# The Political Consequences of the Mental Load* 

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#### Abstract

How do levels of cognitive household labor - the "mental load" involved in anticipating, fulfilling, and monitoring household needs - affect political engagement? The mental load is distinct from the physical tasks of e.g., cooking and cleaning, and thought to be disproportionately undertaken by women. Thus far, the few studies addressing the issue have used qualitative methods to document it, and the topic has yet to be studied in political science research. As a result, we may be underestimating household gender gaps and their impact on politics. To investigate this question, I field a descriptive survey on politics and household work to parents in the United States. My survey's novel approach uses a series of questions that ask about who in the household does different cognitive labor tasks. I argue that women have higher mental loads than men, and large mental loads decrease political interest for women. I find support for this theory: women report being mostly responsible for 70 percent of cognitive household labor, while men report being mostly responsible for 30 percent. This 40 percent gender gap is twice as large as the gender gap in physical household labor, and it persists across a range of characteristics. Additionally, I find that the mental load moderates the relationship between gender and political interest, with women, but not men, reporting less interest in politics as the mental load increases. Taken together, my findings offer new empirical evidence about a gender gap too often hidden, and its consequences for equality in democratic life.


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The Covid-19 pandemic has increased gender gaps in household labor and workforce participation (Alon et al. 2020; Collins et al. 2021; Lyttelton, Zang \& Musick 2020). Many parents have struggled to balance caregiving and work, with schools and daycares shut or moved to remote learning for long periods of time. Part of this additional labor consists of not just physical tasks such as cooking, cleaning, or looking after children but mental tasks. Such tasks include ensuring that children make it to Zoom sessions on time, checking in with isolated relatives, and organizing socially distanced extracurricular activities. Anecdotal evidence suggests that many of these mental burdens fall to women - and mothers, especially. ${ }^{1}$ Women, but not men, report higher levels of anxiety and depression due to the drastic increase in what was already a double shift (Lyttelton, Zang \& Musick 2020). There is every reason to think that the Covid-19 crisis has exacerbated a gender gap that is too often hidden: the "mental load".

The mental load is the cognitive labor involved in anticipating, fulfilling, and monitoring household needs. It includes remembering schedules and deadlines, arranging goods and services to support the household, reminding others of what needs to be done, household financial management, finding child care solutions, and juggling priorities and time conflicts (Robertson et al. 2019). The mental load can often involve not only the cognitive labor of managing these tasks, but the emotional labor of worrying about completing them (Dean, Churchill \& Ruppanner 2022). This concept gained traction as a cultural touch point with the publication of the French feminist cartoonist Emma's comic about the issue in 2017, ${ }^{2}$ and recently path-breaking literature from sociology uses in-depth interviews to define the phenomenon conceptually (Daminger 2019). To date, no studies exist measuring the mental load quantitatively, and no studies investigate the potential political causes or consequences

[^1]of this hidden source of gender inequality. This matters because we might be underestimating gender gaps in the household, and failing to target interventions to close what is likely a persistent gap.

As a first step, I field a descriptive survey to 1,528 parents in the United States to shed light on the following research questions. First, how do levels of the mental load differ across gender and household context? Second, how does the mental load affect levels of political interest for men and women? The United States, with its relatively high level of women's employment combined with scant federal support for parental leave and child care, offers an extreme case. ${ }^{3}$ I expect gender gaps in the mental load to be large. The potential ramifications of this hidden gender gap are extensive. Women have made significant progress in education and the labor force within a relatively short span of time. Yet, if women but not men remain the ones mainly responsible for managing household labor, it stands to follow that gender gaps in public life outside the household are likely to persist. For the sake of this paper I focus on consequences for one type of political engagement in particular, interest in politics. I argue that women with high mental loads are less interested in politics, either because the mental load "crowds out" space for additional interests, or because the types of mental work that women tend to do are more mentally taxing and could discourage social relationships where politics are discussed.

I find evidence of large gender gaps in cognitive household labor which persist across nearly every household context and individual-level characteristic assessed. Women report being mostly responsible for 70 percent of cognitive household labor according to my task-based measure, while men report responsibility for 30 percent. This gender gap of 40 percent is twice as large as the gender gap I find for the estimated share of physical household labor, and it does not vary significantly by income, education, or political party. The gender

[^2]imbalance I document in often invisible forms of cognitive household labor has important implications for politics. Women, but not men, report lower levels of political interest as their mental load increases. These findings suggest the enduring relevance of the household division of labor to equality in political life. They point to increasing men's participation in not just physical but also cognitive household labor - particularly in those routine, nondiscretionary tasks traditionally done by women, such as child care and cleaning - as an essential part of closing gender gaps in political engagement.

## Gender, the Mental Load, and Political Interest

Women continue to do the bulk of household labor across nearly every context in the world. According to data from the Organisation for Economic Co-operation and Development (OECD), globally women spend between two and ten times more time on unpaid care work than men. These gender gaps narrow with women's education and employment, and when the gender wage gap is relatively smaller (Ferrant, Pesando \& Nowacka 2014; Iversen \& Rosenbluth 2010). According to household bargaining theories, when women have greater outside options they have more negotiating power at home, and men begin to take on some of the physical household work (Iversen \& Rosenbluth 2010). The same dynamics might not hold for gender gaps in cognitive household labor. While gender gaps in physical household labor decrease with women's relative income (e.g., Fuwa 2004), I do not expect the gender gap in the mental load to similarly decline with education or income. This is because cognitive labor is harder to outsource than physical household labor, and it does not require women's physical presence in the home. Instead, it can always be in the back of one's mind. Even very affluent families with full-time child care, cleaning and other household help require someone to manage all of the services and the day-to-day schedules of family members - most often, the mother (Sherman 2017).

In addition, the rise of intensive mothering has affected middle and upper class women in particular (Hays 1996). This dominant paradigm suggests that 'good' mothers ought to be highly involved in all aspects of their children's lives, but the same social pressures are not placed on fathers (Damaske 2013). Women but not men are socialized to be the ones ultimately responsible for family life - and they are likely judged by their peers if they do not adhere to these norms (Thébaud, Kornrich \& Ruppanner 2021). Men, conversely, face social pressure to be 'ideal workers' and often feel unable to take up policies such as flexible working or parental leave (when it is offered) due to risks of stigmatization (Tanquerel \& Grau-Grau 2020). One recent study highlights that men and women have different patterns of perception about domestic tasks, with women seeing more possibilities for action ("affordances") related to their households than men (e.g., women might see a floor and think it needs sweeping, but this might not occur to men) (McClelland \& Sliwa 2022). These affordances take up more of womens attention and cognitive space. For all these reasons, gender gaps in the mental load are likely to be especially sticky.

The main expectations about the gender gap in the mental load are thus that the gender gap is large - women having on average higher "mental loads" than men - and that this gap persists across socio-economic characteristics, such as income or education. I also expect the gender gap in cognitive labor to be larger than the gender gap in physical household labor, for the reasons previously outlined but also because of the invisible nature of such work. As Daminger (2019) explains, cognitive labor is "diffuse, disjointed, and often invisible even to the doer" (p.9). This could make it more difficult to identify and reallocate within households than physical labor, even if partners want to.

Gender-based inequalities in the division of household labor could leave women with less time and fewer opportunities to engage with politics, among other activities. Yet, few existing studies link household labor to political interest or participation directly. Burns,

Schlozman, and Verba (1997; 2002) find no link between the percentage of housework done and political activity for men or women; however, having more leisure time is associated with greater participation for men. Other studies show that becoming a parent and the presence of young children affect mothers and fathers in contradictory ways. Analysis of political engagement in 27 European countries finds that gender differences in political interest are largest among couples with children (Quaranta \& Dotti Sani 2018). Having a child is associated with less voting frequency for women but not men (Voorpostel \& Coffé 2012). Even becoming pregnant leads to significant declines in women's levels of political participation, but this is not true for their partners, expectant fathers (Naurin, Stolle \& Markstedt 2022).

