



The Fair Play Method

Can We Solve for the Unequal Division of Domestic Labor?

Final Report
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Disclaimer

The views expressed herein are those of the authors and not necessarily those of the Fair Play Institute, the USC Dornsife College of Letters, Arts and Sciences, or the University of Southern California as a whole.

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Executive Summary

In a multi-site study involving over 500 participants—primarily mothers—we evaluated the division of domestic labor within households and explored how that division related to mothers’ mental health and well-being.

Domestic labor is often thought of as tasks like cooking, cleaning, and doing laundry, but often forgotten is the effort of anticipating, planning, or coordinating such tasks—and ensuring that they get done. We specifically sought to test the division of cognitive labor, or the mental load of housework, as this is an understudied aspect of the domestic workload that may have important ramifications for mental health.

Our study was anchored around the Fair Play Method—a card-based system that assigns a card for common household tasks. The 100 cards represent both the Planning and Execution of a range of responsibilities, including doing dishes, meals, kids’ medical appointments—and then uses the cards in a game-like system to quantify and visualize couples’ respective domestic labor burdens. We assessed both Planning and Execution for 30 cards in the Fair Play Deck that account for the most common household tasks.

Our results showed that mothers consistently shouldered more household responsibilities than their partners, including a notably larger share of the mental load (Planning). Indeed, for every card we used in the study, mothers reported a greater share of Planning compared to Execution, relative to their partners.

Mothers who held a disproportionate share of overall domestic responsibilities reported:

- **Worse relationship satisfaction**
- **Higher perceived stress**

Mothers who carried a greater mental load (i.e., handled all or most of the planning for each card) showed the same negative indicators, plus others, including:

- **Higher depression & overall worse mental health**
- **Greater personal burnout**
- **Reduced physical health**

After establishing a baseline, we assessed whether the Fair Play Method intervention could alter the distribution of household labor, and if these changes could enhance women's health and well-being. Our main findings showed:

- **The more modules of the intervention that a participant completed, the more equitable their division of tasks became.**
- **Larger shifts in the division of labor that occurred as a result of the intervention were linked with greater improvements in mental health.**
- **Women whose household workload balance improved after the intervention also reported better relationship quality and less personal burnout.**
- **These findings suggest that when participants engage with the Fair Play Method intervention fully, they can improve the distribution of labor within their household.**
- **The findings also suggest that improvements in the division of labor are linked with corresponding mental health and relationship quality improvements.**

Despite these promising results, the intervention experienced notable attrition with both cohorts. Out of 337 invited individuals, only 190 (56%) began the intervention. Among these, 128 (38%) advanced to Module 4, but only 89 (26%) completed the entire program. Because only about a quarter of the invited participants completed the intervention, it is important to interpret our results with caution.



Introduction

FAIR PLAY

The distribution of household responsibilities plays a crucial yet often neglected role in global gender inequality. Research indicates that women bear a disproportionate share of domestic tasks, which can negatively affect their health and well-being. A key component of this burden is cognitive household labor—activities such as planning, anticipating needs, and assigning tasks—which primarily falls to women. This "mental load" has a negative impact on well-being¹, yet is frequently overlooked as an invisible and undervalued form of labor.

Despite unpaid care work contributing over \$10 trillion to the global economy, its significance is still largely unrecognized

Many women experience increased stress, dissatisfaction in their relationships, and difficulties in balancing work and family life due to this unequal division of household responsibilities. In addition, the unfair distribution of domestic duties hampers women's economic and professional progress around the world. Despite unpaid care work contributing over \$10 trillion to the global economy², its significance is still largely unrecognized.

The Fair Play Method seeks to elevate the value of care work and advance gender equality at home. By treating the household as our most critical organization, this novel approach has the

potential to make a meaningful impact in every household and drive cultural change, thereby improving women's lives. By guiding couples to share domestic tasks more equitably, the Fair Play Method aims to enhance overall well-being starting within the home.

