

Similar or Different?

The Importance of Similarities and Differences for Support Between Siblings

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Using a large-scale Dutch national sample ($N = 7,126$), the authors examine the importance of similarities and differences in the sibling dyad for the provision of support. Similarities are assumed to enhance attraction and empathy; differences are assumed to be related to different possibilities for exchange. For helping with housework, helping with odd jobs, giving advice, and showing interest, logistic regression models are estimated and similarities and differences in gender, age, educational level, partner status, and whether the siblings have children are examined. The authors find only limited corroboration for the relevance of similarities, both siblings being sisters, or both being childless. Validation for the importance of differences is found, relating to different roles. For instance, older siblings are more supportive toward their younger siblings than the other way around, and the childless support their parenting siblings, especially in young adulthood.

Keywords: *adult siblings; social exchange; support; functional specificity model*

In the past decade, researchers in the field of family sociology have become increasingly interested in the adult sibling relationship. Until quite recently, attention for the sibling relationship was only minimal compared to the interest in other family relationships, such as the parent-child or

the spousal relationships (Bedford, 1989), but more and more researchers have come to acknowledge the importance of brothers and sisters as a source of comfort and support (Bedford, 1995; Eriksen & Gerstel, 2002), companionship (Connidis & Davies, 1990), and well-being (O'Bryant, 1988). Even though siblings do not always play a major role in most adults' day-to-day interactions, they tend to be permanent members of people's social networks throughout the life course, as the sibling bond is potentially the longest relationship people have.

We will focus on the support function of the sibling relationship in the lives of adults in the Netherlands among a representative sample of the Dutch population. Starting from the functional specificity model (Campbell, Connidis, & Davies, 1999), we follow previous studies on support (Wellman & Wortley, 1990) and the sibling tie (Eriksen & Gerstel, 2002), examining the importance of similarities and differences between siblings for the provision of sibling support. To give a broad perspective on the tasks with which siblings may help each other, we include four different types of support: help with housework, help with odd jobs, giving advice, and showing interest in a sibling's personal life.

We advance on previous work by shifting the focus from specific separate influences on sibling support toward a broad theoretical perspective of similarities and differences. Furthermore, by using a large representative sample of the Dutch population, the sibling relationship can be studied for all age groups and not just for the elderly, as many current studies do. By distinguishing between different age groups, the sibling relationship can be investigated during different phases of the life course.

Background

Existing theoretical traditions in family research provide limited help to explain support behavior between adult siblings, because they do not focus on the choices that are made by the individual family members involved but rather on the family as a whole or the family history. Examples of this are family systems theory (Cicirelli, 1980; Minuchin, 1974), attachment theory (Bowlby, 1979; Cicirelli, 1989), and models on social support, such as the

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hierarchical compensatory model (Cantor, 1979) and the task specification model (Litwak, 1985; Litwak & Szelenyi, 1969).

Family systems theory treats the family as a set of separate relationships that are all interconnected and aims to understand how families function. This approach is less concerned with the sibling bond in itself and is more descriptive in nature (Dilworth-Anderson, Burton, & Klein, 2005). Attachment theory explains different kinds of behavior as the result of attachment styles individuals develop during infancy and childhood (Crosbie-Burnett, Lewis, Sullivan, Podolsky, & Mantilla de Souza, 2005), therefore treating the behavior siblings display toward each other merely as a result of the development of a close bond during childhood. The hierarchical compensatory model sees the sibling relationship as one that will only become active when preferred alternatives are lacking (Cicirelli, Coward, & Dwyer, 1992; Connidis & Campbell, 1995; Miner & Uhlenberg, 1997). The presence or absence of preferred alternatives for assistance is not enough to explain sibling support by itself though. Individuals and the characteristics of their relationships are relevant too (Eriksen & Gerstel, 2002; White & Riedmann, 1992). The task specification model (Litwak, 1985; Litwak & Szelenyi, 1969), finally, poses that the function required by a particular helping task determines who will help, but it has difficulty explaining why some helpers with similar ability do not always provide comparable amounts and types of support (Cicirelli, 1995).

The models of hierarchical compensation and task specificity focus on social support, as does the functional specificity model. The latter model incorporates the idea that relationships may perform specific functions but that functions are not necessarily restricted to specific relationships, taking account of the fact that relationships are negotiated throughout time. In their study on sibling ties of older adults, Campbell et al. (1999) compared the three different social support models and found the most support for the functional specificity model. A British study by Finch and Mason (1993) on family obligations stressed that family relationships develop with time and responsibilities do not flow automatically from specific relationships. For instance, unpartnered childless siblings may have a very different relationship in terms of support than married siblings with children, because they have developed different expectations and exchange patterns with time.

But how can we predict the outcome of these negotiations for different subsets of people? When will siblings be more likely to support each other? The functional specificity model does not predict which relationship is most likely to provide help (Cicirelli, 1995), which characteristics are important, or how they are important. In their study on older adults' sibling relationships, Campbell et al. (1999) found differences related to gender, partner

status, and marital status but only investigated one side of the dyad, whereas negotiations are a result of characteristics of both individuals in the dyad.

We proceed from the functional specificity model and formulate specific expectations on how different characteristics of the individuals in the dyad lead to outcomes regarding support provision. We investigate two possible arguments: The first states that similarity breeds attraction (Lazarsfeld & Merton, 1954; McPherson, Smith-Lovin, & Cook, 2001), and the second contends that differences foster exchange (Becker, 1976). Known relevant influences on sibling support are incorporated into this general theoretical framework.

To learn about the adult sibling relationship in general, siblings of all ages need to be incorporated. Existing research on the sibling relationship in adulthood often focuses on specific age groups, such as the elderly (Cicirelli et al., 1992; Dykstra, 1990; Dykstra & Knipscheer, 1995). Of course, there are some exceptions of studies that use large representative samples, for example, for the United States (White, 2001; White & Riedmann, 1992), Great Britain (McGlone, Park, & Roberts, 1999), and the Netherlands (Verbakel & De Graaf, 2004), allowing conclusions on aspects such as frequency of contact, closeness, and helping behavior in the adult sibling relationship. We not only include siblings of all age groups but also distinguish between different age groups, because what is relevant for older siblings does not need to be influential in earlier phases of the life course and vice versa. For instance, being unpartnered and childless means something different for young adults than for older adults, because many young adults will eventually make the transition into parenthood, which is not the case for older adults.

