HOUSEHOLD LABOR AND MARITAL QUALITY: PERCEIVED PARTNER RESPONSIVENESS AS A BUFFER

FOR UNFAIR DIVISIONS OF LABOR

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ABSTRACT

Perceptions of household labor divisions as unfair are associated with lower marital quality, particularly for women. However, perceived partner responsiveness - individuals' beliefs about their partner as caring, validating, and understanding to one's core needs and values – might buffer against the effects of unfair divisions of labor. This study examined perceived partner responsiveness as a moderator of the association between individual's perceptions of fairness of the division of household labor and global marital quality. The sample consisted of married or cohabiting adults from the third wave (2012) of the National Survey of Midlife Development in the United States (MIDUS) study (N =1923). Hierarchical regression analyses suggested that perceived partner responsiveness did function as a moderator, such that at higher levels of PPR, perceptions of the division of labor as unfair were associated with higher marital quality and lower marital strain. Contrary to hypotheses, results did not differ by gender. These findings suggest the importance of positive relationship processes, such as perceptions of partner responsiveness, as buffers against the negative effects of unfair divisions of labor for couples.

HOUSEHOLD LABOR AND MARITAL QUALITY: PERCEIVED PARTNER RESPONSIVENESS AS A BUFFER FOR UNFAIR DIVISIONS OF LABOR

The division of household labor is a common source of conflict for heterosexual couples, particularly as more women have entered the workforce (Galovan et al., 2014). Despite women's increasing contributions to the paid workforce and political sphere, women still perform disproportionate amounts of household labor compared to men (e.g., Lincoln, 2008; Pew Research Center, 2015). Equity of the division of labor has been linked to individual well-being and positive relationship processes for both partners, particularly for women (Stevens et al., 2001). However, a wealth of research suggests that marital quality is more dependent upon whether individuals *perceive* the division of labor to be fair than upon how equally household labor is divided (e.g., Amato et al., 2007; Dew & Wilcox, 2011; Yogev & Brett, 1985). The association between perceptions of fairness and marital quality is particularly salient for women (Coltrane, 2000; Mikula et al., 2012).

Despite the increasing prevalence of egalitarian attitudes in modern marriages, there are many macro-level societal barriers to the departure from more conventional gender roles in the home, even for couples who desire to do so. These barriers include employment policies that support and reinforce the woman's role as caretaker of the home and family (Correll et al., 2007) and rewarding social messages for those who adhere to traditional gender roles (e.g., Coltrane, 2000; Kamp Dush et al., 2018; Thébaud, 2010; West, 1987). As egalitarian perspectives become more common, the gap between egalitarian beliefs and egalitarian behaviors may continue to widen due to continued structural barriers impeding the progress of "undoing gender" within the home (West & Zimmerman, 2009). As this discrepancy continues to increase, so might individuals' perceptions that the division of labor in their homes is unfair, which carries concerning implications for the marital quality of these relationships (Hochschild & Machung, 2003).

One relationship process that might buffer the negative effect of perceptions of unfairness on marital quality is perceived partner responsiveness (PPR), whereby individuals perceive their partners to be actively supportive, caring, and understanding of their needs, goals, and core values (Reis et al., 2004). Women who perceive their husbands contribute to disproportionately less household labor may be more likely to report higher marital quality if they are benefitting in other domains of their relationship, or if they perceive that their husbands are responsive to their needs. Thus, PPR shows promise as a domain-general marital process that might weaken the association between perceptions of unfairness in the division of household labor and low marital quality, such that perceptions of the division of labor as unfair might be associated with better marital quality when high partner responsiveness is also perceived.

The purpose of this study was to examine whether perceived partner responsiveness is a buffer in the association between perceptions of the division of labor as unfair and marital quality, and whether the strength of these associations varies by gender. I examined two types of marital quality: a) a measure of overall marital quality and b) a measure specific to marital strain, in relation to perceptions of unfairness in the division of labor.

Review of Literature

Types of Household Labor

Definitions of household labor vary across studies; traditionally, many have used the term to refer to instrumental household tasks such as chores, child care, or financial management. Other scholars use *household chores* interchangeably with related terms such as family work, meaning any unpaid work performed to maintain a home and/or a family (Shelton & John, 1996). This includes the instrumental tasks (e.g., laundry, meal preparation, house cleaning, and running errands) as well as expressive tasks (e.g., child rearing, providing moral support, and looking after the emotional well-being of family members; Bahr & Bahr, 2009; Seery & Crowley, 2000). Household labor can be further divided by periodic tasks (e.g., car maintenance, home repairs, or paying bills) versus routine tasks (e.g., running errands, meal preparation, laundry, and house cleaning). Similar to distinctions made in the broader literature, throughout the paper I use the term "'household labor" to refer to instrumental and expressive tasks, excluding child care, and "household chores" to refer specifically to instrumental tasks.

Household Labor and Gender

Inequitable structural gender roles are reproduced in the home, often outweighing individual beliefs of how gender should be enacted (Connidis & Barnett, 2018). Although many women now contribute to their family finances through paid work, they still, on average, contribute to more home responsibilities than their male counterparts – in child care (Yavorsky et al., 2015) and household labor, in which they contribute almost twice as much work as men (Pew Research Center, 2015). For partnerships in which husbands and wives work similar hours outside of the home, women still perform a greater

proportion of household labor (Lincoln, 2008; Working Mother Research Institute, 2015). Even couples who harbor more egalitarian views often divide labor according to traditional gender norms, with women contributing more to household labor and child care, and men performing more paid labor (Moen & Roehling, 2005). Thus, despite egalitarian attitudes becoming increasingly prevalent in heterosexual marriages, societal barriers make it difficult for married couples to eliminate gendered role enactment in the home.

