Gender Effect of Parent-Child Relationships on Parental Health

by

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Abstract

It is believed that part of the ambiguity in the research on how older individuals fare in their relationships with their adult children is due to the need for the examination of the gender effect of the parent-child relationship dyads. Gender effect signifies the gender of the parent *and* the child in the relationship. This study examines the association between the gender composition of the parent-child relationship dyad and relationship quality and older men and women's health. Furthermore, this study examines the meditational effect of relationship quality on the association between gender effect and health. Hypotheses were partially supported for the female-female dyads in that older women reported better relationship quality and better health. Relationship quality was not found to mediate the association between gender effect and health. Other variables such as, parent age, parent marital status, and child education, were significantly related to the relationship quality of the parent-child dyads and parent health as well. Limitations and future directions are discussed.

Gender Effect of Parent-Child Relationships on Parental Health

There has been a great deal of ambiguity in the research findings on how older individuals' familial relationships influence their health, especially in reference to gender. The simple and traditional belief that women fare better in their relationships because they are more involved in them has been contradicted with research findings (Fingerman, Hay, & Birditt, 2004, Suitor & Pillemer, 2006, Antonucci, Akiyama, & Lansford, 1998, Umberson, 1992, & Fingerman, Pitzer, Lefkowitz, Birditt, & Mroczek, 2008). Ambiguous results are especially prevalent in the research on the relationships between older individuals and their adult children. It is believed that part of the ambiguity may be due to the fact that researchers have not examined the gender composition of the parent-child dyad, especially among older adults and their adult children. It is hypothesized that both the gender of the parent *and* the child is important for understanding how older men and women fare in their relationships with their adult children. It is predicted that once the gender effect is examined, it may be found that men and women actually fare similarly in their relationships with their adult children. To further examine the association between parent-child relationships and the health of the older parent, this study first examines the association between dyad gender composition and the quality of the relationships between older men and women and their adult children. Next, the association between dyad gender composition of parent-child relationships and the health of the older parents is examined. Finally, this study examines if relationship quality mediates the association between dyad gender composition of the parent-child relationship and the health of the older individuals.

Age and Health

As individuals age, they report more physical health problems (Ferraro, 1980). Mental health disorders also become more prevalent in old age (Reed, Boyd, & Buckwalter, 1989).

Some of the most common types of physical heath problems among the elderly are respiratory, circulatory, digestive, and nervous system malfunction, arthritis, and tumors and cancer (Liang, 1986). Some of the most common types of mental disorders among the elderly are dementia type disorders such as Alzheimer's Disease, major depression, and anxiety type disorders (Gallo & Lebowitz, 1999). Reed, Boyd, and Buckwalter report that there may be a continuous need for knowledge about the mental health problems of older adults for the elderly population continues to grow. As a result of the increasing health concerns of older individuals, researchers have begun to look into the strategies older individuals use to try to overcome their health problems. One of the most common strategies is to rely on family members for instrumental (financial) and emotional support, in particular support from adult children whom older individuals tend to rely on most as they continue to age (Antonucci, 2001).

Men and Women's' Relationships

Both men and women are more likely to rate their familial networks as close whereas non-familial networks are more likely to be rated as problematic (Fingerman, Hay, & Birditt, 2004). However, people are also more likely to report ambivalent feelings about their family network members. This means that their relationships with their family members consist of positive and negative characteristics simultaneously. Specific gender differences in older men and women's relationships are more saliently referenced in examining older men and women's relationships with their adult children.

