



What Happens at Home Does Not Stay at Home: Family-to-Work Conflict and the Link Between Relationship Strains and Quality

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Abstract

Family scholars have devoted much effort to understand relationship strains and couple well-being. However, surprisingly few longitudinal studies have sought to capture within-individual variations in relationship strains over time, and the ways that family conditions moderate the association between relationship strains and couple well-being. Using four waves of panel data from the Canadian Work, Stress, and Health Study (2011–2017; $n = 1778$ individuals; 5058 person-years), this study investigates the association of relationship strains (i.e., the unequal division of housework, perceived housework unfairness, and spousal disputes) with couple relationship quality—and the extent to which family-to-work (FWC) and breadwinner status moderate that association. We use fixed effects regression techniques to analyze this diverse sample of workers with multi-item measures of focal variables. We find that the unequal division of housework, perceived housework unfairness, and spousal disputes are associated with lower levels of relationship quality, respectively. Moreover, FWC amplifies the adverse associations of perceived housework unfairness and spousal disputes with relationship quality over time—but FWC’s moderating influence is exacerbated among non-breadwinners. Our findings elaborate and sharpen the scope of FWC as a moderator (and breadwinner status as an additional contingency) in the application of equity theory alongside other conceptual ideas like stress amplification in the stress process model.

Keywords Family-to-work conflict · Relationship strains · Relationship quality · Division of housework · Perceived housework unfairness · Breadwinner status

Introduction

Among a growing body of research that documents relationship strains and their consequences, scholars have underscored the ways that the unequal division of housework, perceived housework unfairness, and marital conflict represent central threats to couple well-being (Carlson et al., 2020; Choi & Marks, 2008; Gillespie et al., 2019; Schieman et al., 2018). Prior studies have established that the unequal division of housework is linked to worse relationship outcomes (Carlson et al., 2020; Schieman et al., 2018). Similar patterns have also been observed for perceived housework unfairness and marital conflict (Choi & Marks, 2008; Gillespie et al.,

2019). While these cross-sectional findings provide useful guideposts, few longitudinal studies have sought to capture within-individual variations in relationship strains over time. Moreover, given the ubiquitous nature of relationship strains and their associations with a couple’s well-being (Carlson et al., 2020; Choi & Marks, 2008; Gillespie et al., 2019), it is important to advance knowledge on the extent to which other qualities within the household might modify the link between the two. Unfortunately, little is known about the factors that moderate the association between relationship strains and couple well-being. In this study, we focus on two of the most prominent family-related conditions as potential moderators: family-to-work conflict (FWC) and breadwinner status.

FWC refers to “a chronic inter-role stressor that captures the process whereby the family role detracts from the time, attention, and performance of the work role” (Badawy & Schieman, 2020, p. 1189). According to the stress amplification perspective (Badawy & Schieman, 2020), FWC might exacerbate the association between relationship strains

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and couple well-being. Moreover, using relative resource and bargaining theories as a guiding framework (Brines, 1994; Rogers, 2004), we suspect that breadwinner status might further influence the nature of FWC's moderating role. Breadwinner status refers to the share of household income relative to one's partner (Chesley, 2017). Although most prior research focuses on breadwinner status as a bargaining resource that helps individuals avoid doing less enjoyable household tasks (Baxter & Hewitt, 2013; Carlson & Lynch, 2017; Killewald, 2011), we shift the focus to examine the moderating potential of breadwinner status when couples experience both relationship strains and FWC simultaneously.

In the present study, we analyze longitudinal data to examine the following research questions. First, are relationship strains—as measured by the unequal division of housework, perceived housework unfairness, and spousal disputes—associated with relationship quality? When we refer to 'the unequal division of housework,' we are referring specifically to inequality in which the respondent performs a greater share (i.e., underbenefits). And, when we refer to 'perceived housework unfairness,' we are referring specifically to the perception that the division of housework is unfair to oneself. As we describe in detail below, we use fixed-effects analytical techniques to account for unmeasured sources of time-stable confounding. Second, we advance prior research by assessing two common family-related conditions embedded in couple relationships that might moderate the association between relationship strains and couple well-being. Specifically, we first ask: does FWC amplify the association of relationship strains with couple relationship quality? And, if so, we then ask: does the moderating influence of FWC further depend on breadwinner status in the household?

Background

The Unequal Division of Housework and Relationship Quality

Family research has applied equity theory to examine the association between the unequal division of housework and relationship outcomes (Ruppanner et al., 2018; Schieman et al., 2018). Equity theory stresses that inequality associated with perceived injustice in social exchange might have adverse cognitive, affective, and behavioral consequences, thereby reducing one's sense of interpersonal closeness in the relationship (Hegtvedt & Parris, 2014; Krehbiel & Cropanzano, 2000). To mitigate these negative consequences, individuals are motivated to restore equity. If they fail to do so, they might attempt to minimize the emotional threat by modifying their cognition and behavior or alternatively,

by terminating the relationship (Adam, 1965). Although the unequal division of housework is detrimental to both partners (Lively et al., 2010), the partner who performs a larger share of the housework—that is, the one who underbenefits—tends to experience more negative consequences (Carlson et al., 2020; Schieman et al., 2018). For instance, using the 2006 Marital and Relationship Survey (MARS), Carlson and colleagues (2020) found that the unequal division of housework was associated with lower levels of relationship satisfaction for both men and women. Likewise, Schieman et al. (2018) discovered that performing a larger share of the housework was linked to lower relationship quality. Collectively, theory and prior research provide a rationale for the following (**Hypothesis 1**): The unequal division of housework will be associated with lower levels of relationship quality over time—especially when it is the respondent who reports doing the bulk of the housework.

Perceived Housework Unfairness and Relationship Quality

Research shows that most men and women view their division of housework as fair, though women consistently report performing the majority of housework (Baxter, 2000; Lennon & Rosenfield, 1994; Smith et al., 1998). As Greenstein (1996) stressed, the unequal division of housework might only be linked to deleterious marital consequences when that inequality is perceived as unfair. For instance, the unequal division of housework might not be harmful for relationship quality if women are satisfied with doing more housework than their male partners (Braun et al., 2008; Treas et al., 2011). The *perceived unfairness* of housework might therefore be more important than the *actual unequal division* of housework in shaping relationship outcomes (Gillespie et al., 2019).

According to equity theory, people are most satisfied when the rewards received are perceived as fair (Walster et al., 1978). By contrast, people become emotionally distressed when they perceive inequities (Mirowsky, 1985). Applied to the study of couple relationship quality, those who perceive that they get less out of their relationship than they should are classified as 'underbenefiting,' while those who perceive that they get more out of their relationship than they should are classified as 'overbenefiting.' Although both forms of inequity produce negative emotional outcomes (Canary & Stafford, 1992; Sprecher, 1986), these consequences are more pronounced among individuals who perceive inequity for oneself than for one's partner (Gillespie et al., 2019; Hegtvedt & Parris, 2014). Research shows that individuals who perceive housework arrangements to be unfair to oneself view their relationship less favorably than if the arrangements are perceived as unfair to their partner (Claffey & Mickelson, 2009; Lively et al., 2010). In

their analyses of more than 10,000 responses collected via an online national news website, Gillespie and colleagues (2019) found that the perceived unfairness of housework was associated with lower levels of relationship satisfaction. Prior studies observe similar patterns (e.g., Amato et al., 2003; Chong & Mickelson, 2016; Frisco & Williams, 2003; Greenstein, 1996). Collectively, these theoretical ideas and prior evidence inform the following (**Hypothesis 2**): Perceived housework unfairness will be associated with lower levels of relationship quality.