This study investigates the division of labor, including cognitive tasks, among parents from two separate cohorts, and examines the relationship between domestic workload and well-being. Participants completed a baseline survey and then were invited to participate in an online intervention using the Fair Play Method to evaluate their involvement in "Planning" and "Execution" of household duties. The intervention was followed by a follow-up survey which mirrored the baseline survey. Ratings from the intervention were then linked to participants' self-reported mental and physical health.



¹ Aviv, et al. (2024). Cognitive household labor: gender disparities and consequences for maternal mental health and wellbeing. Archives of Women's Mental Health.

² Coffey, C., et al. (2020). Time to Care: Unpaid and underpaid care work and the global inequality crisis. Oxfam.

Participants

We studied participants across two separate cohorts—one featuring women across the country who were recruited as part of a USC-affiliated study (Cohort 1), and the other composed of employees of a Fortune 500 healthcare company (Cohort 2).

Cohort 1

Participants from Cohort 1 were drawn from an existing longitudinal sample that transitioned to parenthood during the COVID-19 pandemic, making them a particularly interesting group with which to study the division of labor. This sample was first recruited in Spring 2020 and followed by the research team for several years. All participants were expecting a child at the time of recruitment. The data included in this report was collected between May 2023 and March 2024, so all participants had at least one child of approximately three years of age.

Three hundred and fifty-four participants completed the baseline survey. Of those, 29 participants (8.2%) were ineligible for the intervention because they had previously read and implemented *Fair Play* (1.1%); lived outside of North America (1.7%); did not live with their romantic partner (5.7%); or some combination therein. Seventy participants (19.8%) were not interested in the intervention. Of the remaining 255 participants, we randomized 167 (47.2%) into the intervention group and 88 (24.9%) into a waitlist comparison condition. Of the 167 individuals in the intervention group, 52 (31.1%) started the intervention and were invited to complete a follow-up survey, 38 (22.7%) completed at least half of the lessons, and 30 participants (17.9%)

completed all lessons. The waitlist group was also invited to complete a follow-up survey at about the same time (between August and November 2023). After the first follow-up data collection was completed, we invited the waitlist group to participate in the intervention. Of those, 34 (38.6%) started the intervention and were sent the follow-up questionnaire, 21 (23.9%) completed at least half of the modules in the intervention, and 17 participants (19.3%) completed all lessons. Therefore the combined sample of participants who completed the intervention across both groups was 47 (33.1% of the total number of participants who initially signed up for the intervention). All data was collected between May and November 2023.

Of the participants who started the intervention and therefore were invited to complete the post-intervention follow-up questionnaires, most of the sample (92%) identified as female. The sample was majority (73%) White, 9% Latinx, 2% African-American, and 11% Asian-American, with an additional 5% of participants who identified as multiracial or “Other.”

The majority of participants who started the intervention (90%) had a bachelor’s degree or higher. 55% of the sample reported a household income of less than \$125,000 per year, and 45% reported a household income of more than \$125,000 per year. Most participants (71%) were employed full-time and 11% were not currently employed. The remainder of the sample was either employed part-time, self-employed, or a student or trainee.

