# Partners' overwork and individuals' wellbeing and experienced relationship quality 

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#### Abstract

The negative impact of long work hours, or overwork, on individuals' physical and psychological wellbeing is well documented. Less is known about the impact of overwork on individuals' families, especially in regard to partners. In this paper, we address this gap in the literature using high quality data from the Work, Family, and Health Network in a sample of IT workers in the US ( $\mathrm{N}=590$ ). Specifically we examine whether partners' long work hours are associated with individuals' perceived stress, time adequacy with partner, and relationship quality, and whether these relationships vary by gender. In addition, following the marital stress model, we investigate whether any negative correlation between partners' long work hours and relationship quality is mediated by time adequacy or perceived stress. We find that women partnered to men who work long hours ( 50 or more hours per week) have significantly higher perceived stress and significantly lower time adequacy and relationship quality compared to women partnered to men who work a standard full-time work week (35-49 hours). Further, the increased stress associated with being partnered to a man who overworks, not lower time adequacy, mediates the negative relationship between overwork and relationship quality. Conversely, we find that men partnered to women who work long hours report no differences in stress, time adequacy, or relationship quality than men who are partnered to women who work a standard full-time work week. Our results highlight the need for more research that examines the impact of overwork on individuals and their families.


## Keywords

Dual-Earner; Work Hours; Wellbeing; Work Family Balance; Multiple Roles

[^0]The idea that Americans are experiencing "overwork," or long hours in paid work, was first put forward by Schor (1991) in The Overworked American. She argued that rising demands of workplaces resulted in a decline in leisure time between 1969 and 1987. Although her analysis was called into question (Jacobs and Gerson, 2001), for some American workers - specifically, managers and professionals - overwork is a very real phenomenon (Jacobs and Gerson, 2001, 2004; Cha and Weeden, 2014). In 2006 the percentage of men working over fifty hours per week was $19 \%$ overall and $28 \%$ among college graduates (Kuhn and Lozano, 2008). The percentage of women working long hours has also increased, but not to the same level as men, possibly because of women's greater share of household labor (Cha and Weeden 2014). Further, overwork is not a uniquely US phenomenon (Jacobs and Gerson 2004; Wharton and Blair-Loy 2006; Burke and Cooper 2008). With these changes in employment status and hours worked comes an increase in individuals experiencing work-family conflict (Nomaguchi 2009 Winslow, 2005), a type of conflict in which role demands in one domain interfere with role demands in another (King et al., 2012; Greenhaus and Beutell, 1985).

Working long hours is among the best predictors of work-family conflict (Kelly et al, 2008). And long work hours are associated with negative physical and mental health outcomes for individuals, as well as negative physical health outcomes for their children (Sparks et al., 1997; Virtanen et al, 2009). Recent literature has linked partners' work hours to spousal self-reported health (Kleiner and Pavalko, 2014), but what is less well understood is whether an individual's long work hours affect the wellbeing of his or her spouse and the spouse's evaluation of relationship quality, especially when his or her spouse also works full-time.

In this paper we extend the literature that examines the impact of long work hours on families. We hypothesize that being partnered to someone who works long hours has a negative impact on stress, time adequacy with one's partner, and relationship quality. Further, following the marital stress model, we hypothesize that partner overwork affects relationship quality through higher rates of stress and lower time adequacy with one's partner. We test these hypotheses using the Work, Family, and Health Network research project data, specifically on full-time, employed workers who are in heterosexual marriages or cohabiting relationships. This strategic sample allows us to focus on how partners' long hours may affect the wellbeing and experienced relationship quality of individuals within dual-income households. While this analysis is centered on US employees in a particular IT firm, professional overwork is a US-wide and, increasingly, international phenomena, and we believe research on its impact on family members will therefore be of broad interest (Jacobs and Gerson 2004; Wharton and Blair-Loy 2006; Burke and Cooper 2008).

## Theoretical Framework

Three theoretical perspectives inform the relationship between partners' overwork and stress, time adequacy, and relationship quality. The first, the work-family conflict perspective, illuminates how partners' overwork is a likely cause of external stress for individuals. The work-family conflict perspective identifies two ways in which role demands at work interfere with role demands at home (and vice versa): through time and through strain. Overwork is directly related to conflicts tied to time (Major, Klein, and Ehrhart
2002). In fact, working long hours is considered to be among the best predictors of whether an individual experiences work-family conflict (Kelly et al., 2008). Work-family conflict is known to have a negative impact on individuals' wellbeing (Moen et al. 2014 2016) and in addition, is known to "cross-over" to impact individuals' families (Westman 2001). Partners' overwork may therefore affect an individuals' wellbeing in this way, particularly in regard to stress.

Supporting the work-family conflict perspective's concept of "cross-over," there is a large body of literature that focuses on the concordance, or similarity, in partners' physical and mental health (for a review, see Meyler, Stimpson, and Peek, 2007). At least some of the research has suggested that the relationships are causal. For example, Kouros and Cummings (2010) found using longitudinal data that depressive symptoms in individuals predicted future depressive symptoms in their spouses. If long work hours impact an individual's wellbeing negatively, as past work has shown (Moen et al 2014), this decline in wellbeing could in turn affect the wellbeing of his or her spouse.