Adult Child and Parent Relationships

Fingerman (2001) proposes that the mother-daughter relationship may be the most enduring familial relationship throughout life due to gender-specific similarities mothers and daughters share. Although Fingerman did not include fathers and sons in her research, one might

hypothesize that the same may be true of older men's relationships with their adult sons. Perhaps the father-son tie may be the most enduring familial relationship compared to others for men, e.g. the father-daughter tie, due to gender-specific similarities the fathers and sons share as well. However, there is no literature to date that examines this notion. Furthermore, Suitor and Pillemer (2006) found that mothers prefer to rely on their adult daughters for emotional and instrumental support due to the belief that their daughters would share gender-specific values. Yet, there are instances where mothers prefer the support of their sons when they believe that their sons are the ones to actually share similar values. Again, there may be reason to believe that these findings are applicable to the relationships between older men and their adult sons. Older men may prefer support from their adult sons due to the belief that their sons share gender-specific values. However, they could come to rely on an adult daughter over a son if they believe she is the one with whom they share values. Again, there is no research that examines this notion in the relationships between older men and their adult children. It is suggested that research needs to consider both the gender and the perceived quality of the relationships between older individuals and their adult children. Both could operate independently. For instance, the gender similarity of the mother-daughter tie may make it the most enduring familial relationship and may cause a mother to prefer support from her daughter because she assumes they have similar values, nevertheless, their relationships may not be particularly positive.

Adult Child and Parent Relationships and Health Implications

The research discussed thus far examines the quality of older individuals' networks. Findings are inconsistent in the research on how older individuals' relationships affect their health. Although women have more close networks than men, they report less happiness than men due to the perceived demands of the networks (Antonucci, Akiyama, & Lansford, 1998).

Inconsistent findings are also prevalent in the research on older adults' relationships with their adult children specifically. Umberson (1992) found that frequency of contact with children was more beneficial for the mental health of fathers than it was for mothers while strained relations with children was more detrimental for the mental health of mothers than it was for fathers. It is important to note that frequency of contact and strained relations were consistently beneficial and detrimental, respectively, for both mothers and fathers, just more so for one or the other in some cases. Various other factors, such as marital status, race, and SES had effects as well. For instance, the SES of the adult children affected how often they were able to see their parents and provide support; the higher their SES the more they could contact their parents, the lower the adult child's SES, the less they could contact their parents. This in turn had an effect on the mental health of the parents. Fingerman, Pitzer, Lefkowitz, Birditt, and Mroczek (2008) found that there were significant declines in reports of physical and mental health among mothers when they reported that their relationships with their adult children were ambivalent, i.e. had both positive and negative characteristics. For fathers, there were significant declines in mental, but not physical health under similar circumstances. What causes this inconsistency in the association of older men and women's relationship quality with their adult children and their health? It is hypothesized that examination of the gender composition of the parent-child relationship dyad would provide a better understanding of the influence of older men and women's relationships with their adult children and their effect on health.

This study examines the effect of the gender composition of the relationship between a parent and an adult child on the quality of the relationship between the parent and the child and the parents' health. It is hypothesized that there will be significant associations among same gender dyads, relationship quality, and the health of the older men and women. This would

suggest that relationship quality would be most positive and the health of older men and women better when the child with whom they have the closest relationship is of the same gender. Furthermore, no significant differences are expected between older men and women in examining the association between the same gender parent-child dyads and relationship quality and health. This would suggest older men and woman actually fare similarly in their relationships with their adult children when they both have the closest relationship with a child of the same gender. This study also examines whether relationship quality mediates the association between the gender composition of the relationship dyads and the health of the older individuals. It is predicted that relationship quality mediates the association between gender composition of the parent-child dyads and health.

Method

Sample

Data for this study are based on the responses of the older individuals with adult children on the second wave of the Social Relations and Health over the Life Course survey collected by the Survey Research Center at the University of Michigan. The first wave of data was collected from 1992-1994 and consisted of individuals aged 8-93 (N=1,703). The response rate was 72%. The second wave was collected in 2005. The follow-up sample consisted of 1,076 individuals with a response rate of 78%. This study focuses on the responses of the participants age 50 and older. By focusing on those 50 and older, the sample size was reduced to 543. Then, those reporting having children were selected from the former sample (N=483). A final sample was produced by focusing on those who reported having adult children age 18 and older (N=433).

Procedures

This study focuses on older individuals' reports on the relationships with their adult children. The participants were randomly selected by computer-assistant telephone interview software. The interviews lasted approximately an hour. Participants provided the name, age, and gender of the adult child with whom they have the closest relationship.

