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ORIGINAL ARTICLE

# Communal Responsiveness in Relationships with Female versus Male Family Members

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**Abstract** Two studies of college students in the US utilized a new methodological approach in which participants arranged their multiple family members (i.e. parents, siblings, aunts, and uncles) within a series of relationship network grids. These grids measured participants' *own* feelings of communal responsiveness toward and *perceived* feelings of communal responsiveness from each family member relative to one another. The results of Study 1 ($N$ = 86) and Study 2 ($N$ = 111) supported the hypotheses that (1) people perceive more responsiveness from female family members than from male family members and (2) people feel more responsive toward female than toward male family members. Study 2 provided evidence that these associations were mediated by felt and perceived intimacy, dependence, and obligation, but not liking.

**Keywords** Communal responsiveness · Family relationships · Gender differences

## Introduction

Responsiveness within communal relationships, or the extent to which a person responds to his or her relationship partner in a way that maximizes the partner's welfare, has received considerable research attention (Reis et al. 2004), as has the topic of gender differences in providing and seeking help (Eagly and Crowley 1986). However, gender differences in own and perceived communal responsiveness have not been examined across a person's extended family network. Furthermore, gender differences in felt and expected communal responsiveness have not been studied together as they both occur within a variety of types of family relationships. In the present work, we examine *perceived communal responsiveness* received from a variety of family members (i.e. parents, siblings, aunts, uncles, and grandparents) and *own communal responsiveness* provided to the same family members, with the intent of assessing whether people expect more responsiveness from, and feel more responsive toward, female family members than male family members. We also explore possible reasons why there may be gender differences in responsiveness in family relationships by examining specific qualities of the relationships, such as feelings and perceptions of others' feelings of intimacy, obligation, dependency, and liking. In testing our hypotheses, we conducted two studies of college students in the US and utilized a new methodological approach—we asked people to arrange their multiple family members within a series of relationship network grids. This allowed people to rank their various family members with regard to own responsiveness toward and perceived responsiveness from each family member. This approach allowed us to better understand a person's perceptions of and feelings of responsiveness toward each particular family member in relation to their other family members.

### Responsiveness in Multiple Relationships

In our conceptualization of responsiveness, we draw from theory and empirical research on communal relationships. Communal relationships, ideally, are those in which each member cares for the partner's welfare and responds to the other's needs and desires without contingencies (Clark and Mills 1979, 1993; Mills and Clark 1982). Most people have more than one communal relationship. Communal relationships are often exemplified by relationships with family members. An important aspect of communal relationships is that they vary in strength (Mills and Clark 1982; Mills et al. 2004), with strength referring to the degree of communal

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responsiveness felt toward (or expected from) partners. In this paper, communal responsiveness is defined as the degree to which a person feels intrinsically responsible for the welfare of another and attends to the other's needs non-contingently. This can include such things as providing instrumental and emotional support to a partner, supporting a partner's goal strivings, and conveying understanding of who a partner is (see Reis et al. 2004; Clark and Monin 2006). The extent to which responsiveness occurs in a close relationship influences how "close," subjectively, that relationship feels (Mills et al. 2004). Ideally, in family relationships between adult family members each person enacts communal responsiveness in support of his or her partner and receives communal responsiveness from the partner.

In this paper, it is proposed that people vary in the responsiveness they feel toward and expect from various family members. For example, young adults are likely to expect more responsiveness from their parents than from their aunt or uncle and are likely to feel more responsive to their parents than to their aunt or uncle. For most people, family relationships, taken as a group, are among the very strongest communal relationships, with strength varying within that group.

In the present research, we examine the different levels of communal responsiveness expected from and directed toward different family members by asking participants to complete relationship network grids (see Fig. 1). Here is how it worked. First, participants were asked to think of a number of family members and assign each family member a short code (e.g. M for "Mom"). Then, participants were asked to consider the degree of responsiveness to each person's needs. They were asked to consider how responsible they felt for each person's welfare and the extent to which they responded to each person's needs without expecting anything immediately in return. They were also asked to think about how much responsibility they really feel day-to-day at the present time, rather than how much they believe they *should* feel. The grid consisted of 20 squares across and 20 squares down. Along the left margin they saw a scale ranging from "I feel no responsibility" at the bottom of the grid, to "I feel extremely responsible" at the top. Participants' task was to take all their relationship codes, and put each one of them in one of the squares on the grid according to the amount of responsibility they felt for meeting each person's needs. For example, let's say the participant had three aunts: Mary, Susan, and Jane. We will call them by their codes, A-1, A-2, and A-3. After thinking about his or her relationship with Mary, the participant may have decided that he/ she felt a lot of responsibility for Mary's needs and put the code, A-1, in one of the top squares on the grid. After thinking about his or her relationship with Susan, the participant may have decided that he/she felt a medium to low amount of responsibility for meeting Susan's needs and placed the code A-2 in one of the low-middle squares on the grid. Lastly, after considering his or her relationship with Jane, the participant might have decided that he/she felt a lot of responsibility for meeting Jane's needs and put the code A-3 on the same line as Mary's, near the top of the grid. This was done for each family member. Participants were allowed to put all of their family members on the same level if they saw fit.

By asking people to rate their own and perceived responsiveness for each family relationship, we could see patterns within the hierarchies of family relationships. In using this approach in various samples, including a community sample of newlyweds, we have been struck by a rather consistent pattern- people tend to place female relatives over male relatives in their relationship networks (Monin and Clark, unpublished data). For example, people tend to place mothers higher than fathers, sisters higher than brothers, and aunts higher than uncles. The present research began with an explicit a priori hypothesis that we would observe in a new sample what we had observed in prior work. It also represented an attempt to examine why this patterning might occur.