We advance on previous work by using data from a large representative sample of the Dutch population. This provides insight into sibling support and the relevant influences on support not limited to specific groups. In this study, we analyze sibling relationships of all ages taken together and distinguish between three age groups: up to age 35, ages 36 to 55, and older than 55.

Theory and Hypotheses

The functional specificity model allows for the unique nature of the relationship to influence the provision of support. This implies that the content of the sibling relationship in terms of support varies for different groups of persons. To explain which sibling dyads are most likely to be supportive, we examine which dyadic characteristics are related to support provision. By taking the general approach of looking at whether similarities or differences are important for support and applying this to the sibling relationship, we aim to further specify the functional specificity model for siblings.

Similarity. The first approach comes from social psychology and argues that people who are alike are attracted to each other (Lazarsfeld & Merton, 1954). People who share similar values or status have rewarding interactions as they express their views to each other, which leads to liking the other person (Homans, 1974). Such predilection is also enhanced by people thinking they are liked more by a similar other (Condon & Crano, 1988). Attraction is related to supportive behavior (see for the sibling relationship, Riggio, 2000), which is further stimulated by similarity, because higher similarity generally leads to increased empathy, which in turn enhances helping behavior (Batson, 1991).

This line of research has focused almost exclusively on achieved relationships, such as those with spouses (Kalmijn, 1998) and friends (Marsden, 1988). The importance of similarity for ascribed relationships such as the one between siblings has only rarely been investigated (see Eriksen & Gerstel, 2002; Verbakel & De Graaf, 2004, for an exception), and results are somewhat contradictory, where some studies find some support for the similarity claim (Eriksen & Gerstel, 2002) and others find none (Verbakel & De Graaf, 2004).

Difference. A second and contrasting approach to the provision of support in the adult sibling relationship originates in exchange theory, which implies a “two-sided mutually contingent, and mutually rewarding process involving ‘transactions’ or simply ‘exchange.’ . . . The exchange approach in sociology might be described, for simplicity, as the economic analysis of non-economic social situations” (Emerson, 1976, p. 336). The basic idea behind exchange in economics is that people with different resources engage in exchange to maximize their rewards (Klein & White, 1996). This exchange perspective has been used to explain behavior in family relationships on the whole (Becker, 1991) and in this study will be applied to the sibling relationship as well. For siblings too, differences in amount and type of resources they dispose of can create opportunities for exchange of support.

To achieve a broad perspective on supportive behavior between siblings, we examine several support tasks. Included are practical as well as emotional support tasks; gender specificity of certain tasks is also taken into account, as this is found central to supportive behavior in family relationships (Hoyt & Babchuk, 1983). The practical support tasks are help with housework (female typed) and help with odd jobs, and the emotional support tasks are giving advice and showing an interest in the personal life of a sibling. In the remainder of this section, we formulate hypotheses on effects of similarities as well as differences in characteristics found to be important in sibling relationships: gender, age, education, partner status, and the presence of children.

Gender. The gender composition of the dyad is expected to be important for support. There are arguments for both same-gender and mixed-gender composition to improve support in the sibling relationship, and there is much disagreement about this in the literature (Bedford, 1995).

It can be argued that same-gender siblings are more supportive because they are emotionally closer than mixed-gender sibling pairs. Gender commonality is found to be important in nonfamily relationships, especially in friendships (Kalmijn, 2002; Marsden, 1988), and there is empirical support for this in sibling relationships as well. Erikson and Gerstel (2002) found in their study on sibling support that more support was given in same-gender pairs. In her overview of sibling studies, Connidis (2001) discusses studies espousing that both men and women feel closer to a sibling of the same gender but also reports empirical evidence demonstrating otherwise.

Following exchange theory, differences between men and women lead to opportunities to exchange all kinds of services. With regard to the provision of emotional support, the centrality of women is well known (Felling, Fiselier, & Van der Poel, 1991; Wellman & Wortley, 1990). Women are often expected to fulfill the role of “nurturer” (McGoldrick, 1991) or “kin keeper” (Rosenthal, 1985), which explains why both men and women are found to be more likely to turn to a woman than to a man in times of stress (Buhrke & Fuqua, 1987). It can therefore be argued that it is the involvement of women that is relevant rather than gender commonality. According to this approach, sisters are supposed to be most supportive, followed by brother-sister pairs, and brother-brother pairs are expected to be least supportive. Several studies point to the fact that having sisters is important for well-being and emotional support (Bedford, 1995; Connidis, 2001; O’Bryant, 1988).

A second argument as to why gender differences may matter for support is that tasks can be gender specific, leading to specialization by brothers and sisters. A gender-specific division of tasks in and around the house is often found, with women more likely to provide help with domestic tasks and men helping out more often with home maintenance (Felling et al., 1991; Liebler & Sandefur, 2002). From an economic exchange perspective, most can be gained from being part of a mixed-gender sibling dyad, where the skills of a sister complement those of her brother. According to this view, we expect that help with housework is most likely to be provided by sisters to brothers and that help with odd jobs is most likely to be provided by brothers to sisters.

We will investigate whether support for the four different support tasks is more likely to be exchanged in same-gender dyads (Hypothesis 1a), in dyads involving more women (Hypothesis 1b), or whether the gender specificity of the task is of influence (Hypothesis 1c).

Age difference. Does closeness or rather difference in age enhance sibling support? On one hand, siblings closer in age can be expected to be more supportive because closeness in age often means more shared experiences during childhood (Ross & Milgram, 1982), leading to enhanced closeness in adulthood. In other kinds of relationships too, those closer in age tend to relate more closely and personally (Marsden, 1987; McPherson et al., 2001; Verbrugge, 1977).