Socialization and reinforced gender roles are one such barrier to egalitarian divisions of labor. Many women have been socialized from childhood to be caretakers of the home and family. In contrast, most men are socialized to contribute more of their efforts to paid labor outside the home (West & Zimmerman, 2009). Consequently, even men who desire to contribute equally to household labor are limited in their preparation and capacity to do so. Men who contribute to household labor are more likely to perform periodic household tasks (e.g., yard work, home maintenance), while women perform more routine tasks in the home (Coltrane, 2000; Dew & Wilcox, 2011). Men are also more likely to engage in instrumental household tasks, while women typically perform more expressive duties (Seery & Crowley, 2000).

Because expressive work is largely considered to be "women's work," women receive more positive societal messages when they perform these tasks than do men (Holmes et al., 2007). These reinforcing messages perpetuate gendered divisions of labor in the home, leaving women to shoulder the greater load. Women also perform many "invisible" tasks in the home, such as delegating household duties and overseeing the everyday functioning of the household (Few-Demo et al., 2014). Women's contributions to "invisible" tasks and expressive duties often go unseen by their partners. Thus, husbands' efforts to contribute to household labor might be impeded by lack of awareness of and preparation for many of these responsibilities. This places additional burden on wives to facilitate their husbands' contributions to household labor.

Just as women are reinforced for performing unpaid work in the home, men receive more positive societal messages when they contribute to paid work than do women (Thébaud, 2010). For women in the workplace, perceptions of their obligations to childcare and household labor as substantial can diminish opportunities for career advancement, including promotions and pay increases (Correll et al., 2007; Lothaller et al., 2009). This increases the likelihood that husbands will be the primary breadwinner, reinforcing gender roles in the home. In contrast, couples who stray from traditional gender roles outside the home may overcompensate by adhering even more closely to gendered responsibilities within the home. For example, men whose financial contributions are overshadowed by their wives' sometimes perform even less household labor than they would otherwise (Bittman et al., 2003; Thébaud, 2010).

These social barriers create a greater divide between individuals' beliefs that household labor should be divided equally (i.e., cognitive egalitarianism) and their successful implementation of egalitarianism in their households (i.e., behavioral egalitarianism; Ogolsky et al., 2014). As egalitarian attitudes become more prevalent, the widening gap between cognitive and behavioral egalitarianism carries implications for marital outcomes. Younger couples are increasingly likely to report the division of labor to be unfair, even when they are satisfied with their marital relationship overall. For women, cognitive egalitarianism has been associated with lower marital quality (Lavee & Katz, 2002). With this lag in behavioral egalitarianism, it is important to examine other positive marital processes that might buffer against the effects of perceptions of unfair divisions of labor on overall marital quality.

Division of Labor and Relationship Outcomes

Research has long documented the impact of the division of household labor between husbands and wives on relationship outcomes. Equity of the division of labor has been linked to individual well-being and positive relationship processes (Stevens et al., 2001). More egalitarian divisions of housework are associated with high happiness and low conflict (Kamp Dush & Taylor, 2012), as well as increased marital quality and stability for both partners, but particularly for women (Amato et al., 2003). Inequitable divisions of labor are associated with greater conflict (Kamp Dush & Taylor, 2012) and relationship dissolution (Frisco & Williams, 2003).

Marriages in which one partner contributes more to household labor than the other have varying relational outcomes. Frisco & Williams (2003) found that both men and women who perceive inequity in the division of labor report lower marital quality. Husbands' involvement in performing care work (i.e., meeting the emotional needs of family members) has been shown to be associated with higher marital quality for both spouses (Galovan et al., 2014). However, Amato et al. (2007) reported that husbands' participation in routine household labor was associated with higher marital happiness, fewer marital problems, and lower divorce proneness for wives, but the opposite was true for husbands. Inequity in the division of labor is associated with decreased marital satisfaction for women (Britt & Roy, 2014). Thus, although women are more influenced by equitable and inequitable divisions of labor, only egalitarian divisions predict higher marital quality for both men and women (Amato et al., 2003; Kamp Dush & Taylor, 2012).

These results partially support the primary assumption of equity theory, that both partners benefit when they equally invest in their relationship, and both suffer when the contributions to the relationship are inequitable (Walster et al., 1978). When either partner benefits more than they contribute to a relationship, both partners experience psychological distress. The underbenefiting partner may experience resentment, while the overbenefiting partner may feel guilt, with the experiences of both partners diminishing the overall quality of their relationship (Hatfield et al., 2008). Consequently, men and women who either undercontribute or overcontribute to household labor report fewer positive emotions and more negative emotions in their relationship (Lively et al., 2010). Further, the negative effects of inequity in the division of labor on marital outcomes outweigh the positive effects of equity, and this contrast is greater for women (Grote et al., 2002). This is not surprising, considering women have traditionally been more perceptive of relationship issues than men (Acitelli, 1992).

Perceptions of Fairness

Although equity in the division of labor is associated with positive relational outcomes for men and women, these relational outcomes are more closely tied to *perceptions* of fairness than upon overall objective equity (Bird et al., 1984; Yogev & Brett, 1985). The association between the division of labor and marital quality is mediated (Lavee & Katz, 2002) and moderated (Zhang & Tsang, 2012) by perceptions of whether the division of labor is fair. Perceived fairness of the division of labor by husbands and wives is associated with greater marital quality for both spouses (Amato et

al., 2007), although some studies report that the association is greater for women than for men (Coltrane, 2000; Mikula et al., 2012). Even when carrying unequal loads, women report higher marital quality when they perceive the division of labor to be fair (Dew & Wilcox, 2011). In contrast, relationship quality has been shown to decrease when the division of labor is perceived to be unfair by either partner (Mikula et al., 2012; Wilcox & Nock, 2006). The same is true for marital distress, with greater perceptions of unfairness predicting less favorable outcomes (Claffey & Mickelson, 2009). Perceptions of unfairness in the division of household labor have also been associated with higher risk of divorce for women (Frisco & Williams, 2003).