Independent Variables

Gender Effect. This variable was assessed by considering the gender of both the parent and the child to whom the parent felt he or she had the closest relationship. The four types of gender compositions are labeled as follows: Male-male (N=76), for father-son, male-female (N=89), female-female (N=169), and female-male (N=99).

Dependent Variables

Relationship Quality. All items were assessed on a five-point scale from 1 (*Agree*) to 5 (*Disagree*). Some items were recoded so that all lower values would indicate a lower measure of the relationship quality variable and higher values a higher measure. Seven items were considered measures of either positive or negative relationship quality. Five items were considered measures of positive relationship quality and two items were considered measures of negative relationship quality. The positive relationship quality items were *When my child is having a hard time, I can help him/her*, *I feel my child supports me*, *that he/she is there when I need him/her*, *I enjoy being with my child*, *I feel my child encourages me in whatever I do*, and *I feel that my child believes in me*. The internal reliability of the positive relationship quality scale was high (α=.81). The negative relationship quality items were *My child gets on my nerves* and *My child makes too many demands on me*. The internal reliability of the negative relationship quality scale was moderate (α=.59). However, this may be due to the fact that there were only

two items as part of this measure. A mean score of the items was calculated for each measure for each respondent.

Health. Individuals were asked to rate their physical health on a scale from 1 (*Excellent*) to 5 (*Poor*). Items were recoded so that the scale went from 1 (*Poor*) to 5 (*Excellent*). Therefore, higher values would indicate better physical health. A mean score was calculated for the whole sample. Mental health was measured by the participants' responses to the Center for Epidemiologic Studies Depression Scale (CES-D) items (Radloff, 1977). There were 20 items. An example of an item is *I felt that I was just as good as other people*, where participants were to rate how often they felt the statement from a scale of 1 (*Rarely/None of the time*) to 4 (*Most/All of the time*). Items were recoded to a scale from 0 to 3, with lower values representing low levels of depression and higher values high levels. A sum composite score was calculated for the depression items. The score ranges form 0-60, with higher values signifying higher levels of depression.

Control Variables. Based on the research literature, a number of variables were included as controls in the data analysis. These variables were parent and child gender, coded as gender effect in the data analysis (will be described later), parent and child age, parent and child education (a SES indicator), parent marital status, the number of children the parent has, parent race, and positive and negative relationship quality in some data analysis (will be described later). The educational attainment of the parents and the children was used as an indicator of their socioeconomic status. The educational attainment of the parents was measured on a scale from 0 (*No education*) to 17+ (*More than 4 years of college*). That of the children was from a scale of 1 (*Less than high school*) to 5 (*More than a college degree*). Data on marital status was collected for the parents only. Parent marital status was coded as either 1 (*Married*) or 2 (*Not*

married). Data was collected on the number of children for the parents only also. Number of

children was coded as either 1 (*One child only*) or 2 (*Two or more children*). Again, for parents

only was data on race collected. The race of the older individuals was coded as 1 (*White*) or 2

(*Other*).

Data Analytic Procedures

      Gender Effect and Relationship Quality. To examine if there is an association between

the gender composition of the parent-child dyads and the quality of the relationships between the

parents and the adult children, ANCOVAs were run to compare the positive and negative

relationship quality between the four dyad groups. Parent and child gender were coded as gender

effect in the data analysis once the gender composition groups were created and then gender

effect was entered as a factor. This was done because any association between gender and any of

the outcome variables in the data analysis would be due to the gender composition of the

relationship dyads, which is the independent variable of the study. Parent race, number of

children (for the parent), and parent marital status were entered as factors as well. Parent and

child age and parent and child education were entered as covariates. For positive relationship

quality, it is expected for the male-male and female-female dyads to have significantly higher

means than the male-female and female-male dyads in support of the hypothesis that there would

be a significantly positive relationship between same-sex dyads and relationship quality.