## Gender Differences in Responsiveness

There is a vast amount of research and theory indicating that women are more communally oriented and have more interdependent motives than males in general (see Cross and Madson 1997). Social role theory suggests that this is because women are socialized to take the role as kin-keepers from an early age, whereas men are socialized to be the providers (Eagly et al. 2000). The origin of these roles stem from the advantages to families of splitting household duties after the transition of the economy from being agrarian to industrial in recent US history (Cancian 1987). Based on these different roles within the family and the differences in the particular relationship-oriented behaviors that accompany them, people are likely to perceive their female relatives as more communally responsive than their male relatives to their needs (Hypothesis 1).

Slightly less clear is whether or not people also feel more communally responsive toward female than male relatives. There is some research suggesting this is the case, most notably the finding by Meyers and Berscheid (1997) that females are mentioned more as recipients of love than are males. Research has also shown that women are more likely to receive help than men (Eagly and Crowley 1986). However, most of this research is based on public behavior among strangers in dangerous situations (when, in reality, most helping happens in the context of close relationships). In the present study, it is predicted that people feel more communally responsive toward females than toward males even among their closest relationships, their extended family (Hypothesis 2).

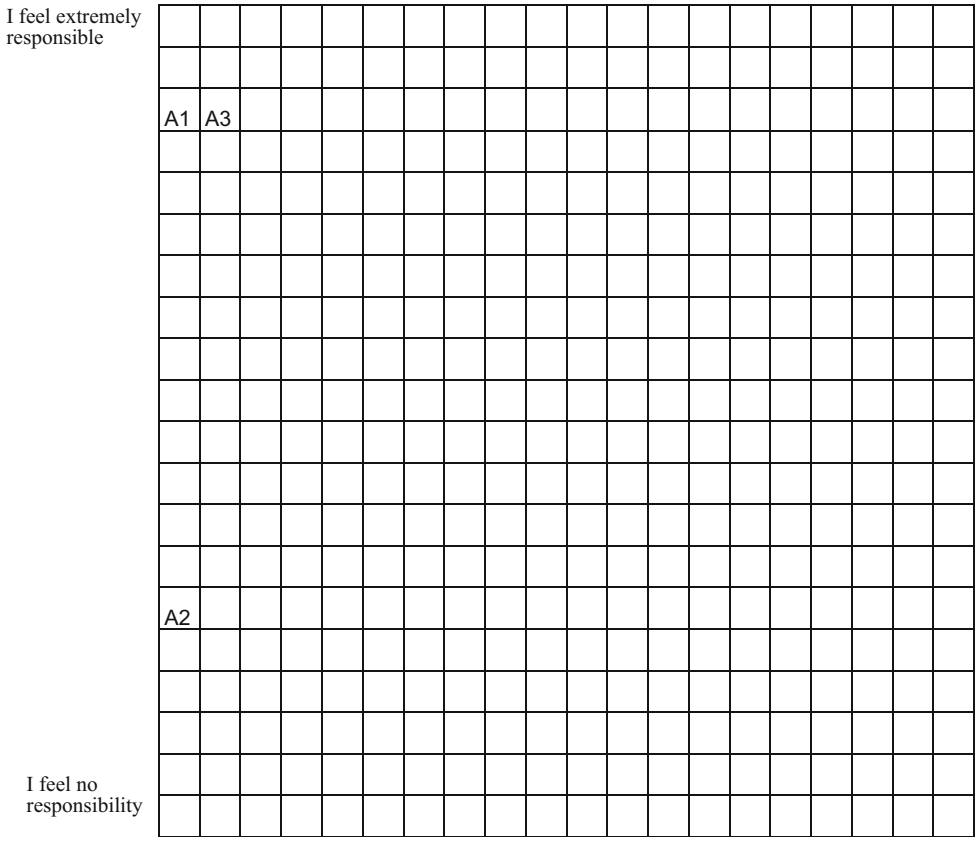


**Fig. 1** An example of a relationship network grid.

But what, more specifically, leads people to feel more responsive toward, and expect more responsiveness from, female family members than male family members? Socialization is likely to be a distal cause. However, in this paper we examine the more proximal causes that lead to differences in responsiveness even within the closest relationships. It is proposed that the hypothesized gender effects of responsiveness in family relationships are due to differing levels of qualities inherent in relationships with female versus male family members, such as intimacy, dependency, obligation, and liking. Because we consider multiple relationship qualities in this investigation, it is worth noting that these proposed mediators are conceptually distinct. However, at the same time, they are all thought to be common and often intertwined antecedents of communal responsiveness. Thus, we expect them also to be linked with one another. We elaborate on these proposed mediators below.

## Proposed Mediators of the Associations between Own/Perceived Responsiveness and Gender of Family Members

### *Intimacy*

Everyone may expect more responsiveness from and feel more responsiveness toward females because both males and females have established greater intimacy in their relationships with females (Reis et al. 1985). Mutual intimacy involves feeling understood, validated, and cared for by a specific close other and feeling that the other understands, validates, and cares for oneself (Reis and Shaver 1998; Reis and Patrick 1996). The establishment of mutual understanding, a sense of validation, and a past history of care would seem to be crucial for providing support to another person. This is because in relationships high in intimacy, one should be better able to understand the types of support the partner needs, whether the partner wishes to receive such support, and whether or not the partner will accept support graciously or not. Intimacy should also be central to expecting responsiveness from others. After all, if another person understands and validates one and has cared for one in the past, it is reasonable to expect that the person will remain responsive in the future.

