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BREAKING THE "IRON" BARRIER:

IMPLICATIONS OF DEVIANCE NEUTRALIZATION THEORY ON THE DIVISION

OF HOUSEHOLD LABOR AND HEALTH

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ABSTRACT

This study examined the interplay of gender dynamics in working Australian married couples. The effects of gender norms and hours worked both inside and outside of the home on health, satisfaction, and work-family conflict was examined. The goal of this study was to demonstrate that the way in which household labor is divided, as predicted by gender, hours worked, and income level relative to one's spouse, can have serious health effects on women and men in married couples, both directly and in combination with work-family conflict and perceptions of fairness. Further, this research examined whether or not gender ideology can explain the relationships among conflict, fairness perceptions, and health among married working couples. The tenets of deviance neutralization theory (Greenstein, 2000) suggest that women are breaking with gender norms when they are the female breadwinner. Thus, the principles of this theory demonstrate that female breadwinners may attempt to preserve gender roles within the home (females perform more housework than their husbands). For the purposes of this paper, female breadwinners who also do the majority of housework were termed "lionesses."

Using HILDA data, Wave 5 (2005), this paper demonstrated that the majority of women still performed more housework than their husbands, whether they were a breadwinner or not. Further, although gender norms were not a significant predictor of the household division of labor, those women who were lionesses reported the same level of work-family conflict and satisfaction with the division of household labor/childcare as their counterparts who did not perform the majority of housework. Although this paper did not demonstrate that overall physical or mental health differences were observed between lionesses and non-lionesses within the female breadwinner subsample, significant differences were found in one facet of mental health – emotional functioning. Thus, this paper contributes to the literature by demonstrating the possible negative effects of continuing to perform greater amounts of work both inside and outside of the home for lioness women. Further, this paper also demonstrated that lioness women may not report greater work-family conflict or lower fairness, despite the fact that hours worked within the home were greater overall.

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Chapter 1

Introduction

The division of household labor is becoming important as women continue to enter the workforce in increasing numbers (U.S. Bureau of Labor Statistics, 2007). It is one of the greatest areas of conflict and dissatisfaction among married couples (Kluwer 1998, 1996, 2000). In fact, almost a quarter of women and men report the division of household chores as a key motive for divorce (deGraaf & Kalmijn, 2006), nearly double the percentage reported in the 50s and 60s. Finally, the gender gap in the reporting of division of labor problems is increasing, with women reporting greater problems than men (deGraaf & Kalmijn, 2006). Therefore, whether paid or unpaid, both inside and outside of the home, the division of work has important implications for working families.

Historically, women performed more household work than did men (Hochschild, 2003; Lu, Maeme, & Bellas, 2000; Bird, 1999). The home is traditionally considered the woman's domain in much the same way that the workplace historically was considered a "man's world." Although men and women increasingly participate at similar rates in the workplace (U.S. Bureau of Labor Statistics, 2007), discrimination still prevails in higher levels of organizations, with females constituting 23.3% of CEOs in the country (U.S. Bureau of Labor Statistics, 2007). Further, although women hold half of all managerial, professional, and related jobs (U.S. Bureau of Labor Statistics, 2007), little appears to have changed at home in the U.S. as women continue to perform more housework than men.

The goal of this study is to demonstrate that the way in which couples divide paid work and housework may be significantly guided by gender norms and that the division of household labor can have implications for health (both mental and physical), despite the fact that higher

levels of work-family conflict and lower levels of satisfaction with the division of household labor may not be reported.

I specifically focused on female breadwinner couples in order to examine the effects of working conditions of female breadwinners (who are making more money than their husbands) whom are also performing greater amounts of work in the home. In order to address the goals of this study and because the data was collected in Australia, I first reviewed literature on the Australian workforce statistics compared to the U.S in women's workforce participation, gender norms, and housework norms. Next, I reviewed the literature on gender, income, and the implications of exchange, bargaining, equity, and deviance neutralization theories in order to provide an explanation for the underlying dynamics involved in marital exchanges in paid and unpaid labor. Hours worked outside the home, income at the individual level, and also the proportion of work hours and income at the couple level were identified as important exchange factors and are important for understanding the division of household labor. Further, in the next section, the way in which gender ideology is linked to the division of paid work and household labor is presented as a key factor in predicting the household division of tasks. This section is followed by a discussion of non-traditional working couples where the wife earns more income. Exchange theories do not necessarily account for the effects that adhering to a traditional gender ideology may have on the household division of labor when a female is the breadwinner. In these situations, the theory of deviance neutralization may be more helpful in explaining the household division of labor than previous frameworks. Thus, I discuss work-family conflict and fairness perceptions, as they stem from the division of labor, with regard to gender norms, and, specifically the ways in which female breadwinner couples with traditional gender ideology may report lower levels of conflict and higher levels of fairness. Finally, I discuss the potential health implications of female breadwinner couples, both for those who use deviance neutralization and for those who do not.

This study adds to the current literature by integrating theories of equity and exchange with deviance neutralization theories in order to understand how more traditional and non-traditional couples navigate the division of paid and household labor. Figure 1 and Figure 2 may help to clarify the predicted links between variables. Figure 1 demonstrates the predicted directionality of all of the hypotheses, while Figure 2 focuses on the predicted hypotheses for deviance neutralization. These figures can be found in Appendix A.

The Australian Context

This study examined the division of household labor among working couples within the Australian workforce. In many ways, Australia is similar to the United States of America. Both countries have implemented anti-discrimination and affirmative action policies in similar ways and, further, equality of access to social policies is available similarly, suggesting that both countries are equivalent in terms of the promotion of women's economic independence (Fuwa & Cohen, 2007). For example, 68% of women aged 15-24 were in the labor force by 2005 in Australia, which is similar to 65% of women aged 16-24 in the US labor force in 2005 (Australian Bureau of Statistics, 2007; US Bureau of Labor Statistics, 2009).

This is particularly interesting because, in comparison with the U.S., Australia shows similar yet greater traditional patterns of workplace discrimination. Further, in terms of actual gender ideology, Australia continues to strongly embrace feminine and masculine ideals, suggesting that the gender role attitudes of working women and men may be more resistant to change than those in more egalitarian countries (Bittman et. al, 2003). Australian women aged 25–54 years tend to have lower labor force participation rates than women in comparison countries (Australian Bureau of Statistics, 2007). A study conducted by the International Labour Organisation revealed that Australia had the lowest percentage of women in management in the industrialized world in the early nineties (Sharma, 1997). In 1993, for example, women represented only 26 percent of all managers, 22 percent of specialized managers, 14 percent of

general managers, and less than 5 percent of senior executives or board of directors (Sharma, 1997). The Australian Bureau of Statistics showed that in 1996 average male total weekly earnings ($671.50) were more than 50 percent greater than average female total weekly earnings ($441.10) (Sharma, 1997). Although participation has increased since 1997, there are still large gaps between women's participation in higher levels of organizations, with only 12% of executive positions being held by women (Catalyst, 2006). This is similar to the U.S, which had 14.6% of executive positions being held by women in 2006 (Catalyst, 2006). In fact, only 6 of the top 200 companies in Australia are led by women (compared to 8 female CEOs within Fortune 500 companies in the US) (Catalyst, 2006). These statistics demonstrate that in Australia, as in the U.S., women (compared with men) are not equally represented in positions of power. One reason provided for this unequal representation is that women's unequal home demands may inhibit their continued or increased participation in the workplace or keep women from entering these top management positions.

The Australian culture presents an interesting context for applying theories of the division of household labor. In 1991, women's labor made up 70% of unpaid work time (Bittman & Lovejoy, 1993). By 1993, the attitudes of women and men in Australia were seemingly changing, and both groups were shown to report that they favored equality both in the workplace and at home (Bittman & Lovejoy, 1993). However, a closer look at Australian household practices showed that although there were small increases in the participation of men in traditionally feminine tasks, husbands with full-time employed wives still did no more housework than husbands with stay-at-home wives (Bittman & Lovejoy, 1993). Therefore, although people in Australia report greater attitudes of equality regarding the division of household labor, little actual behavior change has occurred. Because Australians hold more traditional gender norms than Americans (Prince-Cooke, 2006), Australian women (even when they are the breadwinner) tend to work longer hours in the household than American women do. This may be because the

notion of a female breadwinner is less common in Australia than it is in the U.S. (Bittman et al., 2003). Australian women, then, who are earning more than their spouses and hold traditional gender attitudes may increase the amount of housework performed (Greenstein, 2000). This increase in work hours outside of the home as well as continuing to perform many hours of housework may lead to exhaustion and have implications for work-family conflict and perceptions of the fairness of the distribution of labor within this sample.

Further, the amount of time spent performing housework in general in Australia is much greater than it is in the U.S., with couples averaging 33 hours per week spent on housework compared to 19.8 hours in the U.S. (Fuwa & Cohen, 2007). The gendered division of labor in the U.S. and Australia becomes clear when examining the hours spent by women versus men on household tasks. On average, husbands in the U.S work 6.6 hours per week in the home, while their wives work 13.2 hours on average (Fuwa & Cohen, 2007). However, in Australia, wives work 21.5 hours per week, compared to husbands, who work 11.5 hours (Fuwa & Cohen, 2007). In terms of housework ratio, then, Australian women obtain similar amounts of help from their husbands with a housework ratio of .65, compared to the ratio in the U.S which is .66. However, the greater total amount of housework performed in Australia (21.5 total housework hours per week in Australia versus 13.2 total housework hours per week in the U.S.) adds to the burden of women who are both participating in the workforce and performing greater hours within the household.

Because of the stronger adherence to gender norms and the greater amount of housework performed overall, Australia is a particularly appropriate place to examine the effects of the household division of labor and work-family conflict on health. The results of this paper contributes to the existing literature by examining the effects of the division of household labor on working couples as well as by examining the effects of work-family conflict on this relationship, while taking into consideration the effects of deviance neutralization on the

reporting of both work-family conflict and satisfaction with the division of labor. Now, we turn to the theoretical frameworks for the division of household labor, with regard to the effects of gender and income.

<div align="center">GENDER, INCOME, AND EXCHANGE THEORIES</div>

When women are contributing little to the household in terms of income, it may be an indicator of traditional gender roles within the household (Bittman et al. 2003; Brines, 1994; Greenstein, 2000; Prince-Cooke, 2006). According to traditional gender stereotypes, women perform nearly all of the household duties, while men perform most of the paid work. This "gender specialization" is thought to be beneficial to both partners in the sense that it allows the couple to be mutually dependent on one another (Prince-Cooke, 2006). Both partners, in a sense, depend upon one another, because neither partner performs all of the jobs that go into making the couple "work" on a daily basis. This gendered division of labor has also been labeled the two "separate spheres", one of work (which is male) and one of the home (which is female) (Lundberg & Pollak, 1993).

This viewpoint suggests that when husbands and wives are responsible for separate and distinct sets of work activities (Lundberg & Pollak, 1996), they are not required to coordinate or compromise with one another, creating optimal conditions for both husbands and wives. However, traditional arrangements are less frequent today because both partners in married couples increasingly participate in the labor force (Australian Bureau of Statistics, 2007; U.S. Bureau of Labor Statistics, 2007). Further, research shows that when either member of the couple feels that arrangements either inside or outside of the home are unfair, greater levels of marital conflict and lower marital satisfaction can result in divorce (Lavee & Katz, 2002; Prince-Cooke, 2006).

Exchange Theory: Paid and Non-Paid Work

One theory underlying gender specialization is exchange theory (Bittman, England, Sayer, & Folbre, 2003). According to this theory, the economically dependent person contributes to the relationship by providing more non-monetary goods and, in return, receives monetary goods from the non-dependent partner. Because the economically dependent person relies on the more independent person for economic resources, this dependent person (more often the woman) is unlikely to discontinue the exchange. Further, the economic contributor does not see the need to provide the dependent partner very much in exchange (beyond economic value) for their contributions. The more independent partner perceives that they do not have to contribute a lot in non-monetary ways in order to remain in a relationship with the dependent partner, since that person is not seen as providing much economic value. Since women often make less of an economic contribution in a relationship in comparison to men, given the gender pay gap and the lower representation of women in high powered positions in the workplace (Australian Bureau of Labor Statistics, 2007; U.S. Bureau of Labor Statistics, 2007), women are more likely to be viewed as dependent and may be asked to contribute more in other ways, such as housework, to their relationship while receiving less assistance in exchange.

Bargaining Theory: The Division of Paid Work and Housework

Another line of research using bargaining theory describes the exchanges between husband and wife to be based around "threat points" (Bittman et al., 2003). This model describes the marital relationship as one that is constantly balancing the threat of divorce. The threat point is measured in terms of the resources that individuals in a relationship have to tap if the relationship ends. So, for example, if a woman has more to lose in the ending of a relationship as opposed to a man, then the man would have fewer reasons to provide the woman with a fair exchange. He would, in essence, have more bargaining power over the woman, and therefore, more power to create the conditions in the marriage that are more favorable to him, including performing less housework. In this way, the "threat point" is used to exert power over the more

dependent member within a relationship because the dependent person has fewer resources to use in the event of a divorce. Again, because the less powerful person in a relationship is more likely to be a woman, as measured by income differentials and power differentials in the workplace (Australian Bureau of Statistics, 2007; U.S. Bureau of Labor Statistics, 2007), women are at greater risk for potential oppression and power misuse than men. Therefore, a woman is assumed to be in a better exchange/bargaining position with her husband when she is employed in paid work.

In addition to participation in paid work (income and hours worked), the extent to which a woman is working (both in terms of total hours and compensation for work) *relative* to her spouse is important (Prince-Cooke, 2006). For example, for income, the total amount of money made makes much less of a difference than the amount in relative terms. In other words, a husband who makes a million dollars a year and a wife who makes $700,000 dollars a year are in a similar situation in terms of the adherence to traditional gender norms, to a husband who makes $10,000 dollars a year and a wife who makes $7,000 dollars a year. Although total income matters in many ways, the proportion of the husband's and the wife's income or hours worked tends to have similar effects no matter what the income level (Prince-Cooke, 2006).   In fact, it has been demonstrated that the proportion of income and hours worked seems to be the best measure of division of labor, over and above the use of separate frequencies for husbands and wives (Atkinson & Huston, 1984). Further, this comparison within couples produces some interesting results in terms of the gendered division of household labor. Thus, this study attempts to replicate previous findings by predicting that:

  a. *Men work more hours than women in paid work.*

  b. *Men earn a higher income than women.*

  c. *Men work fewer hours in the household overall than women.*

d. The percentage of income/hours worked will be negatively related to the percentage of household labor completed for men.

The Implications of Income and Hours Worked for the Division of Household Labor

It has been shown that women who work fewer hours than their partner outside of the home are likely to do more household work (Greenstein 2000). These women are also likely to report more fairness in the distribution of household labor (Lennon & Rosenfeld, 1994). Women who perform all of the housework while their husband does all of the work outside of the home reporting the highest levels of fairness (Lennon & Rosenfeld, 1994). These women may perceive this gender specialization of tasks (Bittman et al, 2003) as being fair (e.g. husband takes care of work outside of the home, while wife takes care of work inside of the home). Thus, perceptions of fairness, in this case, are not based on actual hours worked in the home, but rather how these hours are perceived in light of the overall contribution of both partners to the marriage. However, there is evidence that the more couples increasingly equally share the division of paid work, the more equally they share the household labor as well (Bittman, England, Folbre, Sayer, & Matheson, 2003).

For those couples who equally divide household labor, this division of labor becomes more equal when both partners also contribute similarly to the household income (Bittman et al., 2003; Brines, 1994; Greenstein, 2000; Prince-Cooke, 2006). This implies that as partners begin to contribute equally in terms of income and hours worked outside of the home, these equitable practices are also maintained inside the home. Consistent with previous theory, exchange theory (Bittman et al., 2003) provides a basis for understanding equitable interactions and exchanges within marriage. Assuming both partners are equally dependent upon one another, when one partner decides to lessen their contribution to the relationship, exchange theory states that the other partner acquires greater power. The balance of equality is upset in the relationship by

contributing less in the household or outside of the home. The partner who decreases his/her contribution is relinquishing power to their spouse. When one individual is contributing less to their relationship than their partner in terms of paid work or household labor, he or she becomes more dependent and, therefore, holds less power. Conversely, the individual performing more work, either outside or inside of the home now has more independence from their partner, and therefore, holds greater exchange power. When this occurs, the individual no longer contributes in an equitable way, which can create stress. Thus, exchange theory states that this would not be favorable to either party involved and could cause distress in the marriage.

