Little research examines the reasons adult siblings might provide social support to unmarried, dependent brothers and sisters. This article examines how obligation, reciprocity, and the quality of personal relationships affect whether siblings provide social support to the seriously mentally ill. It uses a sample of 108 siblings of 85 participants in a treatment program for the seriously mentally ill to examine the factors that predict several aspects of help provision. Reciprocity is an important predictor of reported and projected support: The more help respondent siblings receive from ill siblings, the more willingness to help they show in return. The availability of parental and other sibling caregivers is also associated with reported help from siblings. Neither norms of family obligation nor relational quality are highly correlated with support. The results indicate that professionals should take into account the potential importance of siblings as providers of social support to the seriously mentally ill and encourage their clients to develop reciprocal interactions with their brothers and sisters.

Predictors of Adult Sibling Social Support for the Seriously Mentally Ill

An Exploratory Study*

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Studies of the family have tended to neglect relationships between adult siblings. Recently, however, researchers have begun to pay more attention to sibling relationships in middle and later life (see Seltzer, 1989). Growing rates of divorce, childlessness, and lifetime singlehood mean that many adults cannot receive support from spouses and/or children. Siblings may be especially important potential sources of social support for unmarried and childless adults, especially those whose parents have died. Indeed, for many people relationships with brothers and sisters are the only close ties that persist throughout the life course (Avioli, 1989; Goetting, 1986).

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Despite the importance of the sibling bond, little research examines the role of adult siblings in social support processes. Most studies of adult siblings focus on elderly populations. These studies indicate that siblings are an important part of supportive networks in later life, especially for people who are unmarried, widowed, or childless (Connidis, 1989; Johnson, 1983; Johnson & Catalano, 1981; O'Bryant, 1988). Few studies, however, examine whether adult siblings in their middle years who typically have obligations to spouses, children, and jobs are sources of aid to their brothers and sisters (Horwitz, Tessler, Fisher, & Gamache, 1992). In addition, adult sibling research concentrates on people who have short-term and acute needs for assistance. We know little about the conditions under which siblings in their middle years will play supportive roles for brothers and sisters who need long-term care.

The issue of sibling social support is particularly important for dependent populations such as the seriously mentally ill. The vast majority of seriously mentally ill people are not married so they lack the possibility of obtaining care from spouses or children (Kramer, 1983). Parents usually serve as primary caretakers for chronically mentally ill adults (Horwitz & Reinhard, 1992). However, in most cases the recipients of parental care outlive their caretakers and thus cannot count on parents as a long-term source of support (Lefley, 1987). The friendships of the seriously mentally ill are typically fragile and are mostly with other seriously mentally ill people who are not stable or reliable providers of assistance (Estroff, 1981; Hammer, 1981). Thus for disabled populations such as the seriously mentally ill, adult siblings may be the only possible sources of long-term informal support.

Although little scholarly literature exists about the sibling relationships of seriously mentally ill people, their brothers and sisters have written many reports of this experience (e.g., Marsh & Dickens, 1993; Swados, 1991; Weisburd, 1992). These accounts portray the extensive turmoil and disruption stemming from the development and persistence of mental illness as well as the problems siblings face if they wish to become involved in supportive endeavors. They also document the ambivalence of well siblings who want to help their ill brothers and sisters yet maintain emotional distance from them, and of ill siblings, whose desires for independence alternate with demands for support. They indicate how the lifelong presence of a mentally ill brother or sister can have a continuing profound impact on siblings. Nevertheless, little systematic research examines the role that siblings play in providing social support to the seriously mentally ill.

This study addresses the factors that might lead adult siblings to participate in supportive activities toward their seriously mentally ill brothers and sisters. Answers to this question require examining the nature of the sibling role in modern societies. What aspects of this role might lead people to become involved in or remain apart from the support process?

SOURCES OF THE SIBLING BOND

Most work on kinship and social support assumes that only close kin have strong enough ties of commitment and loyalty that lead to the assumption of long-term caretaking responsibilities (Bulmer, 1987; Finch, 1989; Litwak & Szelenyi, 1969; Rossi & Rossi, 1990). Kinship norms create moral claims and obligations and thus provide the strongest base of attachment and the most reliable source of care. These norms dictate that one ought to help close kin including spouses, parents, and children more than friends, neighbors, or other unrelated individuals. Beyond the marital and parent-child bonds, sibling ties are the closest kinship relationship (Adams, 1968; Rossi & Rossi, 1990). Do kinship responsibilities extend beyond spousal and parental/child bonds so that relationships between adult siblings can become sources of long-term social support?

