Sex differences in the salience and meaning of kin relations for contemporary Canadians were examined in two studies. In study 1, 24 opposite-sex adult sibling pairs were asked to reconstruct their kindreds as fully as possible, following a computerized menu. Sisters almost invariably recalled more relatives than did their brothers, especially living and matrilateral relatives. In study 2, a questionnaire administered to 150 female and 150 male undergraduates explored the relevance of kinship to characterizations of the self ("Who are you?") and to nominations of one's closest social relationships. Women were much more likely than men to refer to their kinship statuses in characterizing themselves (I am a daughter, a sister, etc.), whereas 28% of men and only 8% of women mentioned their surnames (I am a Smith, Jones, etc.). Women and men were about equally likely to name a relative, as opposed to a mate or friend, as the person to whom they feel closest, but women more often nominated a parent (especially mother) and men a sibling (especially an older sister). These sex differences are discussed in relation to possible differences in how women and men make use of family ties. © Elsevier Science Inc., 1996

KEY WORDS: Close relationships; Family relations; Genealogical knowledge; Kinship; Self-concept; Sex differences; Sibling relations.

For there is no friend like a sister
In calm or stormy weather.
—Christina Rossetti, 1991

Ever since Hamilton (1964), kinship has been of central importance to evolutionary thinking about social perceptions, motives, and action. Inclusive fitness theory implies that relatedness imparts a commonality of interests that is likely to be manifested in solidarity of feeling and behavior. In

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Alexander’s (1979, p. 46) words, “we should have evolved to be exceedingly effective nepotists, and we should have evolved to be nothing else at all.”

The expectation of a close connection between kinship and solidarity gains credence from the prominence of kinship in human affairs. Anthropologists find that ties of kinship exert a dominant influence on all social phenomena in relatively un-stratified, face-to-face societies, and that they remain extremely salient in more complex societies despite the emergence of social structures that are ostensibly independent of kinship (Brown 1991; Fox 1967). According to Leach (1966), “Human beings, wherever we meet them, display an almost obsessional interest in matters of sex and kinship.”

It is often maintained that the relevance of kinship to social life and personal identity has been greatly diminished in modern western society (e.g., Leibowitz 1978; Cousins 1989). However, rumors of the demise of familial ties are premature. The notion that one attains immortality through one’s descendants remains potent (e.g., Timberlake and Chipungu 1992), and the thousands of daily visitors to the Mormon Genealogical Library in Salt Lake City attest to the continuing appeal of tracing one’s ancestry (Shoumatoff 1985). Family reunions and genealogical reconstruction “open the flood gates of time gone by, reminding us who we are and where we have been . . . establishing pride in self and kin and transmitting a family’s awareness of self from the youngest to the oldest” (Taylor 1986, p. 31). And family ties are not just sentimental, but practical. Adult Americans still turn to blood relatives for help, and as the required assistance increases in magnitude, they rely on kin more and on unrelated friends less (e.g., Essock-Vitale and McGuire 1985; Hogan and Eggebeen 1995; Stack 1974).

Granting that kinship networks are of psychological and behavioral significance, even in the modern west, there are several reasons for suggesting that the salience and meaning of kinship may differ for women vs. men. Although ours is a society with bilateral descent reckoning, it derives from a European tradition of named patricians, and a biased emphasis on patrilineage persists in our surnaming practices. Moreover, the contemporary United States retains a degree of virilocality: as in most human populations, women disperse greater distances between birth and first reproduction than do men (Koenig 1989). Nevertheless, American women see their relatives more often than men and exchange more help with them, apparently investing more effort in the maintenance of kin ties (Brody 1965; Hogan and Eggebeen 1995; Oliveri and Reiss 1987; Schneider and Cottrell 1975; Troll 1987). Similarly, Smith (1988) found that Canadian couples with young children saw more of the wife’s parents (the children’s maternal grandparents) than of the father’s parents, despite the fact that the wife’s parents tended to live farther away.