The dampening effect of parenthood for women in particular is also seen at higher levels of political participation, like running for office. For example, mothers with breadwinning responsibility, who despite this still tend to undertake more housework than their partners, are especially unlikely to run for office (Bernhard, Shames \& Teele 2021). Women are also less likely to run for office when it would entail longer commuting time, further constraining the time they have available for household and care responsibilities (Silbermann et al. 2015). This makes sense; while the majority of people believe women are better at multitasking (Szameitat et al. 2015), research shows that there is no female advantage. Everyone is bad at multi-tasking (Hirnstein, Larøi \& Laloyaux 2019). At the same time, voters prefer women candidates with children to women candidates without children; women candidates thus face a double bind (Teele, Kalla \& Rosenbluth 2018). In summary, household inequality can bleed into political inequality - but so far the ways in which the gendered division of household labor impacts political interest, the earliest stage of participation, are unclear.

In the current study, I concentrate on how cognitive household labor might condition gender gaps in political interest. Like cognitive household labor, political interest is
more of a mental state than a physical act. If the mental load affects individuals' engagement with political life, I would expect to observe it first in feelings about wanting to learn about and understand politics. Taking an interest in politics is an important first step that sets the stage for further political engagement and participation. For example, in their study of gender differences in political engagement, Verba, Burns, and Schlozman find that, "differences in political knowledge, efficacy, and interest play a decisive role in explaining the small disparity between women and men in political participation" (Verba, Burns \& Schlozman 1997, 1059).

Previous studies investigating the determinants of political interest find consistent gender gaps (men being more interested in politics than women) in samples from the U.S. and most European countries (Bennett \& Bennett 1989; Burns, Schlozman \& Verba 2002; Fraile \& Gomez 2017; Fraile \& Sánchez-Vítores 2020; Hayes \& Bean 1993; Norris, Lovenduski \& Campbell 2004; Preece 2016; Verba, Burns \& Schlozman 1997; Wolak 2020). However, these gender gaps often do not persist when considering interest in local political issues, as opposed to national or international issues (Campbell \& Winters 2008; Coffé 2013; Hayes \& Bean 1993). This might be because women's greater involvement in household tasks and care work gives them more exposure to certain kinds of local politics, like schools and local health issues. Similarly, when asked about specific political issues, women are more likely to bring up social issues and gender-related concerns (e.g., gender pay gap, gender-based violence) compared to men; yet, men and women do not associate many of these issues with general political interest (Ferrín et al. 2020). ${ }^{4}$

While previous studies have perceived household constraints mainly in terms of time spent in physical household labor, I propose that cognitive household labor also matters to

[^3]political engagement. I offer two potential pathways through which the mental load could affect gender gaps in political interest. The first is bandwidth. The mental load could "crowd out" mental space for other activities, including but not limited to engaging with political life. The notion of "bounded rationality" holds that individuals have only limited (bounded) knowledge and computational capacity, and therefore must be selective in searching for information (Simon 1956). Similarly, cognitive load theory suggests that humans have limited working memory, and so there are constraints on how much new information individuals can register and use in conscious activities (Miller 1956; Plass, Moreno \& Brünken 2010). With more of women's head space taken up by household management, it could be more difficult, and for some less rewarding, to follow political issues that are not perceived to be related to women's substantive interests, which are informed by their gendered daily experiences.

The second potential mechanism is related to the composition of mental tasks that men and women take on. Perhaps people do not decide to take an interest in politics because they have the cognitive space available to them to do so, but because they are in social groups where politics is discussed (e.g., Abrams, Iversen \& Soskice 2011). Some forms of household mental labor likely encourage such social relationships - most obviously the work involved in maintaining social ties, but also food preparation which often has a social component. Other forms of household mental labor probably deter social incentives to engage with politics. For example, mental work related to child care and cleaning is non-discretionary, repetitive, and mentally taxing (Lennon \& Rosenfield 1994). This alone - exhaustion and burnout related to particularly taxing forms of mental work - could depress interest in politics. In addition, these forms of mental work might make it harder to coordinate leisure with others, particularly forms of leisure unrelated to care - for instance, getting together with current or former work colleagues. Previous studies of physical household work establish significant gender-based specialization whereby women do more of the caring and cleaning work and men take on stereotypically masculine tasks related to home maintenance and DIY, which
often has a leisure component (e.g., Blair \& Lichter 1991). I expect such gender-based specialization to be even more prevalent for mental work, and this could pose a barrier for women's involvement in the kind of social networks where politics is discussed.

Because cognitive household labor is a relatively new concept, I find little previous evidence directly related to how it might affect men's and women's levels of political interest. However, in focus groups preceding the 2005 British national election Campbell and Winters (2008) report that several women mentioned "the responsibility of child-rearing" as a reason why they do not keep up with politics, whereas no men mentioned this issue (p. 55). Interestingly, these participants specifically brought up mental work related to care. One said, "I think after two kids my brain kind of goes funny. I swear you know I've lost half of it," and another said, "I felt that when I had children and they were young I just really had no time to think about anything else" (p. 71). These remarks are consistent with the idea that cognitive overload can prevent some individuals from taking an interest in politics, and they also highlight the role of mental load related to childcare in particular.

In summary, my main expectations about political interest are that women with large mental loads are less likely to be interested in politics, especially national and international political issues. The mental load might crowd out cognitive space for interest in politics, or particular types of mental work might deter women from politics. This relationship could occur through mediation (if the mental load explains the process through which gender impacts political interest) or moderation (if the impact of gender on political interest varies depending on the mental load), and I test both possible relationships in the analysis below.

## An Original Survey on Politics and Household Work

In order to understand the role of the mental load in politics, the first step is measuring it. No existing research measures the mental load quantitatively. This type of labor is not captured well by time-use studies which ask respondents to indicate how much time in minutes they spend on different tasks in the day, because the planning and monitoring that goes into managing a household are often secondary or tertiary activities (e.g., adding to the grocery list while at work). To make progress on this, I field an original survey to 1,528 respondents who are parents of children aged 0-12 (below high school age) in the United States. The survey targets parents of children below and of primary school age. While the mental load endures throughout the life course (Dean, Churchill \& Ruppanner 2022), this labor naturally compounds when there are dependent children to be cared for. In addition, gender gaps in pay and promotion intensify on the birth of a child (Goldin 2021; Kleven et al. 2019), suggesting that it is a critical life stage for understanding gender-based inequalities. Unlike previous work which tends to focus only on different-sex couples, the sample includes men and women from same- and different-sex couples, as well as single parents.