Research about adult siblings does not provide clear answers to this question. Instead, studies reach variable conclusions about the strength of sibling bonds. Some research finds that siblings exchange much emotional support, services, and companionship (Cumming & Schneider, 1961; Sussman & Burchinal, 1962; Wellman & Wortley, 1990). These exchanges increase over the adult life course and become especially strong in later life (Goetting, 1986; Gold, 1989). Yet other studies find that adult sibling relationships feature weak ties, little aid, and few bonds beyond a general feeling that sibs should keep in touch with each other (Adams, 1968; Avioli, 1989). In addition, norms that adults ought to be autonomous and self-sufficient can limit the provision of much aid to dependent sibs, who themselves sometimes resent offers of help from brothers and sisters (Avioli, 1989).

In general, some brothers and sisters have strong and extensive bonds and others weak ones. If we know what forces promote supportive sibling relationships we might be able to influence the provision of sibling support to dependent populations such as the seriously mentally ill. A number of factors including social norms, reciprocity, and personal affection might lead to or inhibit the provision of support between siblings.

Norms of kin obligation motivate much caregiving, especially between spouses and between parents and children (Rossi & Rossi, 1990). These relations provide care based on the obligations that inhere in family role relationships. However, the extent of obligation between adult siblings is not clear. On the one hand, ideals of brotherhood and sisterhood provide an image of enduring, diffuse, solidarity that would lead siblings to provide support and help to each other throughout the life course (Handel, 1985; Schneider, 1968). Yet in contrast to the pattern of expected obligation, exchange, and support between spouses or between parents and children, norms between adult siblings are diffuse and lack the quality of binding obligation (Adams, 1968; Avioli, 1989). The sibling role stands between roles with close and mandatory normative obligations and those with diffuse and elective responsibilities. Reports from siblings of the mentally ill indicate their ambivalence and uncertainty over the extent of their obligation to help their brothers and sisters (Marsh, 1992).

Reciprocity, the provision of affection, goods, and services in proportion to their reception, is a second possible motivator of caregiving. Siblings would maintain relationships and exchange aid when they have received aid in the past or expect to receive aid in the future from each other (Avioli, 1989). Because norms of obligation are weaker between siblings than between parents and children, reciprocity may be an especially prominent aspect of sibling ties (Finch, 1989). In addition, the genealogical equivalence between siblings would promote reciprocal relationships, which are based on the principle of equivalent exchanges.

Although reciprocity is a major source of sibling bonds in the general population, it is not clear whether it can operate when one sibling is disabled. Reciprocity is based on the principle of equivalent exchange. Disabled populations such as the seriously mentally ill might not be capable of maintaining a balanced relationship over a long period of time. It is an open question whether reciprocity can motivate sibling ties when one sibling is seriously mentally ill.

Relational quality is a third factor that might promote sibling caregiving. The features of the personal relationship might be especially prominent in sibling ties compared to closer kin relationships because siblings are often age peers. In addition, the relative weakness of normative obligation allows siblings to maintain ties on a voluntary basis based on preferential choices (Avioli, 1989; Bedford, 1989; Handel, 1985). Affection and friendship between sibs would motivate caregiving; in contrast, conflict and hostility would limit sibling willingness to provide social support.

We might expect to find fewer affectionate relationships between mentally ill people and their siblings than between siblings in the general

population. The onset of serious mental illness in late adolescence or early adulthood is often accompanied by conflict, hostility, and rejection that may persist in later life (Weisburd, 1992). Further, many siblings perceive that their parents neglected them because of demands to care for the ill brother or sister. Moreover, they might blame the ill sibling for the distress and burden created in both their parents' and their own lives (Marsh, 1992).

Obligation, reciprocity, and relational quality should be mutually reinforcing sources of sibling bonds. Positive relationships could lead to reciprocal exchange, which in turn would reinforce personal affection. Likewise, norms of family obligation could lead to both reciprocity and affection, and these in turn would strengthen feelings of obligation. Disentangling the relationships between these various sources of sibling bonds is beyond the scope of this article. Here we examine the impact of obligation, reciprocity, and personal relationships on sibling caregiving while controlling for the effect of the other factors. Understanding the conditions that lead siblings to assume caretaking responsibilities is a critical yet neglected topic for unmarried disabled populations whose brothers and sisters may become their closest relations as they move through the life cycle.