Individuals who report the division of labor to be unfair might report higher marital quality if they value overall high rewards in a relationship over equity or fairness (Lloyd et al., 1982). Further, consistent with interdependence theory, individuals may be motivated to put the needs of the relationship above their own as they become more interdependent (Kelley & Thibaut, 1978). This transition from self-interest to a collective interest motivates partners to engage in behaviors that benefit the relationship as a whole, even if they are underbenefiting from the relationship in a particular domain, such as household labor equity (Ledbetter, 2013).

Perceptions of fairness of the division of labor have been examined in the context of communal versus exchange relationships (Clark & Mills, 2011). Communal relationships require that both partners are responsive to one another's needs, rather than to their own individual needs. Individuals in communal relationships seek to meet their partner's needs out of genuine concern for their well-being (Lemay et al., 2007). This focus on partner before self facilitates greater intimacy over equity (Miell & Duck, 1986; Reis & Shaver, 1988). Thus, couples who are responsive to one another's needs are more likely to achieve positive relationship outcomes, as each partner feels understood and cared for (Clark et al., 1986). Perceiving a partner to be responsive might be one way in which couples can achieve greater intimacy and marital quality, even when the division of labor is perceived as unfair.

Perceived Partner Responsiveness

Reis & Shaver (1988) introduced the construct of perceived partner responsiveness as a component of their intimacy model, proposing that individuals who believe their partners to be understanding, validating, and caring in response to selfdisclosure are likely to achieve higher intimacy with their partners. Perceived partner responsiveness reflects how responsive a person believes their partner to be to their core needs and values. Responsiveness can be manifest in verbal and nonverbal communication patterns and behaviors, including attentive listening, expressing validation or concern, or facilitating a partner's goal achievement and personal fulfilment (Kelley, 2013).

Perceived partner responsiveness is associated with positive outcomes for individuals and their relationships. On a personal level, individuals who perceive their romantic partner as understanding, validating, and caring about their needs and values may feel more safe disclosing personal thoughts and concerns (Feeney & Collins, 2001; Reis et al., 2000). From a relational perspective, couples who are each responsive to one another's goals, values, and needs achieve deeper intimacy (Reis, 2012). This development of intimacy is a logical outcome, since partners are more likely to engage in self-disclosure if they feel safe doing so (Laurenceau et al., 1998). Perceived partner responsiveness is linked to marital happiness and individual well-being for both partners (Holmes et al., 2007; Selcuk et al., 2016). But, because women tend to place a greater emphasis on the emotional quality of their intimate relationships (Wilcox & Nock, 2006), their perceptions of partner responsiveness are particularly salient for their relationship satisfaction and individual well-being.

PPR and Household Labor

Perceived partner responsiveness may contribute to increased marital quality when either partner feels that the division of labor is unfair. Although perceived partner responsiveness is associated with increased marital quality for both men and women (e.g., Selcuk et al., 2016), it may moderate the association between perceptions of household labor fairness and marital outcomes more strongly for women than for men. Because much of the labor they perform in the home is "invisible," women in particular might perceive that their partners undervalue their contributions to household labor (Few-Demo et al., 2014). Individuals who perform more than their share of household labor may feel resentment and frustration if their partner does not appreciate or notice their efforts (Acitelli, 1992). Perceptions of a partner as caring and responsive might decrease negative emotions associated with beliefs that the division of labor is unfair. Thus, the relational strain resulting from women's attempts to meet the demands of household responsibilities might be buffered by their partner's efforts to be responsive, validating, and caring.

Women report higher marital quality when their partners contribute to emotion work in the home (Wilcox & Nock, 2006), likely due to societal gender scripts that categorize household labor as "women's work." When men actively contribute to more expressive or "feminine" household tasks such as child rearing, women may feel that their partners are acting out of sensitivity and responsiveness to their needs (Lemay et al., 2007; Reis, et al., 2004). In contrast, gender inequity in emotion work is associated with wives' decreased perceptions of their relationships as caring, supportive, and mutual (Strazdins & Broom, 2004). In contrast, men's contributions to household labor are often viewed by women as manifestations of responsiveness, with women reporting feeling supported and cared for as a result of their partner's efforts to ease their loads (Galovan et al., 2014). Thus, women's marital outcomes may be more strongly, positively influenced by their partner's efforts to contribute to household labor than men's, even when they believe the division of labor to be unfair.

Individuals who perceive their partners to be responsive in other domains of their relationship may be more likely to notice their partner's contributions to household labor. Further, individuals who perceive their partners to be generally responsive might report higher marital quality if benefits in other domains of the relationship outweigh the negative impact of unfair division of labor. Thus, PPR may act as a buffer for both husbands and wives when one or both perceives the division of labor to be unfair, regardless of which partner contributes more to household labor.

The Present Study

The purpose of this study was to examine whether perceived partner responsiveness (PPR) moderates the association between perceptions of the division of labor as unfair and marital quality, and whether these associations differ by gender. I hypothesized that PPR would moderate the associations between perceived fairness of the division of labor and both marital quality and marital strain, such that the association between perceived unfairness of the division of household labor and both poor marital quality and higher marital strain would be weaker under conditions of high PPR. I also hypothesized that the strength of PPR as a moderator of these associations would differ by respondent gender, such that the interactions would be stronger for women than for men.

Because of known associations between marital quality, several key demographic variables were controlled for. Education, income and income are positively associated with marital quality (Karney & Bradbury, 1995). Race and ethnicity were also accounted for, due to research demonstrating that Blacks tend to have lower marital quality for Whites and Hispanics (Bulanda & Brown, 2007). Analyses also controlled for neuroticism, marital duration, and number of children living in the household. Marital duration is negatively associated with marital quality (Umberson et al., 2005). Adult children living at home might also contribute to poor marital outcomes (Bouchard, 2014). Findings are mixed with regards to neuroticism as a predictor of marital outcomes (O'Rourke, 2011), with many studies associating neuroticism with more negative outcomes (Karney & Bradbury, 1995; Margelisch et al., 2017).