The survey was fielded in April and May of 2022 via Prolific, an online platform which recruits respondents mainly via social media. Studies find that Prolific offers higher data quality than MTurk and other platforms on participant honesty, diversity, and ability to target demographics via prescreening (Palan \& Schitter 2018; Peer et al. 2017). Respondents were paid $\$ 2.20$ per completed survey, which translates into an hourly rate of $\$ 11.05$, above the minimum wage and considered high by Prolific's ethical rewards standards. Previous research suggests that respondents in convenience samples such as this one are motivated by earning extra money, and that respondents agree that the level of data quality (e.g., willingness to remain attentive) provided depends on their perceptions of compensation fairness (Lovett et al. 2018). Thus, the relatively high reward matters for both ethical and
data quality reasons.
Table 1: Summary Statistics for Prolific Sample

| Statistic | N | Mean | St. Dev. | Min | $\operatorname{Pctl}(25)$ | $\operatorname{Pctl}(75)$ | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Woman | 1,491 | 0.499 | 0.500 | 0.000 | 0.000 | 1.000 | 1.000 |
| Higher education (B.A. \& above) | 1,528 | 0.609 | 0.488 | 0 | 0 | 1 | 1 |
| Employed | 1,528 | 0.743 | 0.437 | 0 | 0 | 1 | 1 |
| Partner | 1,528 | 0.859 | 0.348 | 0 | 1 | 1 | 1 |
| Same-sex partner | 1,520 | 0.036 | 0.185 | 0.000 | 0.000 | 0.000 | 1.000 |
| Number of children | 1,487 | 1.712 | 0.803 | 0.000 | 1.000 | 2.000 | 4.000 |
| White | 1,528 | 0.793 | 0.406 | 0 | 1 | 1 | 1 |
| Black | 1,528 | 0.065 | 0.246 | 0 | 0 | 0 | 1 |
| Hispanic / Latino | 1,528 | 0.082 | 0.274 | 0 | 0 | 0 | 1 |
| Asian | 1,528 | 0.037 | 0.190 | 0 | 0 | 0 | 1 |
| Voted Democrat in 2020 | 1,528 | 0.563 | 0.496 | 0 | 0 | 1 | 1 |
| Voted Republican in 2020 | 1,528 | 0.188 | 0.391 | 0 | 0 | 0 | 1 |

Notes: All survey respondents confirmed that they are parents of children ages 0 to 12 . The minimum number of children is 0 because this
question asked how many children ages 0 to 18 live with you, and four respondents said 0 .

Table 1 provides summary statistics. The sample was balanced on gender but otherwise it does not mirror the U.S. population, or the U.S. population of parents. In particular, it is better educated, more Democratic, and underrepresents non-white ethnic groups. It is important to acknowledge that external validity could be limited because of this.

The survey starts by asking respondents a series of questions about political engagement and participation. I ask the political questions first because questions about physical
or cognitive household labor might prime gender and parenthood status, affecting responses to political questions in an undesirable way (Klar 2013). Conversely, I have little reason to suspect that answers to questions about physical and mental household labor will change based on respondents first seeing questions about political engagement.

After the questions about political engagement, I introduce the idea that household work can have physical and mental aspects: "People say that running a household typically involves both physical and mental types of work. For this set of questions we want you to think about the physical work involved in managing your household and caring for children, not the mental aspect." I then ask respondents to estimate the hours they personally spend doing both 1) care work and 2) other types of household labor (cooking, cleaning, etc) on a typical weekday and weekend day. ${ }^{5}$ Respondents are likely to be more familiar with the idea of physical household labor than mental household labor, so I ask the physical labor questions first. I use these responses to calculate the estimated hours of physical household labor per week for each individual. These questions allow me to assess how gender differences in household physical labor compare to those in cognitive household labor. Additionally, after all the physical household labor questions I ask respondents to estimate the share of physical household labor that they personally do within their household, on a scale of 0 (none of it) to 100 (all of it).

Next I instruct respondents, "Now think about the mental work involved in managing your household and caring for children, not the physical aspect." To measure the mental load, I use a strategy that builds on previous qualitative research describing the

[^4]cycle of cognitive labor in the household: anticipating needs, identifying options and making decisions, and monitoring progress (Daminger 2019). ${ }^{6}$ The questionnaire asks a series of task-oriented questions that correspond with each of these three components, for eight different types of cognitive household labor: scheduling, child care, social relationships, cleaning, coronavirus, food, finances, and home maintenance (24 items in total). ${ }^{7}$ These categories are not exhaustive, but represent the majority of the nine cognitive labor domains identified as applying to most couples in previous interview-based research (Daminger 2019). ${ }^{8}$ Respondents are asked, "In your family, who typically handles" each task, with a range of options given: "Mostly me", "Mostly my partner", "Partner and I share equally", "Someone else (Includes friends and family)", and "NA". For example, the questions related to scheduling ask respondents who in their household typically handles the following: Remembering to schedule appointments, such as dentist appointments (anticipating); Planning a family event, like a birthday party (identifying options and making decisions); and Keeping track of the family calendar, such as kids' medical appointments (monitoring). ${ }^{9}$

I then construct a composite measure of the mental load for each person, which can be broken down by category. I sum the total number of items that an individual claims is done by "Mostly me" and divide this number by the number of items within each category and overall (removing those items that respondents say are not applicable from the denominator). ${ }^{10}$ The advantage of using the 'mostly me' response to operationalize the mental load,

[^5]without including work reported as shared, is that it provides a straightforward measure of (perceived) individual responsibility for different types of cognitive labor. Cronbach's Alpha of the scale items is 0.925 , indicating excellent internal consistency.

From this I derive the average self-reported mental load done by men and women (absolute task measures), and the gender gap (relative task measures). A similar approach has been found to be effective at measuring issue preferences (Ansolabehere, Rodden \& Snyder 2008). The basic idea is that multiple measures - here of different aspects of the mental load, which mirror accounts of the most relevant categories from qualitative studies - reduce measurement error. This is the main methodological contribution of the study. In addition, after all the cognitive labor task questions I ask respondents to estimate their share of the mental load ("Considering all the mental work to take care of your household, about how much of this work is done by you as opposed to someone else?"). I use this estimate as a validation check on my task-based measure of the mental load.

## Describing the Mental Load among U.S. Parents

My expectation is that the mental load is highly gendered, with women socialized to take on much more of the cognitive labor necessary to manage their households than men. I begin by providing evidence to support this contention. Figure 1 shows the distribution of household labor that is reportedly done by "mostly me" for both men (red) and women (blue) respondents. The left panel presents data from the item-based index of the mental load (the share of relevant tasks that is reportedly done by "mostly me", across all eight categories) and the right panel presents the estimates that respondents gave about how much of the mental work in their household is done by me as opposed to someone else.

Both ways of measuring the mental load show large gender gaps. Women report


Figure 1: Gender differences in mental household labor
doing 70 percent of the mental load while men say that they are mostly responsible for 30 percent of it, using the task-based index (40 percent gap). I note that while men's and women's average self-reported mental loads sum to 100 , this should not suggest perfect alignment between men and women on who does the cognitive labor of the household. The data comes from individuals rather than couples, so the estimates do not reflect what men and women in the same couples do. In addition, recall that the task-based measure is an average of the work that individuals say is done by 'mostly me', and does not include the other options such as share equally. Appendix B presents figures showing the reported distribution for each mental load task by gender across all answer options, and the figures show considerable misalignment between men and women on some tasks. For example, the majority of both men and women claim it is mostly them that keeps track of household expenses. Including the 'share equally' option, average mental loads for men and women total over $100 \%$, suggesting potential bias in reporting by either men or women (or both). Such bias is already well-established in studies of physical household labor, where results suggest that men tend to overestimate their own contributions (or women underestimate men's contributions) (Kamo 2000; Fuwa \& Cohen 2007; Lee \& Waite 2005).

Using the self-reported estimates, both men and women say that they do more of the mental work than the index finds, although the increase is much larger for men. Women estimate doing 79 percent of the mental work in their households, while men estimate doing 49 percent (30 percent gap). T-tests show the gender differences measured in both the taskbased and self-reported estimates are statistically significant. Of course, without somehow observing the mental load directly it is hard to distinguish which measure is more accurate. However, it is reassuring that the two measures (task-based index and estimate) are highly correlated, with a Pearson's correlation coefficient of 0.81 . The index has the advantage of asking respondents about specific tasks, rather than relying on respondents to remember all of the mental work they do as in the estimate. Because of this I rely on the task-based data
for the remainder of the paper.