METHODS

SAMPLING

The data for this study stem from interviews with 108 siblings of seriously mentally ill participants in one program for the seriously mentally ill. All members of The Club, a rehabilitation-oriented community treatment program in New Brunswick, NJ, were approached for consent to interview a sibling. This program serves all chronic mentally ill patients in the catchment area of the local community mental health center (Rosenfield, 1992). Eligible participants must have a history of severe psychiatric disorder of 2 or more years along with significant impairment in social and/or vocational functioning. The only two excluding factors are a history of violent behavior and a primary diagnosis of substance abuse. About 80% of members have diagnoses of schizophrenia and 15% of manic-depression.

We approached all 186 club members who had siblings to obtain informed consent for an interview with a sibling. Of these, 70 (38%) did not consent to a sibling interview. There were no statistically significant

differences between those who consented and the entire club population in diagnoses, age, sex, education, or ethnicity. Nevertheless, nonparticipants probably have more strained sibling ties and consenters better relationships with brothers and sisters. This sample, therefore, is not likely to be representative of all siblings of seriously mentally ill people.

We proceeded to contact siblings of the 116 consenting club members for telephone interviews. We were unable to reach any sibling in 16 of these cases (14%); in an additional 15 cases (13%) no sibling would consent to an interview. We contacted consenting siblings of 85 club members. This group represents a completion rate of 73% of at least one sibling from a consenting club member and 45% (62% × 73%) of club members who had siblings. This completion rate, low by conventional standards of social science research, stems from the necessity to contact and to obtain informed consent both from seriously mentally ill people and from their siblings.

In some cases, members volunteered the names of more than one sibling. Whenever multiple sibling contacts were provided, we approached each listed sibling for an interview. The final sample contains 108 siblings of 85 seriously mentally ill people. We conducted 61 interviews with 1 sibling of a patient, 19 with 2 siblings, and 3 with 3 siblings.

The characteristics of the sibling sample are as follows. Females comprise 56.5% of respondents (although only 40% of ill siblings). Respondent ages range from 21 to 69 years with a mean of 40 years. Twenty-four percent of siblings did not attend college, 31% had some college, and 45% were college graduates. Eighteen percent have household incomes of less than $20,000, 38% between $20,000 and $50,000, and 29% over $50,000. The sample is predominantly White (88%) with 9% Black and 3% Puerto Rican.

MEASUREMENT

Dependent Variables

Social support has several components including frequency of contact, degree of intimacy, and help exchange between the providers and recipients of support (Fisher, Benson, & Tessler, 1990). This article considers several aspects of help provision between siblings.

Reported help. The first measure of social support is how much help siblings report giving their impaired brothers and sisters over the past year

in seven areas commonly surveyed in caregiving studies (Platt, 1985). Responses (*none* = 0, *a little* = 1, *some* = 2, *frequent* = 3) are summed to create an additive index with a possible range from 0 to 21. Actual responses range between 0 and 20 with a mean index score of 7.7 (*SD* = 4.23). The scale has an intra-item reliability of .71 (Cronbach's alpha).

Willingness to help. The actual amount of help from siblings reflects not only their motivation but also their ability to help and the availability of other caregivers. Siblings who are willing to participate in caregiving might not actually provide much help to their brothers and sisters because of the presence of parental or other sibling caretakers or the difficulties created by factors such as physical distance. The willingness of siblings to help is thus distinct from the amount of help they presently contribute. Immediately after the questions about help provision over the past year in the seven areas listed above, respondents were asked, "If no one else were available to help, would you be willing to help (name)" in each area. The response system is identical to that of the items in the reported help index. Responses are summed to create the willingness to help index, which has a mean of 13.91 (*SD* = 5.09). Both the possible and actual responses for the scale range from 0 to 21. This scale has a good intra-item reliability (Cronbach's alpha = .84).