Both men and women define intimacy as involving feelings of love and appreciation, happiness and contentment, and self-disclosure (Helgeson et al. 1987), and both men and women are capable of conveying intimacy in an interaction when specifically given that as a task in a laboratory setting (Reis et al. 1985). However, research has shown that women disclose more emotional information about relationships than do men and that when men do disclose, their disclosures are usually directed toward women (Dindia and Allen 1992). Moreover, when pairs of women, men, or mixed pairs are given the opportunity to be

intimate, any pair including a woman tends to achieve greater intimacy than a male/male pair (Reis et al. 1985). In addition, both men and women report feeling closest to female kin, such that women report feeling closest to a parent, particularly a mother, and men report feeling closest to siblings, especially an older sister (Salmon and Daly 1996). Might it be, then, that we, males and females alike, have achieved the most intimacy in our relationships with women and therefore feel most responsive to females and expect most responsiveness from females? Thus, it is hypothesized that participants own and perceived feelings of intimacy from the partner will mediate the relationship between gender of the family member and perceived responsiveness (Hypotheses 3a and 3b), and participants own and perceived feelings of intimacy from the partner will mediate the relationship between gender of the family member and responsiveness toward the family member (Hypotheses 4a and 4b).

*Dependency*

Because most everyone's first primary caretaker is a woman, most people have learned to depend upon a female from their earliest days. Even after the formative years, mothers have been shown to provide more support (especially emotional support) to their children than have fathers (Marks and McLanahan 1993). Furthermore, women are more likely to serve as caregivers for their parents in their parents' old age than are men (Johnson 1983), and such caregiving is often publicly visible. Thus, people have more experience with women being in a caregiving role than men being in a caregiving role. In addition, gender role schemas generally include expectations that women are more relationship-focused and men are more agentic (Spence 1993), suggesting to people that women are more available for support than are men. Thus, people may feel more comfortable showing their vulnerability to those they view as having more interdependent motivations, so as not to reveal vulnerabilities to those who might take advantage of those vulnerabilities (Clark and Finkel 2004). Thus it is hypothesized that both men and women may have learned to depend on women to a greater extent than they have learned to depend upon men, resulting in greater expectations of communal responsiveness from females than males (Hypothesis 5a).

People may have also learned that women are more dependent upon others than are men, possibly leading to general expectations that women require and will accept more communal responsiveness from others than will men (Hypothesis 5b). Consistent with this idea, women are more likely than men to express their need for support to others in times of stress (Belle 1987). People may, therefore, think women require more responsiveness. We, however, would suggest another reason why the dependency may be linked to giving and receiving responsiveness from and to women. It is simply that dependency is an intrinsic part of well functioning, mutual, communal, relationships (Clark and Monin 2006; Feeney 2007; Murray et al. 2006) and women may tend to have more of these relationships than men.

*Obligation*

Both men and women also may expect that women will be more communally responsive to them because women feel more obligation to relationship partners, particularly kin, than do men (Stein 1992; Hypothesis 6a). Obligation is defined as "something by which a person is bound or obliged to do certain things, and which arises out of a sense of duty or results from custom, law, etc." (Random House Unabridged Dictionary 2006). Feeling a sense of obligation or duty to care for a partner is one of a variety of motives that may drive people to adopt and follow a communal norm (Mills and Clark 1982). We suspected one reason people would think of females as more responsive than males, in part might be because they believe females are more likely to view the maintenance of relationships as a moral and social duty or obligation.

There is evidence that people feel more obligated to maintain ties to female family members (Stein et al. 1998), which is also likely to influence their communal responsiveness toward their female family members (Hypothesis 6b). People may be more likely to feel obligated to women because of societal expectations. For example, people are taught to place the needs of women and children above the needs of men in our society. People may also feel more obligated to attend to the needs of females, because women are more likely to communicate that they expect more from their relationships, and may use strategies to keep family relationship partners close. For example older mothers have been perceived by their children (particularly their sons) to invoke guilt and feelings of obligation as a means of insuring they will be cared for in old age (Nydegger 1983).

*Liking*

Finally, greater liking of females (with liking defined as having warm, positive feelings toward someone and positive evaluations of that person), may account for people being more communally responsive to females than males (Hypothesis 7). This may be the case because females are thought to have more agreeable personalities (Budaev 1999; Costa et al. 2001). Also, a recent study showed that both male and female participants implicitly associated positive words (such as good, happy and sunshine), more often with women than with men (Rudman and Goodwin 2004). We do not know of any research that suggests that

females are more likely to like both males and females more than males like both males and females. Therefore, we do not make a hypothesis about liking as a mediator for the link between gender of the family member and participants' perceived responsiveness from others.

*Overview of the Studies*

Two studies with undergraduate college students were conducted to test our hypotheses. The purpose of Study 1 was to examine whether the gender of family members was related to peoples' felt responsiveness toward each of the family members and peoples' perceptions of family members' responsiveness toward them (Hypotheses 1 and 2). In Study 1, college students completed two family network grids. In one grid, participants were asked to arrange their family members according to how communally responsive they were to each family member ("How responsible do you feel for each person's welfare? In other words, to what extent do you respond to each person's needs without expecting anything immediately in return?"). In the other grid, participants were asked to arrange their family members according to how responsive they thought each family member felt for the participants' needs. The purpose of Study 2 was to replicate Study 1, and also to explore reasons for associations between the gender of family members and participants' own and perceived communal responsiveness within each family relationship. In Study 2, we asked another sample of college students to complete family network grids about felt and perceived communal responsiveness to test Hypotheses 1 and 2, and we also asked them to complete network grids about felt and perceived intimacy, dependence, obligation, and liking, to test Hypotheses 3 through 7, or in other words, to test for possible mediators of the associations between gender of the family members and own and perceived communal responsiveness.