To compare the subjective kinship universes of American women vs. men, Schneider and Cottrell (1975) interviewed married couples and found that the wives both enumerated more relatives and professed to keep in touch with more relatives than did their husbands. Of course, spouses may differ in their actual numbers of relatives of any given degree, so that if a particular wife is cognizant of third cousins whereas her husband is not, we cannot be certain that the difference is one of genealogical awareness. However, we can probably assume that the average woman and
man have comparable kindreds and hence that Schneider and Cottrell's method would reveal average sex differences. What it cannot reveal is how consistent those differences might be. A more precise way to assess any such sex differences is to ask full siblings, whose genealogies are identical except for descendants, to reconstruct their shared kindreds as best they can. This is the approach taken in study 1.

In study 2, we investigated the salience of kinship by means of a questionnaire. In addition to questions about the respondent's familial and other relationships, we elicited a series of self-characterizations in response to the question "Who are you?" This technique, adapted from Hartley (1970), has been widely used to study aspects of the self, such as the salience of ethnic identity and sex roles, but the many studies using it have paid scant attention to responses indicative of one's place in a kinship system. [A partial exception is McGuire and Padawer-Singer (1986), who at least distinguished familial from other responses in tabulating young children's answers to this question.]

**METHOD**

**Study 1**

Subjects were 24 Canadian opposite-sex sibling pairs. In 12 pairs, the brother was older, and in 12, the sister. All were native speakers of English, of predominantly European descent, with 73% having some level of university education. This availability sample, recruited through links of acquaintanceship, had a mean age of 32.6 (± 18.5, SD), with a range of 15 to 91.

Each of the 48 subjects completed a structured computer menu-driven interview concerning their known relatives, without consulting the paired sibling or anyone else. The path that subjects were instructed to take through their genealogy was by generation. Parents were considered first, followed by parents’ siblings and their children (i.e., the subject’s cousins); the next step was grandparents and their siblings, etc. A relative was counted as having been recalled if the subject could provide a personal name other than the surname, and for each such relative, subjects were asked to provide the first and last (natal) name, relationship to the subject, parents’ names, number of siblings, spouse’s names, and children’s names, if known.

Data from all subjects’ self-reported genealogies were summarized to allow between-sex comparisons of genealogical knowledge. Differences between sibling pairs in the numbers of relatives reported in various categories, such as living vs. deceased relatives and matrilineal vs. patrilineal, were subjected to two-tailed, pairwise Wilcoxon signed rank tests, with an absence of sex differences as the null hypothesis.

**Study 2**

Three hundred McMaster University undergraduate students (150 female, 150 male) were asked to complete a questionnaire concerning “identity and family relationships” as partial fulfillment of a requirement (participation as a research subject or a library research paper) for an introductory course in psychology. Ages ranged from
18 to 30 with most subjects under 21 years of age. Subjects were drawn from two predominantly freshman cohorts in successive years. The questionnaire completed by the second set of 160 subjects (80 female, 80 male) included several new questions in addition to those completed by the first set of 140 subjects (70 female, 70 male), but this report concerns only items that were common to both questionnaires.

In addition to such demographic information as the subject's age, birthplace, and number and ages of siblings, subjects were asked to identify the person to whom they felt closest, how far away that individual lived, and how often they saw him/her. Subjects were also asked the following question:

*In the 10 blanks below, please make 10 different statements in response to the question "Who are you?" Write your answers in the order that they occur to you. Go fairly quickly.*

The questionnaire took between 30 minutes and 1 hour to complete.