Methods

Sample

Data for this study came from the third wave of the National Survey of Midlife Development in the United States (MIDUS) study, a national longitudinal study examining well-being and health (Ryff et al., 2019). Prior to testing my hypotheses, I conducted analyses to determine whether there were significant differences between the second wave (2008) and third wave (2013) in relation to the primary variables of interest. Pearson correlations demonstrated that primary variables at Wave 2 were highly correlated with their counterparts at Wave 3. Shapiro Wilk tests were conducted, and departures from normality were noted for all primary variables (p < .001). Related samples *t*-tests were conducted to determine whether there were significant mean differences between primary variables at Wave 2 and Wave 3. Results revealed no significant differences for perceptions of fairness, t(1673) = -0.37, p = .39, or for perceived partner responsiveness, t(1673) = 1.67, p = .09. Results demonstrated significant mean differences between waves for marital quality, t(1673) = -2.25, p < .02; and marital strain, t(1673) = 2.99, p = .003. However, follow-up Cohen's d tests showed negligible effects for both marital quality and marital strain. As a result, and to maintain parsimony, only results from Wave 3 were included in the analyses.

Data for the third wave included a phone interview and self-administered questionnaire (n = 3294). Of the 2923 participants who took the self-administered questionnaire, 2063 (71%) reported being married or living with a partner in a marriage-like relationship. Of these, 121 (6%) did not respond to one or more primary variables of interest and were excluded from the analyses. Due to the emphasis on gender differences

between partners for this study, the 19 (1%) participants who reported being in a samesex relationship were not included in the final sample. This resulted in a final analytic sample of 1923.

The 2013 survey included demographic data on age (M = 62.88, SD = 10.56), income measured in thousands (M = 59.51, SD = 59.32), and education. Education was measured on an 11-point scale, from 1 (*no school/some grade school*) to 11 (*master's degree*), with 6 (*one to two years of college*) as a mid-point. The average participant had completed three or more years of college (M = 7.66, SD = 2.47). Participants also reported on years married (M = 39.20, SD = 12.89), number of times married (M = 1.36, SD = 0.64), number of children living in the household (M = 0.48, SD = 0.90), and marital status. Of the final sample, 72 (3.7%) participants were cohabiting but not married at the time of the study. Descriptive statistics for categorical variables are listed in Table 1.

Measures

Marital Quality

Overall marital quality was assessed using a one-item measure that asked participants to rate their current marriage or relationship on an 11-point scale from 0 (*worst possible*) to 10 (*best possible*). A second measure of marital quality evaluated *marital strain*, including 6 items about tension, arguments, criticism, and partner demandingness (e.g., "How often does he or she criticize you?"). MIDUS participants responded using a 4-point Likert scale from 1 (*a lot*) to 4 (*not at all*). The measure of marital strain demonstrated high internal consistency (Cronbach's alpha = .87). This measure was reverse coded so that higher numbers represented greater marital strain.

Fairness of Household Chores

Fairness of household chores was measured using a single item, which asked participants to rate how fair they think the arrangement of household chores is to them on a scale from 1 (*very fair*) to 4 (*very unfair*). Participants were instructed to report on a cumulation of various household chores including cooking, shopping, laundry, cleaning, yard work, repairs, and paying bills. Responses were reverse coded, such that higher scores reflect higher appraisals of fairness.

Perceived Partner Responsiveness (PPR)

Three items from the MIDUS self-administered questionnaire were used to create a measure of perceived partner responsiveness (revised from Schuster, Kessler, & Aseltine, 1990). The following questions were included in the questionnaire: "How much does your spouse or partner really care about you?," "How much does he or she understand the way you feel about things?," and "How much does he or she appreciate you?" The three components of PPR are understanding, validating, and caring (Reis et al., 2007), and similar measures have been used in previous studies (e.g., Maisel & Gable, 2009). In this study the PPR measure had high internal consistency (Cronbach's alpha = .84).

Control Variables

Demographic characteristics including education, income, race and ethnicity, number of children living in the household, and number of years married were accounted for in the analyses. Number of years married and age were highly correlated, and years married was chosen for its relevance to the focus of the study. Because most participants were White (92%), race was condensed into two categories: White (=0) and Other (=1). Participants reported ethnicity by identifying as Hispanic/Latino (=1) or Not Hispanic/Latino (=0). Other control variables included neuroticism and self and partner employment status. Employment status was condensed into two categories (working = 1, not working = 0), with the second category including participants who were selfemployed, unemployed, retired, homemakers, sick or disabled, and other. Participants also reported on neuroticism (M = 2.04, SD = 0.62), by reporting how four adjectives (moody, worrying, nervous, calm) described them on a 4-point scale (1 = a lot to 4 = not at all). Responses were reverse-coded, and mean scores were calculated for the four responses, so that higher scores represented greater neuroticism.

Results

Data from wave 3 of the MIDUS project were examined using descriptive statistical analyses conducted in R (R Core Team, 2017). Correlations for all primary and control variables can be found in Table 2.

As noted previously, participants missing responses to one or more primary variable were excluded from analyses. Missing data for control variables were handled using multiple imputation, due to its accuracy and statistical power relative to other missing data techniques. The percentage of missing values across the twelve control variables ranged between 0 and 12.38%. In total, 361 out of 1923 records (19%) were incomplete. I used multiple imputation to create and analyze 5 imputed datasets. Incomplete variables were imputed using the default settings of the mice 3.0 package in R (van Buuren & Groothuis-Oudshoorn, 2011). Table 3 gives the missing data rates of each variable.

Diagnostic checks included extending the number of iterations from 5 to 40 to confirm that there were no trends and that trace lines intermingled well. I also examined data plots of the imputed and observed data to confirm that distributions were similar. Distribution patterns across data sets were consistent. For comparison, I also performed analyses on the subset of complete cases and obtained similar results.

Perceived Fairness and PPR as Predictors of Marital Quality

To examine whether the association between perceived fairness of the division of labor and marital quality is moderated by perceived partner responsiveness, I constructed a hierarchical regression analysis with 3 models. To facilitate the interpretation of the intercept for each analysis, all continuous independent and moderating variables were centered.