Furthermore, significant differences are expected between the dyad groups of the opposite

gender composition types (male-male and female-female dyads versus the male-female and

female-male dyads) and not between the dyad groups of the same gender composition types

(male-male versus the female-female dyad and male-female versus the female-male dyad). This

would support the hypothesis that men and women fare similarly in their relationships with their

adult children when they both have the closest relationship with an adult child of the same gender. A lack of significant differences between the male-female and female-male dyads as well would be support for the hypothesis in the opposite direction. For instance, if it is expected for men and women to fair similarly in their relationships with their adult children when they both have the closest relationship with the child of the same gender, then it should not be expected for them to fare any differently when they both have the closest relationship with a child of the opposite gender. Therefore, an opposite pattern is expected for the negative relationship quality model in support of the hypothesis in the opposite direction. It is expected that the male-female and female-male dyads would have significantly higher means than the male-male and female-female dyads (indicating that relationship quality is more negative when the parent and the child are of the opposite gender). Again, this difference is expected between the dyad groups of the opposite gender composition types and not the same gender composition types.

        Gender Effect and Health. The same procedure as that for relationship quality was followed to test the association between gender composition of the relationship dyads and physical and mental health. Just as is expected for positive relationship quality, for the physical health model, the male-male and female-female dyads are expected to have significantly higher means than the male-female and female-male dyads. This difference is expected between the dyads of the opposite gender composition types and not the same gender composition types. For mental health, the male-female and female-male dyads are expected to have significantly higher means than the male-male and female-female dyads (higher scores indicate higher levels of depression, and thus poorer mental health). Again, this difference is expected between dyad groups of opposite gender composition types only.

Relationship Quality as a Mediator. To examine if relationship quality mediates the association between gender effect and physical and mental health, in the first model for both variables, positive and negative relationship quality were entered as covariates. In the second model, positive and negative relationship quality were not entered in the data analysis. This was done to be able to observe if relationship quality influenced how the gender composition of the relationship dyads affected the physical and mental health of the older individuals. In order for relationship quality to be considered a mediator all of the following conditions must have occurred: there is a significant association between gender effect and relationship quality; there is a significant association between relationship quality and health in the health models that include the relationship quality variables; the strength of the association between relationship dyad gender composition and health should increase in the health models without the relationship quality variables. It is predicted that relationship quality (both positive and negative) would mediate the association between gender composition of the parent-child dyads and physical and mental health.

Results

In this section, the descriptive statistics for the parents and the children within the entire sample and within each relationship dyad are presented first. Table 1 provides the descriptive statistics for the whole sample and Table 2 provides this information within the relationship dyads. Next, the ANCOVA results are presented for the relationship quality models. Then, the ANCOVA results for the health variables with and without relationship quality are presented. Finally, there is an examination of relationship quality as a mediating variable. Table 3 provides the ANCOVA summary for the relationship quality models. Table 4 provides the ANCOVA summary for the physical health models, both with and without the relationship quality variables.

Table 5 provides the means and standard errors of each dyad group to facilitate the examination of how they differ from each other.

Parent/Child Descriptives in Whole Sample

As Table 1 indicates, approximately 38% of the parents were male and 62% female. Approximately 40% of the children were male and 60% female. The mean age of the parents was 66.8 with a standard deviation of 11.4. The minimum age was 50 and the maximum 93 with a range of 43 years. The mean age of the children was 38.2 with a standard deviation of 11.4. The minimum age was 18 and the maximum 67 with a range of 49 years. The mean educational attainment of parents was 13.3. The minimum level of education was 2 and the maximum 17. The mean educational attainment of the children was 3.1. The minimum level was 1 and the maximum 5. Approximately 65% of the parents were married and 35% not married. Approximately 12% of the parents had only one child and 88% two or more children. Approximately 77% of the respondents were white and 23% other. The mean rating of positive relationship quality was 4.8 with a minimum rating of 2.4 and a maximum rating of 5. The mean rating of negative relationship quality was 1.9 with a minimum of 1 and a maximum of 5. The mean rating of physical health was 3.7. The minimum was 1 and the maximum 5. The mean sum composite score of mental health was 7.7 with the lowest score being 0 and the highest 57.