Demographics by Intervention Completion

CHARACTERISTIC	OVERALL, N = 255 ¹	DID NOT START, N = 169 ¹	STARTED, N = 39 ¹	FINISHED, N = 47 ¹	P-VALUE ²
GROUP					0.4
Intervention	167 (65%)	115 (68%)	22 (56%)	30 (64%)	
WL-Control	88 (35%)	54 (32%)	17 (44%)	17 (36%)	
GENDER					0.5
female	236 (93%)	157 (93%)	34 (87%)	45 (96%)	
male	17 (6.7%)	10 (5.9%)	5 (13%)	2 (4.3%)	
queer/non-binary	2 (0.8%)	2 (1.2%)	0 (0%)	0 (0%)	
RELATIONSHIP STATUS					>0.9
Cohabiting	8 (3.1%)	6 (3.6%)	1 (2.6%)	1 (2.1%)	
Married/Domestic Partnership	247 (97%)	163 (96%)	38 (97%)	46 (98%)	
RACE/ETHNICITY					0.10
White	204 (81%)	142 (85%)	28 (72%)	34 (74%)	
Black/African American	10 (4.0%)	8 (4.8%)	1 (2.6%)	1 (2.2%)	
Hispanic/Latine	17 (6.7%)	9 (5.4%)	5 (13%)	3 (6.5%)	
American Indian or Alaska Native	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
Asian or Pacific Islander	14 (5.5%)	5 (3.0%)	4 (10%)	5 (11%)	
Multiracial or Other	7 (2.8%)	3 (1.8%)	1 (2.6%)	3 (6.5%)	
Decline to state	1 (0.4%)	1 (0.6%)	0 (0%)	0 (0%)	
Unknown	2	1	0	1	
EDUCATION					
Did not complete high school	3 (1.2%)	2 (1.2%)	1 (2.6%)	0 (0%)	
High School Graduate/GED	8 (3.2%)	4 (2.4%)	2 (5.1%)	2 (4.3%)	
Some College	15 (5.9%)	12 (7.1%)	2 (5.1%)	1 (2.2%)	
Associate's Degree	8 (3.2%)	7 (4.2%)	1 (2.6%)	0 (0%)	
Bachelor's Degree	65 (26%)	37 (22%)	12 (31%)	16 (35%)	
Master's Degree	86 (34%)	59 (35%)	11 (28%)	16 (35%)	
Professional/Doctoral Degree	68 (27%)	47 (28%)	10 (26%)	11 (24%)	
Unknown	2	1	0	1	
OCCUPATIONAL STATUS					0.8
Not employed	25 (9.9%)	16 (9.5%)	5 (13%)	4 (8.7%)	
Part-time employee	20 (7.9%)	13 (7.7%)	5 (13%)	2 (4.3%)	
Self-employed	9 (3.6%)	4 (2.4%)	2 (5.1%)	3 (6.5%)	
Student/trainee	8 (3.2%)	5 (3.0%)	1 (2.6%)	2 (4.3%)	
Full-time employee	185 (73%)	125 (74%)	26 (67%)	34 (74%)	
Other	6 (2.4%)	5 (3.0%)	0 (0%)	1 (2.2%)	
Unknown	2	1	0	1	
INCOME					
<\$25,000	7 (2.8%)	6 (3.6%)	1 (2.6%)	0 (0%)	
\$25,000-\$50,000	18 (7.2%)	11 (6.6%)	3 (7.7%)	4 (9.1%)	
\$50,000-\$75,000	32 (13%)	18 (11%)	7 (18%)	7 (16%)	
\$75,000-\$100,000	28 (11%)	13 (7.8%)	7 (18%)	8 (18%)	
\$100,000-\$125,000	33 (13%)	24 (14%)	4 (10%)	5 (11%)	
\$125,000-\$150,000	46 (18%)	32 (19%)	7 (18%)	7 (16%)	
>\$150,000	86 (34%)	63 (38%)	10 (26%)	13 (30%)	
Unknown	5	2	0	3	

¹ n (%)² Fisher's exact test; Kruskal-Wallis rank sum test



Cohort 2

All participants from Cohort 2 were invited to participate via email starting in February 2024. Four hundred nine (409) people were invited to complete the baseline survey; 170 (42%) provided informed consent and started the survey, and 148 (36%) completed the survey. This was a national sample with participants located across the U.S. Participants were provided time during working hours to take part in the study.

One hundred seventy (170) participants started the baseline survey and were invited to participate in the intervention; 106 individuals (62%) at least started the intervention and were invited to complete a follow-up survey; 69 (40%) completed at least half of the lessons; and 45 participants (26%) completed all lessons.