The first step in the hierarchical regression analyses examined the effects of covariates on marital quality, including respondent sex, race, ethnicity, income, education, employment status, number of children in the household, number of years married, and neuroticism. Model 1 extended the previous analysis to include the main effects of division of labor fairness and PPR on marital quality. Model 2 added an interaction term between division of labor fairness and PPR in predicting marital quality to test the moderating role of PPR. Model 3 was constructed to examine the 3-way interaction between PPR, division of labor fairness, and gender. Demographic tests showed that two data points had high leverage and high discrepancy and were removed from the analyses. Three additional data points were removed that appeared to deviate from the overall pattern of data in visual plots, resulting in a sample size of 1918 for analyses with marital quality as the outcome variable.

Covariates accounted for 10% of the variance in marital quality. Adding in the main effects of fairness perceptions and PPR accounted for an additional 52% of the variance in marital quality (Model 1, Table 4). Results for Models 1 and 2 were significant (see Table 4), with the interactive model accounting for 62% of the variance in marital quality. Departures from normality and heteroskedasticity were noted. A simple slopes analysis was conducted, with a .18-point increase in marital quality for those with low PPR for every one-point increase in perceptions of fairness (p < .001; see Figure 1). For those with high PPR, marital quality increased .03 points for every 1-point increase in perceptions of fairness in the division of labor and marital quality were only significant at low levels of PPR. A Johnson-Neyman interval was conducted to test the region of significance of the interaction term (see Figure 2). The results of Model 3 (see the last column of Table 4) failed to support the hypothesis that gender would interact with perceived fairness and PPR to predict marital quality.

Perceived Fairness and PPR as Predictors of Marital Strain

This same series of steps was followed when examining marital strain as the outcome variable (see Table 5). Covariates accounted for 6% of the variance in marital strain. Adding in the main effects of fairness perceptions and PPR accounted for an additional 39% of the variance in marital strain (Model 1, Table 5). The interactive model was significant and accounted for 45% of the variance in marital strain. Departures from normality were noted. A simple slopes analysis demonstrated a .05-point decrease in marital strain for those with low PPR, for every one-point increase in perceptions of fairness (p < .001; see Figure 3). For those with high PPR, marital strain decreased by .1

points for every 1-point increase in perceptions of fairness (p < .001). A Johnson-Neyman interval was conducted to test the significance of the interaction term (see Figure 4). The results of Model 3 demonstrated that gender did not interact with perceived fairness and PPR to predict marital strain.

Discussion

The aim of this study was to determine whether perceived partner responsiveness moderates the association between perceptions of the division of labor as unfair and marital quality. I also examined whether these associations differ by gender. Overall, support was found for PPR as a moderator of the association between perceptions of fairness and marital quality, for both overall marital quality and marital strain, but these findings did not differ by gender of the respondent.

PPR as a Moderator of Perceived Fairness and Marital Quality

The results of this study partially support my first hypothesis, that perceived partner responsiveness would moderate the association between perceptions of division of labor fairness and marital quality, such that the association would be weaker under conditions of high PPR. In accordance with my hypothesis, the positive association between reports of fairness and marital quality was significant under conditions of average or low PPR. Under conditions of high PPR, the association between perceptions of fairness and marital quality was not significant.

One explanation for these results is that high PPR might have a buffering effect on marital quality when the division of household labor is perceived to be unfair. In other words, partners who believe the division of labor to be unfair might report higher marital quality if they also perceive their partners to be responsive. A person who perceives their partner as responsive might be more likely to recognize or accept their partner's contributions to household labor, even if they believe the division of labor is unfair. In contrast, individuals who report low PPR might be more influenced by whether they perceive the division of labor as fair when assessing the quality of their marriage.

It is possible that people report their partners to be responsive *because* their partners openly acknowledge their substantial contributions to household labor and the stress associated with it. For example, a spouse who feels cared for, validated, and understood when communicating their concerns about household labor divisions might report feeling cared for, validated, and understood in their relationship overall. Thus, although perceived partner responsiveness as a construct refers to the relationship as a whole, responsiveness in one particular domain, such as household labor, might make a person more likely to report high PPR overall. Further, the way PPR is measured in this study might be conflated with the one-item measure of marital quality. Although preliminary analyses suggested that the measures of PPR and marital quality used in this study were distinct, it is likely that some aspects of marital quality are closely tied to perceptions of partner responsiveness. Conversely, it is also possible that participants who feel satisfied with the quality of their relationship might report the division of labor to be more fair than they would otherwise due to attribution bias or positive illusions about their partners.

Although more research is needed to determine the directionality of the associations between perceptions of fairness, PPR, and marital quality, my results suggest the importance of PPR in buffering against the negative effects of unfair divisions of labor on marital quality. Prior research examining household labor divisions and marital outcomes has focused on the differences between perceptions of fairness or equity, and actual fairness or equity, in predicting marital outcomes. Perceptions of fairness or equity are more strongly associated with marital outcomes than is actual fairness or equity (Amato et al., 2007; Dew & Wilcox, 2011). However, very few studies have examined factors that explain the *variability* in marital outcomes among couples who perceive the division of labor as unfair. My results suggest that domain-general marital processes, such as PPR, might explain some of this variance.

With the increasing gap between beliefs about how household labor should be divided (i.e., cognitive egalitarianism) and how these divisions are enacted within couples (i.e., behavioral egalitarianism), it is important to consider other factors that enhance mutuality and intimacy in couple relationships, even when partners find it difficult to divide household responsibilities equitably. PPR represents an aspect of intimacy whereby a spouse feels seen, understood, and valued by their partner. In contrast, marital quality is a global construct that represents multiple domains such as intimacy, agreement, independence, and sexuality (Hassebrauck & Fehr, 2002).