Bargaining theory (Bittman et. al, 2003) would also suggest that equitable arrangements are favorable for both members of the couple. Threat points are created when one partner has greater bargaining power over the other. Thus, these threat points could potentially be eliminated if both partners held equal power. Further, equitable exchanges would be more likely, given that one partner does not have the power to make arrangements which are only favorable to him/herself. Therefore, bargaining theory, like exchange theory, also indicates that equitable arrangements both inside and outside of the home are preferred for both members of the couple.

Equity theory, which states that unfair exchanges decrease satisfaction for both parties (Klumb, Hoppmann, & Staats, 2006) can also be applied in order to understand the psychological undercurrents between partners when they perceive they are either doing more or less than their equitable share. Equity theory is similar to exchange theory because the focus is on the exchange between two people. Yet, equity theory differs from exchange theory because, while exchange theory asks who holds the power in the relationship and generally ascribes satisfaction to the person with the most power, equity theory suggests that neither person in the relationship will be happy when exchanges are inequitable, regardless of the power one holds. For women adhering to traditional gender roles, performing more housework could lead to feelings of unfairness in the home when sharing is not equitable. On the other hand, trying to rectify this injustice by doing

less housework may result in feelings of distress because it violates prescribed gender roles. Equally sharing work, on the other hand, might be associated with lower distress for both parties.

According to exchange, bargaining, and equity theories, equality between individuals is beneficial for both people, particularly because it is associated with a lower risk of divorce (Prince-Cooke, 2006) and because perceptions of unfairness in the division of household labor is linked with marital conflict and marital dissatisfaction (Lavee & Katz, 2002).

H1: Gender moderates the relationship between the percentage of income/hours worked and the percentage of housework performed, such that both groups will do less housework as work hours increase, but men will perform less housework and women will perform more housework overall (See Figure 3).
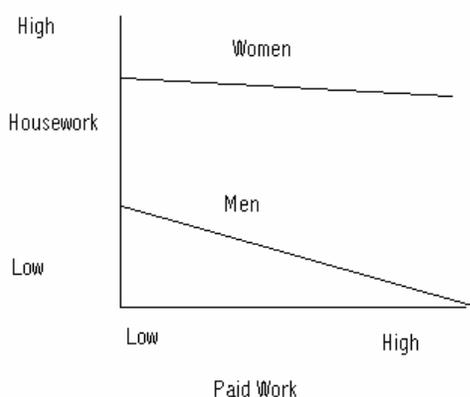
Figure 3. Hypothesized moderation of gender on the relationship between income/hours worked and housework hours

GENDER ATTITUDES – TRADITIONAL AND NON-TRADITIONAL

It may be that the more strongly an individual subscribes to traditional gender roles, the more likely one may be to adhere to the tenets of previous theories, particularly bargaining and

exchange theories. Research demonstrates that adherence to traditional gender roles is associated

with a more traditional division of labor inside the home (Lu, Maeme, & Bellas, 2000). Further,

adherence to traditional gender ideology has been found to preserve the unequal distribution of

labor in the home more than nonparticipation of wives in the workforce (Pina & Bengston, 1993).

Husband's gender ideology has been shown to be a predictor of the division of household labor

(Pyke & Coltrane, 1996). In conjunction, women with traditional gender ideologies have showed

greater clarity about their role both inside and outside of the household because well-developed

roles are available to them (Buunk, Kluwer, Schuurman, & Siero, 2000).

 Further, the ways in which women or men identify themselves outside of the home can

influence household work sharing. For example, husbands and wives that consider themselves

"co-breadwinners" are more likely to share labor in the household (Deutsch, 2001). Those who

identify more strongly with masculine and feminine traits interpret, evaluate, and organize

information in terms of traditional gender roles (for example, men should be the sole breadwinner

for the family and women should be responsible for work inside the home) (Bem, 1985). Thus,

research has shown that in a sample of couples who have nontraditional arrangements outside of

the home, partners still continued to maintain traditional gender identities by reporting that the

male is the breadwinner (Deutsch & Saxon, 1998). The women were reported to have only

participated in paid work due to financial pressure, and being a mother was still considered the

central role (Deutsch & Saxon, 1998). Therefore, gender ideology may affect the ways in which

individuals perceive their roles within a couple, even if objective information about income and

hours worked indicates that partners are equally sharing paid labor.

 Greenstein (2000) discussed gender ideology as one explanation for the way that couples

divide household labor. According to this perspective, couples divide up routine household

activities according to their adherence to gender norms. For example, among couples with more

traditional relative employment hours, husbands spend less time doing female sex-typed

household tasks, such as laundry or washing dishes (Atkinson & Huston, 1984). Therefore, it appears that gender ideology may be one guiding process behind the division of household labor. Thus: *H2: Gender attitudes will moderate the relationship between income/hours worked and the proportion of housework, such that, among women, traditional gender attitudes will be negatively correlated with the proportion of income/hours worked and positively correlated with the proportion of housework performed, and, among men, traditional gender attitudes will be positively correlated with the proportion of income/hours worked and negatively correlated with the proportion of housework performed (See Figure 4).*
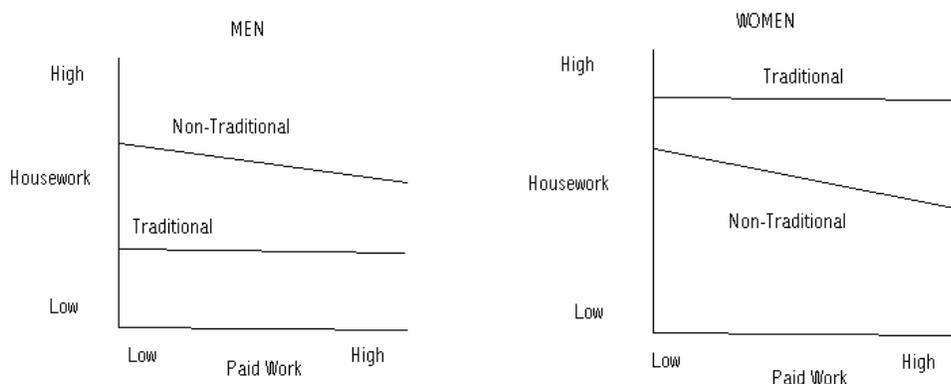
Figure 4. Hypothesized moderation of traditional gender ideology on the relationship between proportion of income/hours worked and housework hours for women and men

Defying the norms at work and at home

When a female is the breadwinner of family, the predictions based on equity theory, bargaining theory, and exchange theory do not appear to hold up. Logically, according to equity theory, when the wife is the main economic contributor, the husband should contribute more to housework. Yet, interestingly, the opposite pattern has been found (Perry-Jenkins & Folk, 1994; Bittman & Lovejoy, 1993; Van Willigen & Drenten, 2001). That is, husbands with wives who work full-time do *no more* housework than husbands with wives that are *unemployed*. Given this

finding, it appears that men's work inside the home increases as the relative proportion of hours worked outside the home decreases, until it reaches a plateau. As a husband's work hours continue to become proportionately less than their wife's and the wife's work hours become proportionately more than their husband's, men's participation in the household decreases. In essence, after the number of hours spent in the labor force by a woman proportionally exceeds that of a male, increases in paid work hours and income are linked to lower levels of help from males in the household. Hochshild (1989) found that one-fifth of husbands who earned more than their wives split the housework (although husbands are more likely to do male sex-typed chores, such as mowing the lawn, car maintenance, and cleaning the garage), along with one-third of those who earned the same as their wife, but none of the husbands who earned less than their wives performed the majority of household work. This pattern clearly puts pressure on women, not only to work full-time outside of the home, but also to carry the entire burden of the household as well.

This phenomenon is not consistent with exchange theory or bargaining theory because, according to these theories, the female breadwinner should have greater resources and greater bargaining power, and therefore, a greater opportunity to negotiate preferable household arrangements. Yet, these women (who work more hours or are paid more than their husbands), are contributing more hours to housework than their husbands. This phenomenon is also inconsistent with equity theory, given that an equitable arrangement should be viewed as preferable to both partners. Thus, women should not be asked to perform greater amounts of paid work as well as housework.

THE EFFECTS OF DEVIANCE NEUTRALIZATION ON THE DIVISION OF

HOUSEHOLD LABOR

While exchange, bargaining, or equity theory cannot fully account for these findings, the theory of deviance neutralization may explain the phenomenon which occurs within female breadwinner couples (Greenstein, 2000). As women increase hours spent in the workforce relative to their husbands, traditional gender roles may be threatened. Because the notion of a female breadwinner does not fit with traditional gender stereotypes, women and men in these non-traditional couples may feel that they must "make up" for violating traditional gender norms outside of the home. This is referred to as "deviance neutralization." Women may perform the majority of housework in order to feel they are, in a sense, still fulfilling their "womanly duties." Similarly, the husband of a female breadwinner may also feel that he is departing from (or failing in) his masculine role by not being the major financial provider for the family. This would explain why adhering to traditional masculine divisions of labor in the household occurs. If a husband does not believe he is adequately fulfilling the breadwinner role (outside of the home), he may preserve his masculinity by opting out of household duties thereby diffusing feelings of gender deviance.

Exchange theory, equity theory, and bargaining theory can explain instances where traditional gender roles are enacted or the situation is gender neutral. However, when gender roles are violated, deviance neutralization appears to provide a more accurate or nuanced explanation (Greenstein 2000). Neutralizing gender deviance does not necessarily make up for the fact that women are often doing more than their fair share of housework, as well as working long hours outside of the home. Also, it may be that one component or commodity within the exchange has to do with one's gender. In other words, women and men are expected to contribute different types of work, or women are expected to contribute more than men in the household, regardless of work completed outside of the home. The expectation that women should "do it all", both

inside and outside of the home, is consistent with the theory that traditional gender roles persist and exert their influence on women and housework, especially for women who work more hours in the home and have a higher income than their husband (Weber, 1998). In order to examine the effects of deviance neutralization, it is important to first establish that deviance neutralization is, in fact, occurring in the current sample. Thus:

H3: (a)Among couples with traditional gender ideology, women will do more household work than their husbands regardless of their participation in paid work and (b) among those with non-traditional gender ideology, couples will be more likely to have similar incomes/hours worked and do similar amounts of housework to their partner.

The Effects of Deviance Neutralization and Gender Role Ideology on Reports of Work-Family Conflict and Facilitation

Work-family conflict exists when specific behaviors devoted to the requirements of one role make it difficult to fulfill the requirements of another role, resulting in strain (Greenhaus & Beutell, 1985). Relatedly, work-family facilitation is defined as "the extent to which the participation at home is made easier by virtue of the experience, skills, or opportunities gained or developed at work" (Frone, 2003). Integrating gender deviance, deviance neutralization, and gender ideology allows us to understand potential research inconsistencies in the reporting of perceived work-family conflict and work-family facilitation among female breadwinners. Further, it is critical to consider the division of household labor as well as the role of paid work when assessing work-family conflict or work-family facilitation. First, gender roles are not violated when the male is the breadwinner, and the female performs the household labor. Thus, research reports that women perceived greater work-family conflict than men because they experience more strain when work interferes with family than men do, particularly when women

adhere to traditional gender ideologies (McElwain, Korabik, and Chapell, 2004). For instance, it has been demonstrated that employed married women with children spend the same amount of time in childcare even as their work hours increase (Barnett & Gareis, 2007). This finding serves as an indicator of the potential persistence of gender role ideology in the division of household labor, despite increasing work hours. Couples may utilize deviance neutralization in order to decrease strain between work and non-work roles because gender roles are preserved within the home, which may alleviate stress caused by conflicting gender roles outside of the home. This rationalization could result in the reporting of lower levels of work-family conflict and higher levels of work-family facilitation.

Similarly, when both individuals contribute equally to a partnership, gender norms may be preserved, although not strictly adhered to depending upon the situation. Both parties may report similar, moderate levels of work-family conflict and facilitation. This is supported by research which shows that those with more egalitarian division of labor report greater dissatisfaction in the division of labor than those in traditional roles, because a small difference in equality becomes noticeable (Buunk, Kluwer, Schuurman, & Siero, 2000).

In contrast, for those couples where the woman earns proportionally more income than her husband, gender norms are clearly violated. This combination of traditional gender ideology and non-traditional work arrangements is the focus of the current study. For these couples, gender neutralization may occur in the household, such that both parties experience less role conflict. That is, those women who are both the breadwinner and complete most of the household labor may report less work-family conflict and more work-family facilitation than women who feel that they are doing less than their fair share of the housework. Because traditional gender roles are used as a guide to clarify appropriate behavior in both work and non-work domains, little work-family conflict is expected. This is more likely to be the case when one strongly adheres to traditional gender roles.

Wives who have a higher income than their husbands, and do not perform the majority of housework, do not neutralize their "gender deviance" (Greenstein 2000). They may perceive more work-family conflict and less work-family facilitation (less work family balance overall) than those who utilize deviance neutralization because they not only engage in more masculine activities and fewer traditional feminine ones, but their husbands do not contribute in ways that are consistent with masculine roles. Similarly, husbands who are not the breadwinner and work greater hours in housework may also feel that their job conflicts more with their role in the home, despite the fact that they are not the main economic contributor. The role in the home (e.g. doing more housework than their wife) does not allow them to compensate for gender deviance in the workplace. This effect has been demonstrated by examining the effect of gaps between gender attitudes and the division of household labor on work-family conflict (Strandh & Nordenmark, 2006). It was shown that the smaller the gap between gender ideology and the division of household labor, the less work-family conflict was reported. Thus, those women who are using deviance neutralization to conform to personal gender ideology may report less work-family conflict, despite the fact that they are doing more actual work.

This may seem counterintuitive, given that it seems logical that work-family conflict would occur for those that are doing the most work, both inside and outside of the home. But, because these groups are at least able to rectify their gender deviance in the home, groups that do not have this outlet may actually feel that their jobs in the workplace are interfering more with their jobs at home than those who do not use deviance neutralization. Thus, research on the effects of the division of labor and gender ideology on work-family conflict, taken together with the previously discussed findings about perceptions of fairness, particularly for those women and men with traditional gender ideology (Bittman, et. al, 2003; Lennon & Rosenfeld, 1994) suggests that:

H4: In couples with traditional gender role ideology, where the wife makes a higher proportion of income and does a greater proportion of housework (lioness), the wife will report lower levels of work-family conflict, higher levels of work-family facilitation and higher levels of fairness (deviance neutralization), than those wives who make a higher proportion of income and do a lesser proportion of housework (Refer to Figure 2).

H5: In couples with traditional gender role ideology, husbands who have a lower proportion of income and work less hours in the household will report lower levels of work-family conflict, higher levels of work-family facilitation, and higher levels of fairness (deviance neutralization), than those husbands who have a lower proportion of income and work more hours in the household (Refer to Figure 2).

Health Effects of the Division of Household Labor and Work-Family Conflict

As previously discussed, the division of household labor, as well as the division of paid labor, can have great implications in the lives of women and men. Thus, it is plausible that one's health may be affected by the arrangements that are made between a husband and wife in terms of the division of labor. Sharing housework decreases depression in wives, while simultaneously increasing marital and personal well-being (Perry-Jenkins & Folk, 1994). More equal distributions of labor in the home are linked to higher levels of psychological well-being among women (Pina & Bengston, 1993). Bird (1999) found that men's lower contributions to household labor partly explained differences in depression between women and men and, further, found that the amount of time spent doing housework made less of a difference in levels of distress than perceived inequity in the division of labor. Also, Bird (1999) found that among full-time working women, depression was highest for wives who performed 79.8% of household labor, and that depression was lowest for those who performed 42.3% of the housework. Husbands' household contributions were related to wives' mental health as well (Gjerdingin & Chaloner, 1994;

Almeida, Maggs, & Galambos, 1993; Saenz, Goudy, & Lorenz, 1989), such that the more a

husband contributes, the better the mental health of his wife.

Although there is extensive literature on mental health, there is evidence that the division

of household labor can influence physical health as well. Research shows that having an

egalitarian viewpoint inside of the home is beneficial to both members of the relationship in many

ways (Bittman et al. 2003; Brines, 1994; Greenstein, 2000; Prince-Cooke, 2006). For example,

the unequal division of household labor was shown to have a direct, negative effect on physical

health which compiled over time in a sample of Russian women (Cubbins & Szaflarski, 2001).