**RESULTS**

**Study 1**

Although sister-brother pairs have identical kindreds, sisters recalled more relatives (mean ± SE: 31.9 ± 2.8) than their brothers (27.5 ± 2.5) (see Table 1). This difference was highly consistent, with 20 women and only two men enumerating more relatives than did the opposite-sex sibling (Wilcoxon test: \( p < .001 \)); in two pairs, sister and brother reported identical numbers of kin. Women performed significantly better than their brothers in recall of both ascendant and collateral kin. The female advantage was almost unanimous with respect to the naming of living relatives and was less consistent but still significant with respect to deceased kin. (Only two subjects named more deceased relatives than living ones, and these two were the oldest sibling pair in the study.) Sisters recalled maternal relatives significantly better than brothers, and also tended to recall more paternal relatives although the difference on this side was not significant. Fourteen sisters knew more natal ("maiden") surnames of their female ascendant kin than did their brothers, whereas no brother knew more than his sister (\( p < .001 \)); 10 sibling pairs tied on this measure. Sisters' superior knowledge of these maiden names was concentrated on maternal relatives.

<table>
<thead>
<tr>
<th>Table 1. Sex Differences in 24 Opposite-Sex Sibling Pairs' Recall of Their Shared Kindreds in Study 1</th>
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<tbody>
<tr>
<td><strong>Number of Sibships in Which Sisters Named . . .</strong></td>
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<tr>
<td></td>
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<tr>
<td>All named kin</td>
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<tr>
<td>Matrilateral</td>
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<tr>
<td>Patrilateral</td>
</tr>
<tr>
<td>Living</td>
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<tr>
<td>Dead</td>
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</table>
Female superiority of performance with respect to one kinship category was not strongly predictive of superiority with respect to another. For example, the sister-minus-brother difference in recall of maternal kin was not significantly correlated with the difference in recall of paternal kin across sibling pairs ($r = 0.243, p = .275$), and neither was the greater female recall of living relatives significantly correlated with the degree of greater female recall of deceased relatives ($r = 0.368, p = .092$).

There were no apparent influences of being the elder (29.6 ± 2.3 relatives recalled) vs. the younger (29.8 ± 2.9) sibling.

**Study 2**

Women and men were equally likely to make some sort of reference to familial or kinship status in answering the “Who are you?” question: 53% of women and 51% of men mentioned a family role (mother, brother, etc.), a family name, or both. However, the sexes differed significantly in the particular aspects of kinship status mentioned (Table 2), with women more likely to mention family roles and men more likely to mention their surnames as aspects of their identity ($\chi^2_{1df} = 14.4, p < .001$). In addition, considering only those who labeled themselves with a relationship term, 44% of women characterized themselves as a “daughter,” whereas just 12.5% of men mentioned being a “son” ($\chi^2_{1df} = 7.2, p < .01$).

When subjects were asked which individual they felt closest to, 83 (27.7%) nominated an unrelated friend, with mothers and mates each nominated by an additional 77 (25.7% of respondents in each case), and only 21 (7%) nominating father (Table 3). Women and men distributed their responses similarly among the three categories of relatives, mates, and unrelated friends; among those who nominated relatives, however, women were significantly likelier to nominate their mothers and men their siblings ($\chi^2_{1df} = 15.3, p < .001$). Both women and men were more likely to nominate a sister than a brother. And when sisters were nominated as the respondent’s closest intimates, it was overwhelmingly older sisters: this was the case for 14 of the 15 men and eight of the 10 women who nominated sisters.

**DISCUSSION**

**Genealogical Recall (Study 1)**

Contemporary North Americans, like other people, continue to rely on relatives, feeling both some entitlement to ask kin for help and some expectation that it will be willingly provided. Women tend to keep in touch with more relatives than do men,

| Table 2. Numbers of Respondents Who Mentioned Familial Roles (e.g., “I Am a Daughter”) and Surnames (e.g., “I Am a Smith”) When Asked to “Make 10 Different Statements in Response to the Question “Who Are You?” in Study 2 |
|-----------------|-----------------|--------|--------|
|                 | Family Role     | Family Name | Both   | Neither |
| Women           | 67              | 0        | 12     | 71      |
| Men             | 35              | 28       | 14     | 73      |
especially maternal relatives (e.g., Schneider and Cottrell 1975), and they apparently rely on kin somewhat more than men, who are relatively likely to turn to unrelated friends instead (e.g., Hogan and Eggebeen 1995). In particular, matrilateral kin are a woman's primary social resources, providing child care, economic assistance, and emotional support (e.g., Stack 1974; Essock-Vitale and McGuire 1985), so it is not surprising that women are highly knowledgeable about them. In this study, women exhibited greater interest in and/or recall of kin than their brothers, especially matrilateral kin. One interpretation is that people who rely heavily on relatives invest the most cognitive resources in keeping track of relatives, and especially relatives in those lineages and subfamilies most relied upon.