## Study 1

Study 1 tested the hypotheses that people expect more communal responsiveness from female family members than from male family members (Hypothesis 1), and that people are more communally responsive to their female family members than to their male family members (Hypothesis 2). We tested these hypotheses with a sample of college students in the US.

### Method

*Participants*

Eighty-six undergraduates (43 males and 43 females) participated in the study as part of their introductory psychology course requirement at a small, private urban university in the United States. They received course credit for participation. The mean age was 19 years of age with a range of 18 to 22. Information about ethnicity was not collected; however similar samples from the same participant pool are predominantly Caucasian. The largest minority group is Asian. Participants came into the lab either individually or in groups of up to three and completed the questionnaire independently.

*Measures and Procedure*

Participants provided demographic information including sex and age. Participants then listed the names of the following relationships (if they had them): a mother, a father, and siblings. The remaining relationships were of their own choosing, with a list of suggestions given (e.g. aunt, uncle, cousin, grandmother, grandfather). They indicated the gender of each relationship and gave each member a brief code (e.g. "M" for mother). Next, using 20 × 20 grids as described earlier in the paper, participants indicated their own communal responsiveness for each family members as well as (on a separate grid) their perceptions of their family members' communal responsiveness to the participants. The scale ranged from 1 at the very bottom row of the grid ("This person feels no responsibility for my welfare"/ "I feel no responsibility for this person's welfare") to 20 at the very top of the grid ("This person feels extremely responsible for my welfare"/"I feel extremely responsible for this person's welfare").

### Results and Discussion

Because we examined multiple relationships that were nested within each participant, we examined hierarchical structures and had non-independent data. One consequence of failing to recognize hierarchical structures is that standard errors of regression coefficients are underestimated, leading to an overstatement of statistical significance. Standard errors for the coefficients of higher-level predictor variables are the most affected by ignoring grouping. Thus, it was necessary to use multi-level modeling to test our hypotheses.

A series of two-level hierarchical linear models examined the effects of gender of the family member on expected responsiveness from the family member, while modeling the dependency of these ratings (due to the fact that each participant rated multiple family members). Follow-up analyses examined whether effects of family member's gender (a Level 1, within-subjects predictor) on communal responsiveness varied as a function of participant gender (a Level 2, between-subjects predictor). These

follow-up models specified participant gender as a "main effect" (a predictor of the intercept, which reflects average ratings of responsiveness) and as a cross-level interaction (a predictor of the family member gender slope, representing the within-subjects effect of gender of the family member). Level 1 slopes and intercepts were modeled as randomly varying across Level 2 units. To reduce error variance in analyses, family members were dummy coded to distinguish those who were in the immediate family (i.e., parents and siblings) from those in the extended family (i.e., all other partners). This dummy variable was included as a control variable in all analyses. The same procedures were performed to examine the effects of gender on participants' own responsiveness to the family members. Means for each family exemplar for Study 1 and are presented in Table 1.

*Perceived Family Member Communal Responsiveness (Hypothesis 1)*

The analyses revealed a significant main effect of partner gender on perceived family member responsiveness, $b = -1.10$, $p < 0.01$. As hypothesized, participants reported that female family members were more responsive to their needs than male family members. In addition, and not surprisingly, participants reported that immediate family members were more responsive to their needs than were extended family members, $b = 4.07$, $p < 0.001$.

The follow-up analyses examining effects of participant gender revealed no significant cross-level interactions, $p$s > .25. In other words, both male and female participants reported that females in their families were more responsive than male family members.

*Participants' Own Communal Responsiveness toward Family Members (Hypothesis 2)*

Also as expected, a significant effect of family member gender on participants' responsiveness indicated that participants felt more responsive toward female family members than male family members, $b = -0.79$, $p < 0.05$. In addition, and not surprisingly, participants felt more responsive toward immediate family members than for extended family members, $b = 5.30$, $p < 0.001$. The follow-up analyses examining effects of participant gender revealed no significant cross-level interactions, $p$s > 0.10. In other words, both males and female participants reported that they were more responsive to females than male family members. However, there was a main effect of gender of the participant, such that female participants felt more responsive to everyone (males and females) in their families than did males, $b = -2.08$, $p < 0.05$.

In summary, participants reported being more communally responsive to the needs of female than male family members, supporting Hypothesis 1, and they also perceived female family members to be more responsive to their own needs than male family members, supporting Hypothesis 2. Furthermore, female participants felt more responsive to everyone in their networks than male participants.