Of course, partners' overwork may affect individuals not through stress "crossing over" from the partner to the focal individual, but through increasing the demands placed on the focal individuals and so decreasing their wellbeing. In other words, rather than "absorbing" a tired spouse's stress, the individual whose spouse works very long hours may be "absorbing" the tasks that he or she cannot fit in. Research suggests that wives do more household labor when husbands work longer hours, though the relationship between wives' work time and men's housework is less clear (Bittman et al. 2003; Gough and Killewald 2011; Hersch and Stratton 1994; Wight, Bianchi, and Hunt, 2013). Inequality in time spent in household labor has been linked to higher rates of psychological distress (Bird, 1999), as has perceived unfairness of the domestic division of labor (Bird 1999).

Increased stress from partner overwork, whether caused by "crossing over" or through increased time demands may impact marital quality. The marital stress model, a theoretical perspective that is complementary to the work-family conflict perspective, posits that stress, both internal (relating to the individual, such as health problems) and external (for example, work-family conflict), has a negative impact on marital quality and increases the likelihood of dissolution (Bodenmann 2000; see also Bodenmann, Ledermann, and Bradbury, 2007). This theory highlights that chronic minor stress can have large negative consequences for relationships by eroding relationship quality slowly over time. As we establish above using the work-family conflict perspective, partners' overwork is likely to increase an individuals' stress, which means partner overwork is likely to decrease relationship quality.

There is a small body of literature that examines the relationship between long work hours and the relationship quality of employed parents (Crouter, et al, 2001; Hostetler et al, 2012). In a sample of 260 dual-earner parents in upstate New York, Hostetler et al. (2012) found that the greater the total couple work hours, the lower mothers and fathers reported their relationship satisfaction. Total couple work hours were not, however, related to how satisfied mothers and fathers were with the support they received within their family. In contrast, in a sample of approximately 200 dual-earner parents in the Northeast, Crouter et al. (2001) found that there was no significant relationship between husbands' long work hours and
marital love or marital conflict, but those long hours were significantly and negatively related to the time that couples spent together.

The marital stress model highlights the time couples spend together as a key mechanism through which stressors, such as partner overwork, are thought to impact relationship quality. As individuals only have so much time to allocate, overwork often comes at the expense of time with their partner and family (Blair, 1993; Kingston and Nock 1987). And time with one's partner is directly linked to both feelings of time adequacy or as if one "has enough" time with his or her partner (Flood and Genadek 2016) and relationship quality (Flood and Genadek 2016; Gager and Sanchez 2003).

While the marital stress model and work-family conflict perspectives are gender neutral in their predictions for individuals, the gender perspective highlights that the allocation of time and experience of family life are shaped by our differential cultural expectations for men and women. Women are socialized to be relationship caretakers (Ridgeway 2011; Thompson and Walker 1989) and may therefore be more sensitive to overwork and the impact it has on their relationship. Given this, men and women may differ in their definitions of time adequacy; specifically, women may have a higher bar for time adequacy than men (Nomaguchi, Milkie, and Bianchi, 2005). In addition, men and women's behavioral response to partners' overwork may differ. As stated above, when faced with a partner who overworks, women have been shown to increase their time in housework, but the evidence for whether men respond to their female partners overworking is mixed (Gough and Killewald 2011; Hersch and Stratton 1994; Wight, Bianchi, and Hunt, 2013; Bittman et al., 2003). In addition, when a spouse experiences work stress, women are more likely to experience that stress "crossing over" to affect their stress (Levine, Bonner, and Klugman 2015) and are more likely to compensate for their spouses' stress through increased household labor (Bolger, DeLongis, Kessler, and Wethington 1989). Since long work hours are related to increased work-family conflict, which is related to stress for individuals (Kelly et al., 2008), it could be that the impact of partners' long work hours impact men and women differently.

## Hypotheses

Following the work family conflict perspective, the marital stress model, and gender theory, we advance the following hypotheses:

## Hypothesis 1:

Individuals whose partners work long hours (50 or more hours per week) report greater stress compared to individuals whose partners work a standard full-time work week (from 35 to 49 hours) net of their own work hours.

## Hypothesis 2:

Individuals whose partners work long hours ( 50 or more hours per week) will report lower time adequacy with their partner and families compared to individuals whose partners work a standard full-time work week (from 35 to 49 hours) net of their own work hours.

## Hypothesis 3:

Individuals whose partners work long hours (over 50 hours per week) will report lower relationship quality compared to individuals whose partners work a standard full-time work week (from 35 to 49 hours) net of their own work hours.

## Hypothesis 4:

Relationships between partners' long work hours and stress, time adequacy, and relationship quality will vary by gender.

## Hypothesis 5:

The impact of partners' long work hours on relationship quality for men and women is mediated by perceived stress and time adequacy with partner.

## Data and Methods

In this paper we utilize data collected from information technology employees in a large U.S. firm (hereafter referred to as TOMO), from the larger Work, Family and Health Network (WFHN) Study (For an in-depth description of the data, see Bray et al., 2013). The WFHN study aimed to examine the intersection of work, family, and health with a particular interest in how workplace policies affect the health of individuals. The designers of the WFHN study were particularly interested in IT workers as "they represent both the promise (in terms of new technologies) and the perils (in terms of global off-shoring) of white-collar employment in the twenty-first century" (Moen et al., 2014).

Data for this study were collected in multiple ways: through a computer assisted personal interview (CAPI) lasting about 60 minutes and a 30 minute health assessment interview in which respondents had their height, weight, blood pressure, and pulse measured and dried blood spots taken for further analysis. We make use of the CAPI survey for this paper. Approximately $70 \%$ of the 1,171 employees who were asked to participate in the study did so. In an analysis to investigate response bias, Kelly et al. (2014, online appendix) reveal that those who participated in the study were more likely to be non-white, female, and were, on average, younger than the employees who chose not to participate.