Figure 2: Gender differences in physical household labor

How do gender gaps in cognitive household labor compare to gender gaps in physical household labor? Figure 2 shows the mean share of hours that men and women say that they do in both household labor and care work combined, per week (left panel), and their estimates about how much of the physical labor to take care of their households is done by them as opposed to someone else (right panel). As expected, significant gender differences emerge - but they are smaller than the gender gaps in cognitive household labor. Considering time spent in household work alone, women say that they do 27 hours per week while men report doing 19 hours. The estimates for care work are 88 hours per week for women and 72 for men. Overall this translates into a gender gap of 3.4 hours per day, 14 percent of time spent in household physical labor. ${ }^{11}$ The right panel shows that women estimate that they

[^6]do 75 percent of the physical labor in their households, while men estimate that they do 55 percent (20 percent gap). In summary, gender gaps in physical household labor are not as large as gender gaps in cognitive household labor.


Figure 3: Reported Responsibility for Cognitive Household Labor Tasks by Gender
Notes: Mean share of men and women reporting that cognitive household labor tasks are done by 'mostly me' as opposed to someone else, by gender. $95 \%$ confidence intervals (CIs) from t-tests. Data include 1490 respondents.

Figure 3 maps men's and women's responsibility for the mental load across different types of cognitive tasks. The figure shows that while women report doing the majority of most tasks, gender differences are especially pronounced for mental work related to scheduling, child care, and cleaning. Examples include planning a family event (scheduling) noticing
labor combined is higher than this in the left panel of Figure 2. This is because the overall physical household work measure combines separate questions about time spent doing care versus household work. Before questions about time spent doing household work, respondents are told, "If you sometimes do household work while looking after family members, count it here if you consider the main activity you were doing to be household work." Still, some respondents either over-report their total time doing care or household labor as the main activity, or do not distinguish the main activity. However, similar findings maintain when examining the separate care and household labor estimates. The estimated gender differences I report are somewhat larger than other studies based on the general population. For example, OECD time use data finds that in the United States women spend 1 hour and 45 minutes per day more than men in unpaid labor (ages 15 - 64 included; data come from the 2019 American Time Use Survey). These differences could be related to my sample, which includes only parents with young children, or differences in how the data are collected.
when children's nails need to be cut (child care), and keeping track of when sheets and towels need to be washed (cleaning). Women report that they are the ones mostly responsible for 88 percent, 81 percent, and 81 percent of these tasks, respectively. Women also report that they are mostly responsible for 65 percent of mental work related to the coronavirus pandemic (including keeping track of online learning and checking in with family and friends that might need help), while men say that they are the ones mostly responsible for only 17 percent of this work. This adds new evidence that the pandemic increased mothers' workloads not just physically but in terms of their mental load as well.


Figure 4: Gender Gaps in Reported Responsibility for Different Cognitive Household Labor Tasks
Notes: Mean differences in reporting that cognitive household labor tasks are done by 'mostly me' as opposed to someone else, by gender (share
women minus share men). $95 \%$ confidence intervals from Welch two-sample t-tests. Data include 1490 respondents.

Conversely, men report that they are the ones mostly responsible for mental work related to home maintenance (mostly responsible for 69 percent of this work). The questions here relate to noticing when an item needs repair, booking a repair professional like a plumber or mechanic, and remembering when items like a boiler or car need servicing. Mental work related to finances (including deciding how to allocate money and keeping track of household
expenses) is the most gender-balanced, although men report higher levels of responsibility compared to women. Figure 4 summarizes the gender gaps in mental work (share of work women say they are mostly responsible for minus share of work men say they are mostly responsible for) by category.

Next, I look at how the gender gap in the mental load overall varies by relevant socioeconomic and household characteristics. As Figure 5 shows, mental work within households is mostly done by women in almost every context I consider. The exception is different-couple households where women but not men are employed. Here, women still report doing more of the mental load than men, but this gender gap of 9 percentage points is not significant (I note the small N of 42 for this sub-sample). The figure also demonstrates that gender gaps in the mental load are smaller among households where women outearn men: the gap narrows to 31 percentage points here, compared to 40 percentage points in households where men out-earn women. By contrast, gender gaps in physical household labor close for female breadwinner households, and reverse (with men doing more of the physical houeshold labor) for households where women but not men are employed (see Figure C1 in Appendix). Finally, gender gaps are also smaller among respondents who identify as Asian (30 percentage points, $\mathrm{N}=57$ ), ${ }^{12}$ and among those of Hispanic, Latino, or Spanish origin (27 percentage points, $\mathrm{N}=125$ ).

Gender gaps in cognitive household labor are especially large in households with 3 or more children (gap of 47 percentage points, $\mathrm{N}=221$ ) and households where men but not women are employed (gap of 50 percentage points, $\mathrm{N}=258$ ). As expected, the figure shows little variation across income levels or education. ${ }^{13}$ I also observe little variation across party as measured by reported vote (voted for Biden versus Trump in 2020). The consistency of

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Figure 5: Gender Gaps in Reported Responsibility for Cognitive Household Labor, by Group Notes: Mean differences in reporting that cognitive household labor tasks are done by 'mostly me' as opposed to someone else, by gender (share women minus share men). $95 \%$ confidence intervals from Welch two-sample t-tests. Data include 1490 respondents overall, with the N varying across different sub-samples of the data.
the gender gap in household cognitive labor across multiple different groups and contexts provides some reassurance about the potential external validity of my findings. Although the sample is not representative of all U.S. parents, because similar patterns are observed across income levels, education, and political party I would expect to see similar results in a sample that mirrors the population of U.S. parents more accurately.

My survey offers some evidence on the mental load among single parents (defined as having no spouse or steady partner), which is very large compared to the average of 70 percent for women and 30 percent for men in the sample of all parents. Single women say that they take on 93 percent of the mental load in their households $(N=82)$, while single men say that they take on 78 percent ( $\mathrm{N}=41$ ). I also offer some initial evidence on the mental load among same-sex couples, although I note my sample size is small. Respondents with a samesex partner have lower mental loads than the average, with women in same-sex partnerships claiming to do 55 percent of the mental load $(\mathrm{N}=36)$, and men in same-sex partnerships
reporting a very low 25 percent of the mental load ( $\mathrm{N}=18$ ). While this evidence should be confirmed with a larger sample, it is in line with previous research suggesting that women in same-sex partnerships will on average have lower mental loads than women in different-sex partnerships (Doan \& Quadlin 2019). ${ }^{14}$

## The mental load conditions the link between gender and political interest

To describe and compare average gender gaps in different types of political interest, I estimate ordinary least squares (OLS) regressions separately for interest in local, national, and international political issues. This question reads, "How interested would you say you personally are in the following types of political issues", with respondents asked to respond to separate question items for "Local", "National", and "International" issues. The response options are "Not at all interested", "Not very interested", "Fairly interested", and "Very interested". For ease of interpretation, I rescale all political interest variables to range between 0 and 1 , where higher values refer to greater interest. However, I note that the findings I report here are robust to models that use ordered logistic regression instead of OLS. ${ }^{15}$

To measure baseline gender gaps in political interest, I deliberately do not control for other covariates such as employment, education, or income because these can all be considered "post-treatment", occurring after gender identity is "assigned" (Sen \& Wasow 2016). Figure 6 presents the gender differences in mean interest. It shows that women tend to have less interest in politics than men, although this gender gap is not statistically

[^8]significant for international political issues (where interest tends to be lower than for other types of politics among both men and women).


Figure 6: Impact of Gender (Woman) on Interest in Political Issues Among U.S. Parents
Notes: Coefficients from OLS Analysis with 95\% CIs. N=1490.