Parent/Child Descriptives within Relationship Dyads

There are no reports on the gender composition of the parents and children within the relationship dyads since the dyads were created based on gender. For instance, in the male-female dyad, one should expect 100% of the parents to be male and 100% of the children to be female since the dyad represents the father-daughter relationship. As Table 2 indicates, in the male-male dyad, the mean age of the parents was 69.7 with a standard deviation of 11.1. The

minimum age was 50 and the maximum 93 with a range of 43 years. The mean age of the

children was 39.7 with a standard deviation of 11.7. The minimum age was 18 and the maximum

67 with a range of 49 years. In the male-female dyad, the mean age of the parents was 67.9 with

a standard deviation of 11.5. The minimum age was 50 and the maximum 91 with a range of 41

years. The mean age of the children was 37.5 with a standard deviation of 10.3. The minimum

age was 19 and the maximum 62 with a range of 43 years. In the female-female dyad the mean

age of the parents was 65.7 with a standard deviation of 11.3. The minimum age was 50 and

maximum 93 with a range of 43 years. The mean age of the children was 38.0 with a standard

deviation of 11.0. The minimum age was 19 and maximum 64 with a range of 45 years. In the

female-male dyad the mean age of the parents was 65.6 with a standard deviation of 11.1. The

minimum age was 50 and maximum 91 with a range of 41 years. The mean age of the children

was 37.9 with a standard deviation of 12.7. The minimum age was 18 and maximum 63 with a

range of 45 years. In the male-male dyad, the parent mean educational attainment was 13.6 with

a minimum of 2 and maximum of 17. Child mean educational attainment was 3.1 with a

minimum of 1 and maximum of 5. In the male-female dyad, the mean educational attainment of

the parent was 13.7 with a minimum of 5 and maximum of 17. The mean educational attainment

of the children was 3.4 with a minimum of 1 and a maximum of 5. Mean parent educational

attainment was 13.1 in the female-female dyad. The minimum was 7 and maximum 17. The

mean child level of education was 3.2 with a minimum of 1 and maximum of 5. And in the

female-male dyad, the mean level of education for the parent was 13.2 with a minimum of 4 and

maximum of 17. Child mean educational attainment was 2.9. The minimum was 1 and maximum

5. In the male-male dyad, approximately 80% of the parents were married and 20% not married.

In the male-female dyad, the percentages were 79% and 21% respectively. Approximately 57%

of parents were married and 43% not married in the female-female dyad. And in the female-male

dyad, 53% were married and 47% not married. In the male-male dyad, 10% of the parents had

only one child and 90% two children or more. In the male-female dyad, 11% of the parents had

one child and 89% two children or more. Approximately 8% of the parents in the female-female

dyad had only one child while 92% had two or more children. And in the female-male dyad,

21% of the parents had only one child and 79% two or more children. In the male-male dyad,

83% of the parents were white and 17% other. Approximately 84% of the parents were white and

16% other in the male-female dyad. In the female-female dyad, 71% were white and 29% other.

In the female-male dyad, approximately 77% were white and 23% other. It is important to note

that the relationship quality and health variables are not provided in the relationship dyad

descriptives because it is being tested how these variables differ between the different dyad

groups.

Gender Effect and Relationship Quality

Table 3 provides the results of the examination of the association between gender

composition and relationship quality. In the positive relationship quality model, there was a

significant association between dyad gender composition and relationship quality

($F(3,407)=3.40$, $p=.02$). As indicated in Table 5, the two groups that differed were the male-male

($M=4.61$, $SE=.05$) and female-female ($M=4.78$, $SE=.04$) dyads ($p=.01$) with the female-female

dyad reporting the highest positive relationship quality. Two additional variables were

significantly associated with positive relationship quality: marital status ($F(1,407)=6.80$, $p=.02$),

and the number of children the parents have ($F(1,407)=21.26$, $p=0$). There was no significant

association between dyad gender composition and negative relationship quality. However, other

variables were significantly associated with negative relationship quality: parent age

($F(1,407)=4.71$, $p=.03$), child education ($F(1,407)=6.57$, $p=.01$), parent marital status

($F(1,407)=5.34$, $p=.02$), and number of children for the parent ($F(1,407)=8.14$, $p=.01$). These

findings provide partial support for the hypothesis that gender composition of the dyad would be

significantly associated with relationship quality.