Of the 318 female respondents and 501 male respondents, we limit our sample to the 215 women and 418 men who report living with an other-sex partner or spouse. We do not include individuals living with a same-sex partner ( 8 women and 12 men ) because research suggests that lesbian relationships tend to be more egalitarian in terms of household labor than heterosexual couples (Blumstein and Schwartz, 1983; Johnson and O'Conner, 2002). The research surrounding household labor in gay male relationships is mixed (Blumstein and Schwartz, 1983; Johnson and O'Conner, 2002), but at least one paper finds gay male parents allocate housework and carework more equally than heterosexual parents (Johnson and O'Conner, 2002). One of the proposed mechanisms in this paper is that partners' long work hours impact the amount women and men spend in household labor and care work; in more egalitarian same-sex couples, this mechanism may not apply. Unfortunately we do not have enough same-sex couples to investigate whether differences exist. Further, we eliminate
approximately 8 female and 21 male respondents due to missing data. Our final sample sizes include 207 women and 397 men.

## Measures

Outcome Variables—Perceived stress is based on responses to four items: "During the past 30 days, how often have you felt ... (1) confident about your ability to handle your personal problems?"; (2) that you were unable to control the important things in life?"; (3) that things were going your way?"; (4) difficulties were piling up and your could not over come them?" Five responses range from Never to Very Often. The scale is additive (alpha=.73) with a greater value capturing greater stress (items 1 and 3 are reverse coded) and a possible range of 4-20. These items are taken from Cohen, Kamarck, and Mermelstein (1983) and have been found to be predictive of many mental and physical health outcomes (for a validation reference, see: Cohen and Williamson, 1988).

Relationship Quality is a scale based on ten items about the respondents' relationship with his or her spouse/partner (S/P). The scale was adapted for WFHN from several existing models (see Bray et al, 2013). The items are: "S/P really cares about me", "S/P really understands the way I feel about things", "S/P appreciates me", "I can open up to S/P if I need to talk about worries", "I can relax and be myself around S/P", "I feel S/P makes too many demands on me", "S/P argues with me", "S/P makes me feel tense", "S/P criticizes me", "S/P gets on my nerves". Respondents are asked their degree of agreement (not at all, a little, some, or a lot) with each statement. Agreement with each positive statement and disagreement with each negative statement are coded high and added together to create the scale with a possible range of 10-40 (alpha=.86).

Time adequacy with spouse/partner is captured by respondents' answer to whether or not he or she has "enough time" to be with his or her spouse/partner. Possible responses were: "Never," "Rarely," "Some of the time," "Most of the time", and "All of the time," which was coded high.

Independent variables-The independent variable of primary interest in this paper is partners' average work hours per week. We operationalize partners' average work hours with three categories: less than full-time ( $<35$, including those who are not employed for pay), regular fulltime hours (35-49), or overwork (50+). Overwork is defined as 50 hours or more following Cha (2010) and Cha and Weeden (2014). While this cut-off may seem quite high in some other national contexts, $17 \%$ of male U.S. workers and $7 \%$ of female U.S. workers reported working at least 50 hours per week in 2007 and these long hours are normative in many professional and managerial jobs (Cha and Weeden 2014). We also investigate a different cut-off for long hours in the additional analyses reported below. We divide respondents' own work hours into two categories rather than three because only two women and one man in our sample work fewer than 35 hours per week in this sample of professional and technical workers.

Schedule control, or the extent that an employee can determine when and where to work, is an important control variable when considering associations of long work hours for individuals and their partners. While some theories suggest that schedule control, like
broader control over work activities, may buffer any impact of long work hours (Karasek and Theorell, 1990; Kelly et al., 2011), there is also some evidence that the flexibility or schedule control can contribute to work-family conflict through the blurring of the lines between work and home (Blair-Loy, 2003; Schieman et al., 2009). A quasi-experimental study of a workplace initiative found that increased schedule control (arising from the workplace initiative) reduced work-family conflict and increased time adequacy, even for those working very long hours (Kelly et al., 2011). Schedule control is an important control variable when considering partners' overwork as couples have been shown to respond to work-family conflict with joint level strategies (Becker and Moen, 1999). Individuals with partners who overwork may seek out employment with schedule control as a response to their partners' overwork. Not controlling for schedule control could therefore suppress the impact of partners' overwork on our outcomes.

In addition, we control for age, race of respondent, whether there are children in the household, the age of youngest child in the household, highest degree attained, immigrant status, and household income. Following Moen et al. (2014), who employs these data as well, we created five race/ethnicity categories: (1) White (2) Asian Indian, (3) Other Asian, (4) Black \& Other Race, and (5) Hispanic. Respondents were asked to identify Hispanic in a separate question. If they identified as Hispanic they are in the Hispanic category regardless of their racial identification. Household income is captured by four categories: less than $\$ 90,000$ per year, $\$ 90,000$ to less than $\$ 120,000, \$ 120,000$ to less than $\$ 150,000$ per year, and over $\$ 150,000$ per year.