How does the mental load relate to gender differences in political interest? My main expectation is that when women have high levels of cognitive labor, they will be less interested in politics. Table 2 presents models regressing political interest on gender and share of the mental load. For each type of political interest (local, national, and international), I first specify an additive model, then an interactive model, and finally an interactive model including relevant covariates. The additive models (Models 1, 4, and 7) show that the mental load does not mediate the relationship between gender and political interest. The coefficients on gender do not decrease on adding the mental load variable, as we would expect if the relationship between gender and political interest is driven by the mechanism of share of overall cognitive labor (Baron \& Kenny 1986). Compared to the bivariate OLS results
shown in Figure 6, the coefficients for gender are similar in size and remain significant for the same types of political interest, local and national. ${ }^{16}$

Next I explore whether the mental load moderates the relationship between gender and political interest, with women less interested in politics at higher levels of the mental load. The idea here is that rather than the mental load explaining the process through which gender is related to political issues (as a mediator), it could affect the strength of the relationship between gender and political interest (as a moderator). Given the different distribution of the mental load by gender in my sample (more women grouped at the high end, and more men at the low end of the spectrum), I follow the recommendations of Hainmueller, Mummulo and Xu (2019). This approach includes diagnostics for common support of the moderator (mental load) across the range of the data for men and women. Figure D1 in the Appendix shows the linear interaction diagnostic plots. These indicate that conditional relationships for both men and women are reasonably approximated by a linear fit - the raw data show negative relationships between mental load and political interest for women, and, interestingly, the opposite for men. Additionally, the plots demonstrate common support to compute treatment effects across the range of approximately 0.3 to 0.85 of the moderator (mental load).

[^9]Table 2: Determinants of Interest in Local, National and International Political Issues


| Asian |  |  | $\begin{aligned} & -0.015 \\ & (0.031) \end{aligned}$ |  |  | $\begin{aligned} & -0.036 \\ & (0.030) \end{aligned}$ |  |  | $\begin{gathered} 0.012 \\ (0.033) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hispanic / |  |  | -0.007 |  |  | 0.014 |  |  | 0.022 |
| Latino |  |  | (0.022) |  |  | (0.021) |  |  | (0.023) |
| Constant | $\begin{gathered} 0.739^{* * *} \\ (0.012) \end{gathered}$ | $\begin{gathered} 0.720^{* * *} \\ (0.014) \end{gathered}$ | $\begin{gathered} 0.623^{* * *} \\ (0.039) \end{gathered}$ | $\begin{gathered} 0.775^{* * *} \\ (0.011) \end{gathered}$ | $\begin{gathered} 0.756^{* * *} \\ (0.014) \end{gathered}$ | $\begin{gathered} 0.654^{* * *} \\ (0.037) \end{gathered}$ | $\begin{gathered} 0.650^{* * *} \\ (0.012) \end{gathered}$ | $\begin{gathered} 0.621^{* * *} \\ (0.015) \end{gathered}$ | $\begin{gathered} 0.551^{* * *} \\ (0.040) \end{gathered}$ |
| Observations | 1,490 | 1,490 | 1,391 | 1,490 | 1,490 | 1,391 | 1,490 | 1,490 | 1,391 |
| $\mathrm{R}^{2}$ | 0.005 | 0.008 | 0.035 | 0.008 | 0.012 | 0.067 | 0.002 | 0.011 | 0.072 |
| Adjusted R ${ }^{2}$ | 0.003 | 0.006 | 0.024 | 0.007 | 0.010 | 0.057 | 0.001 | 0.009 | 0.062 |
| Note: |  |  |  |  |  |  | * $\mathrm{p}<0.1$ | ${ }^{* *} \mathrm{p}<0.05$; | p $<0.01$ |

As Table 2 shows, I find evidence consistent with the moderation theory. The specifications show statistically significant interactive effects of gender and the mental load in the expected negative direction across all types of political interest, with and without controlling for relevant covariates. In specifications 3, 6, and 9 I control for a battery of characteristics that previous studies suggest could impact political interest: the number of children in a household, having a child less than 3 years old, employment, income, higher education, having a partner that lives in the same household, voting Democrat, and ethnic identity (Bennett \& Bennett 1989; Coffé 2013; Verba, Burns \& Schlozman 1997). I also control for the self-estimated share of physical household labor the individual does. The interactive findings hold with the inclusion of these individual and household-context control variables. Additional models in the Appendix (Table D1) show the results for interest in national and international politics are robust to specifications including interactions with gender and all covariates.

My results show little evidence that physical household labor depresses interest in politics for women. It is not a significant predictor of political interest in additive or interactive models. This in line with other research on participation which, despite strong theoretical expectations, "could find no evidence that absence of free time handicaps women as citizens" (Burns, Schlozman \& Verba 1997, 384, see also Burns, Schlozman \& Verba 2002). Yet, when measuring household inequality as cognitive rather than physical labor, this changes. When women, but not men, take on high levels of the mental load, they are less likely to report interest in different types of politics. Measuring the mental load thus helps unpack the longstanding puzzle of gender differences in psychological engagement with politics.

To aid the interpretation of this moderation story, Figure 7 shows marginal effect plots generated using a kernel smoothing estimator, with all controls shown in Table 2 models

3, 6, and 9 included (Hainmueller, Mummolo \& Xu 2019). This method estimates a series of local effects with a kernel reweighting scheme, where confidence intervals are generated using 1,000 iterations of a nonparametric bootstrap. Stacked histograms at the bottom of the plot show common support based on the distribution of the moderator across respondent gender. The three bars compare treatment effects at three values of the moderator, set approximately at the 25 th, 50 th, and 75 th percentile of the data.

The figures show that the "effect" of being a woman on interest in politics is negative and significant when the individual has a relatively high mental load. This significant effect emerges for levels of mental load of 34 percent or higher (national issues), 42 percent or higher (local issues), and 68 percent or higher (international issues). The confidence intervals are large, which likely reflects limited common support particularly toward the limits given less data from men and women simultaneously at these points. However, the figure shows there is sufficient common support to estimate the marginal effects and they display the expected trends. Comparing the effect of gender at high versus low values of the mental load (0.75 vs. 0.25 ), the difference is negative and statistically significant for local and international politics at conventional levels, and for national politics at the 0.1 level. ${ }^{17}$

This finding is also confirmed by regressing the mental load on political interest within the sub-samples of men and women separately. While the mental load is negatively linked to interest in national and international politics for women (this relationship is significant at the 0.1 level for interest in national issues, and at the .05 level for interest in international issues), the opposite is found for men (mental load significant at conventional levels for interest local and international issues, and at the 0.1 level for national issues). Figure 8 summarizes the findings of these bivariate OLS regressions. In summary, my initial

[^10]

Figure 7: Marginal Effects of Gender on Political Interest by Share of Mental Load, Kernel Estimator

The plots show the estimated marginal effects using a kernel smoothing estimator, including covariates shown in Table 2, Models 3, 6, and 9. $95 \%$ confidence intervals are shown, along with a rug plot along the x -axis.


Figure 8: Impact of Mental Load on Interest in Political Issues Among U.S. Parents, by Gender

Notes: Coefficients from OLS Analysis with $95 \%$ CIs. The sample for women includes 744 respondents, and the sample for men includes 747
respondents
findings show that, among parents, the mental load decreases political interest for women while increasing it for men.

## Composition of the mental load and political interest

As expected, high levels of the mental load depress political interest for women. However, the results also find that men express higher levels of political interest as their mental load increases. This suggests that the mechanism cannot be mental bandwidth alone; if this were true, large mental loads ought to decrease political interest for both men and women. In this section I offer initial evidence suggesting that gender differences in the composition of the mental load play an important role in driving political interest.