Of the participants who started the intervention and therefore were invited to complete the post-

intervention follow-up questionnaire, most of the sample (97%) identified as female. The sample was majority (80%) White, 12% African-American, 8% Latinx, and 3% Asian-American, with an additional 3% of participants who identified as multiracial or “Other.” Of the participants who reported their age range, 53% were between the ages of 35-44, 28% aged 45-54, 13% aged 25-34, and 4% 55+. One participant was under the age of 25.

The majority of participants who started the intervention (87%) reported being married or in a domestic partnership, 7% were cohabitating, and 5% reported being in a relationship but not living together. All of the participants who started the intervention and were in a relationship with a partner of a different gender, except one who did not have a partner. The average number of children that participants had living at home was two.

Demographics by Intervention Completion

CHARACTERISTIC	OVERALL, N = 170 ¹	DID NOT START, N = 64 ¹	STARTED, N = 61 ¹	FINISHED, N = 45 ¹	P-VALUE ²
FAIR PLAY COACHING					0.7
group	25 (15%)	7 (11%)	12 (20%)	6 (13%)	
individual	6 (3.5%)	2 (3.1%)	2 (3.3%)	2 (4.4%)	
none	139 (82%)	55 (86%)	47 (77%)	37 (82%)	
GENDER					0.6
Woman	165 (98%)	61 (97%)	59 (97%)	45 (100%)	
Man	4 (2.4%)	2 (3.2%)	2 (3.3%)	0 (0%)	
Unknown	1	1	0	0	
RELATIONSHIP STATUS					0.072
Married/Domestic Partnership	137 (84%)	42 (72%)	53 (87%)	42 (93%)	
Cohabiting	10 (6.1%)	5 (8.6%)	4 (6.6%)	1 (2.2%)	
Relationship But Not Living Together	9 (5.5%)	6 (10%)	3 (4.9%)	0 (0%)	
None	8 (4.9%)	5 (8.6%)	1 (1.6%)	2 (4.4%)	
Unknown	6	6	0	0	
RELATIONSHIP TYPE					0.3
Different Sex	159 (95%)	56 (90%)	60 (98%)	43 (96%)	
No Partner	8 (4.8%)	5 (8.1%)	1 (1.6%)	2 (4.4%)	
Same Sex	1 (0.6%)	1 (1.6%)	0 (0%)	0 (0%)	
Unknown	2	2	0	0	
RACE					0.3
White/Caucasian	135 (81%)	51 (84%)	48 (80%)	36 (80%)	
Black/African American	14 (8.4%)	5 (8.2%)	7 (12%)	2 (4.4%)	
Asian	10 (6.0%)	2 (3.3%)	2 (3.3%)	6 (13%)	
Other	4 (2.4%)	2 (3.3%)	2 (3.3%)	0 (0%)	
Native Hawaiian Or Pacific Islander	2 (1.2%)	1 (1.6%)	0 (0%)	1 (2.2%)	
American Indian Or Alaska Native	1 (0.6%)	0 (0%)	1 (1.7%)	0 (0%)	
Unknown	4	3	1	0	
HISPANIC					0.014
Not Hispanic/Latino	153 (92%)	53 (85%)	56 (92%)	44 (100%)	
Hispanic/Latino	14 (8.4%)	9 (15%)	5 (8.2%)	0 (0%)	
Unknown	3	2	0	1	
CHILDREN IN THE HOME (BIOLOGICAL OR OTHER)					0.5
Mean	2.08	2.30	1.87	2.04	
Range	0.00 - 10.00	0.00 - 10.00	0.00 - 7.00	0.00 - 9.00	
Unknown	2	1	1	0	

¹ n (%)

² Fisher's exact test; Kruskal-Wallis rank sum test



Research Approach

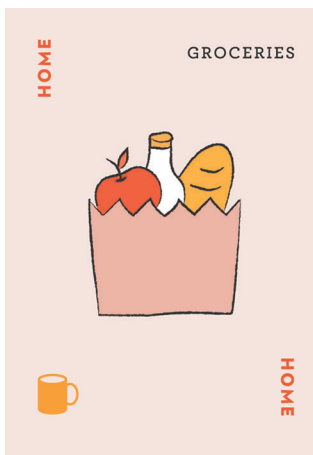
Procedure

Participants from both cohorts were asked via email to fill out a 50-minute survey which included well-validated, widely used measures of mental health, burnout, stress, relationship quality, sleep, and global physical health. 1,089 people (680 from cohort 1; 409 from cohort 2) were invited to the baseline survey, and 502 (46%) completed the survey. The majority of those who completed the baseline survey were from cohort 1 (354 people). This was a national sample with participants located across the US.