Overall our sample is on average highly educated ( $79 \%$ of the sample has a college degree) and very privileged in terms of household income (the modal category is over $\$ 150,000$ ). In comparison, in the US population only $29.3 \%$ of individuals aged 25 and higher have a bachelor's degree and the median household income is $\$ 53,482$ (Population Estimates, 2015). In regard to race and ethnicity, our sample is similar to the US population in percentage of non-Hispanic whites ( $67 \%$ vs. $62 \%$, respectively), but unique in that we have fewer non-Hispanic blacks ( $2 \%$ vs. $13 \%$ ) and Hispanics ( $6 \%$ vs. $18 \%$ ) and more individuals who identify as Asian Indian or Other Asian (23\% vs. 7\%) (Population Estimates, 2015). In fact, our black sample is so small that we combine blacks with those who identify as "other" when asked their race and ethnicity. Overall, this is a highly privileged sample. We discuss the potential impact this has on our results in the discussion.

## Analyses

We use ordinary least squares regression with our outcomes that are measured continuously, perceived stress and relationship quality. For models in which time adequacy with partner is our outcome we use ordered logistic regression, as it is a categorical variable. As respondents work within teams who face many of the same work conditions, all standard errors are Huber-White standard errors, which are robust to clustering within the data. We examine the relationship between partner overwork and our outcomes in the full sample, and then repeat the analysis including gender and partner overwork interactions to see if there are differences by gender.

In order to test whether time adequacy with partner and perceived stress mediate any relationship between partners' long work hours and relationship quality, we first use the Baron and Kenny method of testing for mediation (Baron and Kenny 1986). This method requires 3 steps or sets of regression models to demonstrate mediation. The first two sets of models are the tests of our first three hypotheses. More specifically, in order to demonstrate mediation, first we must demonstrate a significant relationship between IV of interest (partner's long work hours) and our DV of interest in the mediation model (relationship quality). In the second step, we need to show that our IV of interest is related to our mediating variables in the mediation model (perceived stress and time adequacy with partner). If partner's long work hours is significant in both sets of models, our third step is to include a final model in which we examine the relationship between our IV of interest and our DV in the mediation model controlling for our mediating variables. If the effect of our IV on our DV disappears in the third model, then we have established "complete mediation." If the effect reduces in size, it is considered "partial mediation." In addition to the Baron and Kenny method, we use the KHB-method to test the decomposition of the effect of partner's long work hours further (Breen, Karlson, and Holm, 2013; Karlson, Holm, and Breen 2011).

## Results

Table 1 presents the means and standard deviations for the variables in our analysis first for the sample overall and then separately by gender. Overall individuals reported relatively low stress (mean $=8.48$ with a possible range of $4-20$ ) and relatively high relationship quality (mean $=33.69$ with a possible range of $10-40$ ). In addition, the modal response to time adequacy with partner was "most of the time." Women and men were similar in the response to stress (mean $=8.82$ and 8.29 , respectfully) and relationship quality (mean=33.19 and 33.95 , respectfully), but women were slightly less likely to report that had adequate time with their partner "most of the time" and were more represented in the lower two categories. For our independent variable of interest, twenty-one percent of our sample is partnered to individuals who work 50 hours per week or more. Approximately $37 \%$ of women in are sample are partnered to men who overwork. In contrast, approximately $13 \%$ of men in our sample are partnered to women who overwork. This is consistent with what is observed nationally; women are less likely to work very long hours (Jacobs and Gerson, 2001, 2004; Cha and Weeden, 2014). Forty percent of women in our sample are partnered to men who work regular full time hours and $23 \%$ are partnered to men who work less than full-time hours or are out of the labor force. Not surprisingly, men are more likely to have partners that are working less than full-time or not at all (53\%). Finally, $35 \%$ of men are partnered to women who work full time but not long hours.

In Table 2 we present means of our outcome variables by whether partners overwork or not. For the full sample, individuals whose partners overwork have significantly higher perceived stress than those whose partners do not overwork. There are no significant differences for relationship quality or time adequacy with partner in the full sample. Turning to the bivariate relationships by gender, women partnered to men who work long hours have significantly higher stress and less time adequacy with their partners than women who are partnered to men who work less in bivariate analyses. Surprisingly, men partnered to women who work
long hours report higher relationship quality than men partnered to women who work less, although the difference is only marginally significant ( $\mathrm{p}<.10$ ).

In Table 3 we present the results from regressions predicting perceived stress, time adequacy with partner, and relationship quality on the full sample. In Hypotheses 1, 2, and 3 we propose that partners' long work hours will impact individuals' stress, time adequacy with their partner, and relationship quality net of their own work hours and control over their work time. In support of Hypotheses 1 and 2, we see that individuals whose partners work 50 hours per week or more are significantly different than individuals whose partners have an approximate 40 hour work week. Individuals whose partners overwork report higher levels of stress $(\beta=.73, p<.01)$ and are less likely to say that they have adequate time with their partners $(\beta=-.37, p<.10)$ compared to individuals whose partners work standard full-time hours, although the latter is only marginally significantly different. In contrast to these results, in Model 6, we see that there is no relationship between partner overwork and relationship quality. Hypothesis 3 is not supported in the sample of men and women.