## Study 2

After obtaining evidence that people expect more communal responsiveness from and feel more communally responsive toward female family members than male family members, we sought to replicate the findings from Study 1

**Table 1** Study 1 participant's communal responsiveness to family members and family member's communal responsiveness to participants.

| Family member | $N^a$ ($N^b$) | Family member's responsiveness to participant | | Participant's responsiveness to family member | |
|---|---|---|---|---|---|
| | | M | SD | M | SD |
| Mother | 85 (82) | 19.22 (19.24) | 1.52 (1.50) | 16.73 (16.72) | 4.25 (4.29) |
| Father | 82 (82) | 18.43 (18.43) | 3.18 (3.18) | 15.94 (15.94) | 5.34 (5.34) |
| Sister[c] | 42 (16) | 15.05 (15.00) | 5.68 (5.97) | 15.69 (15.63) | 5.08 (4.98) |
| Brother[c] | 49 (16) | 14.24 (14.38) | 5.54 (5.83) | 15.41 (14.56) | 4.72 (5.80) |
| Grandmother[c] | 46 (23) | 16.11 (16.61) | 4.26 (4.15) | 13.70 (13.70) | 4.91 (4.59) |
| Grandfather[c] | 25 (23) | 15.96 (15.65) | 4.62 (4.70) | 13.28 (13.04) | 4.54 (4.66) |
| Aunt[c] | 46 (32) | 11.76 (10.91) | 5.38 (4.67) | 9.83 (8.63) | 5.10 (3.75) |
| Uncle[c] | 19 (32) | 9.92 (9.69) | 5.82 (5.81) | 8.05 (7.66) | 5.01 (4.82) |

[a] Participants who listed the relationship.
[b] In parentheses, limiting sample to participants who rated both the male and female exemplars of each relationship type (e.g. mother and father).
[c] Means based on one grandmother, grandfather, sister, brother, aunt, and uncle. The scale endpoints were 1 (not responsible at all) to 20 (extremely responsible).

and then extend them by investigating whether a series of relationship-related variables (intimacy, dependency, obligation, and liking) might explain these effects. Specifically, we tested Hypotheses 1, that people are likely to perceive their female relatives as more communally responsive than their male relatives, and Hypothesis 2, that people are likely to be more communally responsive to their female relatives than to their male relatives. We also tested the hypotheses that participants' own and perceived intimacy (3a and 3b), own dependency (5a), and perceived obligation (6a) each independently would mediate the relationships between family member gender and participants' perceived communal responsiveness, and we tested the hypotheses that own and perceived intimacy (4a and 4b), perceived dependency (5b), own obligation (6b), and own liking (7) each independently would mediate the relationship between family member gender and participants' own communal responsiveness.

## Method

### *Participants*

One hundred and eleven undergraduates (52 males and 59 females) at a small, private urban university completed a self-report questionnaire independently in the laboratory for course credit. The mean age of participants was 20 years of age (with a range of 17 to 43). Sixty percent of participants were Caucasian; 22% were Asian; 5% were African American; 4% were Hispanic; and 9% identified as other ethnicities. Participants were asked to think of a number of family members and complete a series of family network grids.

### *Measures*

Participants were asked to think of the following family members: their parents, their siblings, an aunt, and an uncle. They were instructed to write down the names of these relationship partners, provide a brief code for each relationship (e.g. "M" for mother), and indicate the gender of each family member. In the case that participants did not have some of these family members, participants left those particular relationships blank.

Next, participants entered their relationship codes into a series of 20 × 20 cell grids analogous to those described for Study 1. Two of the grids measured own and perceived communal responsiveness like in the first study. However, in this study participants were also given similar network grids assessing their own feelings of obligation, liking, and dependence toward family members. To measure intimacy, participants completed grids asking them about their comfort receiving support, comfort with disclosure, and comfort being physically close to each of the family members. An "own intimacy" composite was calculated by averaging the scores for own comfort receiving support, disclosure, and being physically close to others (Cronbach's alpha = 0.83). Participants also were asked about their perceptions of family members' feelings of intimacy toward participants. An analogous "perceived intimacy" composite was created by averaging the scores for perception of the other's comfort receiving support, comfort with self-disclosure, and comfort with physical closeness (Cronbach's alpha = 0.80). Likewise, participants completed grids that assessed participants' relative perceptions of family members' feelings of obligation, liking, and dependence toward the participants. All of the grids were configured like the two grids measuring responsiveness described in Study 1, but with different questions and y-axes. The order of the grids were counterbalanced, such that participants received one of two orders, starting with the networks about responsiveness and ending with the networks about liking or vice versa. See Table 2 for the exact questions and response scales for each grid used in this study.

## Results

Two-level HLM analyses, analogous to models described in Study 1, examined effects of partner gender on own and perceived family member communal responsiveness while controlling for the immediate family vs. extended family dummy variable (to reduce error variance). Subsequent analyses tested mediation. See Table 3 for the means for each family exemplar for Study 2.

### *Perceived Family Members' Communal Responsiveness to Participants (Hypothesis 1) and Participants' Own Communal Responsiveness toward Family Members (Hypothesis 2)*

Replicating the first study, family members' gender significantly predicted perceptions of family members' responsiveness to the self, $b = -0.67$, $p < 0.01$. Participants also perceived immediate family members to be more responsive to them than extended family members, $b = 6.81$, $p < 0.001$. Also replicating results of the prior study, family members' gender significantly predicted participants' responsiveness to family members, $b = -0.96$, $p < 0.01$. Participants also felt more responsible for the needs of immediate family members than for the needs of extended family members, $b = 7.37$, $p < 0.001$.