Hypothetical help. The willingness to help index measures whether respondents would help in the absence of other caregivers. The interview also contains 10 questions developed for this study about providing assistance to ill siblings in hypothetical situations. Items ask whether respondents would allow their siblings to live with them over a variety of time periods, would lend them money, provide rides, or take them on vacations. A sample question is, "If (name) needed a place to stay overnight, I would let him/her stay with me." There are five possible responses ranging from *strongly disagree* (coded 0) to *strongly agree* (coded 4) with an in-between category. Possible responses range from 0 to 40, whereas actual responses range from 4 to 40 units of help. The mean amount of help is 23.85 units (*SD* = 7). The intra-item reliability of the hypothetical scale of helping is good (Cronbach's alpha = .85).

Independent Variables

Obligation. The interview contains a 5-item scale of family obligation using items from several sources (Bardis, 1988; Heller, 1976). The items

are: "A person should always support his or her close relatives if they are in need"; "a person should consult their close relatives before they make important decisions"; "a person should always consider the needs of his or her family as a whole as more important than their own needs"; "a person should always be completely loyal to his or her family"; and "a person should live close to their family and see a lot of them." The responses of *strongly agree* (5), *agree* (4), *in-between* (3), *disagree* (2), and *strongly disagree* (1) are summed to create the obligation index. The scores range from a low of 8 to a high of 25 ($M = 16.30$; $SD = 3.46$). The relatively low intra-item reliability of the obligation index (Cronbach's alpha = .64) seems adequate for the purposes of this study given the small number of scale items and the exploratory nature of the research (Nunnally, 1978).

Reciprocity. A 7-item index of how much help ill siblings give respondent siblings, which is adapted and modified from previous studies of caregiving, is the measure of reciprocity (Tessler, Fisher, & Gamache, 1992). Responses of *no help* (0), *a little help* (1), *some help* (2), and *a lot of help* (3) are summed across each area to create the reciprocity scale, which has an actual range from 0 to 15 ($M = 6.84$; $SD = 3.69$). The percentage of respondent siblings who receive any help from ill brothers and sisters is: economic (6%), caring for others (10%), chores (20%), companionship (63%), gifts (76%), family activities (78%), and affection (84%). As mentioned above, the fairly low reliability (Cronbach's alpha = .67) of this scale can be adequate for exploratory research.

In isolation the reciprocity scale measures only the absolute benefits that respondent siblings obtain from ill siblings. However, because each dependent variable measures the amount of reported or projected benefits respondent siblings provide ill siblings, the coefficient of the relationship between the measure of reciprocity and the dependent variables indicates the extent of equivalence in sibling exchange. The strength of this reciprocity measure varies directly with the association between the independent and dependent measures.

Affection. The interview schedule contains several items reflecting the quality of personal relationships that are derived from narratives of siblings with mentally ill sisters and brothers. Some are unusable because of the uniformly positive feelings expressed (for example, 91% of respondents agree or strongly agree that "I like my sib as a person," whereas 94% disagree or strongly disagree that "I don't like my brother/sister").

We use two items to indicate relational quality. The first refers to the nature of the present sibling relationship: "All things considered, how happy or unhappy are you with your relationship with (name)?" Forty-two percent of respondents report an unhappy relationship and 58% a happy one. The second item asks: "How much disruption did (name's) illness create in your own life?" Possible responses are: *a lot of disruption* (31%), *some disruption* (32%), *a little disruption* (9%), and *no disruption* (5%). Because of the weak correlation between these two items ($r = .092$), they are entered independently in the regression analysis.

Control Variables

A number of demographic factors including gender, age, education, and marital, parental and work statuses might influence sibling support. However, analyses of these data show that neither the correlations nor the regression coefficients of any of these variables with the three dependent variables of social support used in these analyses are significant (tables available from author). Because the relatively small sample size precludes the use of many variables in the multivariate analyses, the multiple regressions do not include demographic variables.

The analyses do control for several other factors. First, sibling ability and willingness to help could depend on how far siblings must travel to help their brothers and sisters. The measure of distance is the logarithmic transformation of how many minutes respondents must travel to see patients. About two thirds of respondent siblings live within an hour's drive of the ill sibling.

Second, social support from siblings can depend on parental availability. In this sample, 50% of respondents have two living parents, 28% one living parent (90% of whom are mothers), and 22% no living parents. Two dichotomous variables measure parental availability: siblings with one living parent compared to others and those with no living parents compared to others. In the multiple regressions, this technique makes siblings who have both parents living as the reference category for the two dummy variables.