This effect of partners' work hours on stress and time adequacy is net of respondents' own work time and schedule control. In our sample of full-time working individuals, working 50 hours or more per week decreases the likelihood that a respondent will say he or she has adequate time with his or her partner $(\beta=-.52, \mathrm{p}<.01)$ and increases stress $(\beta=.44, \mathrm{p}<.10)$ relative to individuals in our sample who work less than 50 hours per week. Individuals with greater schedule control report lower levels of stress ( $\beta=-1.09 \mathrm{p}<.001$ ) and greater time adequacy with partners ( $\beta=.84, \mathrm{p}<.10$ ) compared to individuals with less schedule control. In results not shown, we test whether greater schedule control moderates any impact of participants' long work hours or partners' long work hours using interaction terms and found no significant interactions.

Turning to Table 4, we test Hypothesis 4 by examining whether the relationship between partners' overwork and emotional wellbeing and experienced relationship quality varies by gender by interacting "male" with our measures of partner's work hours. Hypothesis 4 is supported. In all models, partner overwork significantly interacts with gender. As our interaction variable is male, the main effects of partner overwork in the models represents the impact of partner overwork for women. Women partnered to men who overwork report higher stress ( $\beta=1.49, p<.01$ ), lower time adequacy with their partners ( $\beta=-77, p<.01$ ), and lower relationship quality $(\beta=-1.50, p<.05)$ compared to women whose partners work a standard forty hour work week. When we look at the interactions between male and partner overwork, it appears that partner overwork does not have the same impact on men's stress, time adequacy with partner, or relationship quality. In fact, in results not shown, we alter the reference category of gender and find that, for men, there is no significant difference in their stress, time adequacy, or relationship quality between those who have a partner who overworks versus who do not. For women, therefore, these results support the first two steps of the test for mediation as put forth by Baron and Kenny (1986).

In Table 5 we examine whether the correlation between partners' overwork and women's reports of relationship quality is mediated by stress and time adequacy with partner. In order to do this, we add each of our mediating variables one at a time and then together in a
final model. First, in Model 7, we add perceived stress, which is significantly related to relationship quality. For every one-point increase in stress, individuals report a -.85 points difference in relationship quality. When turning to partner's overwork (weekly work hours 50+) we see that partner's overwork in no longer significant and the size of the coefficient has been largely reduced (from $\beta=-1.49$ to $\beta=-.23$ ). In Model 8 we add time adequacy as the only mediator and see that time adequacy with partner is significantly and positively related to relationship quality. Those who report that their time adequacy is more than "never or rarely" have significantly higher relationship quality that those who report that they never or rarely have enough time with their partner. When we examine the impact of partner overwork in this model, we see that the size of the effect of partner overwork and the significance has reduced slightly (from $\beta=-1.49, p<.05$ to $\beta-1.34, p<.10$ ). Finally, when we include both potential mediators in Model 9, both are significant and the effect of partner's weekly work hours is reduced to $\beta=-.17$ and is not significant.

To further examine how stress and time adequacy mediate the relationship between partner overwork and relationship quality for women only, we used the KHB-method of decomposition (Breen, Karlson, and Holm, 2013; Karlson, Holm, and Breen 2011). In Model 7, the relationship between the main effect of partner overwork and relationship quality (ie. the effect of partner overwork for women) is $85 \%$ mediated by stress alone. Conversely, in Model 8 time adequacy with partner does not significantly mediate the relationship between partner overwork and relationship quality. In Model 9, with both stress and time adequacy included, $88 \%$ of the relationship between the main effect of partner overwork and relationship quality is mediated.

## Additional analyses

In results not shown, we conducted sensitivity analysis to see whether being partnered to someone who works any hours longer than 40 on average had the same impact on our dependent variables as someone who is partnered to an individual who works 50 or more hours per week. We did this by creating a new "partner work hours" variable with 4 categories instead 3: less than 35, 35-40, 41-49, and 50+, and in results not shown, re-running our analyses in our tables with this variable for partner overwork. The results (not shown) support our decision to define overwork as more than 50 hours per week, a decision we make following past research on overwork in the United States (Cha 2010; Cha and Weeden 2014). Outcomes did not differ for respondents whose partners worked 41-50 hours per week as compared to 35-40 hours per week; that was the case in the base models and gender interaction models.

Finally, we examine whether parenthood moderates the relationship between partners' long work hours and our outcome variables. In results not shown we interact whether an individual is living with children with partners' long work hours and find no significant differences.

## Discussion and Conclusions

We have shown that partners' overwork is significantly associated with wellbeing and experienced relationship quality for our sample of female full-time professionals, but not
for our sample of male full-time professionals. Women who are partnered to men who work long hours have greater stress, less time adequacy with their partners, and lower relationship quality than women who are partnered to men who work standard full-time hours. The greater stress experienced by women whose partners overwork mediates the relationship between partner overwork and relationship quality. To our knowledge, this is the first finding that partners' long hours can have a negative impact on individuals' wellbeing and experienced relationship quality, supporting the hypothesis that overwork negatively affects family wellbeing (Hostetler et al, 2012). Partners' work hours have this impact net of the effects of own work hours and schedule control.

