that respondents who have spouses have more resources to meet their needs, marital status was coded 1 for (*re*)*married* and 0 for *not-married*.

The parent-child dyadic characteristics.—Three variables were used for dyadic characteristics of parent-child dyads: gender composition, coresidence, and residential proximity. Gender composition was categorized into four groups on the basis of parents' and children's gender: father-son, father-daughter, mother-son, and mother-daughter. These categories were dummy coded using mother-daughter as the reference group. Coresidence is a dichotomous variable coded 1 for *coresident dyads*. Residential proximity is the distance between parents' and non-coresident children's residences in miles. For coresident dyads, their residential proximity was coded 0. To address positive skew of distance, we used a log-linear transformation in analyses.

Family obligation.—Parental obligation (for parents) or filial obligation (for children) asked how often parents or children should provide adult children or parents following

six types of support: emotional support, practical assistance, financial support, listening to the other's talk, socializing, and advice (Silverstein, Gans, & Yang, 2006). The answers ranged from 1 (*never*) to 5 (*always*). Means of the six items were computed ($\alpha = .67$ for parents; $\alpha = .79$ for children). As shown in Table 1, children's obligation toward parents was significantly higher than parents' obligation toward children.

Investment in the parent-child relationship.—Participants rated investment in parent and offspring using a one-item assessment of the importance of the parent or child compared with other social partners (Fingerman et al., 2006, 2009). Ratings were made on a 6-point scale: 6 (*most important person in your life*), 5 (*among the 3 most important*), 4 (*among the 6 most important*), 3 (*among the 10 most important*), 2 (*among the 20 most important*), and 1 (*less important than that*). Paired sample t -tests revealed that parents reported significantly greater importance of relationship with their child than children did (Table 1).

Analysis Plan

To analyze data at the level of the dyad, we used multilevel modeling (SAS PROC MIXED, Cary, NC; Littell, Milliken, Stroup, & Wolfinger, 1996), which accounts for the interdependence of individuals within each dyad or family and enables researchers to predict both the level of the outcome and the level and direction of differences in reports of the outcome within pairs (Maguire, 1999). In a multilevel model, individual observations of parents and children (Level 1) are nested within the dyad (Level 2), which is the unit of analysis. This method has been used to investigate a number of questions regarding dyadic reports within family (Barnett, Marchall, Raudenbush, & Brenna, 1993; Lyons et al., 2002; Willson, Shuey, Elder, & Wickrama, 2006). Given that some dyads (33.8%) are nested in families (Level 3), we also considered Level 3 (family level) models to explain the shared variance of dyads within the same family.

At Level 1 (within-dyad approach), we used observations from each dyad member to fit a regression line on an indicator

variable (Generation: *G1* or *G2*). This regression model was summarized by two parameters: an intercept and a slope. The intercept represents the mean level of support exchange for each matched pair (averaged across the dyad members). The slope captures the degree of discrepancy in the level of support exchange between the dyad members. We modeled the individual score (Y_{ijk}) for i th member in the j th dyad in the k th family as

$$Y_{ijk} = \beta_{0jk} + \beta_{1jk}(\text{Generation}_{ijk}) + e_{ijk},$$

which is a function of an intercept (β_{0jk} , the mean score across dyads), a slope (β_{1jk} , the degree of discrepancy between the pair), and individual-level errors of prediction (e_{ijk}). (The indicator variable, Generation, was coded -0.5 for parents (*G1*) and 0.5 for children (*G2*). This is an alternative form of dummy coding to 0 and 1 for examining means and discrepancies between dyad members. The advantage of coding -0.5 and 0.5 is that the intercept can represent a mean across dyad members. Also, the slope represents a discrepancy between dyad members, which is equivalent to coding of 0 and 1. A negative coefficient for discrepancy indicates that parents reported higher level of exchanges than children; a positive coefficient for discrepancy indicates that children reported higher level of exchanges than parents.) We used an unstructured covariance matrix to specify the random effects. At Level 1, if the dyadic mean (intercept) and discrepancy (slope) have significant variance components, it is appropriate to proceed with a Level 2 model in which predictors can be included to explain the variation in these parameters (Bryk & Raudenbush, 1992).