My findings suggest that marital quality differs even between couples who report similar perceptions of fairness, depending on whether partners are benefitting from other domains of their relationship. This suggests that romantic partners might be able to tolerate or accept unfair divisions of household labor if they see their partner making an effort to be responsive in other domains of the relationship. This is consistent with the primary tenet of interdependence theory, that as partners become more interdependent, they are each motivated to engage in behaviors that benefit the relationship as a whole, even if it means underbenefiting from the relationship in a particular domain, such as household labor equity (Ledbetter, 2013). Couples who perceive the division of labor to be unfair, but struggle to balance the scales, might be willing to accept this unfairness, while acknowledging that it exists by refocusing on aspects of their relationship that benefit both partners.

Perceived Fairness and PPR as Predictors of Marital Strain

My second hypothesis was partially supported, in that perceived partner responsiveness moderated the negative association between perceived fairness and marital strain. Contrary to my hypothesis, the negative association between perceptions of fairness and marital strain was stronger under conditions of high PPR. However, the negative association between perceptions of fairness and marital strain is still present under conditions of low PPR, such that those with low PPR report higher marital strain than those with high PPR.

It is possible that individuals who perceive the division of labor as unfair might report greater marital strain if they expect their partners to be more responsive to their concerns about unfair divisions of labor. Couples who feel understood, cared for, and validated in general by their partners might be frustrated or confused when their actions to contribute to household labor do not align with their partners' overall responsiveness. Especially for older adults who tend to avoid or minimize relational conflict, the division of household labor could be a source of unique strain in relationships in which interactions are generally positive.

Spouses who perceive their partners are responsive to their needs, and who report fair divisions of labor, experience very little marital strain. One explanation for this is that they see engagement in household labor as a manifestation of responsiveness. PPR might also facilitate more understanding conversations about the division of household labor for those who perceive the division of labor to be unfair, by enhancing feelings of safety and security within the relationship. Because the division of household labor is a source of conflict for many couples, navigating these conversations with less defensiveness might minimize marital strain. My findings suggest that PPR is a protective factor for couples in minimizing marital strain, under conditions of fairness and unfairness.

Practitioners might utilize these findings by teaching couples how to demonstrate responsiveness and recognize a partner's attempts to be responsive. These skills might soften couples' approaches to conflict about the division of household labor by promoting safety, understanding, and positive attributions about one another.

Gender as a Moderator

My hypothesis that PPR would moderate the association between perceived fairness and marital quality more strongly for women than for men was not supported for either marital quality or marital strain. Prior research suggests that gender plays a significant role in perceptions about the division of household labor, as well as relational outcomes. Amato et al. (2003) suggests that men and women respond differently when men perform more household labor, with women responding positively and men responding negatively. When men do not contribute equitably to household labor, women have the most negative outcomes (Britt & Roy, 2014). The association between perceptions of fairness and marital quality is also stronger for women than for men (Coltrane, 2000; Mikula et al., 2012; Selcuk et al., 2016). Due to the age of my sample and gender differences between men and women in late adulthood, I anticipated seeing greater discrepancies between men and women than were present in my results. This lack of support might be partially explained by the large group of participants who had retired by the time data were collected.

One possible explanation is that women's reports of division of labor fairness might be higher post-retirement if their partners contributed more to household labor than pre-retirement. However, this scenario might only be applicable to a small majority of the sample, according to research suggesting that no significant changes in household labor divisions occur after retirement (Leopold & Skopek, 2015). It is also likely that the older adult men and women in my sample had similar, traditional beliefs that women should be performing more household labor than men (Hank & Jurges, 2007). Thus, although many men in the sample were retired, it is likely that women were still performing more household labor, due to gender structures being upheld within and outside the home (Leopold & Skopek, 2015). This might affect the extent to which PPR influences the association between perceptions of DOL fairness and marital quality, with traditional values minimizing differences between men and women's reported fairness.

Equity theory might also provide an explanation for gender as a nonsignificant moderator, suggesting that both partners benefit when the division of labor is equitable, and both partners suffer when division of labor is inequitable (Walster et al., 1978). Interpreting my results through an equity theory lens suggests that promoting partner responsiveness for either partner might benefit both. Future research should continue to examine PPR in the context of both men and women, because both appear to benefit from its presence in the marital relationship. Interventions targeted at older adults might consider promoting increased responsiveness, and recognition of a partner's efforts to be responsive, for both men and women.

Limitations

The implications of this study cannot be considered without addressing its limitations. One limitation is the cross-sectional nature of the study, which makes it difficult to examine perceived partner responsiveness as a true moderator of the association between division of labor fairness and marital quality. Longitudinal studies are needed to assess how these variables interact over time – with one another, and across significant marital and life transitions such as retirement.

The MIDUS sample also presents limitations in the interpretation of this study's findings. The participants in this study lack diversity, with most participants being White and married, and nearly all being in heterosexual relationships. More research is needed on Black older adult couples in general, but particularly when considering divisions of labor, due to their traditionally more egalitarian gender roles (Coltrane, 2000). Future studies might also examine perceptions of fairness in married versus cohabiting couples, as well as in same-sex couples, who also follow more egalitarian divisions of labor (Goldberg, 2013). Because many participants were retired at the time of data collection, it is difficult to examine employment or income as control variables, without an understanding of the source of the income, participants' wealth, or their employment status prior to retirement. Future studies might consider accounting for more detailed measures of income and employment history. More work is also needed which examines household labor from an intersectionality approach, to understand how gender inequities, race and ethnicity, socioeconomic status, and sexual orientation influence how responsibilities are divided in the home and how spouses' perceive the division.

Further, the participants in this sample are adults aged 42 and older (M = 61.65), whose perceptions of division of labor fairness might be different than younger adult couples. For example, beliefs that household labor should be divided more equally between partners is more prevalent in younger generations. Older

adult heterosexual couples may be more expected and willing to adhere to traditional gender norms in the home, with men performing more paid labor and women performing more household labor. Thus, the older adult women in the MIDUS sample might report the division of labor to be fair, even if they perform most or all of the household labor. Future studies might consider whether the stress of older adult women performing more than their share of household labor carries negative implications for their marital quality. Younger couples might be more cognizant of how unfair divisions of labor affect their overall stress, and might be more likely to report lower marital quality when they perceive the division of labor to be unfair. It is also possible that younger adult couples experience more variability in their perceptions of division of labor fairness than their older counterparts, depending on whether their beliefs align with more traditional or egalitarian marriages.