In contrast to the findings for women in our analysis, men who are partnered to women who overwork are no different, on average, in terms of stress, time adequacy with their partners or relationship quality when compared to men who are partnered to women who work a standard forty hour work week. Our contrasting results by gender may be due to differences in how men and women respond to partner overwork. Wives doing more household labor when their husbands work longer hours is consistent across studies, but the research examining the reverse is less so (Bittman et al. 2003; Gough and Killewald 2011; Hersch and Stratton 1994; Wight, Bianchi, and Hunt, 2013). In part this could be explained by differences in outsourcing behavior. Past research has found that as married women's earnings increase the amount of housework they do decreases regardless of their husbands' earnings (Gupta 2007). Researchers attribute the finding to women outsourcing the domestic labor for which they, because of their gender, are responsible. Indeed, women's earnings have been found to be more important in predicting the outsourcing of female-typed tasks compared to male earnings in married and cohabiting unions (Treas and De Ruijter 2008). Men may feel no additional stress that impacts their relationship quality because their overworking female partners outsource more of the home responsibilities. On the other hand, if women with overworking partners experience more stress because their husbands' work stress crosses over, rather than through increased demands at home, an alternative explanation could be that men are simply less attuned to their female partners' emotions. Indeed, past research has found that men's work stress crosses over to impact female partners' stress, but not vice versa (Levine, Bonner, and Klugman 2015). More research is needed to explore the gendered effect of partner overwork.

Our results are in contrast to work that finds that being partnered to a man who overworks has no impact on married mothers' reports of relationship quality (Crouter, et al, 2001). Our results highlight the need to focus the impact of partner overwork on men and women's experienced individuals who have full-time jobs of their own, something that past studies on partner overwork do not do (Crouter et al. 2001; Hostetler et al, 2012). Given that one of the joint-level strategies of couples faced with work-family conflict is for one person, usually the woman in heterosexual couples, to scale back on his or her hours (Becker and Moen, 1999), it is possible that the impact of partner overwork is missed in cross-sectional studies that do not focus on couples where both are working full-time. In addition, our results highlight that partner overwork may have a negative impact on women's wellbeing and experienced relationship quality, regardless of whether the women have children in the household.

Individual's own long hours significantly related to two of our three outcomes: reported stress and relationship quality. Individuals who overwork have greater stress than individuals who work full-time but fewer hours, on average. Schedule control, conversely, decreases stress and increases feelings of time adequacy for our sample. This supports past research that has found schedule control to be important in reducing work-family conflict and increasing time adequacy (Kelly et al., 2011).

This paper adds to several streams of research on the effects of work hours on family health and on women's labor force exits, which contribute to gender inequality. The scholarship on long work hours and family health has prioritized studying how long work hours affect individuals and their children. We find that individual overwork increases stress and decreases time adequacy with partners for both men and women, but for women the impact of partners' long hours has a greater impact on stress than their own. These findings highlight the need for more research devoted to studying whether and how long work hours (and other work conditions) may impact partners, especially among dual-income couples.

This paper is also a complement to the literature showing that women leave the labor force more readily when they are partnered to men who work very long hours (Cha, 2010; Shafer, 2011), while men's labor force participation is unaffected by partners' hours (Cha, 2010). In our paper, women who are partnered to men who work long or very long hours have significantly higher levels of stress than women whose partners work fewer hours. This finding is also consistent with qualitative work that links women's exit to the stress they felt at having to combine a career with the majority of their household responsibilities because their husbands' were "never home" (Stone, 2008).

This study is not without limitations. Although our sample allows us to narrow in on the wellbeing of employed women and men using high quality measures of wellbeing, as we note above, it is not representative of working women and men throughout the United States. The individuals in our sample have more education and higher household incomes than individuals in the average dual-income couple in the United States (Raley et al., 2006). For women, the relative privilege in our sample compared to most dual-earners suggests that our findings may be even stronger in a sample of women whose economic position gives them no choice but to work. In other words, men's overwork may negatively affect women's stress and other measures of wellbeing in a sample that includes families that are economically struggling and more likely to be working partly or primarily to meet the family's economic needs rather than to pursue their professional careers. Further, only 70\% of workers who were asked to participate in the survey did so. Within the firm, white people, men, and older individuals were less likely to participate in the survey. It is possible that men or older individuals experiencing the most stress and least time adequacy were among those who did not respond to survey requests. Future research should address the impact of partners' long hours on individuals' wellbeing in a more representative sample or in occupational samples of less privileged workers.

In addition, the use of cross-sectional data is a limitation. First, it is possible that we have not correctly identified the direction of the relationship between partners' long work hours and wellbeing. Women's male partners could be spending more time at work because
of poor relationship quality or because they desire less time with their partners because of their partners' greater amounts of stress. Given the lack of a significant relationship between individuals' own overwork and their reported relationship quality, however, this seems unlikely. Second, our sample may suffer from selection bias. Dual-income couples for which overwork was a problem for their relationship may have scaled back their work hours or divorced, thereby eliminating themselves from our sample. Our results are likely weakened by this bias. Further research optimizing longitudinal data is needed to determine the direction of the relationship between partners' long work hours and women's wellbeing as well as the strength of the impact of overwork.

Today's weekly work hour expectations are based on a male breadwinner, female homemaker model (Moen and Roehling, 2005; Williams, 2000). Just as men did not respond to women's entering the labor force by taking up carework or household responsibilities at equal rates as women, employers did not adjust their expectations for workers regarding time spent at work. In fact, the percentage of individuals working very long hours has only increased in the US and other industrialized countries (Jacobs and Gerson, 2004; Wharton and Blair Loy, 2006). For dual-income families, very long work hours can lead to negative effects for individuals, children, and, as we have suggested here, partners. Doing away with the expectation to work very long hours would not only be beneficial for individual and family wellbeing, but it would promote gender equality and, as some work has suggested, improve performance among workers (Baltes et al., 1999; Rosa, 1995).