At Level 2 (between-dyads approach), the intercept (mean score of *G1-G2* reports) and slope (discrepancy between *G1-G2* reports) are treated as outcome variables, which are permitted to vary across dyads. We examined four groups of predictors (needs and resources of parents and children, dyadic characteristics, family obligation, and parent-child relationship importance) to explain the variation of the intercept and slope coefficients across dyads. Because we expected that the predictors may be associated with both mean and discrepancy level of support exchanges, we included them as the predictors of both the intercept and the slope.

$$\begin{aligned}\beta_{0jk} &= \delta_{00k} + \delta_{01k}W_{qjk} + U_{0jk} \\ \beta_{1jk} &= \delta_{10k} + \delta_{11k}W_{qjk} + U_{1jk},\end{aligned}$$

where W_{qjk} are characteristics used as predictors of the effect of β_{pjk} , and δ_{p1k} is the corresponding coefficient representing the direction and strength of association between characteristic W_{qjk} and β_{pjk} . The error term (U_{pjk}) indicates the deviation from Level 2 group mean that do not vary across dyad members.

At Level 3 (between-families approach), we included family level error terms to handle the nested structure of dyads in families.

$$\begin{aligned}\delta_{00k} &= \gamma_{000} + V_{00k} \\ \delta_{10k} &= \gamma_{100} + V_{10k},\end{aligned}$$

where the error term (V_{p0k}) presents the deviation from Level 3 group mean. Because only a small proportion of families included two dyads, however, we compared two-level models and three-level models using the difference between $-2 \log$ likelihood coefficients from each model based on a chi-square distribution to determine if adding family level improved the model fit.

RESULTS

We first present the results of baseline model with only the indicator variable, Generation (*G1* or *G2*), which estimates the mean level and the average discrepancy of dyadic reports. Then, we present the results of explanatory models predicting both the mean level and the discrepancies in reports of parents and children.

Baseline Model

In the baseline model (Table 3), we examined dyad discrepancy scores (slopes) in downward and upward exchanges. The discrepancy score of total support was significant in upward exchanges (from *G2* to *G1*), indicating that children (*G2*) reported giving more support than parents (*G1*) reported receiving. The discrepancy of downward exchanges (from *G1* to *G2*), however, was not significant, indicating that parents and offspring generally agreed on the support that parents provide to children.

Examination of each type of support revealed that all five discrepancy scores for upward exchanges were positive scores, and three were significant (emotional support, listening to other's talk, and financial support), which means that children consistently reported giving more than parents reported receiving for all types of support.

Although parents and offspring generally agreed on total downward support, there were discrepancies in perceptions of specific types of support, practical assistance and advice. The discrepancy score for practical assistance was negative ($B = -0.88, p < .001$), which means that parents reported giving more practical assistance than children reported receiving, whereas the discrepancy score for advice was positive ($B = 0.41, p < .01$), indicating parents reported giving less advice than children reported received.

All the random variance components for the intercepts and the discrepancy scores were significantly different from zero ($p < .001$) at Level 2, indicating that there were substantial amounts of variability in the mean level and the dyad discrepancy across parent-child dyads and Level 2 predictors could be added for a further investigation of variations of discrepancy. Next, when family level (Level 3) was added to the random effects, the variance components in the mean level and the dyad discrepancy are significant

Table 3. Baseline Model: Dyadic Means and Discrepancies of Parents' and Children's Reports on Downward and Upward Exchanges

	Downward exchanges ^a				Upward exchanges ^b			
	Two-level model		Three-level model		Two-level model		Three-level model	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Fixed effect								
Intercept (dyadic mean)	19.43***	0.34	19.50***	0.36	21.01***	0.36	21.27***	0.38
Slope (discrepancy) ^c	-0.53	0.38	-0.47	0.39	1.93***	0.41	2.06***	0.43
Random effect								
Intercept (dyadic mean)								
Level 2 VAR (dyad)	38.24***	2.99	17.61***	3.36	41.99***	3.28	21.08***	4.61
Level 3 VAR (family)			20.80***	4.29			20.13***	5.45
Slope (discrepancy)								
Level 2 VAR (dyad)	45.91***	3.69	31.92***	5.58	54.02***	4.32	29.88***	6.99
Level 3 VAR (family)			12.66*	5.51			17.72**	7.27
-2 log likelihood	4,446.1		4,419.8		4,523.9		4,502.5	
χ^2	110.7***		136.9***		105.4***		126.8***	

Notes: Dyad $N = 337$; Observation $N = 674$. VAR = variance.