Particularly among women who experience conflict and unequal division of labor over extended

periods of time, mental distress may manifest itself adversely, affecting physical health. Further,

husbands whose wives fall ill, and therefore cannot perform household duties, were more likely to

help with household chores only if they were happy in their marriage and held egalitarian

attitudes (Allen & Webster, 2001). Apparently, when the husband holds more egalitarian views

and is happy, he contributes more to household labor. Finally, as proposed in this study, job-

related time and household division of labor accounted for combined effects on wives' physical

health, though not husbands' (Cubbins & Szaflarski, 2001).

There is extensive evidence that work-family conflict can have deleterious health effects.

Adams and Jex (1999) found that health complaints were positively related to levels of work-

family conflict. Also, work-family conflict, family-role stress, and work-role stress have all been

significantly linked to lower physical health (Grandey & Cropanzano, 1999). Gryzywacz (2000)

also demonstrated that work-family conflict is linked to poor physical health outcomes. There is

a high risk of role overload, stress, and psychological illness stemming from work-family conflict

linked to the division of household labor over time (Strandh & Nordenmark, 2006).

Given the effects of the division of household labor and work-family conflict on health,

and utilizing the tenets of the theory of deviance neutralization, it is possible that those who try to

make up for "deviant" gender behavior outside of the home may report that they are experiencing more fair division of labor and less work-family conflict, while nonetheless, experiencing lower mental and physical health. Among non-traditional couples (wife earning a higher income/hours worked than her husband) who adhere to traditional gender ideology and utilize deviance neutralization, partners may feel as if their work is conflicting less with family and that things are therefore, more "fair." But, although reports of fairness and work-family conflict may imply otherwise, physical and mental health may decrease when wives are working more hours in the home and husbands are inactive, leading to counterintuitive health outcomes for those who utilize deviance neutralization. Therefore:

H6: The relationship of the proportion of hours spent performing housework with health will be mediated by fairness perceptions and work-family conflict.

H7: Couples with traditional gender ideology who use deviance neutralization (female breadwinner who does most housework and non-breadwinner husband who does little housework) will report lower levels of work-family conflict and higher levels of fairness. However, they will have worse mental and physical health than those who do not use deviance neutralization (couples with non-traditional ideology and female breadwinner who does not perform greater amounts of housework).

Chapter 2

Methods

Sample

All respondents were taken from the HILDA (Household Income and Labour Dynamics

Survey in Australia), Wave 5 (2005). The final sample includes 1404 people, consisting of 702

heterosexual couples who were both legally married and employed. Each couple in the sample

had children, with 47% of the sample having two children, 24.7% having three children, 17.2%

having one child, and the remainder of the sample (11.1%) having 4, 5, or 6 children. The mean

age of the youngest child was 7.6 years of age (SD = 5.14). Eight participants reported having no

children, but had partners with children and thus were retained in the sample. For employment

status, 65% of the sample was employed full-time, while the remaining 35% was employed part

time. For women, 35.3% of the sample was employed full-time while 95.4% of males were

employed full-time. The mean age of the sample was 40.5 years of age (SD = 6.65) Mean hours

worked per week in all jobs was 37.62 (SD = 15.84). The mean number of hours spent on

housework per week was 36.28 (SD = 24.21). Mean household disposable income (after taxes)

was $83,299.57 (SD = $44,106.43) and mean personal disposable income (after taxes) was

$40,417.44 (SD = $30,144.17).

Operationalization of female breadwinner and lioness (Hypotheses 3, 4, 5, & 7)

Personal income ratio was used to determine who could be categorized as being part of a

female breadwinner couple. Specifically, female breadwinner couples were operationalized as

those couples in which the wife made proportionally more than 50% of the household income.

This resulted in a sample of 138 female breadwinner couples, out of the 702 total couples in the

sample. Out of the 138 female breadwinner couples in the sample, 111 wives (more than 80%) performed more than 50% of the household labor, 79 performed more than 60% of the household labor, 53 performed more than 70% of the household labor, 28 performed more than 80% of the household labor, and 5 performed more than 90% of the household labor. Therefore, 60% was used as the cutoff point to be considered a member of this subsample because almost all (111) of the breadwinner wives did more than 50% of the housework. The cutoff was maintained at 60% or above in order to provide comparison samples of similar size.

Overall, female breadwinners tend to work longer hours in the home even when they are making more money outside of the home. Because female lions both do the hunting for the family and take care of the den (Encyclopedia Britannica, 2009), the couples in which the wife made more than 50% of the income and performed more than 60% of the household work (in reference to their husbands) will be referred to as the "lioness" couples. Those female breadwinner couples in which the wife made more than 50% of the income and who completed less than 60% of the household work will be referred to as "non-lioness" couples. Therefore, husbands of lionesses performed 40% or less of the household labor and husbands of non-lionesses performed more than 40% of the household labor.

Measures

Household hours worked per week

Household hours worked per week was measured by adding together combined minutes and hours spent in housework, errands, childcare, and outdoor tasks.

Personal Income Ratio

The personal income variable was created by 1) subtracting negative disposable income from positive disposable income, in order to arrive at a yearly, post-tax, personal income variable which takes into account various aspects of personal worth (wages and salaries, business income, investment income, private pensions and taxable Australian public transfers). This personal

income ratio was then created by 2) transforming the personal income variable into a ratio score by adding together the personal income of husbands and wives and then dividing each partner's individual personal income by the total. This created two ratios, one for the husband and one for the wife, summing to 1. This calculation is based upon the finding that ratios of income and hours matter more in couples' perceptions than raw income or hours data (Bittman & Lovejoy, 1993; Bittman, et al., 2003; Prince-Cooke, 2006). Thus, for the purposes of this paper, personal income ratio is used as the primary income variable, as opposed to household income (total income of both partners combined) or the raw data for personal income (non-ratio form).

After subtracting negative disposable income from positive disposable income, 4 participants received a negative number for total personal income. The other 1,400 participants had an income falling within the positive range. All participants were retained in the sample, but those with negative income values were set to zero.

Hours Worked Ratio (Work and Housework)

The ratios for hours worked (both paid work and housework) were calculated in the same way as the personal income ratio. For both paid work and housework, husbands' and wives' hours worked per week were added together in order to create a total. Then, the personal number of hours was divided by the whole to get a percentage score. Thus, when added together, husbands' and wives' scores sum to 1. Again, this calculation is based upon the suggestion that the ratios of income and hours have a greater effect on couples' perceptions than total raw hours (Bittman & Lovejoy, 1993; Bittman, et al., 2003; Prince-Cooke, 2006).

Housework and Childcare Satisfaction

Housework satisfaction was measured using a one-item measure, "I am satisfied with the way household tasks are divided between me and my partner." Similarly, childcare satisfaction was measured with one-item, "I am satisfied with the way childcare tasks are divided between me

and my partner." Both items were measured on an 11-point Likert scale, with 0 being

"completely dissatisfied" and 10 being "completely satisfied."

Gender Norms

The gender norms scale was constructed using four items from the HILDA assessing

gender attitudes. A principal components factor analysis using a varimax rotation was conducted.

This test demonstrated that the original measure, which consisted of 17 items, yielded a five-

factor solution. These five factors did not make conceptual sense because many of the items

appeared to be very similar in content, but still loaded on different factors. Since most items did

not load cleanly on the first factor, those items which were highly cross-loaded were deleted from

the scale. Those items which loaded highly on the first factor were retained for the final scale,

resulting in the five item measure used in this paper. A separate principal components factor

analysis was conducted containing the remaining five items. These items loaded on one factor

(eigenvalue = 2.31) and accounted for 46.23% of the variance. The final items in the measure

were: "It is better for everyone involved if the man earns the money, and the woman takes care of

the home and children," "It is not good for a relationship if the woman earns more than the man,"

"On the whole, men make better political leaders than women do," "If parents divorce, it is

usually better for the child to stay with the mother than with the father," and a reverse coded

version of "Children do just as well if the mother earns the money and the father takes care of the

home and the children." Items were scored on a 7-point Likert scale, with 1 being strongly

disagree and 7 being strongly agree. Higher scores indicate more traditional gender norms. This

scale yielded an alpha of .70.

Work-family conflict and work-family facilitation

The work-family conflict and work-family facilitation scales were derived from a larger

scale which originally included 16 items on work-family balance. Principal components factor

analysis using a varimax rotation was conducted. This test demonstrated that the overall scale

yielded a two-factor solution (eigenvalue = 4.94 for WFC; eigenvalue = 3.14 for WFF). The first factor (WFC) accounted for 30.85% of the variance and the second factor (WFF) accounted for 19.61% of the variance. These two factors were interpreted as work-family conflict and work-family facilitation based on item content. The work-family conflict scale (alpha = .86) contained 8 items. Example items are: "Because of the requirements of my job, I miss out on home or family activities that I would prefer to participate in." and "Working leaves me with too little time or energy to be the kind of parent I want to be." For WFC, higher scores mean higher levels of conflict. The full scale is presented in Appendix B.

The work-family facilitation scale (alpha = .88) includes 8 items. Example items were: "Having both work and family responsibilities makes me a more well-rounded person" and "My work has a positive effect on my children." Responses were scored using a 7-point Likert scale, with 1 being strongly disagree and 7 being strongly agree. For WFF, higher scores mean higher levels of facilitation. The full scale is presented in Appendix B.

Physical Health

The physical health scale is a combination of 3 subscale scores. Participants completed a health measure which combined multiple aspects of physical and mental health. This health measure contained a variety of subscales (each scored out of 100 points), which were then aggregated to create a physical and mental health overall factor (Ware, 2000). Three of these subscales – physical health, general health, and bodily pain were combined into an overall factor of physical health for a total of 300 possible points (100 points per subscale) in the combined measure. Principal components factor analysis demonstrated that the subscales load onto one factor (eigenvalue = 1.89). These scales accounted for 63.03% of the total variance. The solution could not be rotated because only one factor was extracted. Example items were: "In general my health is: excellent, very good, good, fair, poor," and "How much bodily pain have you had in the past 4 weeks: no bodily pain, very mild, mild moderate, severe, very severe." The scale items

were from Ware, Snow, Kosinski, & Gandek (2000) and are from the SF-36 Health Survey,

which is produced by QualityMetric, Inc. Higher scores indicate better physical health. The alpha

for this scale is .70. The full SF-36 scale is located in Appendix B.

Mental health

The mental health scale was created by combining 4 subscale scores taken from the SF-

36 Health Survey (Ware et al, 2000). These 4 subscales were social functioning, emotional

functioning, vitality, and mental health overall. Factor analysis demonstrated that all of these

scales load onto one factor (eigenvalue = 2.64). These scales accounted for 65.91% of the total

variance. This solution could not be rotated because only one factor was extracted. Example

items include "During the past 4 weeks, have you accomplished less than you would have liked

as the result of an emotional problem? (yes or no)," "How much of the time during the past 4

weeks have you felt down?" and "How much of the time during the past 4 weeks have you been a

happy person? (both measured using a 6-point Likert scale with 1 being "all of the time" and 6

being "none of the time"). These scales were combined for a possible 400 points (100 per

subscale), with higher scores indicating better mental health. The alpha for this scale is .80. The

full SF-36 scale is located in Appendix B

Weighting

All analyses were weighted by using the responding person weight from the HILDA data,

Wave 5, which is a common method when using panel data. This weight corrects for sampling

distribution errors as well as sample attrition.

Analyses

In order to test the data for primary assumptions of differences in housework, paid work,

and salary for women and men, independent samples t-tests were conducted in order to compare

the mean differences between men and women in the whole sample, as well as within the sample

of full-time workers. In order to test Hypothesis 1 and Hypothesis 2, multiple regression analyses

were conducted to test for moderation in the whole sample, the female breadwinner couples sample, and the lioness couples sample. To test Hypothesis 3, a series of t-tests were performed in order to compare mean differences between women and men in traditional versus non-traditional couples and female breadwinners and female non-breadwinners (as well as their husbands) within the whole sample. In order to test Hypothesis 4, a series of t-tests were performed in order to compare mean differences between female lionesses and non-lionesses within the female breadwinner couples sample. Hypothesis 5 replicated the analyses of Hypothesis 4 in order to compare differences between husbands of female lionesses and husbands of non-lionesses within the female breadwinner couples sample. To test Hypothesis 6, a series of multiple regression analyses were conducted to investigate mediation within the whole sample, the female breadwinner couples sample, and the lioness couples sample. Finally, for Hypothesis 7, a series of t-tests were conducted in order to test for differences between female lionesses and non-lionesses, as well as differences between husbands of lionesses and non-lionesses within the female breadwinner couples sample.

Chapter 3

Results

Data Descriptives

<u>*Whole Sample*</u>

Paid employment hours

Women worked significantly fewer hours per week (M = 27.34) than men (M = 47.16) (t (1190) = 27.65, $p<.05$; d = 1.6). This mean difference was smaller, yet still present, among full-time employed women (M = 42.05) and men (M=48.24) (t(790) = 7.87, $p<.05$; $d=.64$).

Salary

Salary showed a significant effect, such that men earned significantly higher salaries (M = \$51,294.36) than women (M = \$28,657.28) overall (t(1192) = 13.95, p<.05; d = .56). Among full-time workers, men still earn significantly more money (M = \$52,227.14) than women (M = \$36,892.04) (t(792) = 6.05, $p<.05$; d = .49).

House work hours

For the whole sample, correlational analyses (See Table 1a) demonstrated that housework hours (e.g. housework plus errands, outdoor tasks, and childcare) were significantly and negatively related to hours worked per week outside of the home (r = -.50; $p<.01$), personal salary (r = -.27; $p<.01$), and household income (r = -.08; $p<.01$). For men, housework hours were significantly and negatively related to hours worked per week outside of the home (r = -.18; $p<.01$), personal salary (r = -.14; $p<.01$), and household income (r = -.15; $p<.01$)

For women, housework hours were also significantly and negatively related to hours worked per week outside of the home (r = -.37; $p<.05$) and personal income (r = -.12; $p< .05$). Housework hours were not significantly related to household income for women, however (r = -.07; $p>.05$).

Overall, women worked significantly more hours on housework (M = 48.11) than men (M = 29.29) (t(1191) = -18.25, p<.05; d = 1.07). Among the full-time employed, women again worked significantly longer hours in the home (M = 40.00) than men (M = 24.70) (t(791) = -10.47, p< .05; d = .85).

The general housework measure was composed of multiple tasks including household tasks, household errands, childcare and outdoor tasks. Using the full sample, there were gender effects across all types of tasks. Women performed significantly more hours (M = 18.97) than men (M = 6.372) (t(1191) = -23.97, p<.05; d= 1.39) on household related tasks. For household errands, women performed an average of 5.30 hours and men performed 2.96 hours (t(1191) = -9.20, p< .05; d = .53). In childcare, women performed significantly more hours (M = 21.09) than men (M = 10.92) (t(1191) = 1.27, p<.05; d = .65). Men, on the other hand, performed significantly more outdoor tasks (M = 5.05) than women (M = 2.74) (t(1192) = 9.21, p<.05; d = .53).

Gender effects were similar when the whole sample was restricted to only full-time workers. Women perform significantly more household related tasks (M = 16.42) compared to men (M = 6.30) (t(792) = -17.42, p<.05; d = 1.40). The mean of household errands showed marginally significant differences between women (M = 6.30) and men (M = 4.63) (t(791) = -6.24, p = .054; d = .51) with a moderate effect size. Women also performed significantly more childcare tasks (M = 15.534) than men (M = 10.56) (t(792) = -5.42, p<.05; d = .46). Men, once again, performed more work than women in outdoor tasks (M = 4.97; M = 2.61) (t(792) = 6.76, p<.05; d = .55).

Interestingly, both within the whole sample and in the full-time employed workers subsample, time performed on outdoor tasks makes up the smallest amount of total hours spent overall on housework. Household related tasks was the category in which the greatest amount of

time was spent, in both the whole sample and when the sample was restricted to full-time workers only.

Relationship between Housework and Paid Work Hours

For men, the more hours they work, the less housework they perform ($r = -.12$; $p<.05$). For women, however, this correlation was even stronger, such that the more hours one works, the less housework is performed ($r = -.34$; $p<.05$). However, as reported before, the mean level of housework performed is greater for women than men even in a full-time only sample. Therefore, it is important to examine both correlations and means to understand the relationship between paid work and housework hours for women and men. In addition, scatterplots were visually examined in order to determine whether or not a curvilinear relationship between paid work hours ratio and housework hours ratio was present in the sample. However, for both men and women, the trend appeared to be linear. Thus, curvilinear relationships were not tested.