On the other hand, an argument can be made for why a larger age difference may increase support. A difference in age may be associated with different resources as a result of more life experience and, for siblings, another role in the family. Research on birth order and sibling roles shows that the relationship between siblings is not totally egalitarian but that age differences can be associated with different roles. Especially early in the life course, older siblings function as a model for their younger counterparts (Cicirelli, 1995), and younger siblings imitate their older siblings, which in turn helps the latter develop social skills (Teti, 1992). Among a population of college students, Younglich (1964) found that younger siblings look to their older siblings for leadership and decision making. In Italian American families, older siblings were found to look after their younger ones (Johnson, 1982). A study among college students showed that even though ordinal position did not have an effect on affection, older siblings did influence their younger siblings more than the other way around (Newman, 1991). The roles that siblings learn when they grow up may perpetuate into adulthood. Therefore, an alternative hypothesis is that older siblings are more likely to provide support to younger siblings.

An age difference may also be related to a difference in opportunities to provide support and a need for support. Among older adults, a much younger sibling is more likely to provide support than an older sibling. Siblings who are in approximately the same phase of the life course are confronted with similar needs for support, which makes them less suited for support exchange. Gold (1989) found in her study among older adults that limitations in terms of health decline or financial restrictions made siblings stop providing practical help. Similar health limitations are less likely when there is a greater age difference.

We will test whether support is more likely to be provided to a sibling closer in age (Hypothesis 2a) or to a sibling that is much younger (early and middle adulthood; Hypothesis 2b) or older (late adulthood; Hypothesis 2c) and whether this fluctuates for different tasks of support.

Education. Similarity in education may be important, because a different educational background is related to different experiences in the past and to

a different lifestyle associated with a different social status (Zablocki & Moss Kanter, 1976), making mutual understanding and empathy more difficult. Indeed, in chosen relationships, the most important of the achieved characteristics by which people shape their network is similarity in educational attainment (McPherson et al., 2001). Among siblings, a differential educational attainment sometimes leads to sibling rivalry, causing strain in the relationship (Ross & Milgram, 1982), and such rivalry may last until late adulthood (Cicirelli, 1985). Adult siblings are seen as measuring sticks to evaluate their own success or lack thereof (Troll, 1975), and different occupational levels are found to be related to poor relationships between brothers (Adams, 1968). Nowadays, this may have become increasingly relevant for sisters as well, given women's increased labor force participation. From this perspective, similarity in educational level between siblings is likely to enhance support.

In contrast, because educational attainment is a form of human capital, different educational levels imply differences in resources, increasing the possibilities for exchange. Those with a higher education tend to have higher social status, higher income, and better health (Monden, 2003). Education can therefore be seen as a resource in many ways. Seen this way, siblings with a higher educational level are more likely to support siblings with less resources. There is some empirical support for this idea. A study among older siblings by Suggs (1989) showed that between Black siblings, educational disparity was related to enhanced closeness. Ross and Milgram (1982) found in their qualitative study of adult sibling relationships that even though most consequences of employment or educational discrepancies were negative, in certain cases increased admiration for the more highly educated or more successful sibling enhanced sibling ties.

We will test whether similarity (Hypothesis 3a) or difference (Hypothesis 3b) in educational attainment enhances the likelihood of support provision for the four different tasks.

Partner status. For partner status too, it can be argued that similarity breeds closeness and empathy, leading to more support exchange. Especially enhanced closeness, contact, and support exchange between never-married and widowed siblings are widely documented (Campbell et al., 1999; Cicirelli, 1991; Connidis, 1989, 2001; O'Bryant, 1988). This finding is often explained by the hierarchical compensatory model of support, assuming that a sibling becomes more important as a provider of support when a partner is absent (Cicirelli, 1995; Cicirelli et al., 1992), making two unpartnered siblings especially likely to be close and supportive. The functional specificity model does not assume

that siblings compensate for absent partners but that unpartnered siblings have negotiated different relationships with each other than their partnered counterparts (Campbell et al., 1999).

For married sibling pairs, there also is evidence that similarity in marital status improves closeness in the relationship, as a result of sharing the common experience of being married (Connidis, 1992)—despite some research indicating the opposite (Ross & Milgram, 1982). The positive effect of similarity of marital status is therefore expected to be stronger for unpartnered (never married, divorced, or widowed) sibling pairs.

An argument can also be made for a discrepancy in partner status enhancing sibling support. A partner may be a resource for supporting an unpartnered sibling. Some evidence backing this comes from a study on sibling support to older widows by O'Bryant (1988), who found that for widows a married sister living close by is a significant predictor of support. Indeed, in this study, the sisters' partners were also found to be engaged in support provision to the widow. This leads to the expectation that support is most likely to be provided by a partnered sibling to an unpartnered sibling.

We will test whether support is most likely provided in a sibling dyad with homogeneity in partner status (Hypothesis 4a) or whether a different partner status stimulates support provision (Hypothesis 4b) for four different tasks.

Presence of children. Similarity in parent status is expected to influence support in the sibling dyad because being in the same phase of the life course is expected to facilitate the provision of emotional support (see for instance Connidis, 2001, for the shared experience of parenthood by siblings), as it is easier to understand each other and be empathetic. Furthermore, the presence of a new generation tends to open up the family, intensifying bonds with kin such as siblings (Schvaneveldt & Ihinger, 1979). Previous research indeed found an effect of same parental status in the sibling dyad on the provision of practical help (Eriksen & Gerstel, 2002).

The absence of children is an alternative reason why siblings might be more focused on each other. Again, following the functional specification model, this closer relationship between childless siblings may be the result of negotiation across the life course, making them more focused on each other (Campbell et al., 1999).

Differences in parental status may also lead to increased support between siblings, and this is expected to vary for different phases of the life course. When one sibling has young children, the childless sibling may be best able to help out and to function as a surrogate parent because of fewer competing family obligations. This is found indeed in research among

older, never-married childless women (Allen & Pickett, 1987), and this role is not limited to women (Milardo, 2005).

When children are grown up, resources may be distributed differently. Given that much support flows between parents and children (Komter & Vollebergh, 2002) and that older adults are most likely to turn to adult children for support (Quadagno, 2005), children can be seen as a resource in late adulthood. When children are there to help out their parents, these parents may have more possibilities to help out their own siblings.