Perceived Spousal Disputes and Relationship Quality

In addition to the actual unequal division of housework and perceived housework unfairness, another common strain involves spousal disputes (Young et al., 2014). According to the stress process model, chronic strains attached to key social roles such as intimate couple relationship can cause stress, thereby undermining individuals' health and well-being (Choi & Marks, 2008; Pearlin et al., 1981). Experiencing spousal disputes over time might negatively affect couples' relationship quality. Common spousal disputes include arguments about housework and finances (Young et al., 2014). These negative verbal exchanges might increase levels of dyadic hostility and decrease levels of partner support—and these dynamics can contribute to lower relationship quality (Choi & Marks, 2008). Most empirical research to date has focused on the health consequences of marital conflict, suggesting that it is linked to worse mental and physical health outcomes (Choi & Marks, 2008; Garcia & Umberson, 2019; Robles et al., 2014; Sandberg et al., 2013). Despite a lack of direct empirical evidence on the association of spousal disputes with couple relationship outcomes, the aforementioned theoretical ideas and empirical evidence provide a rationale for the following (**Hypothesis 3**): Spousal disputes will be associated with lower levels of relationship quality.

Mediating Roles of Perceived Housework Unfairness and Spousal Disputes

The unequal division of housework is likely to be intricately interwoven with perceptions of unfairness. According to equity theory (Coltrane, 2000; Lavee & Katz, 2002), it is plausible that some of the hypothesized detrimental association between the unequal division of housework and relationship outcomes might be due to differences in perceived housework unfairness. Although this proposition has received considerable empirical attention, the evidence remains inconclusive (Lavee & Katz, 2002). For instance, using a convenience sample of three ethnic-religious groups in Israel, Lavee and Katz (2002) showed

that perceived housework unfairness fully explained the association between the unequal division of housework and marital quality for women, but not for men. Other studies find similar patterns (e.g., Carlson et al., 2020; Robinson & Spitze, 1992). By contrast, Voydanoff and Donnelly (1999) found little evidence that perceived housework unfairness accounted for the association between time spent in housework and marital happiness. These mixed patterns might be attributable to the analyses of less representative samples (Lavee & Katz, 2002). Nevertheless, based on the ideas embedded in equity theory, we propose the following (**Hypothesis 4a**): Perceived unfairness of housework—when one underbenefits—will account for the adverse association between the unequal division of housework and relationship quality.

Here, we also see a potential mediating role for spousal disputes in this process. Perceived housework unfairness likely elevates spousal disputes, which could further explain the association between the unequal division of housework and poorer relationship quality. We integrate concepts of primary stressors, secondary stressors, and stress proliferation embedded in the stress process model to develop a framework for the mediating potential of spousal disputes (Pearlin et al., 1981). The stress process model highlights the association between primary and secondary stressors where one stressor is often linked to additional stressors, and this process is referred to as “stress proliferation” (Pearlin et al., 1981). Applied to the present study, perceived housework unfairness attributed to the unequal division of housework might place additional strains on couples because of its potential exposure to other stressors, such as spousal disputes. Thus, the resulting experience of spousal disputes might undermine couples' relationship quality. To our best knowledge, no studies have examined the mediating potential of spousal disputes in the association of the unequal division of housework with relationship quality. Based on these aforementioned theoretical ideas, we propose the following (**Hypothesis 4b**): Spousal disputes will further account for the association between the unequal division of housework and relationship quality—net of perceived housework unfairness. Moreover, spousal disputes might also explain some of the link between perceived housework unfairness and relationship quality (**Hypothesis 4c**).

The Potential Moderating Role of Family-to-Work Conflict (FWC)

After establishing the associations among relationship strains and relationship quality, our attention shifts to explore the potential contingencies in those associations. Although equity theory is clear in the predictions that the unequal division of housework and perceived housework unfairness should be linked to unfavorable relationship outcomes

(Hegtvedt & Parris, 2014; Krehbiel & Cropanzano, 2000), it provides less insight about why some social role conditions might make some individuals more vulnerable than others. To fill this gap, we employ the stress process model—especially stress amplification perspective (Chai & Schieman, 2021)—to augment the predictions of equity theory, demonstrating why the links between the unequal division of housework or perceived housework unfairness (alongside spousal disputes) to relationship quality might be stronger for individuals with greater FWC.

FWC is a form of spillover that involves family-related dynamics or processes that interfere with the work role (Anderson et al., 2002; Govender et al., 2006). FWC might undermine one's capacity to fully concentrate in the work role during normal work hours. For individuals who internalize the ideal worker norm and the work devotion schema, they might be more susceptible to viewing their family responsibilities and obligations as preventing them from fully engaging and adequately performing their work-related tasks (Acker, 1990; Blair-Loy, 2003). Research shows that FWC is negatively linked to job performance (Warokka & Febrilia, 2015). In addition, salient others in the workplace (e.g., supervisors and coworkers) might perceive FWC as a violation of the ideal worker norm; by extension, individuals who experience FWC might therefore feel less willing to ask for support (Li et al., 2015). Together, the tensions between family responsibilities and the ability to sustain the standards of the ideal worker norm might generate negative emotional responses towards one's own family members, especially a partner or spouse. Indeed, some research shows that FWC is linked to lower levels of relationship satisfaction (Minnotte et al., 2013). We extend that research by integrating equity theory (Walster et al., 1978) and the stress process model (Pearlin et al., 1981) in a longitudinal framework to examine whether the *combinations* of the unequal division of housework, perceived housework unfairness, or spousal disputes with FWC are more problematic for reducing relationship quality than either one is on its own. While equity theory suggests that the unequal division of housework and perceived housework unfairness generate detrimental relationship quality (Walster et al., 1978), and the stress process model posits that spousal disputes are linked to lower relationship quality (Pearlin et al., 1981), a *stress amplification hypothesis* (Chai & Schieman, 2021) predicts that the unequal division of housework, perceived housework unfairness, and spousal disputes might be even more harmful for individuals who simultaneously experience other chronic stressors over time—in this case: FWC. Taken together, these ideas provide our rationale for the following (**Hypothesis 5**): FWC will amplify the adverse associations of the unequal division of housework, perceived housework unfairness, and spousal disputes with relationship quality over time.

Further Elaboration: Breadwinner Status

The stress process model also suggests that the influence of stressors—and their amplification—might differ across social statuses (Pearlin et al., 1981). Applied to the present scenario, we hypothesize that breadwinner status might further shape the moderating roles of FWC. The theoretical motivation for testing this contingency is based on long-standing perspectives—specifically *relative resource* and *bargaining* theories—that are commonly used to explain the allocation of division of household labor (Brines, 1994; Rogers, 2004) and couple relationship outcomes (Blom & Hewitt, 2020). According to relative resources and bargaining theories, negotiation is a main factor that influences couple relationship quality (Brines, 1994; Rogers, 2004). The partner with greater power can often negotiate a better position for themselves. This power is typically determined by the level of economic resources that each partner brings to the relationship; the partner that contributes to a larger share of household income tends to have more power (Blom & Hewitt, 2020). Moreover, the partner with greater economic resources might be better positioned to 'bargain out' of performing less enjoyable household tasks (Blood & Wolfe, 1960; Kim et al., 2019). Although past research finds that women who earn more income than their partners tend to perform a greater share of housework (Baxter & Hewitt, 2013; Bittman et al., 2003), they might still be able to negotiate other household decisions, thereby making their relationship more satisfying (Blom & Hewitt, 2020).