Hypothesis Testing

In order to test Hypothesis 1, whether gender moderates the relationship between personal income ratio and housework hours ratio within the whole sample, main effects for gender and personal income ratio were entered into the regression equation first. Then, the interaction term was added into the equation in the third step. In the third step, effects for gender ($\beta = .30$, p<.01) were significant. However, personal income ratio ($\beta= -.02$, p>.05) was non-significant. Further, the interaction term for gender and personal income ratio was not significant ($\Delta R^2= .00$, $\beta= .02$, p>.05). Thus, the hypothesized moderated relationship was found to be non-significant (see Table 2a). Next, moderation analysis was conducted to test whether or not gender moderated the relationship between the ratio of hours worked per week and the ratio of housework hours worked per week. In the third step, effects for gender ($\beta = .21$, p< .01) and paid hours ratio ($\beta= -.30$, $p<.01$) were significant. The interaction term did not explain any additional variance ($\Delta R^2= .00$, $\beta= -.01$, $p>.05$). Therefore, the hypothesized moderated relationship was

found to be non-significant (see Table 2b). It should be noted that within all non-significant

moderation tables, main effects and hierarchical relationships between variables are presented in

order to provide further information about these variables in relation to one another. The results

pertaining to moderation analyses have been presented in bold so that this information is easily

accessible.

In Hypothesis 2, the moderating effect of gender norms within the whole sample was

assessed. Moderation analyses were conducted in order to test for the moderating effect of

gender norms on the relationship between personal income ratio and housework hours ratio

within the whole sample (including both part-time and full-time workers). Main effects were

entered into the first step and second steps of the equation, with the interaction term added into

the third step. In the third step, the effect of personal income ratio was significant ($\beta = -.12$, $p <$

.01). The effect of gender norms was also significant ($\beta = .02$, $p < .01$). The interaction term was

also significant ($\beta = -.08$, $p < .01$) and the change in R^2 was significant when the interaction term

was entered into the model ($\Delta R^2 = .01$, $p < .01$) (See Table 3a; for a graph of the interaction, see

Figure 4).

To look at this two-way interaction by gender, for males within the whole sample, the

effect of gender norms was non-significant ($\beta = -.02$, $p > .05$), as well as the effect for personal

income ratio ($\beta = -.08$, $p > .05$). The interaction term was also non-significant ($\Delta R^2 = .00$, $\beta = .01$,

$p > .05$) (See Table 3b). Thus, a moderating effect was not found for males. For females, the effect

of personal income ratio was non-significant ($\beta = .03$, $p > .05$), as well as the effect for gender

norms ($\beta = .03$, $p > .05$). When entered into the model, the interaction term was also non-

significant ($\Delta R^2 = .00$, $\beta = -.05$, $p > .05$) (See Table 3c). Thus, gender norms were not found to

moderate the relationship between income ratio and housework hours ratio for men or for women.

Moderation analyses were also conducted in order to test for the effect of gender norms

on the relationship between paid hours worked ratio and housework hours ratio. Main effects

were entered in the first step and the interaction term was added into the second step. For the

whole sample, in the second step, effects for both gender norms (β= .01, p<.01) and paid hours

worked ratio (β= -.57, p<.01) were significant. When the interaction term for paid work hours

ratio and gender norms was entered into the equation, the moderated effect was significant (β= -

.05, p<.05). Further, there was a statistically significant change in R^2 for model 2 (ΔR^2 = .00,

p<.05). However, because the ΔR^2 was .00, this finding is not practically significant. Thus, a

moderated relationship was observed statistically but not practically (See Table 4a; for a graph of

the interaction, see Figure 5) within this sample. For males within the whole sample, the effect

for gender norms (β= .00, p>.01) was non-significant, while hours worked ratio (β= -.26, p<.01)

was significant. Further, when entered into the regression equation, the interaction term was not

significant (ΔR^2 = .00, β= -.03, p>.05). Thus, a moderated relationship was not observed (See

Table 4b). For females, the effect of hours worked ratio was significant (β= -.31, p<.01), while

the effect for gender norms was not significant (β= .01, p>.05). When the interaction term was

entered into the equation, it was not significant (ΔR^2 = .00, β= -.01, p>.05). Thus, the moderated

model was not significant (See Table 4c).

In order to test Hypothesis 3(a,b), mean differences in gender ideology related to

housework, paid work hours, and income were tested within the whole sample. First, the sample

was split into those couples in which both partners were traditional (mean gender norms greater

than or equal to 2.5) and those couples in which both partners were non-traditional (mean gender

norms less than 2.5). This yielded 209 traditional couples and 204 non-traditional couples.

Couples which had one member who was traditional and another who was non-traditional were

excluded from analysis. There was a significant difference between the mean (couple-level)

gender norms for traditional vs. non-traditional couples (t(824) = 53.93, p<.05, d = 3.73).

However, for women within the traditional/non-traditional sample, t-tests did not yield significant

differences in housework hours ratio (t(396) = 1.88, p>.05, d = .18), paid work hours ratio (t(395)

= .41, p>.05, d = .08) or personal income ratio (t(396) = .50, p>.05, d = .04). When the sample was restricted to full-time women only, the findings were similar. Differences between women in traditional versus non-traditional couples were non-significant for housework hours ratio (t(134) = .58, p>.05, d = .07), paid work hours ratio (t(133) = -.72, p>.05, d = .16), and personal income ratio (t(134) = -1.25, p>.05, d = .23). When part-time women in traditional versus non-traditional couples were compared, findings were non-significant for paid hours ratio (t(260) = .33, p<.05, d = .09) and significant for housework hours ratio (t(260) = 2.06, p>.05, d = .24) and personal income ratio (t(261) = 2.21, p<.05, d = .24). For housework hours ratio, those who were more traditional performed more housework (mean ratio of .69 for traditional versus .65 for non-traditional). However, for personal income, more traditional part-time women made more money (mean ratio of .34 for traditional versus .30 for non-traditional).

Differences in men's participation in paid work and housework versus women's participation in paid work and housework were tested by comparing members of traditional and non-traditional couples using housework hours ratio, paid work hours ratio, and income hours ratio. Men continued to have a significantly lower housework hours ratio than women (t(416) = -21.39, p<.05, d = 2.00) and significantly higher paid work hours (t(415)=23.96, p<.05, d = 2.24) and personal income ratio (t(416) = 15.81, p<.05, d = 1.57) within members of traditional couples. In non-traditional couples, the same pattern was found, with men having a lower housework ratio (t(405) = -15.04, p<.05, d = 1.49), and greater paid hours worked ratio (t(405) = 23.19, p<.05, d = 2.31) and personal income ratio (t(406) = 11.88, p<.05, d = 1.19). To further examine non-traditional couples for differences in men's versus women's participation in housework and paid work, the sample was restricted to full-time workers only. Within the full-time, non-traditional sample, a similar pattern was found, with men having a lower housework hours ratio (t(262) = -9.37, p<.05, d = 1.36), higher paid work hours ratio (t(262) = 11.10, d = 1.53) and higher personal income ratio (t(263) = 4.05, p<.05, d = .58). Finally, when the sample

was restricted to part-time workers only, a similar pattern was obtained with men continuing to have lower housework hours ratio (t(140) = -3.06, p<.05, d = .79), higher paid hours worked ratio (t(141) = 6.17, p<.05, d = 1.97) and higher personal income ratio (t(141) = 4.09, p<.05, d = 1.24)

Also, within the whole sample, female breadwinners did not differ from non-breadwinner females, and male breadwinners did not differ from male non-breadwinners in average gender ideology at the couple level (average of the two partners), the individual level, or in their partner's level of gender ideology. For non-breadwinner males compared to breadwinner males, no significant mean differences were found in their wife's gender ideology (t(615) = -.50, p>.05; d = .05), the couple level mean gender ideology (t(617) = .44, p>.05; d = .04), or their own ideology (t(614) = 1.3, p>.05; d = .12). Non-breadwinner females compared to breadwinner females also did not show significant mean differences in their husband's gender ideology (t(571) = -1.38), p>.05; d = .15), the couple level mean gender ideology (t(573) = -.56, p>.05; d = .06), or their own gender ideology (t(572) = .54, p>.05; d = .04).

Further, mean differences for gender ideology were not found between female lionesses and non-lionesses within the female breadwinner couples sample for partner gender ideology (t(108) = -1.2, p>.05; d = .23), couple level mean gender ideology (t(108) = -.72, p>.05; d = .13), or personal level ideology (t(108) = -.02), p>.05; d = .01). Further, no differences were found for husbands of lionesses vs. non-lionesses within the female breadwinner couples sample for partner gender ideology (t(121) = -.57), p>.05; d = .16), couple level mean gender ideology (t(121) = -.01, p>.05; d = .00), or personal gender ideology (t(121) = .59, p>.05; d = .17). In addition, within the female breadwinner couples sample, gender norms did not predict hours worked in the home for husbands (R^2= .06, p>.05) or for wives (R^2= .00, p>.05). Similarly, the ratio of hours worked for husbands (R^2= .01, p>.05) and for wives (R^2= .02, p>.05) did not predict hours worked in the home using simple linear regression. Thus, dividing breadwinner couples by gender ideology was not logical, and was therefore dropped from the analyses. It should be noted, however, that

gender norms did correlate negatively and significantly with gender ($r = -.20$, p<.01) and personal

income ($r = -.29$, p<.01) within the female breadwinner couples sample. Thus, it may be the case

that women tend to have less traditional gender norms on the whole. Further, as gender norms

become more traditional, less money may be earned in paid work overall for both men and

women combined.

In order to test Hypothesis 4, mean differences were compared between lionesses and

non-lionesses within the female breadwinner couples sample. Again, because mean differences

were not observed in level of gender ideology between lioness and non-lioness females or

husbands of lionesses versus non-lionesses, this variable was not used as a grouping variable.

When comparing female lionesses to female non-lionesses within the female breadwinner sample,

there were no significant mean differences in level of work-family conflict ($t(-1.1, 108) = .07$, $p>$

.05; $d = .21$), work-family facilitation ($t(108) = -1.67$, $p> .05$; $d = .33$), housework labor division

satisfaction ($t(108) = 1.86$, $p>.05$; $d = .36$), or childcare division satisfaction ($t(103) = 1.95$,

$p>.05$; $d = .39$). However, it should be noted that effect sizes fall within the range of small (.20)

and moderate (.50) values (Cohen, 1988). Thus, statistical significance testing may be masking

true effects.

Because mean differences were not found between lioness and non-lionesses (or their

husbands) for gender ideology, moderator analyses were conducted in order to further examine

the potential role which gender norms may play in reporting of WFC, WFF, and division

satisfaction. Thus, for an omnibus test, a moderator analysis was conducted for the moderating

effect of gender norms on the relationship between housework hours ratio and WFC, housework

hours ratio and WFF, housework hours ratio and housework division satisfaction, and housework

hours ratio and childcare division satisfaction amongst females within the female breadwinner

couples sample. For the moderation of gender norms on the relationship between housework

hours ratio and WFC, neither the main effect of housework hours ratio ($\beta = .37$, $p>.05$) or gender

norms (β= -.01, p>.05) were significantly related to WFC. The interaction term was also found to be non-significant when entered into the equation (β= .55, p>.05). Thus, a moderated relationship were not observed. For the moderation of gender norms on the relationship between housework hours ratio and WFF, neither the main effect of housework hours ratio (β = .60, p>.05) nor gender norms (β= .06, p>.05) were significantly related to WFF. The interaction term was also found to be non-significant when entered into the regression equation (β = .67, p>.05). Therefore, a moderated relationship was not observed for housework hours ratio, gender norms, and WFF.

Similarly, the moderating effect of gender norms on the relationship of housework hours ratio and housework division satisfaction is non-significant. The main effects of both housework hours ratio (β = -.25, p>.05) and gender norms (β= .62, p>.05) are both non-significant. When the interaction term was entered into the equation, it was also found to be non-significant (β = -.79, p>.05). Thus, a moderated relationship was not observed in this sample. Finally, when testing for a moderating effect of gender norms on the relationship between housework hours ratio and childcare division satisfaction, neither the main effect for housework hours ratio (β= -2.35, p>.05) nor gender norms were found to be significant (β= .28, p>.05). The interaction term was also found to be non-significant when entered into the equation (β= -.47, p>.05). Therefore, none of the omnibus tests for moderation were found to be significant.

Hypothesis 5 was tested in the same way as Hypothesis 4. Husbands of lionesses (performing less than 40% of housework) and husbands of non-lionesses (performing more than 40% of housework) within the female breadwinner couples sample were tested for significant mean differences in work-family conflict and work-family facilitation, along with housework and childcare division satisfaction variables. No significant mean differences were found in the level of work-family conflict (t(121) = .78, p>.05; d = .15), work-family facilitation (t(121) = 1.36, p>.05; d = .25), housework labor division satisfaction (t(121) = -.12, p>.05; d = .02) or childcare division satisfaction (t(121) = -1.14, p>.05; d = .21).

As in Hypothesis 4, moderation analyses were conducted as an omnibus test of the moderating effect of gender norms on the relationship between housework hours ratio and WFC, WFF, housework division satisfaction, and childcare division satisfaction amongst husbands of female breadwinners within the female breadwinner couples subsample. In testing the moderating effect of gender norms on the relationship between housework hours ratio and work-family conflict, the main effects of both independent variables were found to be non-significant ($\beta = .15$, $p>.05$; $\beta= .20$, $p>.05$). When entered into the regression equation the interaction term was also found to be non-significant ($\beta= -.07$, $p>.05$). Thus, a moderated relationship was not found. When testing for moderation of gender norms on the relationship between housework hours ratio and work-family facilitation, the main effects for housework hours ratio ($\beta = -1.05$, $p>.05$) and gender norms ($\beta= -.11$, $p>.05$) were both found to be non-significant. The interaction term was also non-significant ($\beta= -.37$, $p>.05$). Thus, a moderated relationship was not observed. The moderation of gender norms on the relationship between housework hours ratio and housework division satisfaction was tested, demonstrating that both the main effect for household hours ratio ($\beta= .77$, $p>.05$) and gender norms ($\beta= -.26$, $p>. 05$) were found to be non-significant. The interaction term was also found to be non-significant ($\beta= .30$, $p>.05$). Therefore, a moderated relationship was not found. Finally, the moderating effect of gender norms was tested on the relationship between housework hours ratio and childcare division satisfaction. The main effects of housework hours ratio ($\beta= 1.44$, $p>.05$) and gender norms ($\beta= -.16$, $p>.05$) were found to be non-significant. When entered into the regression equation, the interaction term was also found to be non-significant ($\beta= .77$, $p>.05$). Therefore, none of the omnibus tests of moderation were found to be significant for husbands of female breadwinners within the female breadwinner couples sample.

Mediation analysis was conducted for the relationship between the housework hours ratio and mental health and housework hours ratio and physical health in order to test Hypothesis 6.

The mediating variables tested were work-family conflict, work-family facilitation, housework division satisfaction, and childcare division satisfaction. Thus, in total, there were two different dependent variables (mental health and physical health) with four different mediating variables tested (WFC, WFF, housework division satisfaction, childcare division satisfaction), resulting in 8 total equations. This set of equations was tested in the 3 samples: the complete sample, the female breadwinner couples sample, and the lioness couples sample.

In the whole sample, only one mediated relationship was found to be significant: the mediation of housework division satisfaction on the relationship between the housework hours ratio and mental health. Using Baron and Kenney's (1986) methodology for mediation, I demonstrated that 1) the independent variable is related to the dependent variable, 2) the independent variable is related to the mediator, and 3) the relationship between the independent variable and the dependent variable was no longer significant when accounting for the mediator. As such, housework hours ratio is significantly related to mental health (β = -23.45, $p < .01$). The housework hours ratio is also significantly related to housework fairness perceptions (β= -2.33, $p<.01$). When both are entered into the regression equation, the housework hours ratio is no longer significant ($p>.05$), while housework fairness remains significantly related to mental health ($p<.05$) (See Table 5).