Severity of the ill siblings' illness can also influence the respondent siblings' willingness to provide social support. Whether respondents think the illness is *very serious* (36%), *moderate* (42%), *a little serious* (13%), or *not serious* (6%) is the measure of perceived severity. Although this measure is not comparable to a diagnostic appraisal, it does directly assess respondents' perceptions of the seriousness of the illness.

The final control variable is whether the respondent is the only sibling interviewed in this study ($n = 61$), one of two siblings interviewed ($n = 38$), or is one of three respondent siblings ($n = 9$). Sibling obligation could stem from not only the relationship between particular sibs but also from whether or not other brothers and sisters participate in caregiving. When more than one sibling provides help, each might feel less responsibility because the perceived obligation to help is diffused among siblings (Matthews, 1987, 1988). If so, respondents who are the only sibling in this sample will provide more social support than those who have other siblings in the sample.

RESULTS

Table 1 shows the correlations among the independent, control, and dependent variables. Reciprocity is associated with the other independent variables of family obligation and the two measures of relational quality as well as with each of the three help indexes. Family obligation is associated with the willingness to help and the hypothetical help indexes. Happiness with the sibling relationship and disruption from the sibling's mental illness are associated only with the index of hypothetical help. The only control variables that are significantly related to the dependent variables are physical distance, which is associated with the reported help and willingness to help indexes, and the number of study siblings, which is associated with reported help. Siblings who must travel longer distances and those who are the only sibling in the study report less help, and respondents who live farther away are also less willing to help their brothers and sisters.

Panel A of Table 2 shows the multiple regression that predicts the amount of help respondents report providing to their siblings. The set of variables predicts 25% (adjusted R^2) of the variance in reported help. The percentage of respondents who give any help in each area is: household tasks (17%), shopping (33%), crises (43%), finances (45%), rides (48%), gifts (87%), emotional support (93%). Neither family obligation nor either of the two variables that measure relational quality is related to the overall index of help provision. Reciprocity is the only independent variable that significantly predicts help: Ill siblings who report giving the most help to respondents are also more likely to receive more help in return. Several control variables are also associated with the amount of current help that respondents report. Siblings with one living parent report more help than

TABLE 1
Pearson *R*s for All Study Variables

	Reciprocity	*Obligation*	*Happy*	*Disrupt*	*Distance*	*Serious*	*One Parent*	*Two Parents*	*Study Sibs*	*Help*	*Willingness*	*Hypothetical*
Reciprocity	1.000	.269**	.398***	–.217**	–.083	–.298**	–.103	.077	.034	.344***	.522***	.478***
Obligation		1.000	.158	.143	–.221*	–.098	.199*	.012	.223**	.170	.263**	.302**
Happiness			1.000	.092	.071	–.312***	–.105	.181	.068	.180	.162	.324***
Disruption				1.000	–.127	.016	.164	.000	–.201*	.110	.050	.280**
Distance					1.000	–.144	–.230*	.114	–.007	–.248*	–.326***	.103
Serious						1.000	.016	–.078	.089	.081	–.138	–.185
One parent							1.000	–.331***	.110	.173	.101	–.018
Two parents								1.000	–.084	.086	–.096	.115
Number of study sibs									1.000	–.218**	–.141	.076
Reported help										1.000	.636**	.327***
Willingness to help											1.000	.539***
Hypothetical help												1.000

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

TABLE 2
Unstandardized and (standardized) Regression Coefficients for Predictors of Reported Help, Willingness to Help, and Hypothetical Help

	A. Reported Help		*B. Willingness to Help*		*C. Hypothetical Help*	
Variable	B	*(Beta)*	B	*(Beta)*	B	*(Beta)*
Obligation	.042	(.037)	.252	(.182)	.708**	(.358)
Reciprocity	.279*	(.243)	.597***	(.431)	.460*	(.236)
Happiness	1.146	(.140)	.310	(.032)	2.205	(.160)
Disruption	.468	(.125)	.096	(.021)	−1.877**	(-.296)
Distance	−.807	(−.140)	−1.764*	(−.254)	1.530	(.154)
Seriousness	1.160*	(.251)	.006	(.001)	.094	(.012)
No parents	1.699	(.178)	−.696	(−.061)	1.497	(.087)
One parent	2.476**	(.276)	.822	(.076)	1.047	(.070)
Number of study sibs	−1.660**	(−.276)	−1.640*	(−.226)	−.909	(−.088)
Constant	9.509***		11.184***		9.890*	
R^2		.322		.427		.394
Adjusted R^2		.250		.367		.325

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

those with both parents alive; those with neither parent living also say they help more, although at a marginal level of statistical significance ($p = .06$). In addition, respondents who are sole participants in the study report more help than those with other study siblings. Finally, respondents are also more likely to say they aid siblings when they think the illness is more serious.