Another limitation to this study was the absence of many other forms of labor that might compete with the demands of household labor, such as child-rearing and paid employment. Many individuals in this sample were retired, and few had children living in the home. Even those who did have children living at home would be likely to have adult children who might put fewer demands on their parents and might even be contributing to household labor themselves. Future studies should examine how the demands of parenting young children or participating in paid work influence perceptions of fairness of the division of labor.

Finally, the validity of my findings might be influenced by the efficacy of the measures of perceived partner responsiveness and marital quality. Prior studies

define perceived partner responsiveness as how understanding, validating, and caring a person perceives their partner to be of their core needs and values (Kelley, 2013). The measure used in this study examines understanding, appreciation, and caring as components of PPR. Although this measure has been used in prior studies, it examines PPR as a manifestation of responsiveness in daily interactions and might not represent perceptions of partner responsiveness in various domains of the relationship, or over time. More research is needed to determine the validity of this measure, and to differentiate it from similar constructs such as intimacy or marital quality. The one-item, global measure of marital quality does not provide insight into various dimensions of marital quality, nor how marital quality fluctuates over time. Given the high correlation between the measures of marital quality and PPR used in this study, using a measure that examines multiple dimensions of marital quality might provide insight into whether and where these constructs overlap. This is even more important because partner responsiveness is a component of intimacy (Reis & Shaver, 1988; Reis, 2012), and intimacy is believed to be a central dimension of marital quality (Hassebrauck & Fehr, 2002). Examining PPR relative to less associated constructs might highlight its significance as a buffer when household labor is perceived as unfair.

Despite these limitations, this study shows promise as one of the first to examine moderators of the association between perceived fairness and marital quality. That PPR was a significant moderator of this association for older adults suggests that perceptions of partner responsiveness might be even more important for younger couples, for whom the gap between perceived fairness and marital quality might be greater than for older adult couples. Further, although this study examined primarily White, heterosexual couples, the results provide insight into perceptions of division of labor fairness relative to a population known for adhering to more traditional gender roles in the home.

Conclusion

Women's increased participation in the workforce has contributed to changes in how couples divide household labor and child care. However, structural barriers make it difficult for husbands and wives to achieve equitable divisions, regardless of their personal sentiments or desire for equality. As such, it is important to examine processes that might buffer against the effects of inequitable divisions of household labor on relationship outcomes. Perceived partner responsiveness has shown promise in this study as a way for partners to contribute to the overall quality of the relationship, even when the division of household labor remains unequal.

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APPENDIX A: TABLES AND FIGURES

	Male (<i>n</i>	= 981)	Female	(<i>n</i> = 942)
	п	%	п	%
Employment Status				
Working	438	44.6	407	43.2
Self-employed	172	17.5	102	10.8
Unemployed	16	1.6	16	1.7
Retired	338	34.5	306	32.5
Homemaker	2	0.2	84	8.9
Sick or Disabled	5	0.5	10	1.1
Other	10	1.0	17	1.8
Ethnicity				
Hispanic/Latino	27	2.8	30	3.2
Other	954	97.2	912	96.8
Race				
White	894	91.1	871	92.5
Black	18	1.8	17	1.8
Native American	7	0.7	7	0.7
Asian	1	0.1	3	0.3
Other	61	6.2	44	4.7

Table 1. Participant Demographics (N = 1923).

					•		-			
	1	7	ς	4	5	9	L	8	6	10
1. Marital quality	1									
2. Marital strain	65**	I								
3. Perceived fairness	.37**	35**	·							
4. PPR	.77**	66**	.40**	ı						
5. Age	.22**	09**	**80.	.13**	I					
6. Income	00 [.]	03**	.03	**90.	11**	I				
7. Education	04	02	.02	00.	13**	.37**	I			
8. Household children	16**	**60.	08**	10**	45**	**90.	**60.	I		
9. Years married	.23**	09**	**60.	.12**	.89**	16**	21**	44**	I	
10. Neuroticism	19**	.23**	14**	19**	13**	12**	13**	.07**	10**	ı
M	8.45	2.09	3.33	3.61	62.88	59.51	7.65	0.48	39.20	2.04
SD	1.77	0.63	0.85	0.56	10.56	59.32	2.47	0.90	12.89	0.62
<u> </u>	Income	ic listod	the the	and a la	202	2 02 2 - 1	(01)			

Table 2. Means, Standard Deviations, and Correlations between Study Variables (N = 1923).

Note. *p < .05. **p < .01. *Income is listed in the thousands (e.g., 59.51 = \$59,510).*

Variable	n	%
Gender	0	-
Ethnicity	2	0.10
Race	9	0.47
Income	238	12.38
Education	3	0.16
Employment status	0	-
Partner employment status	0	-
Marital status	2	0.10
Years married	27	1.40
Household children	0	-
Neuroticism	7	0.36

Table 3. Missing Data Rates for Control Variables (N = 1923)