In the female breadwinner couples sample, none of the mediator analyses were found to be significant because housework hours ratio (the independent variable) was not significantly related to either mental (β = -25.57, $p>.05$) or physical health (β= 11.56, $p>.05$) (the dependent variables). Thus, because the first step in Baron and Kenney's methodology for mediation was not met, further analyses were not conducted.

Similarly, in the lioness couples sample, none of the mediator analyses concerning mental health were significant because the housework hours ratio was not found to be significantly related to mental health (β = -28.33, $p>.05$). Further, the mediator analyses concerning physical

health were not conducted because housework hours ratio was not significantly related to physical health (β = 16.02, p> .05). Thus, because the first step in Baron and Kenney's (1986) methodology for mediation was not met, further analyses were not conducted.

Finally, Hypothesis 7 tested mean differences between lioness and non-lionesses within the female breadwinner couples sample, as well as differences between their husbands in mental and physical health. For husbands of lionesses versus non-lionesses significant mean differences were found for physical health (t(120) = -2.27, p<.05; d = .42), with the mean for lioness husbands being 224.44 and the mean for non-lioness husbands being 246.15. However, a greater percentage of the husband of lioness sample was out of work for health reasons (27% of the sample as opposed to 17% of the non-lioness husband sample), which may be driving these effects. This is particularly possible because, when broken down, the only area of health which shows a significant mean difference is physical health, as opposed to general health or bodily pain, with husbands of lionesses having significantly lower physical health (M = 81.22) than husbands of non-lionesses (M = 92.20) (t(120) = -2.10, p<.05; d = .39). However, the effect size for overall physical health is larger than the effect size for the facet measure (physical health). Thus, these findings should be interpreted with caution. No significant mean differences in mental health were found (t(121) = -.83, p>.05; d = .42). However, the effect size is approaching the medium level (Cohen, 1988). Thus, a true effect may be masked by statistical significance testing.

For female lionesses vs. female non-lionesses within the female breadwinner couples sample, no significant mean differences were found in physical health (t(106) = 1.05, p>.05; d = .21) or mental health overall (t(108) = 1.59, p>.05; d = .31). However, when the components of mental health were broken down, significant mean differences were found in emotional functioning, such that lionesses had a lower mean level of emotional functioning (M = 81.57) than non-lionesses (M = 94.00) (t(108) = 2.32, p<.05; d = .45). However, the effect size is small

to moderate (Cohen, 1988), again raising concerns that statistical significance testing is not

illuminating differences within this sample.

Chapter 4

Discussion

The present study examined the interplay of gender attitudes, work-family conflict, satisfaction with the division of labor, and health within an Australian sample. Female breadwinner couples were the focus, specifically comparing couples in which the female performed more housework than her husband (more than 60% of the housework) and couples in which the female did not perform more housework than her husband (less than 60% of the housework). The theory of deviance neutralization (Greenstein, 2000) was used as the framework to understand behavior within couples, which states that as females increase their participation in paid work outside of the home, they are aware that they have broken with gender norms. Thus, in order to preserve gender norms within the home, the female continues to perform more housework than her husband.

Descriptive results of this study demonstrated that overall, the data are consistent with past research, in that men worked more paid hours and earned more money than women overall, even when the sample compared only full time workers. Further, women performed more household tasks than men in every category, except for outdoor tasks. In addition, outdoor tasks made up the smallest percentage of household labor in general, such that men's work hours in this category did not detract from the overall finding that women perform greater amounts of housework than men. The gendered division of household labor was consistent across sample types (whole, female breadwinner couples, and lioness couples), with the majority of women performing more housework than their husbands regardless of their breadwinner status within the couple. This is consistent with previously cited literature which demonstrates the gendered division of labor in Australia (Fuwa & Cohen, 2003).

Although the data fit the basic assumptions of paid labor and household labor with regards to gender norms, the overall findings of this paper did not support the hypothesized relationships. For Hypothesis 1, gender was not found to moderate the relationship between the ratio of income and the ratio of housework. The moderating effect of gender on the relationship between the ratio of paid work hours and the ratio of household hours worked was also found to be non-significant. Thus, gender did not change the relationship between the ratio of income and the ratio of housework performed. Because gender was highly intercorrelated with the ratio variables (personal income ratio, hours worked ratio) this may explain the lack of a moderated effect. However, post-hoc analyses demonstrated that gender ($\beta = .20$) did account for additional variance over and above hours worked ratio ($\beta = -.32$) ($\Delta R^2 = .10$, $p<.05$) when predicting housework hours ratio. In addition, gender ($\beta = .27$) predicted over and above personal income ratio ($\beta = -.09$) ($\Delta R^2 = .26$, $p<.05$) when predicting housework hours ratio. Thus, analyses which attempted to find moderation between gender and personal income ratio do account for additional variance above and beyond one another. However, because we know from the literature that ratio variables are important (Atkinson & Huston, 1984) future research should attempt to disentangle the methodological issues involved in using ratio variables, particularly when the variables of interest are highly gendered.

For Hypothesis 2, it was demonstrated that gender norms moderated the relationship between personal income ratio and housework hours ratio. However, the directionality of the moderated effect was not as expected. In the whole sample, those with more traditional gender norms, when they were making less money than their partner, were more likely to perform greater amounts of housework than their partner (in comparison to those holding non-traditional gender norms). However, for those who held traditional gender norms and were making more money than their partner, housework hours ratio was lower than for those who had non-traditional gender norms. Because this effect may vary with gender (females are likely to make less money and to

do more housework, and vice versa for men) post-hoc three way interactions were tested with gender, gender norms, and personal income ratio as well as gender, gender norms and hours worked ratio predicting housework hours ratio. The three way interaction between gender, gender norms, and hours worked ratio was found to be non-significant. While the three-way interaction term was significant in the prediction equation ($\beta = .07$, $p<.01$), the change in R^2 for the model including the three-way interaction term was .00. Although this change in R^2 was found to be statistically significant ($p<.01$), practically the 3-way interaction is non-significant. Similarly, the three-way interaction between gender, gender norms, and personal income ratio was non-significant in predicting housework hours ratio. While the three-way interaction term was found to be significant when entered into the prediction equation ($\beta = .01$, $p<.05$), the change in R^2 was .00 for the model including the three-way interaction term. Although this change in R^2 was statistically significant ($p<.05$), it is not practically significant. Again, these findings may be due to the use of a ratio which is highly intercorrelated with gender.

For the moderating effect of gender norms on the relationship between paid work hours ratio and housework hours ratio, the results were found to be statistically, but not practically significant ($p<.01$). Thus, due to large sample size (N = 1404), moderation was found despite the fact that the change in R^2 was .00. Once more, these effects are statistically, but not practically significant. Further, moderating effects were not found for either females or males within the whole sample.

It is likely the case that the hypothesized moderating effects of gender norms were not found because the gender norms scale had a very low average score, with a small standard deviation (M = 2.6, SD = 1.10). This may be due to the universal nature of the items and the increasing awareness of the politically correct answer to questions pertaining to gender roles. As such, the majority of people reported having non-traditional gender norms. This is consistent with literature which demonstrates that Australian citizens are now more likely to endorse an

egalitarian ideology (although patterns of paid work and housework may not be aligned with these reportedly changing attitudes) (Bittman & Lovejoy, 1993). For example, an item such as "It is not good for a relationship if the woman earns more than the man" may not be specific enough to one's own situation (e.g. I think it is fine for people in general, but maybe not for me personally) and may invoke socially desirable responses. However, these are only post-hoc interpretations because scale score measures of social desirability were not collected or utilized for participants.

For Hypothesis 3, the sample was originally intended to be split according to traditional versus non-traditional gender norms. However, because being a part of a traditional (both partners' mean gender norms above 2.5) or a non-traditional (both partners' mean gender norms below 2.5) couple did not predict women's participation in paid work/housework or men's participation in paid work/housework, this method was dropped from the analyses. Further, gender norms did not distinguish between lionesses and non-lionesses or husbands of lionesses versus non-lionesses. Thus, it appears that the gender norms scale used in this study was not a useful predictor of patterns of workforce or housework participation for members of traditional or non-traditional couples.

Similarly, for Hypothesis 4, couples were not divided according to gender ideology. However, female lionesses and non-lionesses were compared within the female breadwinner sample on various outcome measures. It was hypothesized that lionesses would report less work-family conflict and higher levels of satisfaction with the division of labor than those women who were breadwinners and were not doing more than 60% of the housework (deviance neutralization). While this hypothesis was not supported, no mean differences were found between lionesses and non-lionesses within the female breadwinner sample for work-family conflict, work-family facilitation, satisfaction with the division of household labor, or satisfaction with the division of childcare. Thus, although lionesses report doing more housework, they may

not be reporting the potential effects of their continued unequal household participation. This is interesting because lioness women are not reporting higher levels of conflict and lower levels of fairness despite the fact that they are working longer hours within the home. This is in line with the tenets of deviance neutralization theory (Greenstein, 2000), such that those women who are the breadwinner and who are also performing greater amounts of housework may be convincing themselves that they can "do it all," such that work and family domains are not problematized. This is also in line with research which suggests that the smaller the gap between gender ideology and patterns of labor (both inside and outside of the home), the less work-family conflict is reported (Strandh & Nordenmark, 2006). Because women may not be acting in alignment with their gender ideology outside of the home, they may be attempting to preserve traditional patterns inside of the home, and thereby, may be decreasing reports of work-family conflict.

Further, in Hypothesis 5, husbands of lionesses versus husbands of non-lionesses did not show significant mean differences in level of work-family conflict, work-family facilitation, satisfaction with household division of labor, or satisfaction with the division of childcare. Thus, it may be the case that husbands are also utilizing deviance neutralization, such that those husbands who are making less money than their wives and are doing less housework are still reporting similar amounts of work-family conflict and satisfaction with the division of labor in comparison to those husbands who are making less money and performing more housework overall. This can be interpreted in multiple ways. It may be the case that husbands who are not the breadwinners and who are doing a substantial amount of housework are reporting low levels of work-family conflict and high levels of fairness because they see their role in the home as "fair", given their inactivity in paid labor. These husbands were not performing the majority of paid work, but were contributing substantially to the housework. This is in line with equity theory (Klumb, Hoppmann, & Staats, 2006), since a decrease in economic contribution warrants an increase in other contributions to the couple (i.e. housework). Thus, they may have had

similar perceptions when compared to husbands of lionesses who are also reporting low levels of conflict and high levels of fairness (and may be using deviance neutralization) because these husbands were, in essence, not doing much of anything in either domain (which also seems "fair" in terms of gender expectations). This is in line with Hochschild's (1989) observation that husbands did not participate in housework, even when they were unemployed. However, it could also be the case that, in general, men report similar levels of fairness and work-family conflict across the board because they are not usually required to do much work at home, which seems both fair and allows for less conflict, no matter what their wives' contribution is to paid work.

Hypothesis 6 tested for the mediating effect of satisfaction with the division of labor as well as work-family conflict and work-family facilitation on the relationship between housework hours ratio and health (physical and mental). None of the mediating effects were found to be significant within the female breadwinner couples sample or in the lioness couples sample because the independent variable was not found to be related to the dependent variable (Barron & Kenney, 1986). Thus, because the first step of mediation was not met, the remaining steps were not performed.

For the overall sample, one mediated relationship was found: the mediation of housework division satisfaction on the relationship between the housework hours ratio and mental health. Thus, the ratio of housework hours one works only has an effect on mental health through satisfaction with the division of housework. It is unclear as to why this is the only mediation which was both practically and statistically significant. However, housework hours relates to the recent theory of time availability (Braun, Epstein, Styer, & Braumgarden, 2008), which states that as partners increase time spent in paid work, housework hours should decrease. If this is not the case, because women are participating in household work in greater amounts regardless of their time spent in paid work, this may cause conflict between the logical implications of spending more time in paid work (aka decreasing time spent in housework) and the actual reality of the

situation. Further, time availability suggests that spending a greater amount of time in housework is only acceptable if one's partner spends more time in paid work – and if these conditions are agreed upon by both members (Braun, et al., 2008). This suggests that perceptions of satisfaction in the division of housework may be very important in determining whether or not longer hours worked in the home have an effect on mental health. This effect is also demonstrated in previous literature, in which perceptions of unfair conditions in either paid work or housework can lead to marital dissatisfaction, and potentially divorce (Levee & Katz, 2002). Therefore, perceptions of housework division satisfaction may be important when examining whether or not performing housework will have an effect on mental well-being.

In the final hypothesis, Hypothesis 7, the health of female lionesses was compared to female non-lionesses within the female breadwinner sample. Female breadwinners were not found to differ in mean physical health. In order to perform both work and family duties, these women were more than likely in generally good physical health. Longitudinal studies may be able to address this issue in the future, in order to examine whether physical differences may occur over time. For mental health, lionesses did not differ from non-lionesses. However, when broken down by component, lionesses did show lower levels of emotional functioning (a facet of mental health). Thus, while lionesses do not differ in terms of mental health from non-lionesses with regards to overall mental well-being, there may be differences in their emotional stability in particular. However, these findings should be interpreted with caution given that overall differences in mental health were not found to be significant.

Husbands of lionesses were also compared to husbands of non-lionesses within the female breadwinner couple sample with regards to mental health. Although overall mean differences were not found for physical health or mental health, physical health as a specific component of the overall scale was found to be significantly lower for husbands of lionesses. However, this may be due to the fact that those husbands who were not working and were not

performing any housework may have had a health condition which prevented them from participating in labor of any kind. In order to examine these relationships within a sample of husbands whom did not have a long-term health condition, post-hoc t-tests were rerun in order to examine differences between husbands of lionesses vs. non-lionesses within the female breadwinner sample with cases containing a long-term health condition excluded. No significant differences were found for overall mental health (t(92) = .32, p>.05, d = .07), overall physical health (t(91) = -.57, p>.05, d = .12), work-family conflict, (t(92) = 1.14, p>.05, d = .24), work-family facilitation (t(92) = .76, p>.05, d = .15), housework division satisfaction(t(92) = .15, p>.05, d = .03), or childcare division satisfaction (t(87) = -.93, p>.05, d = .20). Further, none of the facet measures of physical health (facet physical (t(92) = -.67, p>.05, d = .14), bodily pain (t(92) = -.38, p>.05, d = .08), general health (t(91) = -.81, p>.05, d = .04) or mental health (vitality (t(92) = .72, p>.05, d = .15), social functioning (t(92) = -.19, p>.05, d = .04), emotional functioning (t(92) = .02, p>.05, d = .00), facet mental health ((t(92) = .67, p>.05, d = .14) were found to be significantly different within the sample. Because facet physical health differences were found between husbands of non-lionesses versus lionesses when the sample contained those with long-term physical health conditions (but were not found when these participants were filtered out), these physical health differences appear to have been driven by long term health conditions. Thus, future research should examine how much of deviance neutralization is attributable to long-term health conditions in males.

Overall, the findings reported in this paper should be examined in light of both statistical significance and effect size. Although significant differences were not found in many of the t-tests which were conducted, effect sizes were often approaching moderate size. Thus, true findings may be difficult to discover through the use of statistical significance testing alone.

To the author's knowledge, this paper is the first to examine the effects of deviance neutralization on the reporting of work-family conflict and satisfaction with the division of

household labor. Future research should examine potential mechanisms which may explain potentially deflated reports of work-family conflict and inflated reports of fairness for those who are working more hours in the home (female lionesses) and working lesser hours in the home (husbands of female lionesses).

Practically, this paper has implications for the ways in which couples divide household labor. Given the finding that perceptions of satisfaction with the division of household labor mediated the relationship between housework hours ratio and mental health outcomes, it is important for couples to be aware not only of how hours are divided but also how this division is perceived by their partner. Even if the household hours ratio appears fair, if partners are not satisfied with the way work is divided, mental health may suffer. Further, this paper solidifies existing research which demonstrates that women's participation in housework continues to be unevenly distributed, regardless of breadwinner status. In addition, this overworking may lead to decreased emotional functioning for female breadwinners who are performing greater amounts of housework. This has implications for the workplace because employers may need to be more cognizant of the time demands on females in upper level positions. Thus, work-family policies should take special care to include the needs of female breadwinners, given the expectations which may exist for them at home as well as at work. This may be especially important given the finding that female breadwinners who do more housework do not report more work-family conflict than female breadwinners who do not perform more housework. Therefore, those who potentially need to make the most use of work-family policies may only be equally likely to use them. Employers may want to make an extra effort to reach out to female breadwinners in order to ensure better mental functioning.