We will test whether similarity (Hypothesis 5a) or difference (Hypothesis 5b) in parental status results in more support exchange for the four different support tasks and how this varies for different age groups.

Method

Data: The Netherlands Kinship Panel Study

We used data from the Netherlands Kinship Panel Study (Dykstra et al., 2005), a large-scale data collection among a representative sample of the Dutch population on the subject of family solidarity. The fieldwork of the first wave we are working with was completed in 2004. Using a structured questionnaire, 8,161 individuals between ages 18 and 80 were interviewed face to face at home. A self-completion questionnaire was also filled out by respondents. The response rate was 45%.

Compared to the Dutch population, women were overrepresented, especially the 35 to 54 age group. Young men were also underrepresented (ages 18 to 30). Considering household status, there was an overrepresentation of people with children at home in the data set and an underrepresentation of children still living with their parents.

Respondents reported on various family relationships, including the sibling relationship. On all living siblings, data were collected on gender, age, contact frequency, and place of residence. An additional set of questions (e.g., partner status and parental status, educational level, and support exchange) was asked about a maximum of two randomly selected siblings age 15 or older. We selected one of these two siblings for our analysis. Of all respondents, 92.2% had at least one biological sibling, sharing both parents, age 15 or older. Respondents with only half siblings, step siblings, adopted siblings, or no siblings at all were excluded from the analysis (896 respondents), as were respondents who still lived with their parents or who lived with the sibling in the same household (135 respondents). Furthermore, respondents with

missing values on the dependent variables and with unreliable values (such as an age difference of 79 years) were excluded (4 respondents). A data set of 7,126 respondents remained. Missing values for the independent variables were estimated by single imputation using Expectation Maximization (Acock, 2005).

Measures

Dependent variables. Four tasks were analyzed: help with housework, help with odd jobs, giving advice, and showing an interest in the other's personal life. The first two can be characterized as practical support, the latter two as emotional support (Pierce, Sarason, Sarason, Joseph, & Henderson, 1996). These tasks were measured in the data set with the following four questions: (a) In the last 3 months, did you help [name of sibling] with housework, by preparing meals, cleaning, grocery-shopping, doing the laundry? (b) In the past 3 months, did you help [name of sibling] with practical matters, such as chores in and around the house, lending things, transportation, moving things? (c) Did you give counsel or good advice to [name of sibling] in the past 3 months? (d) Have you shown an interest in the personal life of [name of sibling] in the past 3 months? Response categories were 0 = *none*, 1 = *once or twice*, and 2 = *several times*. Given the limited number of categories and the nonnormal distribution of the variables, the responses were dichotomized, creating four binary variables indicating whether this kind of support was provided or not.

Table 1 presents descriptive statistics for all variables in the model, showing that help with housework was least common; 10% of all respondents provided this kind of help. Of all respondents, 17% helped with odd jobs, 41% gave advice, and 75% showed interest in the personal life of their siblings.

Independent variables. Variables concerning the following characteristics of the sibling dyad were included for each sibling: gender composition, age heterogeneity, educational heterogeneity, partner status, and whether children were present. Statistics of the independent variables are given in Table 1.

For the gender composition of the dyad, four dummy variables were constructed: sister-sister dyad (29% of the dyads), brother-sister dyad (21%), sister-brother dyad (30%), and brother-brother dyad (21%). In the analysis, the brother-sister dyad was the reference category.

For age difference, three dummy variables were constructed that distinguished between both siblings being of approximately the same age, the providing sibling being older, and the providing sibling being younger than

Table 1
Descriptive Statistics of Support Variables, Independent Variables,
and Control Variables ($N = 7,126$)

	<i>M</i>	<i>SD</i>	Range
Housework	0.10	0.30	0 to 1
Odd jobs	0.17	0.38	0 to 1
Advice	0.41	0.49	0 to 1
Interest	0.75	0.43	0 to 1
Brother to sister	0.21	0.41	0 to 1
Sister to sister	0.29	0.45	0 to 1
Brother to brother	0.21	0.41	0 to 1
Sister to brother	0.30	0.46	0 to 1
Same age	0.47	0.50	0 to 1
Younger to older	0.34	0.47	0 to 1
Older to younger	0.19	0.40	0 to 1
Same educational level	0.58	0.49	0 to 1
More highly to less educated	0.26	0.44	0 to 1
Less to more highly educated	0.16	0.37	0 to 1
Partnered to unpartnered	0.14	0.35	0 to 1
Partnered to partnered	0.52	0.50	0 to 1
Unpartnered to partnered	0.22	0.42	0 to 1
Unpartnered to unpartnered	0.11	0.31	0 to 1
Parent to childless	0.15	0.35	0 to 1
Parent to parent	0.56	0.50	0 to 1
Childless to parent	0.15	0.35	0 to 1
Childless to childless	0.15	0.35	0 to 1
Relationship quality	2.85	0.92	1 to 4
Age	47	14.56	18 to 79
Education	5.95	2.34	1 to 10
Number of siblings	2.98	2.18	1 to 16
Distance (km)	59	82.18	0 to 300
Sibling lives abroad	0.08	0.27	0 to 1
Income/1,000 (in euros)	2,146	2,394	0 to 98,606
Normative obligation	3.71	0.72	1 to 5
Health	1.97	0.80	1 to 5

the sibling receiving support. For having the same age, a range of 3 years was chosen, assuming that a difference of 3 years or less is small enough for siblings to consider each other as age peers. This resulted in one dummy variable indicating that the siblings were approximately of the same age (47%), the reference group in the analysis; two for age heterogeneity, distinguishing between dyads in which the support-providing sibling was at

least 3 years older (19%); and one where the support-providing sibling was at least 3 years younger (34%).

Educational level was measured according to an ordinal scale ranging from 1 to 10, where 1 stood for not having finished primary school and 10 for a postdoctoral level of education. A difference of at least two categories was treated as an educational difference. Being in the same category or one lower or higher was treated as having attained the same educational level (58%). One dummy variable indicated that the providing sibling had a higher level of education than the receiving sibling (26%), and one dummy variable indicated the opposite (16%).