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Table 1:

## Descriptive Statistics of Model Variables

|  | Overall ( $\mathrm{N}=604$ ) |  | Female ( $\mathrm{N}=207$ ) |  | Male ( $\mathrm{N}=397$ ) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | S.D. | Mean | S.D. | Mean | S.D. |
| Outcome Variables |  |  |  |  |  |  |
| Perceived Stress | 8.48 | (2.56) | 8.82 | (2.78) | 8.29 | (2.42) |
| Time Adequacy with Partner ( $1=\mathrm{Yes}, 0=\mathrm{No}$ ) |  |  |  |  |  |  |
| Never/Rarely | 0.09 | (.28) | 0.14 | (.35) | 0.06 | (.23) |
| Some of the Time | 0.35 | (.48) | 0.38 | (.49) | 0.33 | (.47) |
| Most of the Time | 0.50 | (.50) | 0.40 | (.49) | 0.54 | (.50) |
| All of the Time | 0.07 | (.26) | 0.08 | (.27) | 0.07 | (.26) |
| Relationship Quality | 33.69 | (4.72) | 33.19 | (5.46) | 33.95 | (4.27) |
| Independent Variables |  |  |  |  |  |  |
| Partners' Work Hours per Week ( $1=$ Yes, $0=$ No) |  |  |  |  |  |  |
| Less than Full-Time (0-34 hours) | 0.42 | (.49) | 0.23 | (.42) | 0.53 | (.50) |
| Full Time (35-49 hours) | 0.36 | (.48) | 0.40 | (.49) | 0.35 | (.48) |
| Long Hours (50+ hours) | 0.21 | (.41) | 0.37 | (.48) | 0.13 | (.34) |
| Male ( $1=$ Yes, $0=\mathrm{No}$ ) | 0.66 | (.48) |  |  |  |  |
| Age | 45.8 | (8.63) | 46.24 | (8.03) | 45.57 | (8.92) |
| Age of Youngest Child | 6.35 | (7.60) | 7.21 | (7.83) | 5.90 | (7.45) |
| Parent ( $1=$ Yes, $0=$ No) | 0.65 | (.48) | 0.65 | (.48) | 0.66 | (.66) |
| Race and Ethnicity ( $1=$ Yes, $0=$ No) |  |  |  |  |  |  |
| White | 0.67 | (.47) | 0.64 | (.48) | 0.68 | (.47) |
| Black \& Other Race | 0.04 | (.19) | 0.05 | (.22) | 0.03 | (.16) |
| Asian Indian | 0.16 | (.37) | 0.08 | (.28) | 0.20 | (.40) |
| Other Asian | 0.07 | (.26) | 0.10 | (.30) | 0.06 | (.23) |
| Hispanic | 0.06 | (.25) | 0.12 | (.33) | 0.04 | (.18) |
| Immigrant ( $1=$ Yes, $0=\mathrm{No}$ ) | 0.30 | (.46) | 0.25 | (.43) | 0.32 | (.47) |
| Highest Degree Received ( $1=$ Yes, $0=\mathrm{No}$ ) |  |  |  |  |  |  |
| High School Only | 0.04 | (.19) | 0.08 | (.28) | 0.01 | (.11) |
| Some College or Technical School | 0.17 | (.38) | 0.23 | (.42) | 0.14 | (.35) |
| College Degree or Higher | 0.79 | (.41) | 0.69 | (.47) | 0.84 | (.36) |
| Household Income Category ( $1=$ Yes, $0=\mathrm{No}$ ) |  |  |  |  |  |  |
| <\$90,000 | 0.13 | (.33) | 0.07 | (.26) | 0.16 | (.36) |
| \$90,000 - < 120,000 | 0.29 | (.45) | 0.24 | (.43) | 0.31 | (.46) |
| \$120,000 - < \$150,000 | 0.27 | (.45) | 0.27 | (.45) | 0.28 | (.45) |
| \$150,000+ | 0.31 | (.46) | 0.42 | (.49) | 0.25 | (.44) |
| Weekly Work Hours ( $1=$ Yes, $0=\mathrm{No}$ ) |  |  |  |  |  |  |
| Full Time ${ }^{1}$ (35-49 hours) | 0.71 | (.46) | 0.71 | (.45) | 0.71 | (.46) |
| Long Hours (50+hours) | 0.29 | (.45) | 0.29 | (.45) | 0.29 | (.46) |
| Schedule Control | 3.60 | (.68) | 3.61 | (.72) | 3.60 | (.65) |

1 Two women and one man who are coded as "Full Time" work fewer than 35 hours per week.

Table 2:
Descriptive Statistics of by Whether Partners' Work Over 50 Hours Per Week for Full Sample and Separately by Gender


[^1]Table 3:
OLS and Ordered Logistic Regression Results of the Assocation between Partner Overwork and Relationship Quality, Stress, and Time Adequacy with Partner ( $\mathrm{N}=604$ )


[^2]
## Table 4:

OLS and Ordered Logistic Regression Results of the Assocation between Partner Overwork and Relationship Quality, Stress, and Time Adequacy with Partner, with Gender Interactions (N=604)

|  | $\underset{4}{\text { Perceived Stress Model }}$ | Time Adequacy with Partner Model 5 | Relationship Quality Model 6 |
| :---: | :---: | :---: | :---: |
| Age | 0.00 | 0.01 | -0.03 |
| Male | -0.07 | 0.60 * | -0.07 |
| Any children in household | 0.67 * | $-1.33 * * *$ | $-1.17{ }^{+}$ |
| Age of youngest child in household | -0.01 | $0.06{ }^{* * *}$ | 0.00 |
| Education (Reference $=$ High School Only) |  |  |  |
| Some College or Technical School | 0.51 | $-0.76{ }^{+}$ | -2.46 ** |
| College Degree or Higher | 0.48 | -1.07 * | -2.26 ** |
| Race/Ethnicity (Reference $=$ White, not Hispanic) |  |  |  |
| Black \& Other Race | -0.16 | 0.15 | -0.79 |
| Asian Indian | -0.12 | -0.24 | -1.20 |
| Other Asian | -0.49 | 0.07 | -2.37 ** |
| Hispanic | -0.58 | -0.06 | -0.38 |
| Immigrant | 0.12 | 0.37 | -0.35 |
| Household Income (Reference $=<\$ 90,000)$ |  |  |  |
| \$90,000 - < 120,000 | -0.28 | 0.44 | -0.05 |
| \$120,000 - < 150,000 | -0.54 | 0.12 | 0.49 |
| \$150,000 ${ }^{+}$ | -0.59 | $0.50{ }^{+}$ | 0.67 |
| Respondent works 50+ hours per week | 0.49 * | $-0.55^{* *}$ | -0.52 |
| Schedule Control | -1.10 *** | 0.84 *** | 0.39 |
| Partner's Weekly Work Hours (Reference $=35-49$ ) |  |  |  |
| 0-34 | $0.92{ }^{+}$ | -0.22 | -2.27 + |
| $50^{+}$ | 1.49 ** | -0.77 ** | -1.50 * |
| Partner's Weekly Work Hours *Male |  |  |  |
| 0-34 * Male | -0.73 | 0.00 | $2.15{ }^{+}$ |
| $50^{+*}$ Male | -1.55 ** | 0.90 * | 2.23 * |
| Constant | 11.57 *** |  | 37.52 *** |
| Cuts |  |  |  |
|  |  | -0.25 |  |
|  |  | 2.20 |  |
|  |  | 5.50 |  |

[^3]
## Table 5:

OLS Regression Results of the Assocation between Partner Overwork and Relationship Quality controlling for Stress and Time Adequacy with Partner ( $\mathrm{N}=604$ )

|  | Relationship Quality |  |  |
| :---: | :---: | :---: | :---: |
|  | Model 7 | Model 8 | Model 9 |
| Age | -0.03 | -0.03 | -0.03 |
| Male | -0.13 | -0.41 | -0.33 |
| Any children in household | -0.60 | -0.54 | -0.28 |
| Age of youngest child in household | -0.01 | -0.03 | -0.02 |
| Education (Reference $=$ High School Only) |  |  |  |
| Some College or Technical School | -2.03 * | -2.10 * | -1.86 * |
| College Degree or Higher | $-1.85 * *$ | -1.75 * | -1.60 * |
| Race/Ethnicity (Reference = White, not Hispanic) |  |  |  |
| Black \& Other Race | -0.93 | -0.88 | -0.98 |
| Asian Indian | -1.30 + | -1.14 | -1.29 |
| Other Asian | -2.79 ** | -2.48 ** | -2.85 ** |
| Hispanic | -0.87 | -0.33 | -0.83 |
| Immigrant | -0.48 | -0.67 | -0.52 |
| Household Income (Reference $=<\$ 90,000)$ |  |  |  |
| \$90,000 - < 120,000 | -0.29 | -0.17 | -0.32 |
| \$120,000 - < 150,000 | 0.03 | 0.49 | 0.07 |
| \$150,000 ${ }^{+}$ | 0.16 | 0.50 | 0.12 |
| Respondent works $50{ }^{+}$hours per week | -0.11 | -0.28 | 0.00 |
| Schedule Control | -0.55 * | 0.07 | -0.66 * |
| Partner's Weekly Work Hours (Reference $=35-49$ ) |  |  |  |
| 0-34 | -1.49 | -1.36 | -1.42 |
| $50^{+}$ | -0.23 | $-1.34+$ | -0.17 |
| Partner's Weekly Work Hours *Male |  |  |  |
| 0-34 * Male | 1.53 | $2.08{ }^{+}$ | 1.51 |
| 50+ *Male | 0.90 | 1.91 * | 0.82 |
| Perceived Stress | -0.85 *** |  | -0.81 *** |
| Time Adequacy with Partner <br> (Reference $=$ never or rarely $)$ |  |  |  |
| Some of the time |  | 2.01 * | $1.39{ }^{+}$ |
| Most of the time |  | 3.13 *** | 1.85 * |
| Always |  | 3.71 ** | 2.12 * |
| Constant | 47.39 *** | $35.66{ }^{* * *}$ | 45.62 *** |

${ }^{+}$p<. 10
$*$
$\mathrm{p}<.05$
$* *$
$\mathrm{p}<.01$

$\quad$| $* * *$ |
| :--- |
| $\mathrm{p}<.001$ |


[^0]:    emily.shafer@pdx.edu.

[^1]:    Note: For Perceived Stress and Relationship Quality, T-Tests were Performed, for Time Adequacy with Partner, Chi-Square tests for independence were performed.

    * $<$. 05
    ${ }^{+}$p<. 10

[^2]:    ${ }^{+}$p<. 10

    * $<.05$
    **
    *** $\mathrm{p}<.001$

[^3]:    ${ }^{+}$p<. 10

    * $<.05$
    ** $\mathrm{p}<.01$