^aSupport given by parents and received by children.

^bSupport received by parents and given by children.

^cNegative discrepancy scores indicate parents reporting more than children reporting; Positive discrepancy scores indicate children reporting more than parents reporting.

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

for family level. Compared to two-level models, the model fit also improved for both downward ($\Delta -2$ log likelihood = 26.3 (3), $p < .001$) and upward exchanges ($\Delta -2$ log likelihood = 21.4(3), $p < .001$). Therefore, for examining the predictors of discrepancies in reports, we used three-level models.

Determinants of Discrepancies in Reports of Support Exchanges

Table 4 presents the results of multilevel regressions with four sets of variables added to predict: (a) dyadic mean level of exchanges and (b) discrepancy in parent-child reports of total support in downward and upward exchanges. Our interest is how parent and child view the same exchange, so although we showed findings for both mean levels (intercept) and discrepancies (slope), we focused on predictors of discrepancies. We also examined each of the five types of support in a separate model to confirm the results from total amount of support and check whether there are different patterns for specific types of support (not shown in table).

Parents' and children's needs and resources had little influence on discrepancies of total support in downward and upward exchanges, with one exception that children's health was positively associated with a discrepancy of downward exchange. That is, children in better health reported receiving more support compared with their parents' reports of support given. Looking at each type of support, although some significant effects of children's characteristics were found on discrepancies, the effects were not consistent across most or all types of support.

Turning to the parent-child dyad characteristics, none of the predictors were associated with discrepancies in

downward exchanges and only coresidence was positively associated with a discrepancy score in upward exchanges, indicating that children who live together with their parents reported giving more help than parents reported receiving. Post hoc tests of each type of support showed that children of coresident dyads reported giving more advice ($B = 2.08$, $p < .05$) and financial support ($B = 2.49$, $p < .05$) than parents reported receiving.

Parents' obligation toward children was the most consistent and significant predictor of discrepancies in reported support in both downward and upward exchanges. Parents who have strong feelings of obligation toward children were likely to report giving and receiving more support than children report. The post hoc tests of each type of support revealed that for upward exchanges, parents' obligations were significant for discrepancies in all types of support except financial support. For downward exchanges, parents' obligation was significant for discrepancies in practical assistance ($B = -0.38$, $p < .05$) and advice ($B = -0.69$, $p < .01$). Children's obligation toward parents, however, was not associated with discrepancies in total support for either downward or upward exchanges. It should be noted that both parents' and children's obligations were significantly associated with mean levels of support exchanges.

Turning to ratings of the importance of the relationship, children's ratings showed significant effects on discrepancies in total support for both downward and upward exchanges. Children who regarded the relationship with their parent as more important tended to report giving and receiving more than parents reported. For specific types of support, children's importance ratings were significant for the discrepancies in emotional support ($B = 0.82$, $p < .001$) and listening to their parent ($B = 0.30$, $p < .05$) in downward

Table 4. Predictors of Parent–Child Reporting Discrepancies for Downward and Upward Exchanges