Gender Effect and Health

We next consider the results for the models examining the association between dyad

gender composition and health. As Table 4 indicates, in the model without the relationship

quality variables, there was a significant association between dyad gender composition and

physical health ($F(3,418)=2.65$, $p=.05$). As Table 5 indicates, the female-female dyad reported

the best physical health. There was no significant association between dyad gender composition

and mental health. In the model that included relationship quality variables, there was no

significant association between dyad gender composition and physical health. However, other

variables were significantly associated with physical health. These were parent education

($F(1,404)=12.17$, $p=.001$), parent marital status ($F(1,404)=10.41$, $p=.001$), parent race

($F(1,404)=5.44$, $p=.02$), and negative relationship quality ($F(1,404)=7.67$, $p=.01$). There was no

significant association between dyad gender composition and mental health. Yet again, other

variables were significantly associated with mental health: parent education ($F(1,405)=11.20$,

$p=.001$) and negative relationship quality ($F(1,405)=3.97$, $p=.05$).

Hypotheses were partially supported. These analyses support the hypothesis of an

association between dyad composition and health in the case of physical health in that there was

a significant association between dyad gender composition and physical health. The hypothesis

that same gender dyads would have the best health was supported only for the same gender

female-female dyads, not for the male-male dyads. The hypothesis was not supported in the case

of mental health. However, there was no evidence of relationship quality acting as a mediator.

Relationship Quality as a Mediator

For mediation to be demonstrated, the association between dyad gender composition and

health as well as the association between dyad gender composition and relationship quality first

must both be independently established. When these have been established, mediation can be

examined by entering both dyad composition and relationship quality into the equation

predicting health. Mediation is demonstrated when the association between dyad gender

composition and health is significantly changed when relationship quality is in the equation.

While a significant association was established between both dyad gender composition and

positive relationship quality as well as dyad gender composition and physical health, when both

were entered into the equation, neither gender dyadic composition nor positive relationship

quality significantly predicted physical health. Thus, there is no evidence of mediation in the

case of positive relationship quality.

In the case of negative relationship quality, somewhat different circumstances were

evident. Although negative relationship quality was significantly related to physical health, it

was not predicted by dyad gender composition. Therefore, it cannot be concluded that negative

relationship quality mediates the association between dyad gender composition and physical

health because no significant association was found between dyad gender composition and

negative relationship quality in the respective model.

In summary, neither positive nor negative relationship quality was found to mediate the

association between dyad gender composition and either physical or mental health because there

was no situation where all three necessary conditions to determine mediation occurred.

Discussion

This study focused on the gender effect of the parent-adult child dyad on the physical and mental health of the parent. It was hypothesized that dyad gender composition was a neglected, but important influence on the association between parent and adult child relationships and health. In particular, it was hypothesized that dyad gender composition would affect both relationship quality and health; and that relationship quality would mediate the gender effect-health association. Partial support was found for the importance of the dyad gender composition, but no support for relationship quality as a mediator in the gender effect-health association was observed. Implications for the quality of older men and women's relationships with their adult children are discussed based on the gender composition of the relationships. Implications for the influence of these relationships on older individuals' health in regards to the gender composition of the relationships are discussed as well. Finally, the influence of relationship quality and other variables on the association between the parent-child dyad gender composition and health are also considered. Limitations and future direction are also discussed.

Gender Effect and Relationship Quality

Based on the results from the relationship quality ANCOVA models, the hypothesis that there is a significantly positive association between same gender parent-child dyads and relationship quality is partially supported. In the positive relationship quality model, the two dyad groups found to significantly differ from each other were the female-female and male-male dyads, with the female-female dyad having the higher mean. These findings are consistent with those of Fingerman (2006) who only studied mother-daughter pairs. The present findings suggest that the female-female parent-child dyad does not operate in the same manner as the male-male dyads. Unfortunately, these findings suggest that the male-male dyad is considerably

disadvantaged in that they report much less positive relationships than the mother-daughter pair. Interestingly, there were no dyad gender composition differences in the negative relationship quality model.