### *Testing Mediation*

Baron and Kenny (1986) recommended a multiple regression model in which four conditions are required to test for mediation effects. First, the independent variable (gender of family members) must predict the dependent variable

**Table 2** Study 2 network grid questions and response scales.

| Questions and responses |
|---|
| Communal responsiveness |
| Grid 1: How responsible to you feel for each person's welfare? In other words, to what extent do you respond to each person's needs without expecting anything immediately in return? |
| Grid 2: How responsible is each person for your welfare? In other words, to what extent does each person respond to your needs without expecting anything immediately in return? |
| (Response scale: "Extremely responsible" to "Not responsible at all") |
| Comfort receiving support |
| Grid 1: How comfortable do you feel when each person helps you? |
| Grid 2: How comfortable does each person feel when you help him/her? |
| (Response scale: "Extremely comfortable" to "Not comfortable at all") |
| Dependence |
| Grid 1: How much does each person depend on me? |
| Grid 2: How much do I depend on each person? |
| (Response: "Extremely depends on me" to "Does not depend on me at all"/ "Extremely depend on this person" to "Do not depend on this person at all") |
| Obligation |
| Grid 1: How obligated do you feel to attend to each partners' needs? |
| Grid 2: How obligated does each person feel to attend to your needs? |
| (Response: "Extremely obligated" to "Not obligated at all") |
| Intimacy: physical proximity and disclosure |
| Grid 1: How comfortable are you being physically close to each person? |
| Grid 2: How comfortable does each person feel being physically close to you? |
| (Response: "Extremely comfortable" to "Not comfortable at all") |
| Grid 3: How likely are you to share a personal problem with each person? |
| Grid 4: How likely is each person to share a personal problem with you? |
| (Response: "Extremely likely" to "Not likely at all" |
| Liking |
| Grid 1: How much do you like each person? |
| Grid 2: How much does each person like you? |
| (Response: "I extremely like this person" to "I do not like this person at all"/ "This person extremely likes me" to "This person does not like me at all") |

(perceived and own communal responsiveness). This was established in our analyses testing Hypothesis 1 and 2.

Second, the independent variable must predict the mediator. We measured several potential mediators of the effect of family member gender on perceptions of family members' responsiveness to the participant (own intimacy, perceived intimacy, own dependence, and perceived obligation) and the effect of family member gender on participants' responsiveness to family members (own intimacy, perceived intimacy, perceived dependence, own obligation, own liking). The effects of the independent variable on these potential mediators (controlling for immediate vs. extended family), presented in Table 4, were significant in every case except for predicting own liking.

**Table 3** Study 3 participant's communal responsiveness to family members and family member's communal responsiveness to participants.

| Family member | $N$ [a] ($N$[b]) | Family member's responsiveness to participant | | Participant's responsiveness to family member | |
|---|---|---|---|---|---|
| | | M | SD | M | SD |
| Mother | 111 (107) | 19.14 (19.25) | 2.25 (2.16) | 17.57 (17.58) | 3.88 (3.94) |
| Father | 107 (107) | 18.79 (18.79) | 2.89 (2.89) | 16.70 (16.70) | 4.75 (4.75) |
| Sister[c] | 71 (23) | 17.28 (16.26) | 3.63 (4.28) | 17.96 (17.57) | 3.17 (3.76) |
| Brother[c] | 53 (23) | 14.92 (14.65) | 4.81 (4.91) | 17.25 (16.13) | 3.80 (5.06) |
| Aunt[c] | 106 (101) | 11.84 (11.79) | 6.11 (5.96) | 10.62 (10.52) | 5.74 (5.56) |
| Uncle[c] | 106 (101) | 10.74 (10.70) | 6.06 (6.04) | 9.37 (9.56) | 5.92 (5.94) |

[a] Participants who listed the relationship.
[b] In parentheses, limiting sample to participants who rated both the male and female exemplars of each relationship type (e.g. mother and father).
[c] Means based on one sister, brother, aunt, and uncle. The scale endpoints were 1 (not responsible at all) to 20 (extremely responsible).

**Table 4** Effects of gender of social family members on potential mediators: intimacy, dependence, obligation, and liking.

| Potential mediator | *b* | *t* |
|---|---|---|
| Own intimacy | −1.55 | −6.40*** |
| Perceived intimacy | −2.20 | −9.04*** |
| Own dependence | −0.99 | −3.63*** |
| Perceived dependence | −1.49 | −5.84*** |
| Own obligation | −1.00 | −4.28*** |
| Perceived obligation | −0.81 | −3.16** |
| Own liking | −0.29 | −1.31 |

*** $p<0.001$
** $p<0.01$

Third, the mediator must predict the dependent variable when controlling for the independent variable and, fourth, full mediation is suggested when the independent variable no longer predicts the dependent variable when controlling for the mediator, whereas partial mediation is suggested when the effect of the independent variable is decreased but remains significant.

Table 5 displays results for predicting perceptions of family members' responsiveness to the participant (controlling for immediate vs. extended family). Each of the mediators significantly predicted family members' responsiveness to the participant after controlling for family member gender, fulfilling this requirement for mediation. Furthermore, family member gender no longer predicted perceptions of family members' responsiveness after controlling for each of the mediators, suggesting full mediation. Sobel tests (Goodman I version; Baron and Kenny 1986) verified the significance of each of these indirect effects, *p*s < 0.005. Thus, results support the hypotheses that felt intimacy toward and perceived intimacy from others (Hypotheses 3a and 3b), own dependence (5a), and others' obligation (6a) mediated the relationship between family members' gender and perceived communal responsiveness from family members.

Table 6 displays results for predicting participants own communal responsiveness to family members (controlling for immediate vs. extended family). Each of the mediators significantly predicted responsiveness to family members while controlling for participant gender, meeting this condition for mediation. Moreover, the effect of family member gender on participants' responsiveness was rendered insignificant after controlling for each of the mediators, suggesting that each of these variables completely mediated the effect of family member gender on participants' responsiveness. Sobel tests (Goodman I version; Baron and Kenny 1986) verified the significance of each of these indirect effects, *p*s < 0.001. Thus, results support the hypotheses that felt intimacy toward and perceived intimacy (Hypotheses 4a and 4b), others' dependence (Hypothesis 5b), and own obligation (Hypothesis 6b) mediated the relationship between family members' gender and participants communal responsiveness toward family members. However, and interestingly, the hypothesis that own liking would mediate the link was not supported (Hypothesis 7).