Parameter	Downward exchanges ^a				Upward exchanges ^b			
	Dyadic mean		Discrepancy ^c		Dyadic mean		Discrepancy ^c	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Fixed effect								
Intercept	21.13***	0.90	−1.79	1.12	22.86***	0.85	2.87*	1.24
Needs and resources								
G1: Age	0.05	0.07	−0.00	0.08	0.17**	0.06	0.03	0.09
Education	0.02	0.14	0.16	0.19	−0.13	0.14	0.15	0.21
Income ^d	0.51	0.31	0.09	0.41	−0.08	0.30	−0.05	0.45
(Re)Married ^e	−0.71	0.75	0.15	0.94	−2.42***	0.71	1.13	1.04
Self-rated health ^f	0.38	0.28	−0.24	0.38	−0.52	0.27	0.41	0.42
G2: Age	−0.19*	0.09	−0.02	0.11	−0.17*	0.08	−0.13	0.12
Education	0.06	0.20	0.33	0.25	−0.23	0.19	0.26	0.28
Income ^d	−0.83*	0.34	−0.51	0.42	−0.07	0.33	0.40	0.47
(Re)Married ^e	0.16	0.96	1.64	1.19	1.29	0.92	−2.12	1.31
Self-rated health ^f	−0.32	0.34	0.85*	0.43	0.24	0.33	0.27	0.47
Dyadic characteristics								
Father–son ^g	−3.78***	1.00	−1.39	1.25	−5.02***	0.89	0.12	1.38
Father–daughter ^g	−1.89*	0.91	0.10	1.08	−2.82***	0.70	−0.49	1.20
Mother–son ^g	−1.85*	0.75	0.19	0.95	−1.82*	0.71	−0.70	1.05
Coresidence ^h	3.05*	1.36	−0.63	1.73	4.94***	1.28	3.80*	1.91
Proximity (logged mile)	−1.25***	0.33	0.22	0.43	−1.74***	0.33	−0.39	0.48
Family obligation ⁱ								
G1: Obligation to offspring	1.43**	0.50	−1.92**	0.68	1.52***	0.47	−3.27***	0.75
G2: Obligation to parent	1.51*	0.67	1.64	0.82	1.50*	0.64	0.82	0.91
Investment in the relationship ^j								
G1: Importance of tie	0.44	0.32	−0.71	0.44	0.55	0.31	0.27	0.48
G2: Importance of tie	1.31**	0.40	1.61**	0.51	1.07**	0.38	1.20*	0.56
Random effect								
Level 2 VAR (dyad)	10.36***	2.41	24.11***	5.33	11.05***	2.64	37.49***	8.69
Level 3 VAR (family)	13.71***	3.15	9.02*	5.11	12.34***	3.22	11.10	8.69
−2 Log Likelihood			3,591.6				3,591.5	
χ ²			76.9***				80.0***	

Notes: VAR = variance.

^aSupport given by parents and received by children.

^bSupport received by parents and given by children.

^cNegative discrepancy scores indicate parents reporting more than children reporting; positive discrepancy scores indicate children reporting more than parents reporting.

^dRated from 1 (*less than \$10,000*) to 6 (*more than \$100,000*).

^e1 = *married or remarried*, 0 = *not-married*.

^fRated from 1 (*poor*) to 5 (*excellent*).

^gMother–daughter dyads were used as a reference group.

^h1 = *shared household*, 0 = *independent household*.

ⁱMean of 6 items rated from 1 (*never*) to 5 (*always*).

^jRated from 1 (*less than among the 20 most important*) to 6 (*most important person in your life*).

p* < .05; *p* < .01; ****p* < .001.

exchanges. Also, children’s rating of importance was significantly associated with the level of upward and downward exchanges. Interestingly, parents’ perceived importance of the parent–child relationship was not associated with discrepancies as well as levels of support exchanges.

DISCUSSION

Exchanges of support between parents and their adult children are used to meet everyday needs and sustain the bonds between generations. Our results suggest that parents and their adult children differ in systematic ways in their perceptions of how much support is exchanged. How each

generation views these exchanges of support may be of considerable importance. If a parent–child dyad disagrees on how much support is exchanged, it may lead to misunderstandings, resentment, or conflict and may affect their continued willingness to give support to one another. For example, in situations where parents perceive that children give less support than children perceive they have given, a parent may feel entitled to receiving more frequent support, whereas a child may interpret the discrepancy as indicating the parent would like all of his/her time and attention. The ways in which discrepancies affect parent–child relationships and future exchanges needs further exploration.