Measures Used

Beck Depression Inventory	Dyadic Adjustment Scale	Perceived Stress Scale	Copenhagen Burnout Inventory	PROMIS Scales
21-item scale assessing depressive symptoms (e.g. changes in mood, appetite, sleep). This measure has been cross-validated with clinician diagnoses and with other questionnaire measures.	32-item questionnaire that measures an individual’s perceptions of his/her relationship with an intimate partner.	A widely used measure of perceived stress that asks about subjective experiences of stress and overwhelm.	Instrument measuring burnout that includes 19 items distributed across 3 domains: personal burnout, work burnout, and patient burnout. We only used the personal burnout scale in this study.	Physician-administered batteries that assess physical health, mental health, sleep disturbance and global health.

At the conclusion of the baseline survey, participants were shown 30 cards from the Fair Play Deck and asked how they divide household tasks with their partner. Each card provided a breakdown of the responsibilities involved in both the Planning and Execution of each task. The cards and their descriptions were selected from the broader deck to highlight tasks most common among our sample group (mothers of preschoolers), focusing on the “Daily Grind” cards. Cards were selected if they were relevant to parents of toddlers and required regular attention. An example card and its definition are presented below.



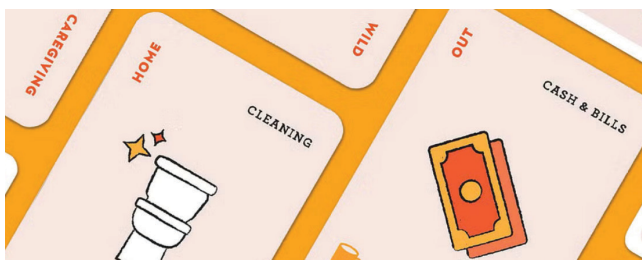
Example of a Fair Play card.

Planning

- Making a master list (consulting with “meals” cardholder)
- Checking refrigerator and pantry for what is low and adding to list

Execution

- Shopping (grocery stores and/or online)
- Loading and unloading groceries
- Placing items in pantry/refrigerator
- Throwing away expired items from refrigerator/freezer

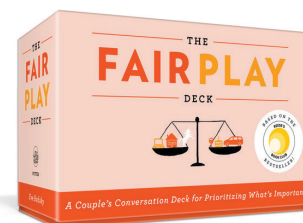


Participants were then asked to evaluate the extent to which they were responsible for the Planning and Execution of each card, using a 7-point Likert scale slider where “1” indicated “All me” and “7” indicated “All partner.” They rated the Planning and Execution scales separately for each card.

For Cohort 1 only, after the baseline survey we sent a hair sampling kit via postal mail with a stamped, addressed return envelope to all participants. Cortisol concentration in hair reflects cumulative cortisol output over the previous months, a marker of the hypothalamic-pituitary-adrenal axis, which is used in response to threats, stress, and challenges. Cortisol levels were measured via the hair samples after being sent to a collaborator’s lab ([Clemens Kirschbaum](#)) for assay.

Recognizing the significant evidence for the gendered division of household labor and its negative impact on women’s well-being, we then invited participants to join the Fair Play Method online intervention. This intervention aimed to re-balance housework responsibilities within families.