Recall from Figures 3 and 4 that while women say that they take on the majority of most categories of cognitive household labor, the majority of men say that they are mostly responsible only for tasks related to home maintenance and finances. Women, conversely,
undertake the vast majority of mental tasks related to scheduling, child care, social relationships, and cleaning. Mental tasks related to for example cleaning and child care are probably among the most prevalent, occurring on a daily basis "without a well-defined beginning or end" (Blair 2013, 614), and lacking a leisure component (Lennon \& Rosenfield 1994). These tasks are mostly done by women. The mental load variable is not weighted. This means that men and women who report doing the same overall share of mental work for the household (number of relevant tasks) might be doing different types of work. This matters if some types of cognitive tasks encourage political engagement (or at least do not deter it), and others do not.

To better understand if mental load responses across different mental load issue domains are part of the same underlying response pattern, or whether household mental work might be characterized by separate and distinct dimensions, I employ exploratory factor analysis (EFA). The EFA tests the plausibility of a multiple-factor solution by letting survey items freely load on any latent factors (1, 2, or more) in the data. I use counts of primary responsibility for the mental load by domain in the analysis shown in Figure 9 (where the minimum is 0 and maximum is 3 , indicating primary responsibility for the number of mental load tasks in the relevant domain), but the same result maintains when using the individual survey items that make up the domains. I perform the EFA using a principal-components extraction method, and it identifies two main dimensions. Items that load on Factor 1, which I call Routine mental load, include most routine and non-discretionary mental load tasks, namely those related to cleaning, child care, scheduling, social relationships, food, and coronavirus, while those that load onto Factor 2, Non-routine mental load, emphasize the domains of financial management and home maintenance only. ${ }^{18}$ These two factors explain

[^11]74 percent of the shared variance. The results of the initial EFA are thus consistent with the interpretation that these two gendered dimensions of what we might consider routine and non-routine mental load tasks are orthogonal.


Figure 9: Exploratory Factor Analysis Factor Loadings
Notes: The plot displays factor loadings from the first two factors of the same EFA analysis, and shows two distinct groupings

While women report primary responsibility for $79 \%$ of routine mental tasks compared to men's $19 \%$, for non-routine mental tasks related to finances and home maintenance men report the highest resposibility ( $63 \%$ compared to women's $46 \%$ ). Having established that patterns of household mental work fall into two main uncorrelated and gendered dimensions, Table 3 investigates how each dimension of mental work is related to political interest. The table shows that routine types of mental load tend to depress political interest, while non-routine mental load related to finances and home maintenance increases it. Table 3 uses a measure of political interest that combines interest in local, national, and international issues (rescaled to range between 0 and 1 ), but similar results hold for the individual issues.

Further research is needed to unpack the process through which different dimensions of cognitive household labor are linked to social and political engagement for men and women.

Table 3: Mental Load Composition and Political Interest

|  | Dependent variable: |
| :--- | :---: |
|  | Political Interest |
| Routine Mental Load | $-0.025^{* *}$ |
|  | $(0.013)$ |
|  | $0.024^{*}$ |
| Constant | $(0.013)$ |
|  | $0.710^{* * *}$ |


| Observations | 1,504 |
| :--- | :--- |
| $\mathrm{R}^{2}$ | 0.005 |
| Adjusted $\mathrm{R}^{2}$ | 0.003 |

Note: $\quad{ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$

For example, qualitative, interview- or focus group-based studies would shed valuable light on how men and women experience doing different types of cognitive household work, the values they place on this work, and how they see this aspect of their everyday lives related to broader engagement with the political community. It will also be valuable to investigate how different types of mental work relate to exhaustion and burnout. A study of household labor in seven European countries confirms that high mental loads (measured using three questions about household tasks in the Generations \& Gender Survey) increase exhaustion levels for women especially (Haupt \& Gelbgiserb 2022).

## Conclusion

Despite major advances in women's access to education and employment over recent decades, women still take on a "second shift" in unpaid labor in the home (Hochschild \& Machung 2012). The contribution of this study is to begin to measure the cognitive element of this household labor and its political consequences. This study is among the first to measure absolute and relative cognitive household labor in a quantitative way. I find large and consistent gender gaps among U.S. parents, in the order of 40 percent, with women on average claiming to be mostly responsible for 70 percent of cognitive household labor while men report responsibility for 30 percent. These gender gaps are twice as large as those found for physical household labor. Previous time-use studies which include some element of cognitive household labor (for example, asking respondents to estimate the time spent in mental labor related to the household) find smaller gender gaps, on par with gender gaps in physical household labor (Lee \& Waite 2005; Offer \& Schneider 2011). As Daminger (2019) points out, this is likely because it is very hard to estimate the time spent doing this kind of diffuse mental work which goes on throughout the day. My task-based measure of the mental load affirms the qualitative findings that women take on the vast majority of
such work (Daminger 2019, 2020). A natural follow-on project is to investigate how these large gender gaps in mental load impact the division of paid labor. For example, recent experimental evidence from Norway finds that hypothetical primary responsibility for the mental load can decrease preferred paid working hours (Helgøy 2022).

The gender gaps I identify in who does the mental work of managing the home and family persist across a wide variety of household and individual characteristics, including income, education, and political party. Examining how the mental load relates to political interest among U.S. parents, I find that higher levels of the mental load decrease levels of political interest for women, while the opposite occurs for men. The subsample analysis of women respondents demonstrates that the mental load impacts especially on women's interest in national and international issues, in line with previous studies which suggest that women connect more with local issues (Campbell \& Winters 2008; Coffé 2013; Hayes \& Bean 1993). Indeed, gathering information on local issues related to schools and health could easily make up part of the mental load of caring for family members. Men and women also specialize in different types of mental load. Women take on more of the day-to-day, non-discretionary tasks like child care and cleaning, which tend to have more negative impacts on political interest. The implication of this finding is that, if men took on more cognitive household labor - particularly labor related to routine, non-discretionary tasks - and women's share of this kind of mental load subsequently decreased, gender gaps in political interest would decline as a result.

While the mental load involves an aspect of emotional labor - for example, in anticipating and monitoring the emotions of children and the family as a whole (Dean, Churchill \& Ruppanner 2022), the survey analyzed in this study measures mainly the cognitive labor aspect. It is thus important for future studies to consider whether and how we can render the emotional aspect of the mental load more visible. As one indicator of well-being, the
survey asks questions about how satisfied respondents are with the division of physical and mental labor in their household. The results suggest that most women but not men are not satisfied with the cognitive labor division in particular. While 69 percent of men say that they are extremely or somewhat satisfied with the division of mental work in their household, only 36 percent of women say the same. ${ }^{19}$ A gender gap also emerges for satisfaction with the division of physical work in households, but it is roughly ten percentage points smaller: 46 percent of women are satisfied versus 68 percent of men. Chi-squared tests find that both gender gaps are significant at conventional levels. The implication of this finding is that gender gaps in cognitive labor could cause distress, anxiety, and ultimately poorer well-being for women.

Future comparative work could shed light on to what extent the mental load (and gender gap in the mental load) varies across countries and welfare state systems. Do generous state policies like shared parental leave, paternity leave, and subsidized child care reduce these gender gaps, or not? Recent research suggesting that direct exposure to paternity leave can increase fathers' participation in household work (Patnaik 2019) and increase gender-egalitarian norms among both mothers and fathers (Tavits et al. 2022) offer promising evidence that such policies could make a difference. What about labor markets that encourage part-time working for both men and women, such as the Netherlands? What are the national- and individual-level conditions under which men and women take on cognitive household labor equally, and does this translate into more political equality as well? There is much room for this exciting new research agenda uncovering hidden cognitive labor gender gaps, and pinpointing solutions to close them.