But our focus here is on whether breadwinner status influences the ways that FWC moderates the link between relationship strains and relationship quality. Despite the insights gained from prior research, gaps remain in the work-family literature on the moderating potency of breadwinner status across different kinds of research puzzles. In our study, we posit that breadwinner status might buffer against FWC's detrimental moderating influence for at least three reasons. First, within the couple relationship, the breadwinner might be more likely to hold a high-income occupation compared to their partner. And high-income occupations often provide more 'family-friendly' benefits than low-income occupations (Ford, 2011; Weigt & Solomon, 2008). In this scenario, the breadwinner might have more flexible work arrangements whereas the non-breadwinner might have more unpredictable schedules, fewer formal benefits, and less flexibility (Ford, 2011; Weigt & Solomon, 2008). There is evidence that workplace flexibility is linked to lower levels of FWC (Hill et al., 2010). Second, breadwinners might have greater access to social capital compared to their partner—so they might be better positioned to count on others for assistance when they experience (or anticipating experiencing) FWC (Ciabattari, 2007). These benefits attached to breadwinners' earning advantages might therefore mitigate the adverse

consequences of FWC. Third, given these aforementioned advantages, a breadwinner might have more bargaining power over their partner, which prevents the potential incidences of FWC in the future. For instance, the breadwinner might be asked by their partner to take an elderly parent to the doctor for regular medical care. The breadwinner might be willing and able to do so because of their flexible work arrangements. However, as an illustration of a future exchange dynamic, if the breadwinner subsequently experiences a form of FWC—such as caring for a sick child during a workday at a time when they need to engage with an important work client—the breadwinner might then ‘use’ what they had contributed to the family in the past as a bargaining tool. This, in turn, might mitigate the threat of FWC if they ask their non-breadwinning partner to rearrange their schedule in order to care for the sick child. Collectively, these dynamics suggest that breadwinner status might function as an additional contingency in the ways that FWC functions as a moderator. Based on these ideas, we propose the following (**Hypothesis 6**): FWC’s adverse moderating role in the associations between relationship strains and quality should be stronger among non-breadwinners.

Data and Method

Sample

The present study analyzes four waves of data from a longitudinal panel of Canadian workers—the 2011–2017 Canadian Work, Stress, and Health Study (CAN-WSH). This data set has a large and diverse sample of Canadian workers. To be eligible for participation, respondents had to be (a) residing in Canada, (b) 18 years of age or older, (c) currently working at a paid job or operating a business, (d) employed in the civilian labor force, and (e) living in a noninstitutional residence. Using random-digit-dial methods, phone interviews were conducted with a regionally stratified unclustered random probability sample. The Wave 1 sample had 6,004 participants with a response rate of approximately 40%. Follow-up interviews were conducted in 2013, 2015, and 2017, yielding a sample of 4,423 participants in Wave 2 (74% retention of Wave 1), 3,805 participants in Wave 3 (63.4% retention of Wave 1), and 3,378 participants in Wave 4 (56.3% retention of Wave 1). For these analyses, we selected individuals who were either cohabiting or married across all four waves. The final analytical sample has 1778 individuals (5,058 person-years).

Measures

Relationship Quality

We used three items to measure relationship quality.¹ As other studies have described, these items include themes of support and the sense of “togetherness,” which are predictive of indicators of couple relationship well-being (Chai & Schieman, 2021; Young et al., 2014). Participants were asked if they agree or disagree with the following statements: “I feel very close to my spouse/partner,” “My spouse/partner takes time to talk over my problems with me,” and “I know that my spouse/partner will always be there for me.” We coded the responses as follows: “strongly disagree” (1), “disagree” (2), “agree” (3), and “strongly agree” (4). To create the index, we averaged responses such that higher scores indicated higher levels of relationship quality ($\alpha = 0.77$).

The Unequal Division of Housework

We used the following five core tasks to assess the unequal division of housework—cooking, cleaning, dishes, laundry, and grocery shopping. As past research suggests, “core tasks are less flexible and more repetitive, making it more likely that disproportionate responsibility for this kind of housework will result in strain for individuals” (Schieman et al., 2018, p. 55). Thus, participants were asked the following: “Who prepares the meals?” “Who does the laundry?” “Who cleans the house?” “Who shops for groceries?” “Who does the dishes?” We followed the coding scheme described by Schieman et al. (2018) to represent the response choices as proportions: “my spouse/partner always does it” (coded 0), “my partner/ spouse usually does it” (coded 0.25), “we both do it” (coded 0.5), “I usually do it” (coded 0.75), and “I always do it” (coded 1). We averaged these responses to create an index (i.e., from 0 to 1), which reflects the respondents’ relative contribution to housework. The higher scores indicated that the respondent performed a greater share of housework.

We recognized that some participants reported that “someone else” performed these housework items. Therefore, before creating this index we recoded “someone else does it” responses as missing and then took the average of the responses across all five items. These missing values have little impact as their frequencies across the five items were quite low (Schieman et al., 2018). Thus, outsourcing

¹ We acknowledge that other labels have been used to describe this measure, like marital satisfaction/dissatisfaction (Chai & Schieman, 2021; Young et al., 2014). We submit that the underlying conceptual logic is similar in that the items represent the presence or absence of a perceived supportive relationship that reflect the assessment of relationship quality.

housework tasks should not bias our measure of division of housework.²

Perceived Housework Unfairness

Following the items about the relative contribution to housework, we used the following item to assess participants' perceptions of housework fairness: "In general, how fair do you feel the division of housework is in your household?" Responses were coded as "very unfair to your spouse/partner" (1), "somewhat unfair to your spouse/partner" (2), "fair to both you and your spouse/partner" (3), "somewhat unfair to you" (4), and "very unfair to you" (5). We interpreted higher scores as the division of housework being more unfair to oneself. This measure has been used in prior research (Schieman et al., 2018).

Spousal Disputes

We used one item to assess spousal disputes. Respondents were asked how often in the last three months they argued with their spouse about housework, finances, or their relationship. Responses included "never" (1), "rarely" (2), "sometimes" (3), "often" (4), and "very often" (5). Higher scores reflected more frequent disputes. Prior studies have used this same measure (Chai & Schieman, 2021; Young et al., 2014).

Family-to-Work Conflict

We used four items to measure family-to-work conflict. Participants were asked the following experiences in the past three months: "How often did your family or personal life keep you from doing as good a job at work as you could?" "How often did your family or personal life keep you from

concentrating on your job?" "How often did your family or personal life drain you of your energy you needed to do your job?" and "How often did you not have enough time for your job because of your family or personal life?" Response choices were as follows: "never" (1), "rarely" (2), "sometimes" (3), "often" (4), and "very often" (5). We averaged the responses where higher scores indicated more family-to-work conflict ($\alpha = 0.76$). Similar measures of family-to-work conflict have been used in past research (Badawy & Schieman, 2020; Chai & Schieman, 2021; Chai et al., 2020).

Breadwinner Status

We used annual personal income and household income to create breadwinner status. Participants were asked to report annual personal income in Canadian dollars. For those who did not report an answer (i.e., "rather not say" or "don't know"), we asked if they would be willing to report if their income fell into one of the following categories: "\$25,000 or less" (1), "between \$25,001 and \$50,000" (2), "between \$50,001 and \$75,000" (3), "between \$75,001 and \$100,000" (4), "between \$100,001 and \$125,000" (5), and "more than 125,000" (6). Next, we bottom-coded the lowest category as "between 0 and \$25,000" and top coded the highest category as "between \$125,001 and \$175,000" (using $\$125,000 \times 1.4$) (Chai & Maroto, 2020). Then, we selected the middle point of each category to create a continuous variable. We combined these individuals with those who reported their personal income in dollars. We also recoded the few cases that reported earning more than \$200,000 as "\$200,000." We used a similar coding strategy for annual household income. Finally, to create the dichotomous breadwinner status variable, we divided annual personal income by annual household income. Values greater than 0.5 were coded as "1" to represent breadwinner status.