Limitations

There are many limitations to this study, the first of which is the low level of variability in the gender norms scale. Because a majority of participants scored low on traditional gender

norms, this scale was not useful for separating the sample. Future research should attempt to use a more specific and less transparent scale.

Further, because previous research has indicated that the use of ratios is very important in determining outcomes for couples (Prince-Cooke, 2006), this paper attempted to utilize ratios as the main variables of interest. Because these ratios were highly intercorrelated with gender, some of the hypothesized results may have been found to be non-significant. Future research should attempt to compare findings using ratio scores versus raw data.

In addition, because some of the husbands of lionesses were physically disabled, this may have changed the dynamic between partners in terms of rationale for dividing labor. Thus, future studies should further test for potential relationships between long term physical health issues and deviance neutralization strategies.

Also, the mental and physical health measures were self-report. Because of the subjective nature of self-report measures of health, these findings must be interpreted with caution. Future research might examine the relationships between paid work, housework hours, and physical and mental health using objective measures.

Finally, due to the limitations of panel data, it was difficult to locate same-sex couples for analysis. Thus, couples were restricted to heterosexual, married partners only. Future work should continue to study the relations between homosexual couples, particularly because these couples may tend to be more egalitarian due to differing gendered expectations.

Conclusion

While gender norms were not a significant predictor of time spent on housework, differences between lionesses and non-lionesses (and their husbands) were examined with the female breadwinner couples sample. Although the study failed to find differences between those who use deviance neutralization and those who do not in reports of work-family conflict, work-family facilitation, and satisfaction with the division of labor, this finding is interesting because

female lionesses may be working more hours in the home, while husbands of lionesses are may be inactive. Thus, it is remarkable that perceptions of conflict and satisfaction did not vary according to housework expectations. Finally, a faceted approach to physical and mental health did yield differences for lionesses and non-lionesses in emotional stability and for husbands of lionesses vs. non-lionesses in physical health. However, when husbands with a long-term health condition were removed from the sample, physical health differences were no longer found for husbands of lionesses vs. non-lionesses. Therefore, it may be more beneficial for future researchers to look at specific facets of mental health for female breadwinners and to account for long-term physical health conditions for husbands of female breadwinners when making comparisons between those who utilize deviance neutralization and those who do not.

APPENDIX A – TABLES AND FIGURES

Table 1a: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Whole Sample)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	40.53	6.65	--									
2. Hours worked per week	37.62	15.84	.18**	--								
3. Household yearly income	$83,300	$44,106	.15**	.04	--							
4. Age youngest child	7.57	5.14	.69**	.12**	.10**	--						
5. Housework division satisfaction	7.34	2.21	.06*	.14**	-.00	.04	--					
6. Childcare division satisfaction	7.76	1.96	.04	.08*	-.03	.05	.80**	--				
7. Personal yearly income	$40,417	$30,144	.14**	.38**	.66**	.03	.09**	.04	--			
8. Housework hours per week (total)	36.28	24.21	-.28**	-.50**	-.08**	-.32**	-.15**	-.10**	-.27**	--		
9. Mental health	317.80	58.76	.01	.09**	.06*	-.01	.22**	.22**	.11**	-.12**	.80	
10. Physical health	241.24	50.69	-.07*	.04	.07*	-.05	.05	.07*	.10**	-.05	.58**	.70
11. Gender norms	2.60	1.10	.15**	.05**	-.03	-.10**	.00	-.03	-.02	.10**	-.06	-.06
12. Work-family conflict	3.72	1.47	.03	.36**	-.04	-.02	-.10**	-.16**	.11**	-.18**	.28**	-.21**
13. Work-family facilitation	4.88	1.01	.01	-.06*	-.05	.00	-.14**	-.18**	-.08**	-.04	.20**	.15*
14. Hours/Income Ratio	.50	.19	-.02	-.17**	.01	.01	-.00	-.01**	.31**	.08**	-.01	.02
15. Housework Hours Ratio	.49	.22	-.12**	-.53**	.01	.01	-.23**	-.13**	-.33**	.68**	-.09**	-.01
16. Hours Worked Per Week Ratio	.50	.19	.12**	.80**	-.01	-.02	.19**	.11**	-.43**	-.48**	.08**	.03
17. Personal Income Ratio	.51	.23	.06*	.43**	.00	-.01	.10**	.08**	.52**	-.26**	.04**	.03
18. Full-time Status	1.34	.47	-.16**	.80**	-.02	.10**	-.19**	-.11*	-.37**	.46*	-.10**	.04
19. Gender	1.48	.50	-.17**	-.63**	.00	.00	-.26**	-.15**	-.38**	.47**	.07*	.01

Note.

N = 1404, For Gender, 1 = Male; 2 = Female, For Full-Time Status, 1 = Full-Time, 2 = Part-Time

* $p < .05$, two-tailed, ** p< .01, two-tailed

Table 1a: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Whole Sample) Continued

Variable	11	12	13	14	15	16	17	18	19
1. Age									
2. Hours worked per week									
3. Household yearly income									
4. Age youngest child									
5. Housework division satisfaction									
6. Childcare division satisfaction									
7. Personal yearly income									
8. Housework hours per week									
9. Mental health									
10. Physical health									
11. Gender norms	*.70*								
12. Work-family conflict	.08**	*.86*							
13. Work family facilitation	.05	.21**	*.88*						
14. Hours/income ratio	.01	-.06	.03	--					
15. Housework hours ratio	-.10**	-.22**	.03	.05	--				
16. Hours worked ratio	.05	.35**	.06*	-.19**	-.62**	--			
17. Personal income ratio	.03	.23**	-.03	.61**	-.37**	.56**	--		
18. Full time status	-.06*	.31**	-.05	.05	.51**	-.73	-.47**	--	
19. Gender	-.12**	-.22**	-.01	.03	.67**	-.74**	-.48**	.64**	--

Note.

N = 1404, For Gender, 1 = Male; 2 = Female, For Full-time status, 1= Full-time; 2 = Part-time

* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1b: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Female Breadwinner Couples Sample)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	41.75	6.72	--									
2. Hours worked per week	40.11	15.33	.17**	--								
3. Household yearly income	$76,631	$37,772	-.02	.09	--							
4. Age youngest child	8.10	5.43	.71**	.10	-.07	--						
5. Housework division satisfaction	7.47	2.17	.03	.14*	-.03	.06	--					
6. Childcare division satisfaction	7.92	1.92	.01	.07	.01	.06	.78**	--				
7. Personal yearly income	$40,385	$30,199	-.13*	-.03	.83**	-.12	-.15*	-.07	--			
8. Housework hours per week (total)	36.41	23.30	-.23*	-.44**	-.09	-.26**	-.21**	-.16*	.08	--		
9. Mental health	311.44	67.31	.01	.19**	.19**	-.01	.25**	.22**	.16*	-.11	*.80*	
10. Physical health	236.48	56.17	-.17**	.10	.19**	-.03	.03	.06	.22**	.03	.60**	*.70*
11. Gender norms	2.64	1.12	.17**	.03	-.23**	.07	.02	-.01	-.29**	-.09	-.12	-.09
12. Work-family conflict	3.74	1.46	.03	.31**	-.06	.01	.02	-.01	-.06	-.11	-.18**	-.11
13. Work-family facilitation	4.99	.98	.05	.02	-.06	-.15*	.11	-.09	.07	-.03	-.20*	-.18**
14. Hours/Income Ratio	.49	.27	-.15*	-.57**	.02	.01	-.27**	-.16*	.35**	.42**	-.11	.00
15. Housework Hours Ratio	.50	.22	-.09	-.38**	.01	.02	-.21**	-.15*	.18**	.71**	-.09	.05
16. Hours Worked Per Week Ratio	.50	.16	.11	.73**	-.01	-.04	.22**	.14*	-.13*	-.42**	.10	.04
17. Personal Income Ratio	.51	.23	-.09	-.20**	.02	-.02	-.16*	-.04	.30**	.20**	-.06	.02
18. Full-time Status	1.25	.43	-.12	-.74**	-.11	-.10	-.13*	-.07	-.03	.41**	-.20**	.13*
19. Gender	1.47	.50	-.16*	-.36**	.00	.03	-.30**	-.22**	.34**	.44**	-.06	.06

Note.

N = 276, For Gender, 1 = Male; 2 = Female, For Full-time status, 1 = Full-Time; 2 = Part-Time

* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1b: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Female Breadwinner Couples Sample Continued)

Variable	11	12	13	14	15	16	17	18	19
1. Age									
2. Hours worked per week									
3. Household yearly income									
4. Age youngest child									
5. Housework division satisfaction									
6. Childcare division satisfaction									
7. Personal yearly income									
8. Housework hours per week									
9. Mental health									
10. Physical health									
11. Gender norms	*.70*								
12. Work-family conflict	.07	*.86*							
13. Work family facilitation	.00	.26**	*.88*						
14. Hours/income ratio	-.10	-.09	-.03	--					
15. Housework hours ratio	-.12	-.02	-.10	.52**	--				
16. Hours worked ratio	-.00	.28**	.04	-.73**	-.50**	--			
17. Personal income ratio	-.10	.10	.01	.78**	.28**	-.21**	--		
18. Full time status	-.00	-.29**	-.01	.42**	.32**	-.59**	.10	--	
19. Gender	-.20**	-.05	.11	.67**	.57**	-.48**	.37**	.33**	--

Note.

N = 276, For Gender, 1 = Male; 2 = Female, For Full-time status, 1= Full-time; 2 = Part-time

* $p < .05$, two-tailed, ** p< .01, two-tailed

Table 1c: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Lioness Couples Sample)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	41.80	6.31	--									
2. Hours worked per week	40.31	17.01	.11	--								
3. Household yearly income	$74,355	$37,783	-.09	.13	--							
4. Age youngest child	7.38	5.40	.68**	.04	-.12	--						
5. Housework division satisfaction	7.29	2.23	.01	.21*	.06	.02	--					
6. Childcare division satisfaction	7.67	2.01	.02	.12	.06	.05	.79**	--				
7. Personal yearly income	$35,305	$22,383	-.19*	-.03	.85**	-.15	-.07	-.01	--			
8. Housework hours per week (total)	36.93	26.56	-.32**	-.51**	-.08	-.28**	-.36**	-.24**	.16	--		
9. Mental health	304.94	76.57	-.12	.24**	.17*	-.08	.27**	.27**	.15	-.17	*.80*	
10. Physical health	229.07	61.33	-.27**	.14	.17	-.04	.06	.07	.24**	.05	.67**	*.70*
11. Gender norms	2.69	1.14	.16	.00	-.18*	.09	-.01	-.04	-.25**	-.10	-.09	-.10
12. Work-family conflict	3.85	1.44	.01	.39**	.08	.05	.02	-.05	.09	-.20*	-.17	-.04
13. Work-family facilitation	4.87	.99	.02	-.02	-.01	-.09	-.05	-.09	.05	-.05	-.26**	-.23**
14. Hours/Income Ratio	.48	.31	-.19	-.60**	.03	-.00	-.31**	-.14	.37**	.57**	-.16	-.00
15. Housework Hours Ratio	.48	.27	-.20*	-.49**	.01	.01	-.38**	-.25**	.31**	.79**	-.10	.07
16. Hours Worked Per Week Ratio	.51	.18	.17	.75**	-.01	-.03	.28**	.15	-.17	-.53**	.15	.04
17. Personal Income Ratio	.48	.47	-.11	-.22*	.03	-.03	-.16	-.00	.32**	.27**	-.08	.02
18. Full-time Status	1.27	.45	-.02	-.76**	-.19	-.05	-.25**	-.18*	-.06	.51**	-.31**	-.24**
19. Gender	1.47	.50	-.21*	-.45**	-.00	.02	-.37**	-.26**	.34	.73**	-.09	.08

Note.

N = 158, For Gender, 1 = Male; 2 = Female, For Full-time status, 1 = Full-time; 2 = Part-time

$* p < .05$, two-tailed, $** p < .01$, two-tailed

Table 1c: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variable (Lioness Couples Sample) Continued

Variable	11	12	13	14	15	16	17	18	19
1. Age									
2. Hours worked per week									
3. Household yearly income									
4. Age youngest child									
5. Housework division satisfaction									
6. Childcare division satisfaction									
7. Personal yearly income									
8. Housework hours per week									
9. Mental health									
10. Physical health									
11. Gender norms	*.70*								
12. Work-family conflict	.07	*.86*							
13. Work family facilitation	.10	.20*	*.88*						
14. Hours/income ratio	-.13	-.09	-.02	--					
15. Housework hours ratio	-.17	-.08	-.11	.72**	--				
16. Hours worked ratio	.03	.34**	.03	-.74**	-.62**	--			
17. Personal income ratio	-.11	.14	.02	.79**	-.37**	-.21*	--		
18. Full time status	.08	- .36**	.05	.47**	.47**	-.63**	.12	--	
19. Gender	-.24**	- .03	-.10	.69**	.94**	-.57**	.35**	.43**	--

Note.

N = 158, For Gender, 1 = Male; 2 = Female, For Full-time status, 1= Full-time; 2 = Part-time

* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1d: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Females within the Female Breadwinner Couples Sample)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	40.60	6.38	--									
2. Hours worked per week	34.24	14.50	.15	--								
3. Household yearly income	$76458	$37,760	.03	.25**	--							
4. Age youngest child	8.26	5.46	.78**	.20**	-.07	--						
5. Housework division satisfaction	6.80	2.42	.03	.11	-.06	.11	--					
6. Childcare division satisfaction	7.47	2.17	-.03	.07	-.03	.06	.78**	--				
7. Personal yearly income	$44,277	$25,161	-.01	.21*	.94**	-.10	-.08	-.02	--			
8. Housework hours per week (total)	47.13	24.80	-.24**	-.37**	-.19*	-.46**	-.20*	-.14	-.15	--		
9. Mental health	306.94	69.88	.12	.25**	.31**	.08	.18	.23*	.26**	-.18	.80	
10. Physical health	239.74	59.40	-.05	.19*	.26**	-.05	-.05	.03	.24**	-.03	.64**	.70
11. Gender norms	2.41	1.14	.08	-.24	-.33**	.07	.06	-.01	-.32**	.08	-.09	-.13
12. Work-family conflict	3.65	1.61	.10	.36**	-.08	.09	.05	-.01	-.11	-.09	-.19	-.17
13. Work-family facilitation	2.84	.94	-.12	-.13	-.09	-.11	-.16	-.14	-.10	.13	-.15	-.10
14. Hours/Income Ratio	.68	.19	.04	-.49**	-.23*	.04	-.19	-.04	-.07	.20	-.25**	-.26**
15. Housework Hours Ratio	.63	.19	-.03	-.22*	-.09	-.18	-.17	-.20	-.07	.63**	-.17	-.08
16. Hours Worked Per Week Ratio	.42	.14	.09	.80**	.21*	.13	.16	.12	.20	.31**	.20*	.21*
17. Personal Income Ratio	.63	.32	.09	.04*	-.15	.13	-.08	-.07	.01	-.01	-.11	-.12
18. Full-time Status	1.40	.49	-.17	-.82**	-.20*	-.18	-.07	-.03	-.17	.33**	-.16	-.13

Note.