[^12]
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## Appendix

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## A Question Items Composing the Task-Based Measure of the Mental Load

After answering questions about politics and physical household labor, respondents are told the following:
"Now think about the mental work involved in managing your household and caring for children, not the physical aspect.

You will see a series of 8 questions which ask about some different aspects of household and care work. Please respond who in our household (yourself or someone else) typically handles this kind of mental work."

The response options given are: "Mostly me", "Mostly my partner", "Partner and I share equally", "Someone else (Includes friends and family)", and "NA". The eight categories shown below were randomly varied.

Care for children: In your household, who typically does the following?

- Researching options for new items children need, like school supplies or shoes
- Deciding on a child care provider (e.g., babysitter, daycare, camp)
- Noticing when children's nails need to be cut

Cleaning: In your household, who typically does the following?

- Keeping track of when sheets and towels need to be washed
- Cleaning out kids' clothes that no longer fit
- Noticing when the house needs to be tidied

Coronavirus: In your household, who typically does the following?

For this question, please consider who mainly handled the activity anytime since March of 2020.

- Keeping track of any home schooling or online learning activities
- Deciding whether children should go back to daycare / school in person or online
- Checking in with family and friends who might need help during the pandemic

Finances: In your household, who typically does the following?

- Researching options for financial products like bank accounts or insurance
- Deciding how to allocate money (such as paying off credit cards or increasing savings)
- Keeping track of household expenses

Food: In your household, who typically does the following?

- Keeping rack of which groceries need to be purchased
- Deciding what meals to cook
- Monitoring food for "sell-by" dates, or noticing when foods need to be thrown away

Home maintenance: In your household, who typically does the following?

- Noticing when something like a dishwasher or faucet needs repair
- Booking a repair professional like a plumber or mechanic
- Remembering when items like a boiler or car need servicing

Social relationships: In your household, who typically does the following?

- Finding social options for children's enrichment (sports classes, clubs, etc)
- Coordinating a playdate
- Checking in with family and friends

Scheduling: In your household, who typically does the following?

- Keeping track of the family calendar, such as kids' medical appointments
- Planning a family event, like a birthday party
- Remembering to schedule appointments, such as dentist appointments


## B Reported Distribution of Mental Load by Gender for All

 Items Composing the Task-Based Measure of the Mental Load

Figure B1: Reported Distribution of Cognitive Household Labor related to Care for Children, by Gender

Notes: The question text is, "In your household, who typically does the following?" Data include 1491 respondents.


Figure B2: Reported Distribution of Cognitive Household Labor related to Cleaning, by Gender

Notes: The question text is, "In your household, who typically does the following?" Data include 1490 respondents.


Figure B3: Reported Distribution of Cognitive Household Labor related to Coronavirus, by Gender

Notes: The question text is, "In your household, who typically does the following? For this question, please consider who mainly handled the activity anytime since March of 2020." Data include 1490 respondents.


Figure B4: Reported Distribution of Cognitive Household Labor related to Finances, by Gender

Notes: The question text is, "In your household, who typically does the following?" Data include 1490 respondents.


Figure B5: Reported Distribution of Cognitive Household Labor related to Food, by Gender
Notes: The question text is, "In your household, who typically does the following?" Data include 1490 respondents.


Figure B6: Reported Distribution of Cognitive Household Labor related to Home Maintenance, by Gender

Notes: The question text is, "In your household, who typically does the following?" Data include 1490 respondents.


Figure B7: Reported Distribution of Cognitive Household Labor related to Social Relationships, by Gender

[^13]

Figure B8: Reported Distribution of Cognitive Household Labor related to Scheduling, by Gender

Notes: The question text is, "In your household, who typically does the following?" Data include 1490 respondents.

## C Gender Gaps in Reported Responsibility for Physical

 Household Labor, by Group

Figure C1: Gender Gaps in Reported Responsibility for Physical Household Labor, by Group

Notes: Mean differences in self-reported share of physical household labor done by the individual personally, by gender (share women minus share men). $95 \%$ confidence intervals from Welch two-sample t-tests. Data include 1491 respondents overall, with the N varying across different sub-samples of the data.

## D Diagnostic tests and additional specifications



Figure D1: Linear Interaction Diagnostic Plots

The plots show the relationships among the "treatment" $(1=$ woman, $0=$ man $)$, the outcome (interest in local, national, and international politics), and the moderator (share of mental load respondent reports being mostly responsible for, task-based measure) using the raw data. The box plots at the bottom of the figures display quantiles of the moderator for men (left) and women (right). The dot in the center denotes the median, the end points of the thick bars denote the 25 th and 75 th percentiles, and the end points of the thin bars denote the 5 th and 95 th percentiles.

Table D1: Determinants of Interest in Politics, Including Interactions with Gender and All Controls

|  | Dependent variable: |  |  |
| :---: | :---: | :---: | :---: |
|  | Local <br> (1) | National (2) | International (3) |
| Woman | $\begin{aligned} & -0.001 \\ & (0.084) \end{aligned}$ | $\begin{aligned} & -0.029 \\ & (0.081) \end{aligned}$ | $\begin{aligned} & 0.146^{*} \\ & (0.087) \end{aligned}$ |
| Mental load | $\begin{aligned} & 0.087^{*} \\ & (0.047) \end{aligned}$ | $\begin{aligned} & 0.111^{* *} \\ & (0.046) \end{aligned}$ | $\begin{gathered} 0.130^{* * *} \\ (0.049) \end{gathered}$ |
| Women x Mental load | $\begin{gathered} -0.034 \\ (0.069) \end{gathered}$ | $\begin{gathered} -0.136^{* *} \\ (0.066) \end{gathered}$ | $\begin{gathered} -0.211^{* * *} \\ (0.072) \end{gathered}$ |
| \% physical HH labor | $\begin{gathered} 0.065 \\ (0.044) \end{gathered}$ | $\begin{aligned} & -0.049 \\ & (0.043) \end{aligned}$ | $\begin{aligned} & -0.012 \\ & (0.046) \end{aligned}$ |
| Woman x \% physical HH labor | $\begin{aligned} & -0.102 \\ & (0.069) \end{aligned}$ | $\begin{gathered} 0.059 \\ (0.066) \end{gathered}$ | $\begin{aligned} & -0.041 \\ & (0.071) \end{aligned}$ |
| No. children | $\begin{gathered} 0.001 \\ (0.011) \end{gathered}$ | $\begin{gathered} 0.001 \\ (0.011) \end{gathered}$ | $\begin{aligned} & -0.008 \\ & (0.012) \end{aligned}$ |
| Woman x No. children | $\begin{aligned} & -0.013 \\ & (0.016) \end{aligned}$ | $\begin{aligned} & -0.004 \\ & (0.015) \end{aligned}$ | $\begin{gathered} 0.002 \\ (0.017) \end{gathered}$ |
| Child $<3$ | $\begin{aligned} & -0.008 \\ & (0.018) \end{aligned}$ | $\begin{gathered} 0.009 \\ (0.017) \end{gathered}$ | $\begin{gathered} 0.010 \\ (0.018) \end{gathered}$ |
| Woman x Child $<3$ | $\begin{aligned} & -0.018 \\ & (0.026) \end{aligned}$ | $\begin{aligned} & -0.023 \\ & (0.025) \end{aligned}$ | $\begin{aligned} & -0.0003 \\ & (0.027) \end{aligned}$ |
| Low income | $\begin{aligned} & -0.038 \\ & (0.026) \end{aligned}$ | $\begin{gathered} 0.008 \\ (0.025) \end{gathered}$ | $\begin{aligned} & 0.046^{*} \\ & (0.027) \end{aligned}$ |
| Woman x Low income | $\begin{gathered} 0.063 \\ (0.040) \end{gathered}$ | $\begin{gathered} 0.006 \\ (0.039) \end{gathered}$ | $\begin{gathered} 0.026 \\ (0.042) \end{gathered}$ |
| Medium income | $\begin{aligned} & -0.020 \\ & (0.021) \end{aligned}$ | $\begin{gathered} 0.005 \\ (0.020) \end{gathered}$ | $\begin{gathered} 0.035 \\ (0.022) \end{gathered}$ |
| Woman x Medium income | $\begin{gathered} 0.050 \\ (0.037) \end{gathered}$ | $\begin{aligned} & -0.001 \\ & (0.035) \end{aligned}$ | $\begin{gathered} 0.029 \\ (0.038) \end{gathered}$ |
| Higher ed | $\begin{gathered} 0.020 \\ (0.021) \end{gathered}$ | $\begin{gathered} 0.013 \\ (0.020) \end{gathered}$ | $\begin{gathered} 0.005 \\ (0.022) \end{gathered}$ |
| Woman x Higher ed | $\begin{aligned} & -0.005 \\ & (0.029) \end{aligned}$ | $\begin{aligned} & -0.021 \\ & (0.028) \end{aligned}$ | $\begin{aligned} & -0.004 \\ & (0.030) \end{aligned}$ |
| Employed | $\begin{gathered} 0.090 \\ (0.088) \end{gathered}$ | $\begin{aligned} & 0.148^{*} \\ & (0.085) \end{aligned}$ | $\begin{gathered} 0.002 \\ (0.092) \end{gathered}$ |
| Woman x Employed | $\begin{aligned} & -0.051 \\ & (0.092) \end{aligned}$ | $\begin{aligned} & -0.156^{*} \\ & (0.089) \end{aligned}$ | $\begin{aligned} & -0.008 \\ & (0.096) \end{aligned}$ |
| Partner | -0.049 | -0.101 | 0.049 |