Control Variables

Marital status was coded as "married" (1) and "cohabiting" (2). *Presence of children* was measured as the number of children younger than 18 living at home. *Education* was coded as "less than high school" (1), "high school or GED" (2), "specialized vocational training or some college/university" (3), "college graduate" (4), and "post-graduate" (5). *Occupation* was coded as "executive/administrator/management" (1), "professionals" (2), "technical" (3), "sales" (4), "administrative support" (5), "service" (6), and "production" (7). *Respondent's work hours* and *spouse's work hours* were measured as continuous. *Household income* was coded as a continuous amount in dollars. *Survey year* included the following: "2011" (1), "2013" (2), "2015" (3), and "2017" (4). Table 1 presents descriptive statistics of selected variables in the analyses.

² One reviewer raised the concern that paying someone else to do the housework might be associated with higher income compared to those who performed their own housework, which might bias our measure. In our study, 93.04% of the respondents performed their own housework while 6.96% of them paid someone else to do the housework. As the reviewer speculated, average personal and household income were higher for respondents who paid someone else to do the housework compared to those who performed their own housework (\$98,256.27 vs. \$63,847.15 for personal income; \$183,453.7 vs. \$121,892.6 for household income). Given that personal and household income tend to be positively skewed, we also calculated the corresponding medians for personal income (\$90,000 vs. \$55,000) and household income (\$17,000 vs. \$11,000). Our focal interest is breadwinner status—calculated using absolute personal income and household income. Although the percentage of breadwinner status is slightly higher for individuals who paid someone to do housework versus those who did their own housework (54.05% vs. 50.73%), we believe that this difference (3.3%) is too small to bias our measure. Moreover, we control for household income in all of our models.

Table 1 Descriptive statistics for pooled (Wave 1–Wave 4) variables (means, percentages, and standard deviations)

	M or %	SD
Relationship quality	3.69	.49
Unequal division of housework	.58	.20
Perceived housework unfairness	3.13	.69
Spousal disputes	2.16	.95
Family-to-work conflict (FWC)	1.86	.73
Breadwinner (= 1)	50.59	
Married (= 1)	79.16	
Presence of children	.98	1.08
Education		
Less than high school	4.33	
High school	15.07	
Vocational training/some college	23.41	
College graduate (REF)	39.68	
Postgraduate	17.52	
Occupation		
Executive/administrator/management	17.58	
Professionals (REF)	29.91	
Technical	17.44	
Sales	5.32	
Admin support	7.02	
Service	10.87	
Production	11.86	
Respondent’s work hours	39.17	11.90
Spouse’s work hours	40.43	11.87
Household income (logged)	11.60	.48
N (individuals)	1778	
N (person-years)	5058	

Data from four waves of the Canadian Work, Stress, and Health Study (2011–2017). “REF” refers to “the reference category” being used in the analyses

Analytical Strategy

We use fixed-effects regression techniques to estimate the relationships among our focal variables; all models included the full set of control variables. Fixed effects models focus on within-individual variations over time while controlling for any unobserved traits of individuals that are typically invariant over time such as personality and gender (Allison, 2009). In Table 2, Model 1 tests the direct association of the unequal division of housework with relationship quality. Model 2 replaces the unequal division of housework with perceived housework unfairness and tests its direct association with relationship quality; we take this step to assess how perceived unfairness is associated with relationship quality on its own, separately from the actual division of housework. Likewise, Model 3 replaces perceived housework unfairness with spousal disputes and tests its direct association with relationship quality; we take this step to assess how spousal disputes is associated with relationship quality on its own, separately from the division of housework and perceived housework unfairness. Then, in Model 4, we include both the unequal division of housework and perceived housework unfairness in the same model to test the extent to which perceived unfairness contributes to the association between the unequal division of housework and relationship quality—that is, how much of the association between the division of housework and relationship quality occurs indirectly through perceived unfairness. Finally, in Model 5, we include spousal disputes alongside the division of housework and perceived unfairness to test the extent to which spousal disputes contributes to any remaining association between the unequal division of housework and relationship quality.

Table 2 Fixed-effects regression models of couple relationship quality on relationship strains

	Model 1	Model 2	Model 3	Model 4	Model 5
Unequal division of housework	– .412*** (.067)			– .319*** (.068)	– .278*** (.065)
Perceived housework unfairness		– .098*** (.012)		– .086*** (.013)	– .069*** (.012)
Spousal disputes			– .137*** (.008)		– .129*** (.008)
N (individuals)	1778	1778	1778	1778	1778
N (person-years)	5058	5058	5058	5058	5058

Standard errors are in parentheses. Data from four waves of the Canadian Work, Stress, and Health Study (2011–2017). All models include the following control variables: marital status, presence of children, education, occupation, respondent’s work hours, spouse’s work hours, household income (logged), and survey year. All continuous variables are mean centered

*** $p < .001$ (two-tailed test)

Table 3 Fixed-effects regression models of couple relationship quality on relationship strains, moderation by FWC and breadwinner status

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Unequal division of housework	– .267*** (.065)	– .265*** (.065)	– .254*** (.065)	– .248*** (.076)	– .267*** (.065)	– .256*** (.065)
Perceived housework unfairness	– .068*** (.012)	– .066*** (.012)	– .069*** (.012)	– .069*** (.012)	– .072*** (.016)	– .067*** (.012)
Spousal disputes	– .125*** (.008)	– .125*** (.008)	– .119*** (.008)	– .126*** (.008)	– .124*** (.008)	– .131*** (.011)
FWC	– .043*** (.010)	– .042*** (.010)	– .038*** (.010)	– .052*** (.013)	– .053*** (.013)	– .048*** (.013)
Breadwinner (= 1)	.004 (.017)	.003 (.017)	.003 (.017)	.002 (.017)	– .002 (.017)	– .007 (.017)
Unequal division of housework × FWC	– .059 (.045)			– .140* (.061)		
Perceived housework unfairness × FWC		– .039*** (.012)			– .068*** (.016)	
Spousal disputes × FWC			– .041*** (.008)			– .055*** (.010)
Unequal division of housework × breadwinner				– .044 (.074)		
FWC × breadwinner				.032 (.017)	.030 (.017)	.023 (.017)
Unequal division of housework × FWC × breadwinner				.205* (.079)		
Perceived housework unfairness × breadwinner					.008 (.019)	
Perceived housework unfairness × FWC × breadwinner					.062** (.021)	
Spousal disputes × breadwinner						.025 (.013)
Spousal disputes × FWC × breadwinner						.034* (.014)
N (individuals)	1778	1778	1778	1778	1778	1778
N (person-years)	5058	5058	5058	5058	5058	5058

Standard errors are in parentheses. Data from four waves of the Canadian Work, Stress, and Health Study (2011–2017). All models include the following control variables: marital status, presence of children, education, occupation, respondent's work hours, spouse's work hours, household income (logged), and survey year. All continuous variables are mean centered

FWC = family-to-work conflict

* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed test)

In Table 3, we test the interaction terms. Models 1, 2, and 3 examine whether the associations of the unequal division of housework, perceived housework unfairness, and spousal disputes with relationship quality differ across levels of FWC. Then, including three-way interaction terms, Models 4, 5, and 6 test breadwinner status differences in FWC's moderating influence in the associations between the three relationship strains and relationship quality over time. We conduct Hausman tests to determine whether random effects models are more appropriate for the analyses compared to fixed-effect models. Each of these tests is statistically significant, suggesting that random-effects model would be biased

due to the correlations between the predictors in the model and the time-invariant characteristics, so we proceed with reporting the results for the fixed-effects models.³

³ One reviewer requested more discussion of between-individual variation. In response, we have included two sets of random effects models in Appendices 1 and 2, corresponding to each FE model shown in Tables 2 and 3. The patterns of FE and RE models largely remain the same. However, the sizes of the coefficients are generally larger in random effects models. These findings suggest that random effects models might overestimate the coefficients compared to fixed effects models because they are unable to account for unobserved time stable confounding.