Gender Effect and Health

A second hypothesis suggested that dyad gender composition would be significantly related to health. Findings reported above indicate that gender is related to health but only under specific conditions. Dyad gender composition was shown to be related to physical health. The dyad reporting the best physical health is the female-female dyad. This dyad reported significantly better physical health than the female parent-male child dyad. No association between dyad gender composition and mental health was demonstrated. Hence, only partial support was obtained for the hypothesis. As in the case of positive relationship quality, these findings do suggest a positive effect of same gender dyads, but only for women.

Relationship Quality as a Mediator

It was hypothesized that relationship quality would mediate the association between dyad gender composition and health. There was no support for this hypothesis with respect to physical or mental health.

Other Findings

There were many other variables found to be significantly related to relationship quality and health. The most common ones were parent education, parent marital status, and the number of children the parents' had. This suggests, as Umberson (1992) found, that there are various other factors that affect the quality of older individuals' relationships with their adult children and how these relationships affect their health. This may explain why there was only partial support for the hypotheses. Other factors, such as marital status and SES, may have greater

effects than gender on the quality of parent-child relationships and how these relationships affect the health of older individuals. However, this cannot be concluded based on the current findings because this study did not examine the association between these variables and relationship quality and health directly.

Limitations and Future Directions

There are several limitations to this study that should be noted. First, some of the demographic information was collected for the parents, but not the children. This information included marital status, number of children, and race. In a number of instances these factors with respect to parents were found to be influential in the documented association between gender effect and relationship quality and health. The results could have been different had these variables been available for the adult children as well.

Another limitation of this study, as well as many others that examine relations and health of individuals, is that the examination of how relationships with others affect one's health is based on the perspective of one individual. Researchers may receive more accurate observations in the realm of social relationships and health by obtaining multiple perspectives. Future research might consider asking both the parent and the adult child for their views on the relationships and/or the health of both members of the dyad.

Future research might consider the investigation of additional factors that could have influenced the relationship quality and perhaps should also have been examined in the ANCOVA models. For instance, examination of such factors as the frequency and modes of contact with the adult children might have provided important additional insight into the association. Perhaps we will witness more conclusive findings when future research controls for all variables for all

individuals in the relationships and response ratings are based on composites of responses from each individual in the relationships.

The present findings partially support the proposed hypothesis. The present findings do suggest that all male and female dyads are not equally beneficial. In sum, the current findings, while preliminary, do suggest that gender composition may be an important consideration in understanding the parent-adult child relationship and its influence on health.

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Table 1

Parent/Child Descriptives in Whole Sample (N=433)

	M	SD	%	Range
Male parent			38.1	
Male child			40.4	
Parent age	66.8	11.4		50-93
Child age	38.2	11.4		18-67
Parent education	13.3			
Child education	3.2			
Parent marital status				
Married			64.9	
Number of children (parent)				
One child only			12.1	
Parent race				
White			77.1	
Positive relationship quality	4.8			
Negative relationship quality	1.9			
Physical health	3.7			
Mental health	7.7			

Table 2

Parent/Child Descriptives within Relationship Dyads

	Male-male(N=76)				Male-female(N=89)				Female-female(N=169)				Female-male(N=99)			
	M	SD	%	Range	M	SD	%	Range	M	SD	%	Range	M	SD	%	Range
Male parent																
Male child																
Parent age	69.7	11.1		50-93	67.9	11.5		50-91	65.7	11.3		50-93	65.6	11.1		50-91
Child age	39.7	11.7		18-67	37.5	10.3		18-61	38.0	11.0		18-63	37.9	12.7		18-63
Parent education	13.6				13.7				13.1				13.2			
Child education	3.1				3.4				3.2				2.9			
Parent marital status																
Married			80.3				78.7				57.4				53.5	
Number of children (parent)																
One child only			10.5				11.4				7.7				21.2	

Table 2 continued…

	Male-male				Male-female				Female-female				Female-male			
	M	SD	%	Range	M	SD	%	Range	M	SD	%	Range	M	SD	%	Range
Parent race																
White			82.7				84.3				71.0				76.8	