|  | (0.092) | (0.088) | (0.096) |
| :---: | :---: | :---: | :---: |
| Woman x Partner | 0.087 | 0.170* | -0.091 |
|  | (0.099) | (0.095) | (0.103) |
| Democrat | $0.047^{* * *}$ | 0.071*** | 0.085*** |
|  | (0.018) | (0.017) | (0.019) |
| Woman x Democrat | 0.010 | 0.058** | 0.058** |
|  | (0.026) | (0.025) | (0.027) |
| Black | 0.018 | -0.023 | -0.016 |
|  | (0.037) | (0.036) | (0.039) |
| Woman x Black | -0.041 | -0.013 | -0.077 |
|  | (0.050) | (0.048) | (0.052) |
| Asian | -0.035 | -0.038 | 0.016 |
|  | (0.036) | (0.035) | (0.038) |
| Woman x Asian | 0.086 | 0.009 | 0.008 |
|  | (0.074) | (0.071) | (0.077) |
| Hispanic / Latino | 0.005 | 0.052* | 0.054* |
|  | (0.030) | (0.029) | (0.032) |
| Woman x Hispanic / Latino | -0.026 | -0.085** | -0.067 |
|  | (0.045) | (0.043) | (0.046) |
| Constant | 0.629*** | 0.662*** | 0.495*** |
|  | (0.056) | (0.054) | (0.058) |
| Observations | 1,391 | 1,391 | 1,391 |
| $\mathrm{R}^{2}$ | 0.041 | 0.077 | 0.081 |
| Adjusted R ${ }^{2}$ | 0.022 | 0.059 | 0.063 |
| Note: |  | 0.1; ** $\mathrm{p}<$ | ; *** $\mathrm{p}<0$. |


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[^1]:    ${ }^{1}$ See, for example, the February 2021 New York Times feature story, "The Primal Scream: America's Mothers are in Crisis" and the August 2022 CNN feature, "Women were already tired. Then 2022 happened".

    2 "You Should've Asked," by Emma, 20 May 2017.

[^2]:    ${ }^{3}$ According to data from the OECD, 68 percent of women aged $15-64$ are employed in the United States, compared to 79 percent of men, as of 2021 (LFS by sex and age - indicators).

[^3]:    ${ }^{4}$ For this reason some recommend changing the way that surveys ask about political interest, including a range of specific political issues to combat the latent association between politics and masculinity (Tormos \& Verge 2022).

[^4]:    ${ }^{5}$ The question text reads: "On average, how many hours do you personally spend looking after family members (e.g. children, elderly, ill or disabled family members) for a typical weekday and a typical weekend day?" with sliders given for both weekday and weekend day, and, "On average, how many hours do you personally spend on household work (such as cooking, cleaning, or shopping), for a typical weekday and a typical weekend day? If you sometimes do household work while looking after family members, count it here if you consider the main activity you were doing to be household work," with sliders given for both weekday and weekend day.

[^5]:    ${ }^{6}$ While Daminger (2019) identifies four main components of cognitive household labor (where identifying options and making decisions are separate components), I collapse these to three for the sake of survey length.
    ${ }^{7}$ I randomly vary the order of the eight types of cognitive household labor.
    ${ }^{8}$ I leave out "shopping/purchasing" and "travel/leisure" from Daminger's (2019) domains, and add a domain for mental work related to the coronovirus pandemic.
    ${ }^{9}$ See Appendix A for the full list of mental task survey items.
    ${ }^{10}$ The average number of "not applicable" responses among the 24 items was 1 , suggesting that the vast majority of items were relevant to respondents. The item with the most "not applicable" responses (22\%) is related to coronavirus, "keeping track of any home schooling / online learning activities" (See Appendix B).

[^6]:    ${ }^{11}$ While there are only 168 hours in a week, the maximum estimated hours spent doing household and care

[^7]:    ${ }^{12}$ Includes Asian Indian, Chinese, Korean, Japanese, and Vietnamese.
    ${ }^{13}$ Income is measured as individual annual salary (including bonuses and commissions) in U.S. dollars; "low" is less than $\$ 50,000$, "medium" is $\$ 50,000-\$ 100,000$, and "high" is greater than $\$ 100,000$. Higher education is a binary variable coded as 1 if completed Bachelor's degree or higher, and 0 otherwise.

[^8]:    ${ }^{14}$ While I would also like to consider the level of the mental load among non-binary respondents, only 10 respondents answered "Other / prefer not to answer" to the gender question, with a further 27 respondents selecting no option.
    ${ }^{15}$ Results available from the author.

[^9]:    ${ }^{16}$ Causal mediation analysis using the potential outcomes framework (Imai, Keele \& Tingley 2010), similarly, shows no evidence that the mental load mediates the effect of gender on political interest.

[^10]:    ${ }^{17}$ The differences are as follows: local politics, difference $=-0.054, \mathrm{SD}=0.026$, p -value $=0.038$; national politics, difference $=-0.043, \mathrm{SD}=0.025$, p -value $=0.090$; international politics, difference $=-0.075, \mathrm{SD}=$ $0.028, \mathrm{p}$-value $=0.008$.

[^11]:    ${ }^{18}$ Other extraction methods, for example, maximum likelihood, yield similar results. The diagnostic scree test shows that after two components, Eigenvalues of subsequent factors drop significantly, providing additional support for retaining two dimensions (Osborne \& Costello 2009).

[^12]:    ${ }^{19}$ Interestingly, it is not the case that women who are not employed outside the household are more satisfied, as one might assume if they view such labor as an investment, in the vein of traditional household specialization models (Becker 1985). Only $31 \%$ of women who stay at home are satisfied with the division of cognitive labor in their household.

[^13]:    Notes: The question text is, "In your household, who typically does the following?" Data include 1490 respondents.