To indicate the partner status of sibling pairs, four dummy variables were constructed. The first one referred to a sibling dyad in which both siblings were unpartnered, meaning that neither lived together with a partner (11%). The second one referred to dyads in which the provider of support was unpartnered but the sibling was not (22%), the third indicated a dyad in which the provider of support was partnered but the sibling was not (14%), and the fourth referred to those dyads in which both siblings were partnered (52%). In the middle-age group, most partnered-partnered dyads were found and the fewest unpartnered-unpartnered dyads. In the analysis, the partnered-unpartnered dyad was the reference group.

Finally, whether one had children was taken into account. A distinction was made between sibling dyads in which both siblings were childless (15%), both had children (56%), the providing sibling had children and the other did not (15%), and the other way around (also 15%). Childless sibling dyads were rare after the age of 35 (6% and 3%), quite unlike siblings who both had children (62% and 76%).

Control variables. Relationship quality was taken into account, because this is often found to be related to support exchange in relationships (Wellman & Wortley, 1990). Relationship quality was measured by asking the support-providing sibling the following question: Taking everything together, how would you describe your relationship with [name of sibling]? Response categories were 1 = *not so good*, 2 = *reasonable*, 3 = *good*, and 4 = *very good*. By including relationship quality in a separate step, we tested to what extent the link between similarities and differences on one hand and support provision on the other was mediated by relationship quality.

In addition to the dummy variables that indicated differences between siblings, the main effects of age and education were included. Research has shown that support tends to become less frequent with increasing age and more frequent for the higher educated (Eriksen & Gerstel, 2002; Felling

et al., 1991; White & Riedmann, 1992). Table 1 shows that the average age of the respondents was approximately 47, and the average educational level was 5.95 on a scale of 1 to 10.

When people have more siblings, attention and support is often divided among them, decreasing the amount of contact or support with a specific sibling (Eriksen & Gerstel, 2002; Lee, Mancini, & Maxwell, 1990; Wellman & Wortley, 1989), even though contact and support may be greater for the whole sibling group (White, 2001; White & Riedmann, 1992). The size of the sibling group, consisting of the number of living siblings, was included as a control variable. The average number of siblings the respondents had was 2.98 (Table 1). Geographical proximity to the sibling was included too. It is known that proximity facilitates support, especially practical support, because physical presence is often needed (see, for instance, Eriksen & Gerstel, 2002; Lee et al., 1990; White & Riedmann, 1992). Proximity was included as the distance in kilometers between siblings' residences. The range of this variable was 0 to 300 kilometers; the highest value was given to siblings living abroad, and a dummy was included to test whether they differ from siblings living far apart within the Netherlands. On average, siblings lived 59 kilometers (about 37 miles) apart, and older respondents tended to live farther away from their siblings than their younger counterparts (Table 1).

It is known from previous research that when families have less money at their disposal, less emotional as well as practical support is exchanged between the family members in general—emotional support in the form of advice, practical support by way of assistance and care—(Hogan, Eggebeen, & Clogg, 1993) and more specifically between siblings (Eriksen & Gerstel, 2002; White & Riedmann, 1992). Therefore, household income of the provider was controlled for in the analysis. Household income was the sum of the monthly incomes of the respondent and the respondent's partner. The average income per month was 2,146 euros (Table 1). Because the range of the scale of this variable was relatively large compared to those of the other variables in the model, for the analyses, the income was divided by a thousand, to avoid coefficients for income from being represented as .00 in the table. The data did not contain information on the income of the sibling.

The attitude concerning family obligations of the provider of support was also included. From research on intergenerational relationships, it is known that normative expectations are positively related to support exchange and caregiving (Parrott & Bengtson, 1999; Stein et al., 1998), and this is likely to be relevant for sibling relationships as well. This attitude was measured by combining the scores on the following four items about family obligation, taking the mean score: (a) One should always be able to count on family;

(b) family members should be ready to support one another, even if they don't like each other; (c) if one is troubled, family should be there to provide support; and (d) family members must help each other, in good times and bad. Scores were on a 5-point scale, and higher scores represented stronger feelings of obligation toward the family. The reliability of this scale was high (α is .87). When only one or two out of four items were missing, the conditional item mean method was used to replace missing values. This method imputes the missing value by taking into account the scores of the other respondents on the missing item, in addition to the respondent's scores on the other items. When all items were missing, the average score was estimated by single imputation (Acock, 2005).

The self-reported health of the respondent was included to control for limitations for providing help. Health was measured by asking how respondents would judge their own health: 1 = *excellent*, 2 = *good*, 3 = *not good not bad*, 4 = *bad*, and 5 = *very bad*. The average score was 1.97 (Table 1).

Analysis

Logistic regression models were estimated for all four tasks. Results are shown in Table 2. To examine differences for age groups, additional analyses were run for three age groups: one for the age group younger than 36 ($n = 1,850$), one for the 36 to 55 age group ($n = 3,274$), and one for age 55 and older ($n = 2,002$). Relevant findings for these analyses are discussed in the text. Coefficients can be interpreted by taking the antilog (e^b) to determine how strong the odds of support increase or decrease when the independent variable increases by one unit (e.g., from 0 to 1 for the dummy variables).

Results

Housework

Table 2 presents the results for help with housework (Model 1), a female-typed task that was most likely given in a sister-sister dyad, supporting Hypotheses 1a and 1c for women. With regard to age difference, younger siblings were found to be more likely to help out older siblings than was the case in same-age dyads, supporting Hypothesis 2b. A partner was not a resource for help with housework, as indicated by the absence of difference between the partnered sibling helping the unpartnered sibling and the unpartnered sibling helping the partnered sibling. Support was least likely provided in partnered

Table 2
Results of Logistic Regression Analysis on Help Provided to Sibling With Housework (Model 1), Odd Jobs (Model 2), Giving Advice (Model 3), and Showing Interest (Model 4) (N = 7,126)