Results

The analysis begins in Table 2 by estimating the association of the unequal division of housework with relationship quality. In Model 1, we observe that the unequal division of housework—with the respondent performing a greater share—is associated with lower levels of relationship quality over time ($b = -0.412$, $p < 0.001$). Similarly, Model 2 shows that perceived housework unfairness—with the perception that the division of housework is unfair to oneself—is associated with lower levels of relationship quality over time ($b = -0.098$, $p < 0.001$). Model 3 also reveals a similar pattern, suggesting that spousal disputes are associated with lower levels of relationship quality over time ($b = -0.137$, $p < 0.001$). Collectively, these findings support the predictions of Hypotheses 1, 2, and 3 that the three potential relationship strains—the unequal division of housework, perceived housework unfairness, and spousal disputes—are each associated with lower relationship quality over time.

In Model 4, when we include both the unequal division and perceived unfairness of housework simultaneously, we see some overlap in these patterns. After statistically adjusting for perceived housework unfairness, the association between the unequal division of housework and relationship quality decreases in absolute terms ($b = -0.412$, $p < 0.001$ in Model 1 to $b = -0.319$, $p < 0.001$ in Model 4). A Sobel mediation test suggests that perceived housework unfairness partially mediates the association between the unequal division of housework and relationship quality ($Z = -5.763$, $p < 0.001$).

Next, after statistically adjusting for spousal disputes in Model 5, the association between the unequal division of housework and relationship quality further decreases in absolute terms ($b = -0.319$, $p < 0.001$ in Model 4 to $b = -0.278$, $p < 0.001$ in Model 5). A Sobel mediation test suggests that spousal dispute partially mediates the association between the unequal division of housework and relationship quality, net of perceived housework unfairness ($Z = -3.244$, $p < 0.01$). Collectively, these findings support Hypotheses 4a and 4b: Perceived housework unfairness and spousal disputes partially explain the adverse association between the unequal division of housework and relationship quality, respectively. Based on a Sobel mediation test, we also find that spousal disputes partially mediate the association between perceived housework unfairness and relationship quality ($Z = -4.876$, $p < 0.001$), supporting Hypothesis 4c. In Model 5, it is also noteworthy that the unequal division of housework, perceived unfairness, and spousal disputes each have net negative and independent associations with relationship quality. The unequal division of housework matters for relationship quality above and beyond its positive

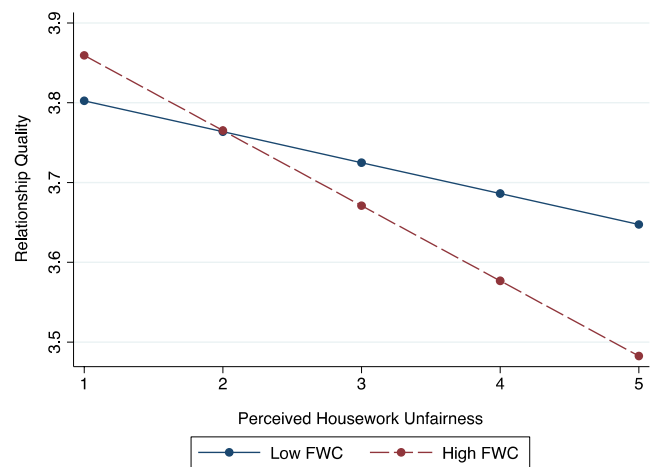


Fig. 1 Predicted values of relationship quality (varying by perceived housework unfairness and FWC). *Note:* Low FWC is 1SD below its mean. High FWC is 1SD above its mean

associations with the perceived unfairness of housework and spousal disputes.

At this juncture, readers might wonder about the possibility of gender differences in these initial patterns. To evaluate that possibility, we perform ancillary analyses, suggesting that perceived housework unfairness and spousal disputes each have a stronger mediating influence among women compared to men (see Appendix 3). For instance, the association between the unequal division of housework and relationship quality decreases in absolute terms ($b = -0.442$, $p < 0.001$ in Model 1 to $b = -0.293$, $p < 0.001$ in Model 4) among women. A Sobel mediation test suggests that perceived housework unfairness partially mediates the association between the unequal division of housework and relationship quality ($Z = -5.989$, $p < 0.001$). However, there is little evidence suggesting the same mediation pattern among men ($Z = -1.533$, $p > 0.05$). These patterns are consistent with prior studies that document the mediating influence of perceived housework unfairness in the association between the unequal division of housework and relationship outcomes (Lavee & Katz, 2002)—with the gender elaboration in our findings.

Moving to the interaction tests for FWC in Table 3, in Model 1 we observe that FWC does not moderate the association between the unequal division of housework and relationship quality over time ($b = -0.059$, $p > 0.05$). In Model 2, however, FWC moderates the association between perceived housework unfairness and relationship quality over time ($b = -0.039$, $p < 0.001$). This indicates that perceived housework unfairness is linked to lower relationship quality—and this association is stronger among individuals with higher FWC. Figure 1 illustrates this interaction pattern with predicted values of relationship quality across levels of perceived unfairness and at low versus high levels of FWC (all

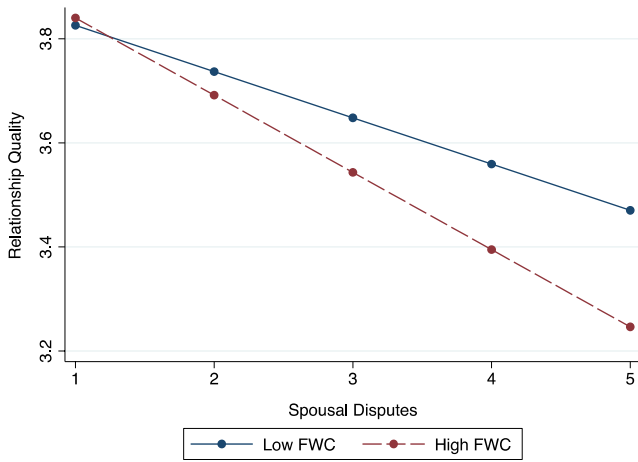


Fig. 2 Predicted values of relationship quality (varying by spousal disputes and FWC). *Note:* Low FWC is 1SD below its mean. High FWC is 1SD above its mean

other covariates at their means). This figure demonstrates that FWC amplifies the link between perceived housework unfairness and poor relationship quality.

Model 3 shows that FWC also exacerbates the adverse association between spousal disputes and relationship quality over time ($b = -0.041, p < 0.001$). Figure 2 illustrates this interaction pattern with predicted values of relationship quality across levels of spousal disputes and at low versus high levels of FWC (all other covariates held at their means). Spousal disputes are more strongly associated with poorer relationship quality when FWC is high. Together, these results partially support Hypothesis 5: FWC amplifies the adverse associations of perceived housework unfairness and spousal disputes (but not the unequal division of housework) with relationship quality over time—patterns that are consistent with the stress amplification perspective. Once again, some readers might wonder if gender also plays a role in these observed patterns (Models 1–3). Our supplementary analyses consider this possibility do not find any significant gender differences (see Appendix 4).