After completing the initial baseline survey, participants received an email invitation to take part in the Fair Play intervention online, spanning an eight-week period. The intervention included 65 lessons divided into nine modules (Modules 0 to 8). There were three types of lessons: text-based, quizzes, and videos. Seven of the eight modules included one video, and the final module featured two videos, ranging from 30 seconds to 6 minutes and 15 seconds in length. Each module had at least one quiz, with quizzes containing one to six



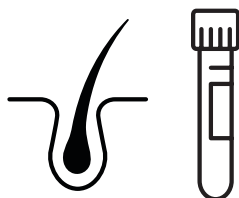
questions. Participants could not proceed to the next lesson without fully watching the videos or completing the quizzes. Beginning with Module 3, participants were offered the opportunity to work with a Fair Play coach in either a one-on-one or couples session, with the option to participate in up to two coaching sessions.

Participants who began the intervention were asked to complete a follow-up survey, which included the same measures as the baseline survey. Those who did not start the intervention were not invited to take the follow-up survey.

At the conclusion of the follow-up survey, participants were asked to reflect on their experiences with the Fair Play Method online program through a series of open-ended questions:

1. What, if anything, from the Fair Play Method have you implemented into your life?
2. How would you describe the Fair Play Method program in five words?
3. What did you find most helpful or interesting about the Fair Play Method program?
4. What would you change about the Fair Play Method online program? What aspects were least helpful?
5. Is there anything else you'd like to share about your experience with the Fair Play Method online program?

For Cohort 1 only, intervention participants who submitted a baseline hair sample were asked to submit an additional hair sample to test for changes in cortisol levels pre- to post-intervention.





Baseline Results

Our team tested two main questions when analyzing our initial (baseline) survey data:

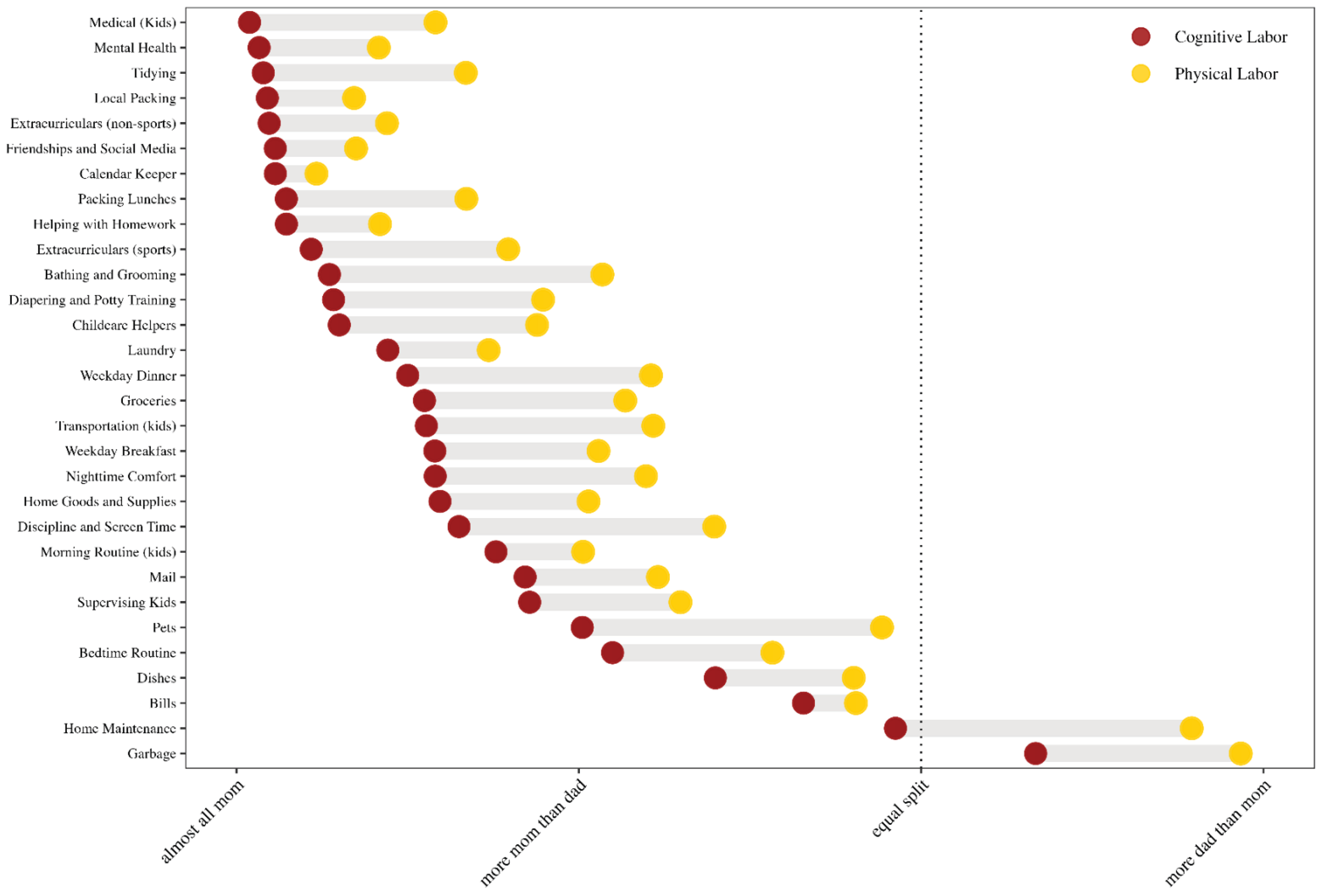
1. Does the participants' answers to Fair Play card questions provide evidence for an unequal mental load?
2. Does the amount of Fair Play Cards held by the participants have a meaningful link with their overall well-being?