	Model 1: Housework			Model 2: Odd jobs			Model 3: Advice			Model 4: Interest		
	<i>B</i>	<i>SE B</i>	<i>e^β</i>	<i>B</i>	<i>SE B</i>	<i>e^β</i>	<i>B</i>	<i>SE B</i>	<i>e^β</i>	<i>B</i>	<i>SE B</i>	<i>e^β</i>
Sister to sister ^a	0.41**	0.12	1.51	-0.25*	.10	0.78	0.54***	0.08	1.72	0.87***	0.10	2.39
Brother to brother ^a	-0.26	0.14	0.77	0.03	.10	1.03	0.02	0.09	1.02	-0.20*	0.10	0.82
Sister to brother ^a	-0.09	0.13	0.91	-0.68***	.10	0.51	-0.04	0.08	0.96	0.40***	0.10	1.50
Older to younger ^b	-0.06	0.13	0.94	0.19*	.10	1.21	0.19*	0.08	1.21	0.06	0.09	1.06
Younger to older ^b	0.19*	0.10	1.21	-0.06	.08	0.94	-0.23***	0.06	0.79	-0.11	0.08	0.90
More highly to less educated ^c	-0.08	0.11	0.92	-0.01	.09	0.99	-0.05	0.07	0.95	-0.26***	0.09	0.77
Less to more highly educated ^c	-0.13	0.13	0.88	0.09	.11	1.09	0.00	0.08	1.00	0.22*	0.10	1.25
Partnered to partnered ^d	-0.68***	0.13	0.51	-0.63***	.10	0.53	-0.72***	0.08	0.49	-0.39***	0.11	0.68
Unpartnered to partnered ^{de}	-0.16	0.15	0.85	-0.42**	.12	0.66	-0.82***	0.10	0.44	-0.46***	0.13	0.63
Unpartnered to unpartnered ^d	0.31*	0.15	1.36	-0.05	.13	0.95	-0.17	0.11	0.84	-0.03	0.15	0.97
Parent to parent ^e	0.04	0.14	1.04	-0.05	.11	0.95	0.07	0.09	1.07	0.24*	0.11	1.27
Childless to parent ^e	-0.01	0.16	0.99	0.09	.13	1.09	0.15	0.11	1.16	0.33*	0.14	1.39
Childless to childless ^e	0.09	0.15	1.09	0.21	.13	1.23	0.28*	0.11	1.32	0.64***	0.15	1.90
Relationship quality	0.70***	0.06	2.01	0.79***	.05	2.20	0.85***	0.04	2.34	1.49***	0.04	4.44

(continued)

Table 2 (continued)

	Model 1: Housework			Model 2: Odd jobs			Model 3: Advice			Model 4: Interest		
	<i>B</i>	<i>SE</i>	<i>e^B</i>	<i>B</i>	<i>SE</i>	<i>e^B</i>	<i>B</i>	<i>SE</i>	<i>e^B</i>	<i>B</i>	<i>SE</i>	<i>e^B</i>
Age	-0.03***	0.00	0.97	-0.03***	0.00	0.97	-0.03***	0.00	0.97	-0.01***	0.00	0.99
Education	0.04	0.03	1.04	0.05*	0.02	1.05	.09***	0.02	1.09	0.23***	0.02	1.26
Number of siblings	-0.05*	0.02	0.95	-0.08***	0.02	0.92	-0.10***	0.01	0.90	-0.09***	0.02	0.91
Distance	-0.01***	0.00	0.99	-0.01***	0.00	0.99	-.00	0.00	1.00	0.00	0.00	1.00
Sibling lives abroad	0.64	0.37	1.90	1.18***	0.32	3.25	0.11	0.19	1.12	-0.52*	0.24	0.59
Income/1,000 (in euros)	0.05	0.03	1.05	0.03	0.02	1.03	.02	0.01	1.02	0.00	0.01	1.00
Family obligation	0.09	0.06	1.09	0.06	0.05	1.06	.05	0.04	1.05	-0.04	0.05	0.96
Health	0.01	0.06	1.01	-0.02	0.05	0.98	.08*	0.04	1.08	-0.01	0.04	0.99
Constant	-2.81***	0.44		-1.82***	0.35		-1.83***	0.27		-3.20***	0.33	
χ^2	619			1,098			1,578			2,413		
<i>df</i>	22			22			22			22		
Nagelkerke <i>R</i> ²	17.5			23.8			26.8			42.6		

a. Reference group is the brother-sister dyad.

b. Reference group is an age difference smaller than 3 years.

c. Reference group is same educational level.

d. Reference group is partnered to unpartnered.

e. Reference group is parent to childless.

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

sibling dyads and most likely in unpartnered sibling dyads, indicating that absence of a partner made siblings turn to each other but only when both were without a partner. This supports the similarity hypothesis (Hypothesis 3a) but only for unpartnered siblings. No significant effects were found for differences or similarities in education (Hypothesis 3) or parental status (Hypothesis 5).

Additional analyses of three separate age groups revealed that especially young sisters (younger than age 36) helped each other with housework. The finding of partnered siblings being least likely to help each other out with housework was found for all age groups.

Odd Jobs

Model 2 in Table 2 presents the findings on help with odd jobs. With regard to gender, help with odd jobs was a more masculine-typed task. Especially sisters were less likely to give this help to brothers or to sisters. This supports our hypothesis on the importance of gender specificity of the task (Hypothesis 1c). A difference in age enhanced support with odd jobs; help with odd jobs was most likely to come from an older sibling, supporting Hypothesis 2b. This finding suggests that ordinal position is related to different roles in the family. Again, support was least likely in partnered sibling dyads. For help with odd jobs, the special bond between unpartnered siblings was not found. Unpartnered siblings were more likely to receive help, but this help came from partnered as well as unpartnered siblings—not supporting our hypotheses on similarity or difference (Hypothesis 4) but supporting the hierarchical compensation model because in the absence of a partner siblings were more important support providers. No effects were found for whether children are present (Hypothesis 5).

Additional analyses of the separate age groups provided some interesting results. First, with regard to age difference, the idea that age difference would matter less among older people (Connidis, 2001) was supported by the finding that only for the 18 to 36 age group were older siblings more likely to help their younger ones; for the older groups, no effect was found. Second, there were differences between the three age groups in terms of parental status. In the youngest age group, help with odd jobs was more likely to be provided in childless sibling dyads. In this age group, childless siblings were also more likely to help out siblings with children than the other way around. This indicates that childless siblings are helping out their parenting siblings in a very busy period of their lives—when the children are young. For the oldest group (55 and older), this was different: When both had raised children, they supported each other less, possibly because adult children filled in this need.