N = 138, For Full-time status, 1 = Full-time; 2 = Part-time

* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1d: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variable (Females within the Female Breadwinner Couples Sample) Continued

Variable	11	12	13	14	15	16	17	18
1. Age								
2. Hours worked per week								
3. Household yearly income								
4. Age youngest child								
5. Housework division satisfaction								
6. Childcare division satisfaction								
7. Personal yearly income								
8. Housework hours per week								
9. Mental health								
10. Physical health								
11. Gender norms	*.70*							
12. Work-family conflict	-.01	*.86*						
13. Work family facilitation	.08	.19*	*.88*					
14. Hours/income ratio	.08	-.16	.02	--				
15. Housework hours ratio	.03	.04	.12	.21*	--			
16. Hours worked ratio	-.22*	.36**	-.07	-.65**	-.30**	--		
17. Personal income ratio	-.07	.11	-.03	.75**	.07	-.04	--	
18. Full time status	.10	- .42**	.06	.40**	.20*	-.66**	.04	--

Note.
N = 138, For Full-time status, 1= Full-time; 2 = Part-time
* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1e: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Female Lionesses within the Female Breadwinner Couples Sample)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	40.39	5.83	--									
2. Hours worked per week	32.19	15.76	.09	--								
3. Household yearly income	$76,269	$37,653	-.03	.31*	--							
4. Age youngest child	7.49	5.38	.79**	.18	-.11	--						
5. Housework division satisfaction	6.43	2.55	.05	.15	.07	.09	--					
6. Childcare division satisfaction	7.13	2.37	.02	.08	.05	.07	.78**	--				
7. Personal yearly income	$44,442	$23,307	-.03	.34**	.94**	-.13	.05	.07	--			
8. Housework hours per week (total)	57.53	24.51	-.33**	-.43**	-.28*	-.47**	-.17	-.07	-.28*	--		
9. Mental health	297.71	82.72	.07	.25	.34**	.06	.24	.26*	.29*	-.18	*.80*	
10. Physical health	234.45	64.36	-.06	.27*	.34**	-.04	.05	.10	.30*	-.03	.78**	*.70*
11. Gender norms	2.41	1.11	.04	-.27*	-.23	.09	-.04	-.07	-.23	.17	-.06	-.07
12. Work-family conflict	3.80	1.64	.08	.46**	-.06	.19	.09	-.01	.07	-.31*	-.20	-.06
13. Work-family facilitation	2.97	.94	-.14	-.18	-.09	-.06	-.17	-.19	-.06	.05	-.22	-.17
14. Hours/Income Ratio	.71	.22	-.02	-.44**	-.29*	-.00	-.18	-.04	-.13	.18	-.28*	-.29*
15. Housework Hours Ratio	.75	.09	.06	-.31*	-.42**	.09	-.09	-.06	-.43**	.40**	-.04	-.05
16. Hours Worked Per Week Ratio	.40	.15	.20	.83**	.22	.22	.19	.06	.23	-.31*	.16*	.22
17. Personal Income Ratio	.66	.41	.10	.08	-.19	.16	-.06	.11	-.03	-.03	-.14	-.12
18. Full-time Status	1.48	.50	-.04	-.85**	-.28*	-.14	-.08	-.08	-.32*	.39**	-.15	-.19

Note.

N = 79, For Full-time status, 1 = Full-time; 2 = Part-time

* $p < .05$, two-tailed, ** $p < .01$, two-tailed

Table 1e: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variable (Female Lionesses within the Female Breadwinner Couples Sample) Continued

Variable	11	12	13	14	15	16	17	18
1. Age								
2. Hours worked per week								
3. Household yearly income								
4. Age youngest child								
5. Housework division satisfaction								
6. Childcare division satisfaction								
7. Personal yearly income								
8. Housework hours per week								
9. Mental health								
10. Physical health								
11. Gender norms	*.70*							
12. Work-family conflict	-.01	*.86*						
13. Work family facilitation	.25	.11	*.88*					
14. Hours/income ratio	.02	-.18	.13	--				
15. Housework hours ratio	.21	-.17	.02	.25	--			
16. Hours worked ratio	-.15	.49**	-.18	-.60**	-.28*	--		
17. Personal income ratio	-.10	.15	-.02	.79**	.13	-.02	--	
18. Full time status	.21	- .52**	.14	.36**	.23	-.72**	-.09	--

Note.

N = 79, For Full-time status, 1= Full-time; 2 = Part-time

* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1f: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Husbands of Lionesses within the Female Breadwinner Couples Sample)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	43.05	6.50	--									
2. Hours worked per week	47.56	14.73	-.05	--								
3. Household yearly income	$74,430	$378,165	-.13*	-.01	--							
4. Age youngest child	7.28	5.46	.62**	-.06	-.14	--						
5. Housework division satisfaction	8.06	1.56	-.24*	-.11	.06	-.07	--					
6. Childcare division satisfaction	8.19	1.42	-.11	-.15	.06	.05	.77**	--				
7. Personal yearly income	$28,450	$17,940	-.21	-.03	.90**	-.20	.12	.11	--			
8. Housework hours per week (total)	18.71	9.50	-.18	-.07	.20	-.47**	-.06	-.04	.22	--		
9. Mental health	311.27	70.76	-.34**	.21	.01	-.22	.30*	.21	.07	-.10	.80	
10. Physical health	224.44	58.67	-.44**	.14	.01	-.03	.19	.07	.12	-.10	.56**	.70
11. Gender norms	2.94	1.11	.18	.02	-.16	.10	-.21	-.16	-.16	.01	-.18	-.10
12. Work-family conflict	3.89	1.25	-.07	.39**	.11	-.11	-.16	-.18	.15	-.14	-.13	.00
13. Work-family facilitation	3.15	.97	.10	.04	.05	-.11	.02	.02	-.01	-.03	-.33**	-.27*
14. Hours/Income Ratio	.28	.24	-.09	-.45**	.30*	-.04	.05	.22	.41**	.09	-.01	.09
15. Housework Hours Ratio	.24	.08	-.04	-.11	.42**	-.09	-.10	.07	.38**	.63**	-.05	-.09
16. Hours Worked Per Week Ratio	.60	.15	-.05	.53**	-.22	-.23	-.05	-.10	-.18	.00	.09	.00
17. Personal Income Ratio	.38	.11	-.10	-.15	.28*	-.15	.20	.26*	.57**	.00	.09	.11
18. Full-time Status	1.09	.29	.25*	-.52**	-.11	.05	-.18	-.03	-.13	.04	-.58**	-.52**

Note.
N = 79, For Full-time status, 1 = Full-time; 2 = Part-time
* $p < .05$, two-tailed, ** $p < .01$, two-tailed

Table 1f: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variable (Husbands of Lionesses within the Female Breadwinner Couples Sample) Continued

Variable	11	12	13	14	15	16	17	18
1. Age								
2. Hours worked per week								
3. Household yearly income								
4. Age youngest child								
5. Housework division satisfaction								
6. Childcare division satisfaction								
7. Personal yearly income								
8. Housework hours per week								
9. Mental health								
10. Physical health								
11. Gender norms	*.70*							
12. Work-family conflict	.15	*.86*						
13. Work family facilitation	-.07	.30*	*.88*					
14. Hours/income ratio	.08	-.02	.01	--				
15. Housework hours ratio	.13	-.12	-.11	.28*	--			
16. Hours worked ratio	-.12	.33**	.09	.55**	-.30*	--		
17. Personal income ratio	-.08	.19	.00	.69**	.07**	-.09	--	
18. Full time status	.21	- .12	.04	.17	-.03	-.28*	-.02	--

Note.
N = 79, For Full-time status, 1= Full-time; 2 = Part-time
* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1g: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Female Non-Lionesses within the Female Breadwinner Couples Sample)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	40.87	7.10	--									
2. Hours worked per week	36.95	12.28	.24	--								
3. Household yearly income	$79,341	$38,108	.09	.14	--							
4. Age youngest child	9.28	5.45	.79**	.17	-.04	--						
5. Housework division satisfaction	7.28	2.17	-.03	-.03	-.29	.09	--					
6. Childcare division satisfaction	7.96	1.76	-.13	-.03	-.22	-.02	.78**	--				
7. Personal yearly income	$45,377	$27,629	.01	.04	.94**	-.10	-.28	-.16	--			
8. Housework hours per week (total)	33.45	17.63	-.15	-.13	.01	-.39**	-.06	-.03	.04	--		
9. Mental health	319.02	46.38	.20	.20	.27	.06	-.07	.03	.25	.09	*.80*	
10. Physical health	246.56	52.21	-.07	-.02	.12	-.12	.29*	-.18	.15	.00	.28	*.70*
11. Gender norms	2.40	1.18	.13	-.21	-.46**	.06	.21	.10	-.42**	-.04	-.20	-.23
12. Work-family conflict	3.46	1.57	.15	.25**	-.26	.01	.03	.05	-.33**	.12	-.13	-.32*
13. Work-family facilitation	2.67	.92	-.10	.02	-.09	-.13	-.07	.01	-.14	.08	.10	.06
14. Hours/Income Ratio	.63	.13	.19	-.58**	-.08	.26	-.09	-.11	.06	-.12	-.04	.13
15. Housework Hours Ratio	.46	.14	-.04	.01	.23	-.23	-.02	-.13	.19	.60**	-.17	-.06
16. Hours Worked Per Week Ratio	.79	.46	-.08	.74**	.17	-.14	-.02	.14	.16	-.03	.25	.12
17. Personal Income Ratio	.60	.11	.16	-.07	.00	.22	-.14	.01	.19	-.25	.19	-.15
18. Full-time Status	1.30	.46	-.33*	-.76**	-.05	-.18	.04	.14	-.03	.08	-.10**	.04

Note.

N = 59, For Full-time status, 1 = Full-time; 2 = Part-time

* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1g: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variable (Female Non-Lionesses within the Female Breadwinner Couples Sample) Continued

Variable	11	12	13	14	15	16	17	18
1. Age								
2. Hours worked per week								
3. Household yearly income								
4. Age youngest child								
5. Housework division satisfaction								
6. Childcare division satisfaction								
7. Personal yearly income								
8. Housework hours per week								
9. Mental health								
10. Physical health								
11. Gender norms	*.70*							
12. Work-family conflict	.00	*.86*						
13. Work family facilitation	-.15	.28	*.88*					
14. Hours/income ratio	.22	-.22	-.31*	--				
15. Housework hours ratio	-.07	.02	-.02	-.17	--			
16. Hours worked ratio	-.37**	.24	.22	-.73**	-.10	--		
17. Personal income ratio	-.02	-.06	-.24	.69**	-.40**	-.01	--	
18. Full time status	-.04	- .34	-.13	.41**	-.05	-.52*	-.21	--

Note.

N = 59, For Full-time status, 1= Full-time; 2 = Part-time

* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1h: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variables (Husbands of Non-Lionesses within the Female Breadwinner Couples Sample)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	42.42	7.40	--									
2. Hours worked per week	42.46	12.89	.29	--								
3. Household yearly income	$79,979	$37,553	.04	-.08	--							
4. Age youngest child	8.87	5.31	.79**	.30*	-.01	--						
5. Housework division satisfaction	8.10	1.91	.10	-.02	-.05	.10	--					
6. Childcare division satisfaction	8.52	1.71	.06	-.05	.04	.07	.72**	--				
7. Personal yearly income	$30,683	$14,198	-.10	.03	.77**	-.13	-.16	-.10	--			
8. Housework hours per week (total)	37.81	18.54	-.08	-.40**	-.20	-.10	.21	.06	-.21	--		
9. Mental health	321.05	56.36	.25	-.02	.19	.06	.38	.11	.13	.04	*.80*	
10. Physical health	246.15	42.10	.02	.06	.30*	-.04	.23	.16	.33*	-.07	.52**	*.70*
11. Gender norms	2.72	1.02	.20	.31*	-.11	.10	-.13	-.05	-.10	-.18	-.14	.20
12. Work-family conflict	3.70	1.39	-.09	.06	-.21	-.03	.04	.09	-.10	-.04	-.23	-.08
13. Work-family facilitation	2.91	.97	-.20	-.11	-.11	.22	-.32*	-.12	.13	-.08	-.14	-.17
14. Hours/Income Ratio	.37	.13	.18	-.41**	.07	-.21	-.15	-.13	.42**	.17	.18	.20
15. Housework Hours Ratio	.54	.14	.20	-.21	-.23	.25	.30*	.22	.37**	.33*	.01	-.05
16. Hours Worked Per Week Ratio	.54	.10	-.04	.61**	-.18	.06	.09	.06	-.13	-.25	-.27	-.06
17. Personal Income Ratio	.40	.10	.16	.02	-.04	-.24	-.15	-.13	.52**	.00	-.08	.18
18. Full-time Status	1.15	.36	-.33*	-.65**	.11	-.13	.21	.15	-.15	.40**	.18	.17

Note.

N = 59, For Full-time status, 1 = Full-time; 2 = Part-time

* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 1h: Descriptive Statistics, Bivariate Correlations, and Alphas for Study Variable (Husbands of Non-Lionesses within the Female Breadwinner Couples Sample) Continued

Variable	11	12	13	14	15	16	17	18
1. Age								
2. Hours worked per week								
3. Household yearly income								
4. Age youngest child								
5. Housework division satisfaction								
6. Childcare division satisfaction								
7. Personal yearly income								
8. Housework hours per week								
9. Mental health								
10. Physical health								
11. Gender norms	*.70*							
12. Work-family conflict	.11	*.86*						
13. Work family facilitation	-.19	.32	*.88*					
14. Hours/income ratio	-.04	.07	.38**	--				
15. Housework hours ratio	-.04	.22	-.21	-.12	--			
16. Hours worked ratio	.14	.07	-.18	.74**	-.13	--		
17. Personal income ratio	.05	.17	.39**	.66**	-.35**	-.03	--	
18. Full time status	-.19	- .03	-.07	.24	.28*	-.50**	.11	--

Note.

N = 59, For Full-time status, 1= Full-time; 2 = Part-time

* *p* < .05, two-tailed, ** p< .01, two-tailed

Table 2a.

The Moderating Effect of Gender on the Relationship between Personal Income Ratio and Housework Hours Ratio (Whole Sample)

Housework Hours Ratio	B	β	R	R^2	ΔR^2
Step 1			.43	.19	.19*
Personal Income Ratio	-.41	-.43			
Step 2			.67	.46	.26*
Personal Income Ratio	-.09	-.10			
Gender	.27	.62			
Step 3			**.67**	**.46**	**.00**
Personal Income Ratio	**-.02**	**-.03**			
Gender	**.30**	**.62***			
Gender X Income Ratio	**.02**	**-.03**			

Table 2b.

The Moderating Effect of Gender on the Relationship between Hours Worked Ratio and Housework Hours Ratio (Whole Sample)

Housework Hours Ratio	B	β	R	R^2	ΔR^2
Step 1			.62	.39	.39*
Hours Worked Ratio	-.71	-.62			
Step 2			.70	.49	.10*
Hours Worked Ratio	-.32	-.38			
Gender	.20	.46			
Step 3			**.70**	**.49**	**.00**
Hours Worked Ratio	**-.30**	**-.27***			
Gender	**.21**	**.47***			
Gender X Hours Ratio	**-.01**	**-.01**			

Table 3a.
The Moderating Effect of Gender Norms on the Relationship between Personal Income Ratio and Housework Hours Ratio (Whole Sample)

Housework Hours Ratio	B	β	R	R^2	ΔR^2
Step 1			.38	.14	.14*
Personal Income Ratio	-.31	-.09*			
Gender Norms	-.02	-.36*			
Step 2			.39	.15	.01*
Personal Income Ratio	-.12	-.14*			
Gender Norms	.02	.11*			
GenderNormsXIncomeRatio	-.08	-.32*			

Table 3b.
The Moderating Effect of Gender Norms on the Relationship between Personal Income Ratio and Housework Hours Ratio (Males within the Whole Sample)

Housework Hours Ratio	B	β	R	R^2	ΔR^2
Step 1			.10	.01	.01*
Gender Norms	-.01	-.10			
Step 2			.12	.02	.01*
Gender Norms	-.02	-.10			
Personal Income Ratio	-.05	-.07			
Step 3			**.12**	**.01**	**.00**
GenderNorms	**-.02**	**-.16**			
Personal Income Ratio	**-.08**	**-.12**			
GenderNormsXIncomeRatio	**.01**	**.08**			

Table 3c.
The Moderating Effect of Gender Norms on the Relationship between Personal Income Ratio and Housework Hours Ratio (Females within the Whole Sample)

Housework Hours Ratio	B	β	R	R^2	ΔR^2
Step 1			.05	.00	.00
Gender Norms	.01	.05			
Step 2			.10	.01	.01*
Gender Norms	.01	.05			
Personal Income Ratio	-.06	-.08			
Step 3			**.11**	**.01**	**.00**
GenderNorms	**.03**	**.04**			
Personal Income Ratio	**.03**	**.16**			
GenderNormsXIncomeRatio	**-.05**	**-.18**			

Table 4a.
The Moderating Effect of Gender Norms on the Relationship between Hours Worked Ratio and Housework Hours Ratio (Whole Sample)

Housework Hours Ratio	B	β	R	R^2	ΔR^2
Step 1			.63	.39	.39*
Hours Worked Ratio	-.71	-.11*			
Gender Norms	-.01	-.30*			
Step 2			.263	.39	.00*
Hours Worked Ratio	-.57	-.50*			
Gender Norms	.01	.06*			
GenderNormsXHoursRatio	-.05	-.19*			

Table 4b
The Moderating Effect of Gender Norms on the Relationship between Hours Worked Ratio and Housework Hours Ratio (Males within the Whole Sample)

Housework Hours Ratio	B	β	R	R^2	ΔR^2
Step 1			.10	.01	.01*
Gender Norms	-.01	-.10			
Step 2			.27	.08	.07*
Gender Norms	-.02	-.11			
Hours Worked Ratio	-.32	-.26			
Step 3			**.27**	**.08**	**.00**
GenderNorms	**.00**	**.00**			
Hours Worked Ratio	**-.26**	**-.20***			
GenderNormsXHoursRatio	**-.03**	**-.12**			

Table 4c.
The Moderating Effect of Gender Norms on the Relationship between Hours Worked Ratio and Housework Hours Ratio (Females within the Whole Sample)

Housework Hours Ratio	B	β	R	R^2	ΔR^2
Step 1			.05	.00	.00
Gender Norms	.01	.05			
Step 2			.26	.07	.07*
Gender Norms	.01	.04			
Hours Worked Ratio	-.33	-.26			
Step 3			**.26**	**.07**	**.00**
Gender Norms	**.01**	**.05**			
Hours Worked Ratio	**-.31**	**-.25***			
GenderNormsX HoursRatio	**-.01**	**-.02**			

Table 5.