Alternatively, the women's superior performance in study 1 might be one manifestation of a sex difference in processing or retrieving social information, rather than being specific to kin. One way to address this hypothesis would be to assess whether sisters can name more unrelated family friends, neighbours, or public figures in various categories than their brothers, perhaps restricting the study to coresiding siblings. It is unlikely that the differential performance reflects an even more domain-general female advantage in this sort of task, since the evidence on sex differences in episodic (as opposed to semantic) memory is mixed, with men doing better on some tasks (e.g., Clifford and Scott 1978), women on others (e.g., Ellis, Shephard, and Bruce 1973), and the sexes performing equally well on still others (e.g., Cunningham and Bringmann 1986). But although there is no general superiority of women in memory tasks, sex differences may emerge when the content to be recalled is of sex-differential salience. Geer and McGlone (1990) investigated sex differences in memory for elements of sexual stories containing romantic, erotic, and neutral elements, for example, finding that whereas the sexes did not differ in responding to the "neutral" sentences, women were quicker and more accurate on romantic elements, whereas men were quicker and more accurate on erotic ones.

If kinship is cognitively distinct, one might hypothesize that women's and men's minds are fundamentally different in this domain. Just as there appear to be distinct female and male sexualities as a result of the different selective pressures faced by women vs. men during human evolution, there could be evolved sex differences in human kinship cognition, as a result of the different social ecologies en-

<table>
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<tr>
<th>Responses</th>
<th>Female Respondents</th>
<th>Male Respondents</th>
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<tbody>
<tr>
<td>Parent</td>
<td>58</td>
<td>40</td>
</tr>
<tr>
<td>Mother</td>
<td>49</td>
<td>28</td>
</tr>
<tr>
<td>Father</td>
<td>9</td>
<td>12</td>
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<tr>
<td>Sibling</td>
<td>12</td>
<td>22</td>
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<tr>
<td>Sister</td>
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<td>15</td>
</tr>
<tr>
<td>Brother</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Other genetic relative</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Mate</td>
<td>37</td>
<td>40</td>
</tr>
<tr>
<td>Unrelated friend</td>
<td>39</td>
<td>44</td>
</tr>
</tbody>
</table>

Table 3. Numbers of Respondents Who Nominated Relatives, Mates, or Friends in Response to the Question "Of All the People You Know Who Do You Feel Closest to?" in Study 2
countered by the sexes. However, female superiority in genealogical recall is not necessarily cross-culturally universal or even usual. Chagnon (1988) has reported that among the Ynomamô Indians of Venezuela, men, for whom the reconstruction of lineages is crucial for negotiating both marital entitlement and alliance in warfare, are apparently more adept at classifying kin than are women. In a modern nation state like Canada, men are presumably much less dependent on kinsmen, and they may rely more on non-kin reciprocal relationships than women largely because local sex roles afford them more opportunities for interaction with non-relatives. To the extent that sexually differentiated benefits of kinship ties and knowledge vary in relation to locale-specific sex roles and practices in domains such as marriage and intergroup conflict, it appears from the Canada-Ynomamô contrast that sex differences in genealogical abilities and interest vary in parallel. Nevertheless, cross-culturally general evolved sex differences in aspects of interests or abilities remain a possibility worthy of investigation, and more detailed comparison of genealogical recall by women and men in societies with different patterns of kin association could be enlightening.

Identity and Closeness (Study 2).