The amount of help siblings report they provide at the time of the interview is conditioned by many factors unrelated to sibling relationships, such as parental support or geographic distance. People might be willing to participate in support processes but see no current reason to do so if they perceive that their ill siblings already receive help from others. Far higher percentages of respondents are willing to give at least a little help to siblings in the absence of other caregivers than those who currently report help provision: household tasks (62%), shopping (70%), crises (93%), financial (92%), rides (68%), gifts (93%), and emotional support (96%). Panel B of Table 2 shows what factors predict whether siblings say they will provide help if no one else is available to do so.

The model is a good predictor of the willingness to help, accounting for 37% of the variance (adjusted R^2). Reciprocity is the strongest predic-

tor of which respondents would be willing to help siblings in the absence of other caregivers. Respondents who report receiving help from mentally ill siblings over the past year are much more willing to help them in the future. None of the other independent variables are associated with the willingness to provide social support. Two control variables predict whether siblings would be willing to participate in supportive activities. Having another sibling in the study, again, is inversely associated with social support. Respondents who have other siblings interviewed for the study not only report less current help but also report less willingness to help in the future. Physical distance is inversely associated with the willingness to help. Even when other caregivers are not available to help, physical distance is a barrier to sibling involvement. Neither parental variable is associated with the willingness to help indicator.

Finally, Panel C in Table 2 shows the results of the multiple regression that addresses the question of whether siblings might help in hypothetical situations that involve providing housing, money, and other forms of assistance. The set of predictor variables explains 32.5% (adjusted R^2) of the variance in responses to hypothetical situations. Reciprocity again predicts whether siblings say that they would provide help. For the first time, adherence to norms of family obligation also predicts sibling support. Those respondents who subscribe to norms of strong family obligation also report the most willingness to help disabled siblings in hypothetical situations. Although respondents who report a happy relationship with ill siblings do not indicate they would provide more help, those who experienced more disruption from their siblings' illnesses are less likely to respond favorably to these hypothetical situations. None of the control variables are associated with responses to the hypothetical questions.

DISCUSSION

The limitations of this study dictate that its findings must be treated cautiously. The sample is not representative of all siblings of seriously mentally ill people but probably reflects siblings who have more positive relationships. It includes more siblings from White, middle-class backgrounds than a general sample of the seriously mentally ill would contain. The sampling design does not allow a comparison of sibling with other types of support. An ideal research design would also examine the role of the entire sibling group in providing support both before and after the death of parents instead of cross-sectionally. Despite these limitations, the

findings provide the first look at some critical aspects of sibling support for the seriously mentally ill.

The central finding is the importance of reciprocity in creating bonds when one sibling is mentally ill. Siblings both report more help and more willingness to provide help to mentally ill brothers and sisters who reciprocate through affection, gifts, chores, and so forth. From the point of view of the sibling literature, this is not a surprising finding—many discussions of the sibling bond emphasize the critical importance of reciprocity (e.g., Avioli, 1989; Finch, 1989). Because siblings have few legal or social obligations toward each other, they are free to provide support of various kinds on a voluntary basis. When they receive nothing in return, they can withhold aid without guilt or social sanctioning. Reciprocity, however, has not been discussed as grounds for sibling support in chronically mentally ill as well as in population samples. Although more research is needed to understand why some siblings establish reciprocal exchanges and others do not, these findings suggest that the factors that promote sibling social support for the seriously mentally ill are similar to those that generally lead to strong sibling bonds.

Reciprocity stands out as the best predictor of sibling social support. In contrast, adherence to norms of family obligation is not related to reported help nor to willingness to give help when other caregivers are not available. Siblings who subscribe to strong norms of familial obligation, however, are more likely to respond favorably to providing help in a variety of hypothetical situations. Similarly, the third expected predictor of sibling bonds, the quality of the personal relationship between siblings, is not associated with the processes considered here except that respondents who experienced more disruption from their siblings' mental illness are less likely to say they would provide help in hypothetical situations. More detailed measures of personal relationships as well as of norms of family obligation might reveal that these processes are more important predictors of sibling support than the measures used here.