## General Discussion

Overall the findings of these studies suggest that (1) people perceive more communal responsiveness from female than from male family members and (2) feel more communally responsive toward females than toward males in their families. Furthermore, we found evidence consistent with the idea that people expect more responsiveness from

**Table 5** Simultaneous effects of gender of family member and potential mediator on perceptions of family members' communal responsiveness to participants.

| Predictor | *b* | *t* |
|---|---|---|
| Mediator: own intimacy | | |
| Family member gender | 0.13 | 0.73 |
| Mediator | 0.48 | 8.94*** |
| Mediator: perceived intimacy | | |
| Family member gender | 0.21 | 0.99 |
| Mediator | 0.42 | 5.98*** |
| Mediator: own dependence | | |
| Family member gender | −0.17 | −1.16 |
| Mediator | 0.49 | 11.38*** |
| Mediator: perceived obligation | | |
| Family member gender | −0.19 | −1.11 |
| Mediator | 0.43 | 5.70*** |

*** $p<0.001$
** $p<0.01$

**Table 6** Simultaneous effects of gender of family member and potential mediator on participants' communal responsiveness to family members.

| Predictor | *b* | *t* |
|---|---|---|
| Mediator: own intimacy | | |
| Family member gender | 0 | 0.02 |
| Mediator | 0.54 | 8.22*** |
| Mediator: perceived intimacy | | |
| Family member gender | 0.33 | 1.53 |
| Mediator | 0.58 | 9.40*** |
| Mediator: perceived dependence | | |
| Family member gender | −0.32 | −1.72 |
| Mediator | 0.37 | 6.72*** |
| Mediator: own obligation | | |
| Family member gender | −0.13 | −0.91 |
| Mediator | 0.68 | 10.76*** |

*** $p<0.001$
** $p<0.01$

females because they perceive that females are more intimate with, dependent on, and obligated to them than are males, and people feel more responsive to females than males because they feel more intimate with, dependent on, and obligated to females than to males.

The finding that people expect more communal responsiveness from women than men is consistent with many studies showing that women are, on average, more relationally oriented and less agentic than men (e.g. Deaux and Major 1987; Spence 1993), females place greater importance on maintaining ties to relatives (e.g. Boneva et al. 2001; Brody 1965; Hogan and Eggebeen 1995; Salmon and Daly 1996; Schneider and Cottrell 1975; Troll 1987), and women are more likely to maintain connections to friends (Wellman 1992). Our general finding that women are seen as more responsive is not new. What is new about this particular finding is that even within the closest relationships, extended family, people viewed mothers, sisters, aunts, and grandmothers as more responsive than their male counterparts across their family networks. One might think that in very close relationships in which people deeply care about each others' welfare, people would view their male and female family members as equally attentive to their needs. One might also reason that people who are less invested in a particular relationship or have less knowledge about that relationship would be more likely to use gender stereotypes to fill in the gaps when making predictions about another person's responsiveness. Thus, our findings highlight the pervasiveness of this gender difference in perceptions of males' verses females' responsiveness to one's own needs. However, perhaps what is more informative about this finding is how it combines with our findings regarding participants' feelings of responsiveness toward female verses male family members.

The finding that people are more communally responsive to female than to male family members is consistent with research showing that adolescents are closer to their mothers than fathers, particularly in the area of kinship relations (Oliveri and Reiss 1987) and research showing that women receive more help than men in the context of interactions with strangers (Eagly and Crowley 1986). However, our study extends these findings across a person's multiple family relationships instead of limiting the investigation to just one close relationship at a time or to strangers.

Also, by examining peoples' multiple relationships within the same study, we were able to ascertain that (1) female–female family relationships seem to be the most mutually responsive relationships, (2) male–male family relationships seem to be the least mutually responsive relationships, and (3) in the male–female relationships, males are feeling more supported in their relationships with females than in their relationships with males, but females are feeling less supported than in their relationships with females. These findings are consistent with Parker and De Vries' (1993) findings concerning friendships, that relationships with men are less reciprocal than relationships with women, and men's same-sex relationships are characterized by less giving and receiving.

Our results suggest that men and women also act differently in relationships with family members. Whereas, perceptions of responsiveness are a major part of relationships for women, the kinds of support that are given, received, and acknowledged in relationships with men may be more subtle. More research is needed to further examine close relationships with men, especially in the context of the family, to better understand how men communicate their care for one another. Our findings suggest that in cross-sex relationships, males may be getting more out of the relationship than females in terms of communal responsiveness, which makes these relationships especially important for the males. Alternatively, it also may be the case that males and females are getting equivalent amounts of support in cross-sex relationships, but when compared to female-female relationships, females perceive male communal responsiveness as inferior to female communal responsiveness.

Finally, and importantly, we found that several relationship variables mediated the associations between family members' gender and participants own and perceived communal responsiveness in their family relationships. First, we found that people have closer relationships with their female family members (as indicated by higher levels of intimacy), feel more dependent on these family members, and perceive that these family members are more obligated to fulfilling their needs. We also found that people are more responsive to female family members, because people have more intimate relationships with these family members, feel that these family members are more dependent on them, and feel more obligated to these family members.

These findings are consistent with research showing that people are more likely to be more intimate with females (Reis et al. 1985), and intimacy has powerful effects on relationship maintenance (Fruzzetti and Jacobson 1990) and supportiveness (Jacobson and Margolin 1979). Being in more mutually intimate relationships is likely to influence both peoples' feelings of responsiveness for their partner and their perceived responsiveness from their partner.