In responding to the question "Who are you?", many subjects did not refer to their kinship statuses at all, lending some support to claims (e.g., Cousins 1989) that the modern American sense of identity is more concerned with personal physical or attributive traits than with social roles. However, it should be noted that these young adults, 96% single and 99% childless, may represent a life stage in which sociality has an especially strong extrafamilial focus. Testing a wider age range could be of interest, as it is certainly possible that salient aspects of identity change in systematic ways over the lifecourse. For example, the presence of children who could benefit from collateral kin investment may make family especially salient to parents. But be that as it may, just over half of the present respondents of both sexes did mention family roles or surnames in answering "Who are you?" (Table 2), and almost half nominated a genetic relative when asked to name the one person to whom they felt closest (Table 3).

Women were more likely than men to mention their family role(s), such as daughter or sister, whereas men were more likely to mention their surnames (Table 2). Most strikingly, in response to "Who are you?", 28 men but not a single woman provided a "clan" name without any additional reference to the respondent's individual familial relationship status(es). It is perhaps unsurprising that patrilineally derived surnames should be of little salience to female identity, both because women derive so much of their social support from maternal relatives and because most still relinquish their natal surnames at marriage (although it should again be noted that these women were almost all single). It may be somewhat more surprising that a named patrilineage is still a significant element in the identity of Canadian males.

Differential emphasis on one's place within a kinship structure was particularly evident in the relative importance attached to being a daughter vs. a son. Thirty-five women used the word "daughter" in responding to "Who are you?", whereas only
six men used the word "son," a much larger sex difference than the 58 women vs. 40 men who nominated a parent as the one person to whom they felt "closest." It has been suggested that mothers actively influence and shape the relationships of all family members with extended kin and that this may be based on an enduring, intimate tie between mother and daughter (Oliveri and Reiss 1987). Under such circumstances, a woman's role in her family may be particularly salient.

If young men tend to break away from family ties and invest themselves in male-male alliances, we might expect them to emphasize friendships, whereas women, who value family responsibility and relationships more highly, would place greater emphasis on closeness to parents, particularly their mothers (Char and McDermott 1987). Women in our study 2 were indeed more likely than men to name parents (especially mothers) as their closest interactants, but men were only slightly more likely than women to nominate unrelated friends. A larger difference was in the frequency of nominating siblings (Table 3). One might propose that fraternal solidarity derives from the fact that brothers have long been a man's most valuable allies, but the men in this study nominated sisters as their closest interactants ($n = 15$) substantially more often than brothers ($n = 7$). This perception of cross-sex sibling closeness is apparently not reciprocated, since only two women nominated a brother as their closest interactant, whereas 10 nominated a sister. Without responses from both members of sibling pairs, it remains unclear to what extent these professions of closeness may be systematically asymmetrical, but some light may be shed by the fact that 88% of respondents who named sisters as their closest interactants named older sisters. The question apparently evoked thoughts of asymmetrical relationships, perhaps with more experienced persons in whom the respondents feel able to confide. Asking respondents from broods of three or more to nominate the sibling to whom they feel closest might further clarify these sibling attachments.

In sum, sisters recalled more relatives than their brothers; men stressed patrilineal surnames as identity features more than women; women stressed specific kin roles more than men; and although respondents of both sexes nominated mother above all other relatives in naming their closest interactants, men were more likely than women to name a sibling instead. These results may be interpreted as reflecting a female kinship psychology that is relatively focused on specific genealogical links between generations and a male psychology that is somewhat more concerned with patrilineal group identity and same-generation alliances. Such sex differences in the meaning or salience of various aspects of kinship could reflect naturally selected responses to consistent differences in the ways in which women and men have made use of their kin, but the contrast between these Canadian results and Chagnon's (1988) Y-nomamó data indicates that sex differences in genealogical interest and expertise are labile. Only further study can clarify whether the phenomena reported here are in any way reflections of a sexually differentiated kinship cognition as a result of a history of selection, or are instead the manifestations of a sexually monomorphic psychology responding to the somewhat different social demands and opportunities facing contemporary Canadian women and men.

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REFERENCES