These results also indicate that the availability of other caregivers is associated with sibling social support. How much help a particular sister or brother reports depends on whether parents and other siblings serve as caregivers. Siblings are less involved in supportive activities when both parents are alive. That siblings who give the most help have one living parent might indicate that some sibling assistance is not only direct support to a brother or sister but also a way for them to extend help to a single living parent, in almost all cases a mother. It is not surprising that neither parental variable is associated with the willingness to help indica-

tor because the question wording controls for the presence of parents by asking whether siblings would provide various forms of help "if no one else were available to help."

Not only parental availability but also the participation of other siblings in caregiving is associated with social support. Respondents with siblings who participated in this study report less help and indicate less willingness to help than those who are the only study sibling. Although this study was not designed to test directly the influence of multiple siblings, the findings could indicate that the participation of multiple siblings in caretaking limits the amount of social support from any particular sister or brother (e.g., Matthews, 1987, 1988). The responsibility to help diffuses among the available sibling group instead of being delegated to a single caretaker. From the point of view of the ill sibling, this might not result in less support because the aggregate amount of received support could still be higher. From the point of view of respondent siblings, however, other sibling caregivers might allow more limited participation in supportive activities. Sibling caregiving is best viewed not only as an exchange between two individuals but also as shaped by the context of the entire family group.

CONCLUSION

The findings of this exploratory study reinforce the potential importance of siblings in caretaking. For unmarried, dependent populations, siblings are often the only possible relations who might serve as long-term informal caretakers. Many such siblings are currently involved in supportive activities, and nearly all express willingness to provide some social support if needed. Although it is unrealistic to assume siblings will provide as extensive support as do parents, their more limited supportive role might avoid the overdependence and limits on the ill member's autonomy that sometimes accompany parental involvement (Terkelsen, 1987).

Although most of these siblings have faced considerable disruption from the mental illness of a sister or brother at some point in their lives, almost all say they are willing to become involved in supportive activities. This might indicate that tensions between siblings of the mentally ill, like those between adult siblings in the general population, diminish over the life course (Cicirelli, 1991). At the same time, the symptoms of psychotic illnesses appear to become more benign and less tumultuous in middle and later life compared to adolescence and young adulthood (Lamb, 1988). The natural course of the mental illness may thus ease the pathway for a growing role for sibling social support over the life cycle.

These findings also have practical implications. Mental health professionals can take into account the reciprocal ties that are at the heart of the sibling relationship. They could encourage their seriously mentally ill clients to become involved with their brothers and sisters through such small acts as sending Christmas or birthday presents or inquiring about their well-being. These gestures can, in turn, promote reciprocal bonds. Some clients might resist such contacts because of bitter conflictual histories, the lack of recent contact, or the need for personal autonomy. It is likely, however, that many others could be encouraged to maintain or reestablish sibling bonds that can enhance their chances for a successful life in the community. Professionals and policymakers who are concerned with encouraging the long-term welfare of the seriously mentally ill, no less than students of the family, should become more aware of the important role that siblings can play over the life course.

REFERENCES

Adams, B. (1968). *Kinship in an urban setting*. Chicago: Markham.

Avioli, P. S. (1989). The social support functions of siblings in later life: A theoretical model. *American Behavioral Scientist, 33*, 45-57.

Bardis, P. D. (1988). *Marriage and family: Continuity, change and adjustment*. Dubuque, IA: Kendall-Hunt.

Bedford, V. H. (1989). Understanding the value of sibs in old age. *American Behavioral Scientist, 33*, 33-44.

Bulmer, M. (1987). *The social basis of community care*. Boston: Allen & Unwin.

Cicirelli, V. G. (1991). Sibling relationships in adulthood. *Marriage and Family Review, 16*, 291-310.

Connidis, I. A. (1989). Siblings as friends in later life. *American Behavioral Scientist, 33*, 81-93.

Cumming, E., & Schneider, D. M. (1961). Sibling solidarity: A property of American kinship. *American Anthropologist, 63*, 498-507.

Estroff, S. E. (1981). *Making it crazy: An ethnography of psychiatric clients in an American community*. Berkeley: University of California Press.

Finch, J. (1989). *Family obligations and social change*. Cambridge, England: Polity Press.