Next, we turn to testing if breadwinner status functions as a social group difference in FWC’s role as a moderator. First, although Model 1 shows that FWC does not moderate the association between the unequal division of housework and relationship quality, in Model 4 the statistically significant three-way interaction coefficient indicates that the association depends on breadwinner status ($b = 0.205, p < 0.05$). As Fig. 3A and B illustrate, non-breadwinner status exacerbates the stress amplification that occurs when the unequal division of housework and FWC combine. In other words, this three-way interaction means that the negative relationship between the unequal division of housework and relationship quality is stronger at high levels of FWC—but only among those who are *not* the breadwinners in the household.

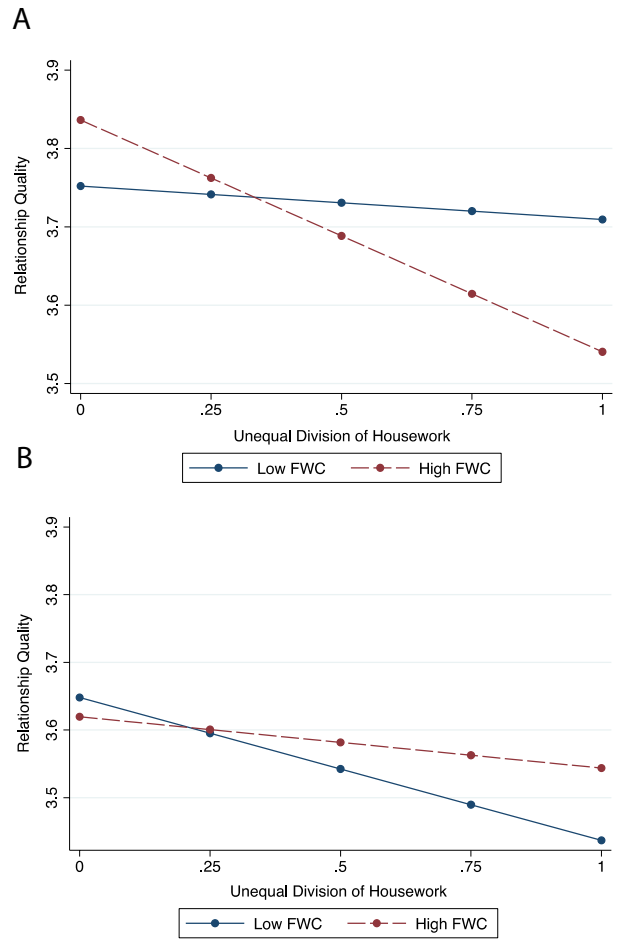


Fig. 3 A Predicted Values of relationship quality (varying by unequal division of housework and FWC) among Non-breadwinners. *Note:* Low FWC is 1SD below its mean. High FWC is 1SD above its mean. B Predicted values of relationship quality (varying by unequal division of housework and FWC) among Breadwinners. *Note:* Low FWC is 1SD below its mean. High FWC is 1SD above its mean

Similarly, Model 5 shows that the three-way interaction coefficient for perceived housework unfairness, FWC, and breadwinner status is statistically significant ($b = 0.062, p < 0.01$). As Figs. 4A and B illustrate, non-breadwinner status exacerbates the stress amplification that occurs when perceived housework unfairness and FWC combine. In other words, this three-way interaction means that the negative relationship between perceived unfairness and relationship quality is stronger at high levels of FWC—but only among those who are not the breadwinners in the household.

In Model 6, we also find a statistically significant three-way interaction coefficient for spousal disputes, FWC, and breadwinner status ($b = 0.034, p < 0.05$). As Fig. 5A and B illustrate, non-breadwinner status exacerbates the stress amplification that occurs when spousal disputes and FWC combine. The negative relationship between spousal disputes

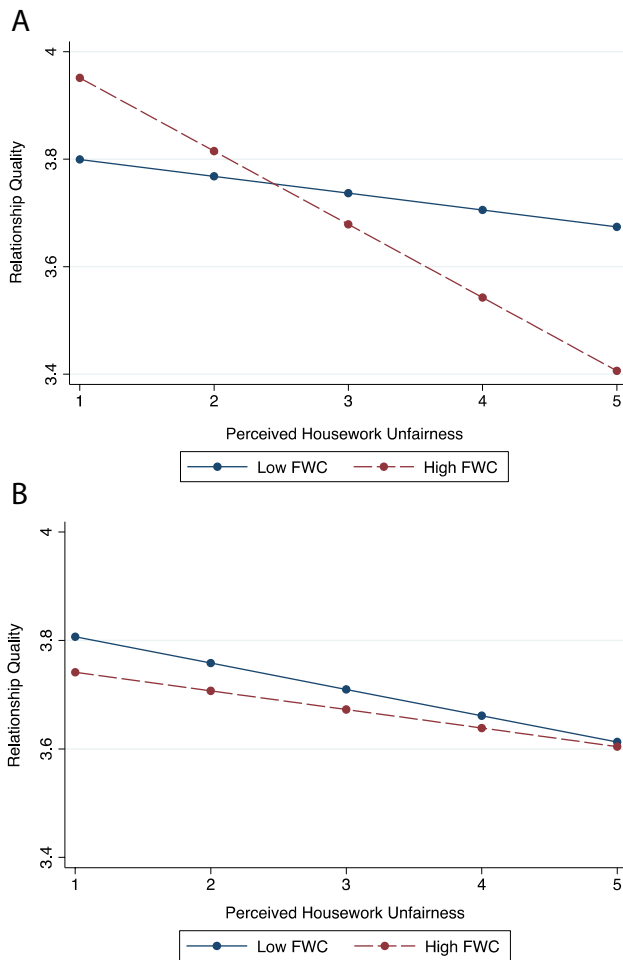


Fig. 4 **A** Predicted values relationship quality (varying by perceived housework unfairness and FWC) among non-breadwinners. *Note:* Low FWC is 1SD below its mean. High FWC is 1SD above its mean. **B** Predicted values of relationship quality (varying by perceived housework unfairness and FWC) among Breadwinners. *Note:* Low FWC is 1SD below its mean. High FWC is 1SD above its mean

and relationship quality is stronger at high levels of FWC—but again only among those who are *not* the breadwinners in the household. Taken together, these statistically significant three-way interaction coefficients support Hypothesis 6: The adverse moderating influence of FWC in the links between relationship strains and relationship quality is stronger among non-breadwinners in the household—patterns consistent with relative resources and bargaining theories.