Table 3

Analysis of Covariance Summary

Source	Positive relationship quality					Negative relationship quality				
	Sum of squares	df	Mean square	F	Partial eta squared	Sum of squares	df df	Mean square	F	Partial eta squared
Gender effect	1.34	3	.45	3.40*	.02	.63	3	.21	.20	0
Parent age	.03	1	.03	.24	0	4.96	1	4.96	4.71*	.01
Child age	.06	1	.06	.43	0	.90	1	.90	.85	0
Parent education	.10	1	.10	.73	0	.63	1	.63	.60	0
Child education	.26	1	.26	1.95	.01	6.94	1	6.94	6.57**	.02
Parent marital status	.89	1	.89	6.80**	.02	5.63	1	5.63	5.34*	.01
Number of children (parent)	2.79	1	2.79	21.26***	.05	8.58	1	8.58	8.14**	.02
Parent race	.20	1	.20	1.51	0	1.57	1	1.57	1.48	0

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

Table 4

Analysis of Covariance Summary

Source	Physical health (with relationship quality)						Physical health (without relationship quality)				
	Sum of squares	df	Mean square	F	Partial eta squared		Sum of squares	df	Mean square	F	Partial eta squared
Gender effect	5.85	3	1.95	2.70	.02		7.31	3	2.44	2.65*	.02
Parent age	0	1	0	0	0		.01	1	.01	.02	0
Child age	.80	1	.80	.90	0		.30	1	.30	..33	0
Parent education	10.75	1	10.75	12.17***	.03		10.38	1	10.38	11.27***	.03
Child education	0	1	0	0	0		.34	1	.34	.37	0
Parent marital status	9.19	1	9.19	10.41***	.03		12.16	1	12.16	13.20***	.03
Number of children (parent)	.87	1	.87	1.00	0		.08	1	.08	.09	0
Parent race	4.81	1	4.81	5.44*	.01		2.76	1	2.76	3.00	.01
Positive relationship quality	1.59	1	1.59	1.80	0						
Negative relationship quality	6.78	1	6.78	7.67**	.019						

Table 4 continued…

Source	Mental health (with relationship quality)						Mental health (without relationship quality)				
	Sum of squares	df	Mean square	F	Partial eta squared		Sum of squares	df	Mean square	F	Partial eta squared
Gender effect	22.78	3	7.59	.11	0		11.00	3	3.67	.05	0
Parent age	3.80	1	3.80	.06	.03		13.99	1	13.99	.20	0
Child age	20.55	1	20.55	.31	0		10.39	1	10.39	.15	0
Parent education	738.38	1	738.38	11.21***	.03		621.27	1	621.27	8.97**	.02
Child education	2.01	1	2.01	.03	0		12.97	1	12.97	.19	0
Parent marital status	66.53	1	66.53	1.01	0		161.21	1	161.21	2.33	.01
Number of Children (parent)	201.21	1	209.21	3.18	.01		492.13	1	492.39	7.11**	.02
Parent race	8.26	1	8.26	.12	0		.43	1	.43	.01	0
Positive Relationship Quality	192.69	1	192.69	2.93	.01						
Negative Relationship Quality	261.50	1	261.50	3.97	.01						

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

Table 5

Relationship Quality and Health by Gender Effect Clusters

Clusters	Positive relationship quality	Negative relationship quality	Physical health (with relationship quality)	Mental health (with relationship quality)	Physical health (without relationship quality)	Mental health (without relationship quality)
1.Male male	4.61 (.05)$_{3}$***	1.98 (.14)	3.70(.13)	8.62 (1.15)	3.68(.13)	9.17(1.15)
2.Male female	4.71 (.05)	2.08 (.13)	3.55 (.12)	9.11 (1.07)	3.53 (.12)	9.52(1.08)
3.Female female	4.78(.04)	2.02 (.11)	3.77 (.10)	8.62 (.86)	3.76 (.10)$_{4}$*	9.07 (.86)
4.Female male	4.71(.04)	2.08 (.12)	3.49(.11)	8.40(.98)	3.44(.11)	9.22 (.96)

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