Fisher, G., Benson, P., & Tessler, R. (1990). Family response to mental illness: Developments since deinstitutionalization. In J. Greenley (Ed.), *Research in community and mental health* (Vol. 6, pp. 325-357). Greenwich, CT: JAI.

Goetting, A. (1986). The developmental tasks of siblingship over the life cycle. *Journal of Marriage and the Family, 48*, 703-714.

Gold, D. T. (1989). Generational solidarity: Conceptual antecedents and consequences. *American Behavioral Scientist, 33*, 19-32.

Hammer, M. (1981). Social supports, social networks, and schizophrenia. *Schizophrenia Bulletin, 7*, 45-56.

Handel, G. (1985). Central issues in the construction of sibling relationships. In G. Handel (Ed.), *Psychosocial interior of the family* (3rd ed., pp. 376-396). Hawthorne, NY: Aldine.

Heller, P. L. (1976). Familism scale: Revalidation and revision. *Journal of Marriage and the Family, 32*, 73-80.

Horwitz, A. V., & Reinhard, S. (1992). Family management of labeled mental illness in a deinstitutionalized era. *Perspectives on Social Problems, 4*, 111-127.

Horwitz, A. V., Tessler, R. C., Fisher, G. A., & Gamache, G. M. (1992). The role of adult siblings in providing social support to the severely mentally ill. *Journal of Marriage and the Family, 54*, 233-241.

Johnson, C. L. (1983). Dyadic family relations and social support. *Gerontologist, 23*, 377-383.

Johnson, C. L., & Catalano, D. J. (1981). Childless elderly and their family supports. *Gerontologist, 21*, 610-618.

Kramer, M. (1983). The continuing challenge: The rising prevalence of mental disorders, associated chronic diseases and disabling conditions. *American Journal of Social Psychiatry, 3*, 13-24.

Lamb, R. (1988). Deinstitutionalization at the crossroads. *Hospital and Community Psychiatry, 39*, 941-945.

Lefley, H. (1987). Aging parents as caregivers of mentally ill adult children: An emerging social problem. *Hospital and Community Psychiatry, 38*, 1063-1070.

Litwak, E., & Szelenyi, I. (1969). Primary group structures and their functions: Kin, neighbors, and friends. *American Sociological Review, 34*, 465-481.

Marsh, D. T. (1992). Siblings: Forgotten family members. *Journal of the California Alliance for the Mentally Ill, 3*, 3-4.

Marsh, D. T., & Dickens, R. (1993). Siblings of people with mental illness: Dimensions of the experience. *Tielines, 10*, 1-4.

Matthews, S. H. (1987). Provision of care to old parents: Division of responsibility among adult children. *Research on Aging, 9*, 45-60.

Matthews, S. H. (1988). Shared filial responsibility: The family as primary caregiver. *Journal of Marriage and the Family, 50*, 185-195.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

O'Bryant, S. L. (1988). Sibling support and older widows' well-being. *Journal of Marriage and the Family, 50*, 173-183.

Platt, S. (1985). Measuring the burden of psychiatric illness on the family: An evaluation of some rating scales. *Psychological Medicine, 15*, 383-393.

Rosenfield, S. (1992). Factors contributing to the subjective quality of life of the mentally ill. *Journal of Health and Social Behavior, 33*, 299-316.

Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent-child relations across the life course*. Hawthorne, NY: Aldine.

Schneider, D. M. (1968). *American kinship: A cultural account*. Englewood Cliffs, NJ: Prentice-Hall.

Seltzer, M. M. (Ed.). (1989). *American Behavioral Scientist, 33*(1).

Sussman, M. B., & Burchinal, L. (1962). Kin family network: Unheralded structure in current conceptualizations of family functioning. *Marriage and Family Living, 24*, 231-240.

Swados, E. (1991, August 18). The story of a street person. *The New York Times Magazine*, pp. 16-18, 44-47.

Terkelsen, K. G. (1987). The meaning of mental illness to the family. In A. Hatfield (Ed.), *Families of the mentally ill: Coping and adaptation.* New York: Guilford.

Tessler, R. C., Fisher, G. A., & Gamache, G. M. (1992). *The family burden interview schedule.* Unpublished report, Social and Demographic Research Institute, Amherst, MA.

Weisburd, D. E. (Ed.). (1992). *Journal of the California Alliance for the Mentally Ill, 3*(1).

Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology, 96,* 558-588.