We drew upon two theories, self-enhancement and family systems, in formulating hypotheses about discrepancies in reports of support exchanges between generations. Consistent with self-enhancement theory, children reported giving all types of support more frequently than parents reported receiving, which is similar to the findings previously reported by Mandemakers and Dykstra (2008). Unlike that study, however, we did not find a consistent pattern in discrepancies for downward exchanges of parents giving to children. For those exchanges, parents reported giving more practical assistance and less advice than children reported receiving, which may still reflect self-enhancement, albeit in a different way. Giving practical help is consistent with a positive image of the parental role, while advice-giving may be interpreted by older adults as being intrusive and interfering in children's lives. This interpretation is consistent with our view that self-enhancement processes are modified by the family context.

This study allowed us to examine a wide range of factors that might account for discrepancies, including structural factors (needs and resources and dyadic characteristics) and psychological factors (family obligation and relationship importance). These factors reflect family process and context regarding support exchanges within family. Our findings showed that psychological aspects of family relationships have most consistent effects on discrepancies. Interestingly, different psychological factors affected discrepancies for parents and children. Parents who felt more obligations toward their children reported both giving and receiving more support than children reported. For children, although obligation was associated with the level of support they reported giving to and receiving from parents, it was not related to discrepancies in support. Rather, for children, rating of the importance of the relationship with their parents had a significant relation to discrepancies. These findings confirmed the report of Mandemakers and Dykstra (2008) that only parent's feelings of obligation toward their children were associated with discrepancies. Since our study focused on offspring in midlife and parents in old age, however, parents in the current study had lower feelings of obligation toward their children than children reported toward parents. As parents age, they may feel less overall obligation to children because they may have fewer resources, greater needs, or their children are settled and have fewer needs. Nonetheless, only parents' obligation to children exerts an influence on perceptions of support given and received. It makes sense that parents who feel a stronger obligation would report giving more support than children report receiving. They may also cast positive light on support received because they view it as reciprocation of the obligation they feel toward their children.

We found a similar pattern regarding investment in the relationship. Parents reported the relationship as more important to them than did their children, but relationship importance was a significant predictor of discrepancies only

for children. Prior studies have documented that children place less importance on their relationship with parents than parents do with children (Bengtson & Kuypers, 1971; Giarrusso et al., 1995). Our findings extend that work by demonstrating that rather children's investment in the relationship has an influence on discrepancies between parents and children in perceptions of support. The finding that children with greater investment would perceive giving more support to parents makes sense. Viewing their relationship with parents as more important may also lead them to cast a more positive light on support received. Taken together, these findings on obligation and importance suggest that discrepancies between parents and children in their perceptions of support given and received have to do with feelings they have about the relationship. As at other points in the life course, it may be that subjective beliefs about the relationship may differ between parents and children and lead to discrepancies in perceptions.

In contrast to these psychological dimensions, needs and resources of parents and children did not consistently predict the discrepancies. Prior studies that reported the effects of needs and resources on discrepancies (Lin, 2008; Shapiro, 2004) did not take into account psychological factors, such as obligation and importance. Our finding shows that while needs and resources affect level of exchanges, subjective beliefs are more important for understanding how people perceive the exchanges.

Dyadic characteristics of the parent-child dyad were also not significant predictors of discrepancies, with the exception of coresidence. For upward exchanges of child to parent, children who live with parents reported giving more support than parents reported receiving. Coresidence may in many cases come about because parents need more support. Children in that situation may be more attuned to giving assistance, though parents may still want to see themselves as independent.

Some limitations of the study need to be considered. First, though the use of information from multiple reporters offers a unique opportunity to look at the correspondence of the reports between parents and children, the parents who agreed to participate in this survey may be more likely to have better relationships with their children than those parents who did not participate. Second, we can only identify discrepancies, but not how the discrepancies are related to the amount of the actual exchanges. How family members perceive exchanges, however, will be more important for the overall quality of their relationships than the actual amounts of support given and received.

These findings confirm and expand upon prior research that demonstrated discrepancies between parents and their middle-aged children in the amount of support given and received. Discrepancies are a potential source of misunderstanding and conflict within families and may condition the response when either parents or their children need extensive help for health or social problems. Of particular note is that

the reasons for discrepancies differ by generation. Intervention for families that face major challenges like caregiving may need to take into account the differences in how parents and children view the support and assistance they give to one another, and the different reasons for these discrepancies. It will be important for future research to examine the effects of discrepancies on future exchanges and other aspects of family relationships over time.

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