Discussion and Conclusion

The present study contributes to knowledge about the association between relationship strains—as measured by the unequal division of housework, perceived housework unfairness, and spousal disputes—and couple well-being by identifying

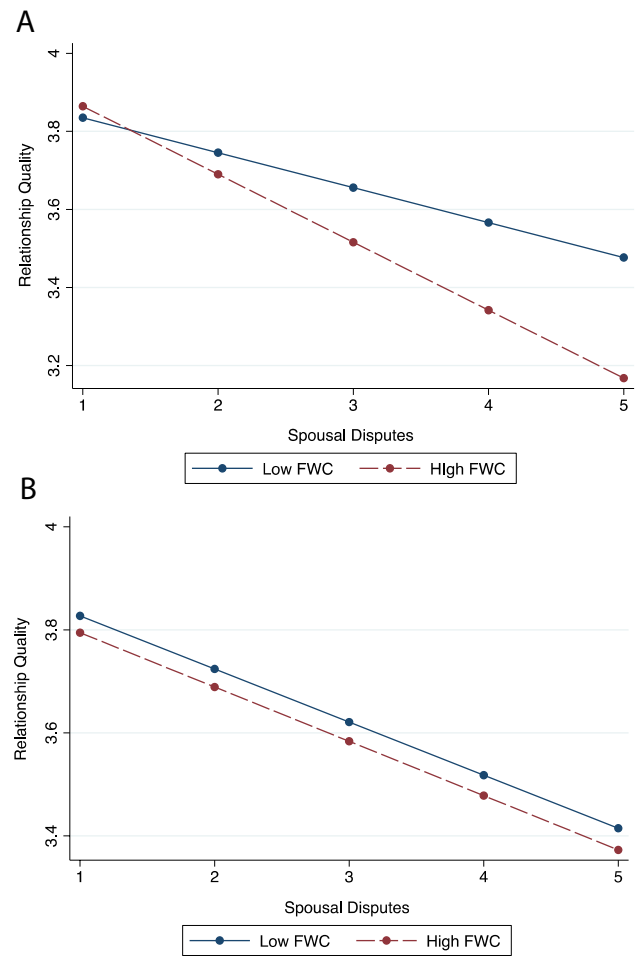


Fig. 5 **A** Predicted values of relationship quality (varying by spousal disputes and FWC) among non-breadwinners. *Note:* Low FWC is 1SD below its mean. High FWC is 1SD above its mean. **B** Predicted value of relationship quality (varying by spousal disputes and FWC) among breadwinners. *Note:* Low FWC is 1SD below its mean. High FWC is 1SD above its mean

FWC as an important moderator, and by further identifying the way that breadwinner status elaborates these relationships. We analyzed four waves of panel data from a national sample of working Canadians to demonstrate that FWC’s moderating influence generalized to both perceived housework unfairness and spousal disputes—amplifying their links to relationship quality. Moreover, non-breadwinner status further exacerbated the adverse moderating influence of FWC. Applying fixed-effects analyses that use within-individual variations over time, we were able to adjust for unobserved time-invariant confounders that might have otherwise biased the observed relationships. Collectively, our findings shed light on the ways that FWC combines with relationship strains to shape relationship quality—and the significance of breadwinner status in those dynamics.

Our first set of findings align with a prominent narrative in the division of housework literature: the unequal division of housework was adversely associated with relationship quality (Carlson et al., 2020; Schieman et al., 2018). Responding to a recent call for more attention to perceived housework unfairness and relationship outcomes (Gillespie et al., 2019), we observed that perceived housework unfairness was associated with lower levels of relationship quality. This finding is consistent with the prediction of equity theory (Walster et al., 1978). We also established the adverse association of a relatively understudied form of relationship strain—spousal disputes—with relationship quality. It is noteworthy that the link between the unequal division of housework and poorer relationship quality remains even net of perceived unfairness and spousal disputes.

In addition, our findings contribute to the literature by showing that perceived housework unfairness and spousal disputes *partially* explained the adverse association between the unequal division of housework and relationship quality over time. To the best of our knowledge, ours is the first national longitudinal study that uses fixed-effects models to estimate the associations between each of these relationship strains and relationship quality simultaneously. This is an important contribution considering the possibility that unmeasured variables such as personality could confound the links between relationship strains and couple relationship quality. Together, our findings help address these issues by (1) documenting multiple forms of relationship strain and (2) using panel data and fixed-effects techniques to control for unmeasured time-stable variables.

After establishing the direct and indirect associations among the different forms of relationship strains and relationship quality, our analyses then turned to understanding the role of FWC as a potential moderator. Here, we discovered that FWC exacerbated the negative associations between (a) perceived housework unfairness and relationship quality and (b) spousal disputes and relationship quality, but not for (c) the unequal division of housework and relationship quality. In line with the theoretical rationale of stress amplification (Chai & Schieman, 2021), our findings demonstrate that relationship strains such as perceived housework unfairness and spousal disputes might be even more consequential for relationship outcomes when couples simultaneously experience other pernicious spillover-type stressors like FWC. Stress amplification means that one stressor “hurts” more in the presence of another stressor. In this case, workers who internalize the ideal worker norm might recognize the ways that FWC impedes their concentration in the work role (Paulin et al., 2017). In other words, when non-work-related responsibilities and obligations spill over into the work domain, workers might be more likely to perceive such experiences as interfering with their ability to fully commit to their work role (Dumas & Sanchez-Burks,

2015). This, in turn, might amplify the negative thoughts and emotions towards their partner, and the adverse consequences might be more severe in combination with relationship strains. The non-significant influence of FWC as a moderator in the association between the unequal division of housework and relationship quality might suggest that perceived and interpersonal aspects of relationship strains matter more in shaping couple well-being when combined with other stressors. Nevertheless, our findings apply these ideas about stress amplification in the stress process model and integrate them with scholarship related to equity theory—especially in the case of perceived unfairness of housework divisions—by documenting how FWC augments the negative association between relationship strains and relationship quality.

But we take this story even further by describing the additional elaboration based on another critical factor in the household: *breadwinner status*. Consistent with the predictions of relative resources and bargaining theories (Brines, 1994; Rogers, 2004), we found that the amplifying role of FWC in the association between relationship strains and relationship quality was stronger among non-breadwinners. Past research suggests that breadwinners tend to hold higher income occupations compared to non-breadwinners (Weigt & Solomon, 2008). The advantages of having higher income occupations might provide breadwinners with greater bargaining power due to access to flexible work arrangements and social capital when dealing with the challenges associated with FWC, compared to their non-breadwinning partners (Ciabattari, 2007; Hill et al., 2010). For instance, the breadwinner might face some form of FWC from time to time when their benefits provide limited help. When this scenario occurs, we speculate that, according to relative resources and bargaining theories (Brines, 1994; Rogers, 2004), the breadwinner might be able to more effectively use their earning advantages as a bargaining tool—and they might solicit more support from the non-breadwinning partner to prevent themselves from the potential adverse consequences of FWC. By contrast, the non-breadwinning partner is likely to have less bargaining power because of their more disadvantaged statuses in terms of unpredictable schedules, fewer formal benefits, and less flexibility (Weigt & Solomon, 2008). In other words, the potential adverse consequences would be more severe for the non-breadwinning partner. Nevertheless, these ideas should be tested more thoroughly—ideally with a mixed methods approach to capture complexities in power, resources, and bargaining within couples.

Before concluding, we wish to acknowledge three limitations of the present study. The first involves reverse causality. We recognize the possibility that relationship quality might be adversely associated with perceived housework unfairness and spousal disputes. However, given the ways

that our patterns mapped on to theoretically-driven hypotheses grounded in equity theory (Hegtvedt & Parris, 2014; Krehbiel & Cropanzano, 2000) and the stress process model (Pearlin et al., 1981), we see the more compelling case that suggests that relationship quality is the result of perceived unfairness in housework divisions and spousal disputes. Nevertheless, future research that conducts cross-lagged panel modeling would provide insights on the potential reverse associations or even reciprocal patterns over time (Maxwell & Cole, 2007).