Advice

Model 3 (Table 2) shows the results for advice. Advice was most likely provided in sister-sister dyads. This implies that gender similarity is only important for sisters (Hypothesis 1a), supporting the special bond between sisters (Neale, 2004). An older sibling seemed to be regarded as wiser, given that advice was most likely to come from an older sibling than from a younger one. Siblings who differed in age appeared to have different roles, where older siblings advised the younger ones. As was also found for the practical support tasks, advice was less likely given in partnered sibling dyads. In fact, unpartnered siblings seemed to receive most advice, be it from an unpartnered or a partnered sibling. Similarity of partner status was therefore not important and neither was a different partner status, refuting both our major theoretical intuitions (Hypothesis 4a and Hypothesis 4b). Unpartnered individuals were more likely to receive advice than partnered ones, and this could come from unpartnered or partnered siblings. Results further showed that advice was most likely provided in childless sibling dyads, arguing in favor of childless siblings having a more supportive relationship.

When the model was run for the three different age groups separately, some interesting differences between the groups emerged. First, age difference seemed to become less influential among older siblings, given that significant effects were not found among the oldest group of respondents. Second, for the middle-aged group (36 to 55), more highly educated siblings were less likely to give advice to their less educated siblings. Educational attainment may be most relevant for this age group, because the impact on labor market position and lifestyles becomes most apparent.

Results for partner status were stable across all age groups, but for parental status, interesting differences emerged. Both siblings having children increased the likelihood of young adults giving advice, as experiences with raising young children were probably exchanged. In the middle-age group, no effect was found for the presence of children. For older adults, whose children were most likely grown up, advice was likely to come from childless siblings. Perhaps they shared their experience of not having children around. For the older adults, advice was also likely to be provided among childless siblings. On the whole, most support was found for similarity of parental status (Hypothesis 5a), for childless siblings in general, and for siblings with children in young adulthood.

Interest

Results for showing interest in the personal life of a sibling are displayed in Table 2, Model 4. For taking an interest in a sibling, femaleness of the dyad was clearly important, supporting Hypothesis 4b. The more women were involved, the more likely interest was shown, and in mixed-gender dyads, more interest was shown by a sister. In addition to a positive effect of educational level, more highly educated siblings showed less interest in their less educated siblings, whereas the less educated siblings showed more interest in their more highly educated siblings. A similar educational level did not breed interest: More highly educated siblings seemed to be more “interesting” rather than more interested compared to less educated ones, supporting the argument of differences (Hypothesis 3b). With regard to partner status, results were comparable to those found for giving advice. Interest was most likely shown in unpartnered siblings, by partnered as well as unpartnered siblings. As for parental status, those with children showed less interest in their child-less siblings than any other combination.

Several findings for the analyses for the different age groups separately are worth discussing. First, for the separate age groups, age difference mattered in several ways. For the middle-aged group (ages 36 to 55), being older than the sibling enhanced interest, and for the oldest group (55 and older), it was the other way around: Those similar in age and those who are younger than their siblings were more likely to show interest. To further investigate these results, we estimated the model with different categories for age difference. Results (not shown) revealed that when someone was much younger or much older, interest was less likely to be provided. Interest was likely to be equally shown within the middle categories. Similarity of age can thus be defined very broadly; only when differences became really large—at least 7 years younger or 10 years older—was less interest shown.

With regard to parental status, it becomes apparent that the findings in the model for all ages were especially based on the middle age group. The presence or absence of children had no effect on showing interest for the youngest age group.

Control variables

Because our argument for similarity was that it breeds attraction and liking, it is possible that relationship quality mediated the relation between similarity and support. We investigated this by analyzing the four tasks without including relationship quality. On the whole, the results were stable.

Relationship quality was linked to support fairly independently of similarities or differences.

All support tasks were less likely to be provided by older respondents. Results were significant for all age groups separately as well, indicating that even within age groups there was a difference between younger and older individuals. With the exception of help with housework, more highly educated people were more supportive toward their sibling than the less educated ones. Having more siblings made support less likely to be provided for all four tasks. Living further away also inhibited support provision but only for the tasks that required physical proximity such as help with housework and odd jobs. No significant effects were found for income. Normative obligation toward the family was not related to support provision when relationship quality was included. Good health increased the likelihood of giving advice to a sibling.

Conclusion and Discussion

In this study, we examined sibling support, starting from the functional specificity model. This model argues that supportive relationships are negotiated over time, leading to variation in supportive behavior for different subgroups of people. We added to this by investigating the importance of similarities and differences within the sibling dyad, to learn more about which subgroups of siblings are most likely to have developed a supportive relationship. We investigated subgroups based on gender composition of the dyad, similarity and difference in age and educational attainment, partner status composition, and the presence of children. Not much convincing evidence was found for the importance of similarity between siblings; mostly, only specific similar characteristics are important, such as the sister-sister dyad in terms of the gender composition of the dyad and childless siblings in terms of parental status. It seems that similarity in itself does not breed attraction and empathy, except for specific instances. Limited validation is found for the importance of differences, which we related to different resources and sibling roles. Relationship quality is connected to support provision, however in most cases, evidence for similarity or difference could not be reduced to differences in relationship quality but were important regardless of how siblings valued their relationship.

With regard to the gender composition of the dyad, most empirical support is found for femaleness of the dyad and for a special bond between sisters yet not for masculine-typed tasks such as chores around the house. For

help with housework and giving advice, a clear distinction between sister-sister pairs and all other combinations was found. For help with housework, giving advice, and showing interest, it is found especially when only siblings younger than age 36 are considered. This supports research by Weaver, Coleman, and Ganong (2003), who found in their study on sibling relationships in young adulthood that only sister-sister pairs differed from other combinations when the provision of services is considered, and femaleness of the dyad was not found important. We conclude from this that sisters have a special bond (Millman, 2004; Neale, 2004), although this shows only for specific tasks and seems to become less important over the years. The diverging findings on gender composition of the dyad for the four tasks and the different age groups helps to understand the disagreement in the literature regarding how exactly gender is important for support provision (Bedford, 1995)—apparently, gender is important in several ways, depending on the task of support and the age group under consideration.