Our findings regarding dependency are also consistent with research indicating that females are more likely to seek support than men and are more willing to express their vulnerabilities to others (Belle 1987), as well as research showing that people are more willing to express their vulnerability to those they view as having more interdependent motivation (Clark and Finkel 2004). This research provides another example of how depending on others is an

important part of close and supportive relationships (Clark and Monin 2006; Feeney 2007).

Concerning obligation, people seemed to view women as adhering to the cultural expectation of feeling more responsible for others or being kin-keepers. Women have been socialized to believe that it is their duty to maintain family relationships. Our findings suggest that participants' higher extrinsic motivation for providing support to female family members is highly related to communal responsiveness to females.

Finally, we did not find liking to explain why people feel more communally responsive towards female family members than male family members. This suggests that caring about someone is not always related to how much a person likes another. This seems particularly relevant in the family context, because people are not able to choose to whom they are related, and therefore may not share similar interests or personalities, but they still usually love them. However, it is noteworthy that Mills et al. (2004) *did* find liking to be significantly related to communal strength (another index of communal responsiveness) for both male and female relatives. Thus the reader should not conclude that liking is never a determinant of communal strength in family relationships with males and females. It might be that obligation and dependency are more important mediators of communal responsiveness than liking for family members, and liking may play a larger role in more voluntary relationships, such as friendships. This speculation fits well with Mill and colleagues' other findings that measures of liking were higher for new friends than for relatives, but the measures of communal strength were higher for relatives than friends. Clearly, both that work and the present work suggest that feelings of communal responsiveness are conceptually distinct from liking.

In sum, this research suggests that feelings of intimacy, obligation, and dependency can all help explain why people expect more communal responsiveness and feel more communal responsiveness toward their female family members than their male family members. Although these findings can all be explained distally by socialization and social role theory, it is important to better understand some of the more proximal relationship qualities that can add to our understanding of why people feel more supported by close females in their relationship networks.

## Limitations and Future Directions

There are some limitations to this study that suggest that future research is needed. First, it is a possibility that social desirability and or gender scripts were driving the effects that women are more responsive than men and that people are more responsive towards women than towards men in their families. Future research should incorporate measures of social desirability and people's tendencies to adhere to gender role scripts, to better understand whether participants' reports are based in reality or are reflecting cognitive schemas. Second, an aspect of the design of the paradigm used in these studies may have introduced noise into the analyses. Specifically, although most participants included all relationship types in their reports of responsiveness, there were some cases where some people did not include information about an aunt or a sibling, either because they did not have that relationship or they failed to provide the information. Although this was rare, it may have affected our results. Third, the proposed mediators and responsiveness were highly inter-correlated, making it necessary for each possible mediator to be analyzed separately in the statistical models. Although each of the variables is theoretically distinct, it is possible that participants did not feel differentiate between some of them (e.g. they may not have felt that communal responsiveness was different from obligation). Further, some of the questions may have been vague. For example, people may not have interpreted the questions about physical closeness (to assess intimacy) the same way (e.g. whether they were thinking about a kiss on the cheek, a kiss on the lips, hugging, etc.). Thus, future research should include more detailed explanations of the constructs when asking about different aspects of their relationships. Fourth, future research should examine explicitly instrumental forms of responsiveness within relationships separately from responsiveness generally, because past literature has suggested than men are more likely to show support by helping with tangible tasks than providing emotional forms of support. Similarly, it would be interesting to incorporate questions about how much time participants spend with each family member. In a study of kin relations among young adults in a southern city, Adams (1968) found that women were more likely than men to say that their partners and relatives were very important in their lives, but in actual contact there were much smaller differences.

## Conclusion

Oftentimes, it seems, women are characterized as being dependent whereas men are characterized as independent. Alternatively, women often are characterized as being more nurturant than are men. Our results certainly do not refute such characterizations but suggests that a different 'take' on such gender differences may capture them better and more holistically. That is, the present research suggests that women may typically be involved in more mutually responsive family relationships than are men, meaning that they are in relationships characterized by both providing

more communal responsiveness to family members and receiving more communal responsiveness from family members. This, of course, involves women being more dependent and being more nurturant, but it characterizes those differences in a new way. That is, these differences are not so much 'individual differences' as they are differences in the very nature of the individual relationships that make up part of a female's social world as compared to those relationships that make up a male's social world.

This research casts a different light on the idea that women are unfairly burdened by being primarily responsible for relationship maintenance in families, something that has often been linked to stress, perceptions of inequity of commitment, and resentment (Cancian 1987; Hochschild 1989; Miller 1976; Thompson and Walker 1989) and depression (Nathanson 1980; Verbrugge 1976; Kessler and McRae 1980). Evidence does suggest that relationships between males and females are lop sided, with women feeling less supported by males than vice versa; however women are also involved in more *mutually* communal relationships with other female family members. Thus, relationships with other female family members may be particularly important for women's well-being. The other side of the coin is that the results of this study emphasize the importance of men's family relationships with women, which is consistent with the large body of research showing that men receive more health benefits from marriage than women do (Berkman and Syme 1979; Carter and Glick 1976; Gove 1973; House et al. 1982; Kotler and Wingard 1989; Stroebe and Stroebe 1983). Relationships that are mutually communally responsive are important for mental and physical health (Clark and Finkel 2004). This research contributes to a further understanding of the nature of communal responsiveness in same-sex and cross-sex family relationships.

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