Second, although one advantage of using fixed-effects models is to control for all unobserved time-invariant characteristics, we still need to rely on observed measures to rule out influential time-varying characteristics. In our study, we controlled for several time-varying sociodemographic characteristics. However, we were unable to take into account other potentially relevant time-varying characteristics, which should be considered in future analyses. To cite one example, prior research demonstrated that gender ideology is linked to the actual unequal division of household labor (Evertsson, 2014), perceived housework unfairness (Carriero & Todesco, 2017) and couple relationship outcomes (Cao et al., 2019) and therefore could represent an omitted confounder. Although we are unable to address the influence of gender ideology given data limitations, we encourage future research to examine how gender ideology might shape the relationships between relationship strains and couple well-being or even alter the moderating roles of FWC and breadwinner status. For example, individuals who adhere to more traditional gender ideologies in terms of work and family

arrangements might not experience the same levels or effects of the unequal division of housework—or perceive particular arrangements as unfair.

Third, perceived housework unfairness was assessed by a single item, which might limit confidence in the validity of this measure (Lavee & Katz, 2002). Nevertheless, most studies to date have employed a single item when measuring perceived housework unfairness (Gillespie et al., 2019; Schieman et al., 2018).

Despite these study limitations, our findings from a unique longitudinal study of Canadian workers offer new insights about FWC as a moderator that harkens to both equity theory and stress amplification. Equity theory is a useful heuristic in the division of housework literature (Hegtvedt & Parris, 2014; Krehbiel & Cropanzano, 2000). Likewise, the stress process model represents a prominent framework for many scholars in the sociological study of health and well-being (Pearlin et al., 1981). We attempt to bridge the two by describing the ways that FWC exacerbates the negative association between relationship strains and relationship quality—and by further elaborating on those patterns by showing the relevance of breadwinner status in the household.

Appendix 1

See Table 4.

Table 4 Random-effects regression models of couple relationship quality on relationship strains

	Model 1	Model 2	Model 3	Model 4	Model 5
Unequal division of housework	– .431*** (.044)			– .236*** (.048)	– .196*** (.045)
Perceived housework unfairness		– .133*** (.010)		– .111*** (.011)	– .088*** (.010)
Spousal disputes			– .172*** (.007)		– .162*** (.007)
N (individuals)	1778	1778	1778	1778	1778
N (person-years)	5058	5058	5058	5058	5058

Standard errors are in parentheses. Data from four waves of the Canadian Work, Stress, and Health Study (2011–2017). All models include the following control variables: marital status, presence of children, education, occupation, respondent's work hours, spouse's work hours, household income (logged), and survey year. All continuous variables are mean centered

*** $p < .001$ (two-tailed test)

Appendix 2

See Table 5.

Table 5 Random-effects regression models of couple relationship quality on relationship strains, moderation by FWC and breadwinner status

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Unequal division of housework	-.192*** (.045)	-.193*** (.045)	-.185*** (.045)	-.208*** (.056)	-.192*** (.045)	-.188*** (.045)
Perceived housework unfairness	-.086*** (.010)	-.083*** (.010)	-.088*** (.010)	-.086*** (.010)	-.093*** (.014)	-.086*** (.010)
Spousal disputes	-.154*** (.007)	-.155*** (.007)	-.149*** (.007)	-.155*** (.007)	-.154*** (.007)	-.156*** (.009)
FWC	-.046*** (.008)	-.045*** (.008)	-.042*** (.008)	-.057*** (.011)	-.058*** (.011)	-.056*** (.011)
Breadwinner (= 1)	-.012 (.013)	-.013 (.013)	-.012 (.013)	-.015 (.013)	-.017 (.013)	-.020 (.014)
Unequal division of housework × FWC	-.088* (.039)			-.154** (.054)		
Perceived housework unfairness × FWC		-.046*** (.010)			-.074*** (.015)	
Spousal disputes × FWC			-.045*** (.007)			-.057*** (.009)
Unequal division of housework × breadwinner				.029 (.062)		
FWC × breadwinner				.033* (.015)	.032* (.015)	.031* (.015)
Unequal division of housework × FWC × breadwinner				.177* (.073)		
Perceived housework unfairness × breadwinner					.017 (.016)	
Perceived housework unfairness × FWC × breadwinner					.059** (.020)	
Spousal disputes × breadwinner						.015 (.012)
Spousal disputes × FWC × breadwinner						.029* (.013)
N (individuals)	1778	1778	1778	1778	1778	1778
N (person-years)	5058	5058	5058	5058	5058	5058

Standard errors are in parentheses. Data from four waves of the Canadian Work, Stress, and Health Study (2011–2017). All models include the following control variables: marital status, presence of children, education, occupation, respondent's work hours, spouse's work hours, household income (logged), and survey year. All continuous variables are mean centered

FWC family-to-work conflict

* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed test)

Appendix 3

See Table 6.

Table 6 Fixed-effects regression models of couple relationship quality on relationship strains

	Panel A: Men				
	Model 1	Model 2	Model 3	Model 4	Model 5
Unequal division of housework	– .373*** (.098)			– .344*** (.100)	– .342*** (.097)
Perceived housework unfairness		– .041* (.018)		– .030 (.019)	– .029 (.018)
Spousal disputes			– .109*** (.013)		– .108*** (.013)
N (individuals)	709	709	709	709	709
N (person-years)	2024	2024	2024	2024	2024
	Panel B: Women				
	Model 1	Model 2	Model 3	Model 4	Model 5
Unequal division of housework	– .442*** (.091)			– .293*** (.092)	– .223* (.088)
Perceived housework unfairness		– .139*** (.017)		– .127*** (.017)	– .096*** (.017)
Spousal disputes			– .153*** (.011)		– .140*** (.011)
N (individuals)	1069	1069	1069	1069	1069
N (person-years)	3034	3034	3034	3034	3034

Standard errors are in parentheses. Data from four waves of the Canadian Work, Stress, and Health Study (2011–2017). All models include the following control variables: marital status, presence of children, education, occupation, respondent's work hours, spouse's work hours, household income (logged), and survey year. All continuous variables are mean centered. We would like to acknowledge that, based on Hausman tests, Models 1, 2, and 4 should be presented as RE models among men, though the patterns between FE- and RE models largely remain the same. We choose to present FE models for the purpose of making comparisons with women

* $p < .05$. *** $p < .001$ (two-tailed test)

Appendix 4

See Table 7.

Table 7 Fixed-effects regression models of couple relationship quality on relationship strains

	Model 1	Model 2	Model 3
Unequal division of housework	– .293** (.100)	– .262*** (.065)	– .249*** (.065)
Perceived housework unfairness	– .068*** (.012)	– .027 (.019)	– .068*** (.012)
Spousal disputes	– .125*** (.008)	– .123*** (.008)	– .101*** (.013)
FWC	– .078*** (.022)	– .063*** (.018)	– .044** (.016)
Unequal division of housework × FWC	– .240* (.098)		
Unequal division of housework × women	.042 (.129)		
FWC × women	.036 (.026)	.029 (.022)	.009 (.021)
Unequal division of housework × FWC × women	.225 (.119)		
Perceived housework unfairness × FWC		– .056** (.021)	
Perceived housework unfairness × women		– .067** (.024)	
Perceived housework unfairness × FWC × women		.019 (.026)	
Spousal disputes × FWC			– .024 (.014)
Spousal disputes × women			– .029 (.017)
Spousal disputes × FWC × women			– .024 (.017)

Standard errors are in parentheses. Data from four waves of the Canadian Work, Stress, and Health Study (2011–2017). FWC=family-to-work conflict. All models include breadwinner status and the following control variables: marital status, presence of children, education, occupation, respondent's work hours, spouse's work hours, household income (logged), and survey year. All continuous variables are mean centered

* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed test)

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Declarations

Conflict of interest The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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