Closeness in age does not foster support. Even though siblings who are closer in age may feel they have more in common and have shared more experiences together (Ross & Milgram, 1982), we believe that the finding that older siblings are more likely to help out younger siblings with odd jobs and give them advice indicates that siblings of different ordinal positions perform different roles and continue to do so early in adulthood up to middle adulthood. This supports earlier research among children (Cicirelli, 1995; Teti, 1992) and young adults (Newman, 1991; Younglich, 1964) and extends it into middle adulthood. That age differences are not important for the oldest age group in our model indicates that age differences are relative and tend to become less influential in old age (Connidis, 2001).

We did not find support for our expectation that an educational difference is important for practical support, such as housework and odd jobs, because different educational levels reflect different amounts of resources. This may result from the fact that education reflects different resources than those needed for tasks such as help with housework and transportation. That those who are more highly educated compared to their less educated siblings show less interest in them indicates less involvement with their siblings. There may be issues of sibling rivalry, where the more highly educated sibling is resented (Cicirelli, 1985; Ross & Milgram, 1982), but given the fact that less educated siblings show more interest in their more highly educated siblings suggests otherwise. A large educational difference may make more highly educated siblings compared to less educated siblings feel less connected to their siblings, whereas less educated siblings are motivated to associate with someone who has a higher social status, in line with

admiration of the more highly educated sibling, as was found by Ross and Milgram (1982).

For all tasks, partnered siblings are the least involved with each other. Unpartnered siblings being most involved with each other, as is found in a number of studies among older adults (Connidis, 2001; Connidis & Campbell, 1995; O'Bryant, 1988), is not sustained by our study. As suggested by Connidis (2001), people may feel a stronger sense of obligation toward their unpartnered siblings than toward partnered siblings, which is reflected by our findings that unpartnered siblings receive more support, from partnered as well as unpartnered siblings. An exception here is help with housework, which is most common in an unpartnered sibling dyad.

How the presence of children influences sibling support appears to fluctuate throughout the life course. Interesting is the role that childless siblings play in the different phases of life. Our findings sustain the idea that childless individuals have a different "family career" than those who have children, as was found for unmarried childless older women by Allen and Pickett (1987). Remaining childless provides opportunities to be engaged in the lives of siblings, who become more family-oriented once children arrive (Schvaneveldt & Ihinger, 1979). The childless should therefore not be regarded as people who are "needy," who have missed out on something, but as having more opportunities to help out their family members, thereby having a different family role. This is corroborated by our findings that in the youngest age group, childless siblings assist their parenting siblings with odd jobs, probably helping them cope with the day-to-day challenges of raising young children. Also, among the oldest group, the childless are most likely to have the advisory role, for childless as well as parenting siblings. For advice, the youngest age group with children tends to turn to siblings with children, probably because they share the experience of parenthood and are best able to provide advice. This is one case in which similarity enhances support.

In terms of the theoretical approach to similarity, our lack of corroboration for the importance of similarity for sibling support may be telling. When looking for friends, people turn to those who are like themselves (Lazarsfeld & Merton, 1954; McPherson et al., 2001). Siblings, however, do not appear more likely to support each other when they are more similar, except in specific instances such as childlessness and between sisters. A study by Eriksen and Gerstel (2002) on the importance of similarity for support between siblings demonstrated some effects of similarity in certain respects. Still, the authors' overall conclusion is that the effect of homogeneity was limited. Given the findings of our study and previous research, we can conclude that similarity is of little significance in adult sibling relationships; this validates

earlier findings on the lacking influence of similarities on contact frequency (Verbakel & De Graaf, 2004) and confiding (Hoyt & Babchuk, 1983) within the sibling relationship.

We should be careful in making a definitive statement on exchange theory, because exchange is a process of which we only investigated one side, namely help being provided by one side of the dyad. Nevertheless, our results indicate that differences are important, especially when related to different roles and depending on age spacing and birth order as well as the presence of a partner and children. Siblings who are older and childless are more supportive when it comes to specific tasks; this raises the question of what they receive from their siblings in return, as is assumed by exchange theory. According to exchange theory, the one who has more resources has more to give, whereas the one with less resources is dependent on the other. These issues could not be addressed because our study is restricted to four specific tasks and a limited amount of resources, and other services may be offered in return that require different resources.

Several limitations of this study deserve attention. First, we investigated the sibling dyad but only used information gathered from one member of the dyad. Even though characteristics such as age and educational level can be reliably gathered from another person, in contrast to characteristics such as attitudes, to truly investigate the dyad, it would be preferable to include information gathered from both members of the dyad. Second, we lost information by dichotomizing the dependent variables. As a result, we studied whether support was provided and not the degree of support. Third, by focusing on the sibling dyad, we did not acknowledge the importance of the family context. We controlled for the presence of children and partner but did not include the relationship with parents and other siblings. Even though, to a certain extent, individuals shape their personal relationships independently of others, the network of the family can be expected to have a strong influence on the sibling relationship. Third, besides family members such as parents and other siblings, limitations of the data prevented us from incorporating siblings-in-law. Given the primary place of the partner in a person's life, if the partner does not get along with a sibling, this will have a major impact on the sibling relationship, which is indeed suggested by previous studies (Allan, 1977; Floyd & Morr, 2003).

By including several characteristics of the siblings and their relationship into two theoretical perspectives on similarities versus differences, we attempted to advance theory development in the area of sibling relationships, which goes beyond treating the sibling dyad as secondary to other relationships or solely as the result of the bond developed in childhood. Incorporating

other aspects besides gender, age, education, partner status, and the presence of children into this similarity/difference perspective would advance this further. Especially a direct measure of value similarity would make a good test of whether similarities really are not important at all for siblings. Furthermore, including a wide age range as well as examining different age cohorts within this group has shed light on how the sibling relationship functions for age groups other than older adults and gives an indication on how the relationship may change throughout the life course. Of course, to truly investigate this, longitudinal data are necessary.

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