	W	lodel I	M	lodel 2		Model 3
Variable	b(SE)	95% CI	b(SE)	95% CI	b(SE)	95% CI
Perceived Fairness	0.12(.03)	$[0.06, 0.18]^{***}$	0.10 (.03)	$[0.04, 0.17]^{**}$	0.06(.05)	[-0.04, 0.15]
PPR	2.31(.05)	$[2.21, 2.41]^{***}$	2.23 (.06)	$[2.12, 2.34]^{***}$	2.28(.08)	$[2.13, 2.43]^{***}$
Gender	0.05(.05)	[-0.05, 0.16]	0.06 (.05)	[-0.05, 0.16]	0.07(.06)	[-0.04, 0.18]
Ethnicity	0.16(.15)	[-0.13, 0.45]	0.14 (.15)	[-0.15, 0.43]	0.15(.15)	[-0.14, 0.44]
Race	-0.05(.09)	[-0.23, 0.13]	-0.05 (.09)	[-0.23, 0.13]	-0.04(.09)	[-0.22, 0.14]
Income	-0.00(.00)	[-0.00, 0.00]	-0.00 (.00)	[-0.00, 0.00]	-0.00(.00)	[-0.00, 0.00]
Education	-0.02(.01)	[-0.04, 0.01]	-0.02 (.01)	[-0.04, 0.01]	-0.02(.01)	[-0.04, 0.01]
Employment	0.13(.06)	[0.01, 0.24]	0.13 (.06)	$[0.02, 0.24]^*$	0.13(.06)	$[0.02, 0.24]^*$
Partner employment	-0.07(.06)	[-0.18, 0.05]*	-0.06 (.06)	[-0.18 0.05]	-0.07(.06)	[-0.18, 0.05]
Marital status	-0.45(.13)	[-0.71, -0.19]***	-0.45 (.13)	[-0.71, -0.19]***	-0.44(.13)	[-0.69, -0.18]***
Years married	0.02(.00)	$[0.01, 0.02]^{***}$	0.02 (.00)	$[0.01, 0.02]^{***}$	0.01(.00)	$[0.01, 0.02]^{***}$
Children in household	-0.04(.03)	[-0.10, 0.02]	-0.04 (.03)	[-0.10, 0.02]	-0.05(.03)	[-0.11, 0.01]
Neuroticism	-0.10(.04)	[-0.18, -0.02]*	-0.10 (.04)	[-0.18, -0.02]*	-0.10(.04)	[-0.18, 0.02]*
Fairness x PPR			-0.14 (.04)	[-0.22, -0.05]**	-0.05(.07)	[-0.20, 0.10]
Fairness x gender					0.08(.07)	[-0.05, 0.20]
PPR x gender					-0.09(.11)	[-0.31, 0.12]
Fairness x PPR x gender					-0.12(.09)	[-0.30, 0.07]
R^2 adjusted	.6236		.6254		.6249	
R^2 change			.0018		.0005	
<i>F</i> -statistic	245.3		229.6		189.3	
<i>Note.</i> $*p < .05$. $**p < .01$. $**$	p < .001.					

Table 4. Summary of Hierarchical Regression Analyses of Predictors of Marital Quality (N = 1918).

	W	odel I	Mc	idel 2	W	1odel 3
Variable	b(SE)	95% CI	b(SE)	95% CI	b(SE)	95% CI
Perceived Fairness	-0.07(.01)	[-0.10, -0.04]***	-0.08 (.01)	[-0.10, -0.05]***	-0.04(.02)	[-0.08, -0.00]*
PPR	-0.67(.02)	[-0.72, -0.63]***	-0.70 (.02)	[-0.74, -0.65]***	-0.68(.03)	[-0.74, -0.61]***
Gender	-0.06(.02)	[-0.10, -0.01]**	-0.06 (.02)	[-0.10, -0.01]*	-0.05(.02)	[-0.10, -0.00]*
Ethnicity	-0.02(.06)	[-0.14, 0.11]	-0.02 (.06)	[-0.14, 0.10]	-0.03(.06)	[-0.15, 0.10]
Race	-0.01(.04)	[-0.07, 0.08]	0.01 (.04)	[-0.07, 0.08]	0.00(.04)	[-0.07, 0.08]
Income	0.00(.00)	[-0.00, 0.00]	0.00 (.00)	[-0.00, 0.00]	0.00(.00)	[-0.00, 0.00]
Education	-0.00(.01)	[-0.01, 0.01]	-0.00 (.01)	[-0.01, 0.01]	-0.00(.01)	[-0.01, 0.01]
Employment	-0.00(.02)	[-0.05, 0.05]	-0.00 (.03)	[-0.05, 0.05]	0.00(.03)	[-0.05, 0.05]
Partner employment	0.02(.03)	[-0.03, 0.07]	0.02 (.03)	[-0.03, 0.07]	0.02(.03)	[-0.03, 0.06]
Marital status	-0.04(.06)	[-0.15, 0.07]	-0.04 (.06)	[-0.15, 0.07]	-0.04(.06)	[-0.15, 0.07]
Years married	0.00(.00)	[-0.00, 0.00]	0.00 (.00)	[-0.00, 0.00]	0.00(.00)	[-0.00, 0.00]
Children in household	0.02(.01)	[-0.01, 0.04]	0.01 (.01)	[-0.01, 0.04]	0.02(.01)	[-0.01, 0.04]
Neuroticism	0.11(.02)	$[0.08, 0.15]^{***}$	0.11 (.02)	$[0.08, 0.15]^{***}$	0.11(.02)	$[0.08, 0.15]^{***}$
Fairness x PPR			-0.04 (.02)	[-0.08, -0.00]*	-0.02(.03)	[-0.09, 0.04]
Fairness x gender					-0.06(.03)	[-0.12, -0.01]*
PPR x gender					-0.05(.05)	[-0.14, 0.04]
Fairness x PPR x gender					-0.05(.04)	[-0.12, 0.03]
R^2 adjusted	.4497		.4507		.4522	
R^2 change			.0010		.0015	
<i>F</i> -statistic	121.8		113.6		94.33	
<i>Note.</i> $*p < .05$. $**p < .01$. $**$	p < 0.001.					

Table 5. Summary of Hierarchical Regression Analyses of Predictors of Marital Strain (N = 1923).



Figure 1. Simple Slopes Analysis for Perceived Fairness and PPR on Marital Quality.

Figure 2. Johnson-Neyman Interval for Perceived Fairness and PPR on Marital Quality.





Figure 3. Simple Slopes Analysis for Perceived Fairness and PPR on Marital Strain.

Figure 4. Johnson-Neyman Interval for Perceived Fairness and Marital Strain.