The Mediating Effects of Housework Labor Division Satisfaction on the Relationship Between Housework Hours Ratio and Mental Health (Whole Sample)

Mental Health	B	β	R	R^2	ΔR^2
Direct Effect of Housework Hours Ratio on Mental Health					
Step 1			.09	.01	.01* .
Housework Hours Ratio	-23.45	-.09*			
Direct Effect of Housework Hours Ratio on Housework Division Satisfaction					
Step 2			.23	.06	.06*
Housework Hours Ratio	-2.33	-.23*			
Mental Health	B	β	R	R^2	ΔR^2
The Mediating Effect of Housework Division Satisfaction					
Step 1			.22	.05	.05*
Housework Division Sat.	5.83	.22*			
Step 2			.22	.05	.00
Housework Division Sat.	5.62	.21*			
Housework Hours Ratio	-9.18	-.04			

Table 6. *Summary table of results.*

Hypothesis	Supported	Results
Data Descriptives	Yes; all data descriptives were supported	Women worked fewer hours, had lower salaries, and worked more hours in the household for both FT and PT workers
Hypothesis 1	No	Gender was not found to moderate the relationship between personal income ratio and housework hours ratio or the relationship between paid hours worked ratio and housework hours ratio
Hypothesis 2	Partially; Supported for whole sample, but not for males and females individually. Findings were not practically significant for the relationship between paid hours worked ratio and housework hours ratio.	Gender norms was found to moderate the relationship between personal income ratio and housework hours and the relationship between paid hours worked ratio and housework hours within the full sample.
Hypothesis 3	No	Gender norms did not predict differences in housework hours, paid work hours, or income for traditional versus non-traditional women in the sample or for males versus females in traditional and non-traditional couples.
Hypothesis 4	No	No significant differences were found between lionesses and non-lionesses within the female breadwinner couples sample for WFC, WFF, or household/childcare division satisfaction. Omnibus moderation tests were also found to be non-significant.
Hypothesis 5	No	No significant differences were found between husbands of lionesses and non-lionesses within the female breadwinner couples sample for WFC, WFF, or household/childcare division satisfaction. Omnibus moderation tests were also found to be non-significant.
Hypothesis 6	Partially supported; one mediation was found to be significant	Housework division satisfaction was found to mediate the relationship between household hours ratio and mental health within the full sample.
Hypothesis 7	Partially; overall differences were non-significant while facet measures were significant	Mean differences were found between lionesses and non-lionesses in emotional functioning, but not in overall mental health. No significant differences were found for physical health. Mean differences were found between husbands of lionesses and non-lionesses in facet physical health, but not in overall physical health. No significant differences were found for mental health.

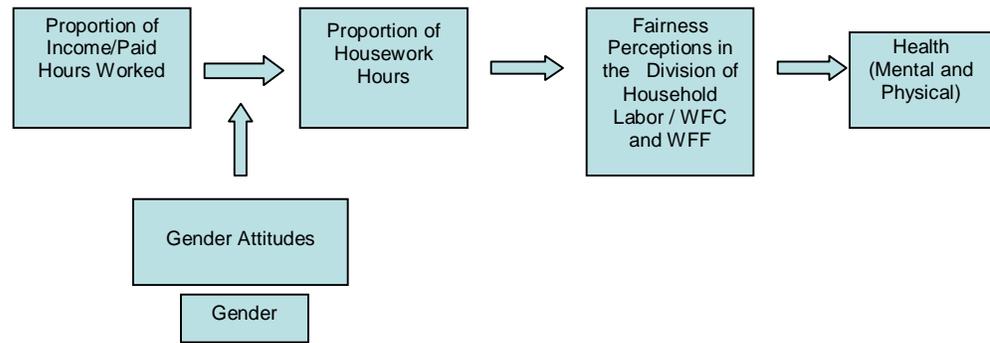Figure 1. *Predicted directionality of hypotheses*.

Figure 2. *Predicted implications of the amount of housework performed for those with traditional gender ideology and a breadwinner wife. The upper left and lower right corners represent cells where gender neutralization is predicted to occur.*

	Husband	Wife
Low	Low conflict High fairness Lower health	HIgh conflict Low fairness Better Health
Amount of Housework Performed		
High	High conflict Low fairness Better health	Low conflict High fairness Lower health

Figure 5. *The Moderating Effect of Gender Norms on the Relationship between Personal Income Ratio and Housework Hours Ratio (Whole Sample).*
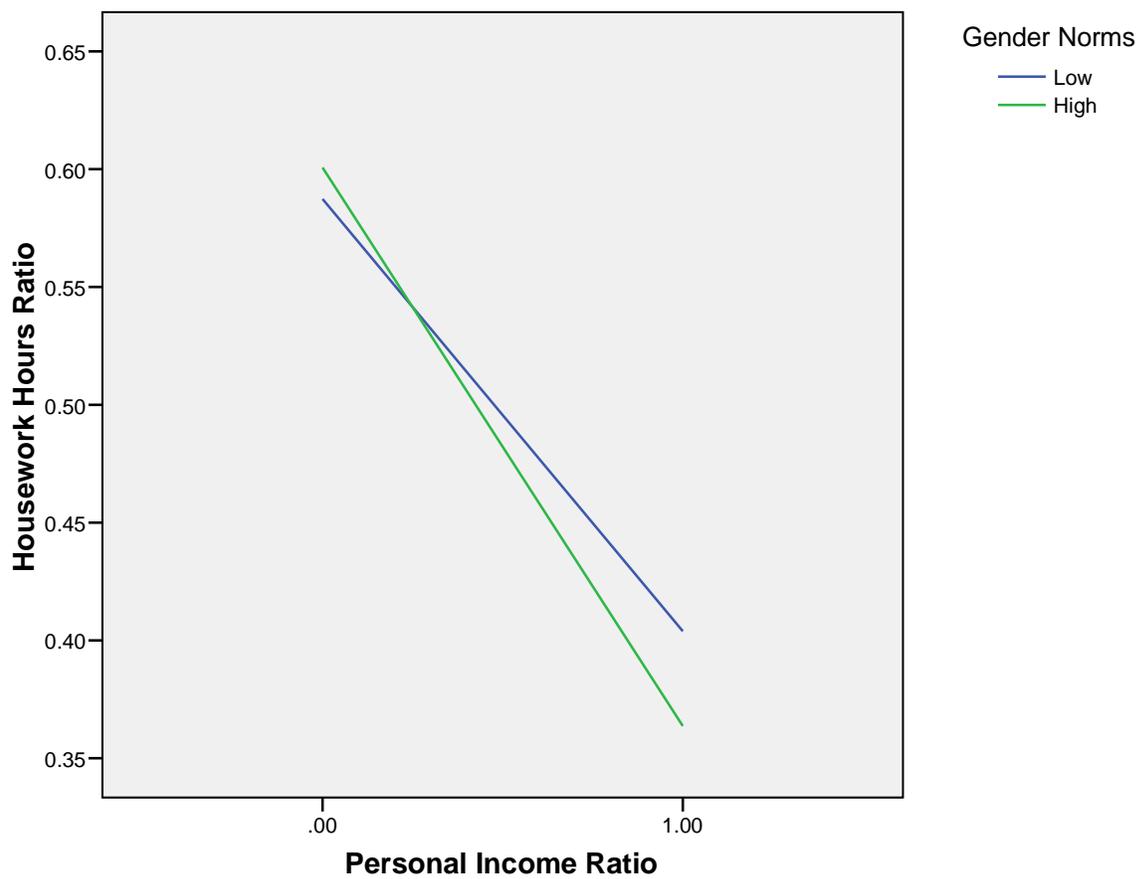
Cases weighted by DV: Responding person sample weight

Figure 6. *The Moderating Effect of Gender Norms on the Relationship between Hours Worked Ratio and Household Hours Ratio (Whole Sample).*
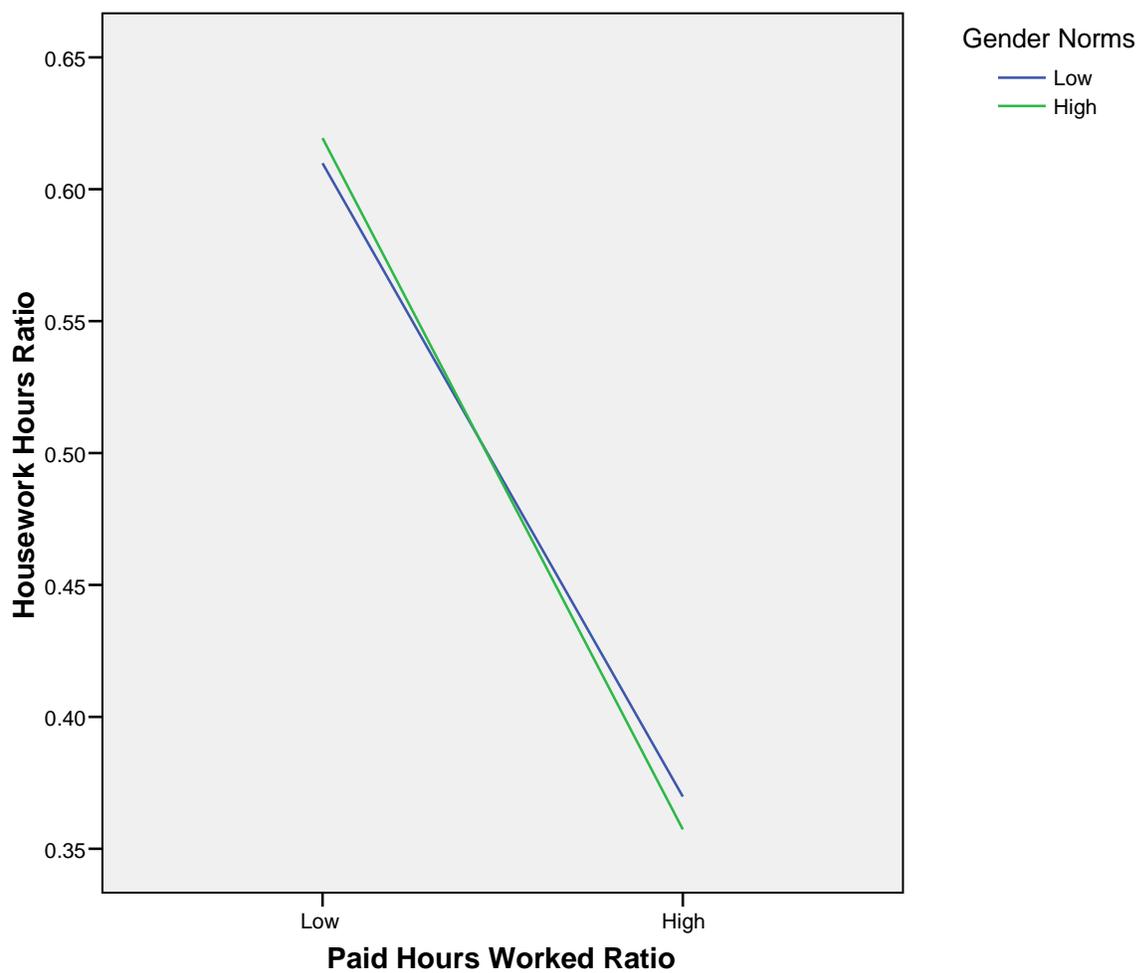
Cases weighted by DV: Responding person sample weight

Appendix B - Measures

Gender Norms

It is much better for everyone involved if the man earns the money and the woman takes care of the home and children.

Children do just as well if the mother earns the money and the father cares for the home and children. (R)

If parents divorce it is usually better for the child to stay with the mother than with the father.

It is not good for a relationship if the woman earns more than the man.

On the whole, men make better political leaders than women do.

Work-Family Conflict

Because of my family responsibilities, I have to turn down work activities or opportunities that I would prefer to take on.

Because of my family responsibilities, the time I spend working is less enjoyable and more pressured.

Because of the requirements of my job, I miss out on home or family activities that I would prefer to participate in.

Because of the requirements of my job, my family time is less enjoyable and more pressured.

I worry about what goes on with my children while I'm at work.

Working leaves me with too little time or energy to be the kind of parent I want to be.

Working causes me to miss out on some of the rewarding aspects of being a parent.

Thinking about children interferes with my performance at work.

Work-Family Facilitation

Having both work and family responsibilities makes me a more well-rounded person.

Having both work and family responsibilities gives my life more variety.

Managing work and family responsibilities as well as I do makes me feel competent.

Having both work and family responsibilities challenges me to be the best I can be.

Working makes me feel good about myself, which is good for my children.

My work has a positive effect on my children.

Working helps me to better appreciate the time I spend with my children.

The fact that I am working makes me a better parent.

Health

Overall Health

In general would you say your health is: Excellent, Very Good, Good, Fair, or Poor?

Physical Health

Using a five-point Likert scale, compared to one year ago, how would you rate your health in general now? Much better now than a year ago, Somewhat better now than a year ago, About the same as one year ago, Somewhat worse now than one year ago, or Much worse now than one year ago.

Does your health now limit you in these activities? If so, how much (Yes, limited a lot, Yes, limited a little, or No, not limited at all)? (dichotomous variable).

a) Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports b) Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling or playing golf c) Lifting or carrying groceries d) Climbing several flights of stairs e) Climbing one flight of stairs f) Bending, kneeling, or stooping g) Walking more than one kilometer h) Walking half a kilometer i) Walking 100 metres j) Bathing or dressing yourself

During the past 4 weeks, have you had any of the following problems with your work or other regular activities as a result of your physical health? (Yes or no)

a) Cut down the amount of time you spent on work or other activities b) Accomplished less than you would like c) Were limited in the kind of work or other activities d) Had difficulty performing the work or other activities (for example, it took extra effort)

Using a five point Likert scale, during the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups? Not at all, Slightly, Moderately, Quite a Bit, or Extremely.

Using a six-point Likert scale, how much bodily pain have you had during the past 4 weeks? No bodily pain, Very mild, Mild, Moderate, Severe, or Very Severe.

Using a 5-point Likert scale, during the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

Not at all, Slightly, Moderately, Quite a Bit, or Extremely.

Using a five-point Likert scale, during the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc)?

All of the time, most of the time, some of the time, a little of the time, or none of the time.

Using a five-point Likert scale, how true or false is each of the following statements for you (definitely true, mostly true, don't know, mostly false, or definitely false):

I seem to get sick a little easier than other people.

I am as healthy as anybody I know.

I expect my health to get worse.

My health is excellent.

Mental Health

Using a six-point Likert scale, how much of the time during the past 4 weeks (All of the time, most of the time, a good bit of the time, some of the time, a little of the time, or none of the time):

a) did you feel full of life? b) have you been a nervous person? c) have you felt so down in the dumps that nothing could cheer you up? d) have you felt calm and peaceful e) did you have a lot of energy f) have you felt down? g) did you feel worn out? h) have you been a happy person? i) did you feel tired?

During the past 4 weeks, have you had any of the following problems with your work or other

regular activities as a result of any emotional problems (such as feeling depressed or anxious)?

(Yes or No)

a) Cut down the amount of time you spent on work or other activities

b) Accomplished less than you would like

c) Didn't do work or other activities as carefully as usual

(3 categorical variables).

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