Fair Play Cards: Evidence for An Unequal Mental Load

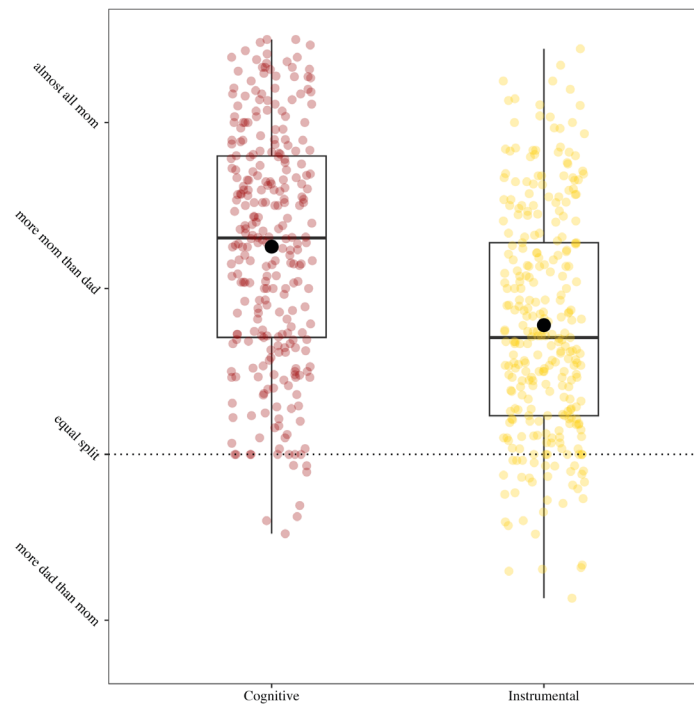
As illustrated in the figures below, participants from both cohorts indicated that they handle the majority of both Planning and Execution for nearly all household tasks. However, the imbalance was more pronounced in the Planning stage: for every Fair Play card, women were responsible for a greater share of Planning compared to Execution. The only exceptions were the "Garbage" and "Home Maintenance" cards, where the partner took on more of the Execution, but the participant still handled the majority of the Planning.

The tasks that were especially gendered for *Planning* included family medical needs, mental health, tidying, packing for local excursions, children's extracurricular activities, and helping their children with homework. For *Execution*, the most gendered tasks were keeping the family calendar, coordinating with friends, packing for local excursions, and mental health. Notably, these are all tasks where Execution includes a cognitive dimension.

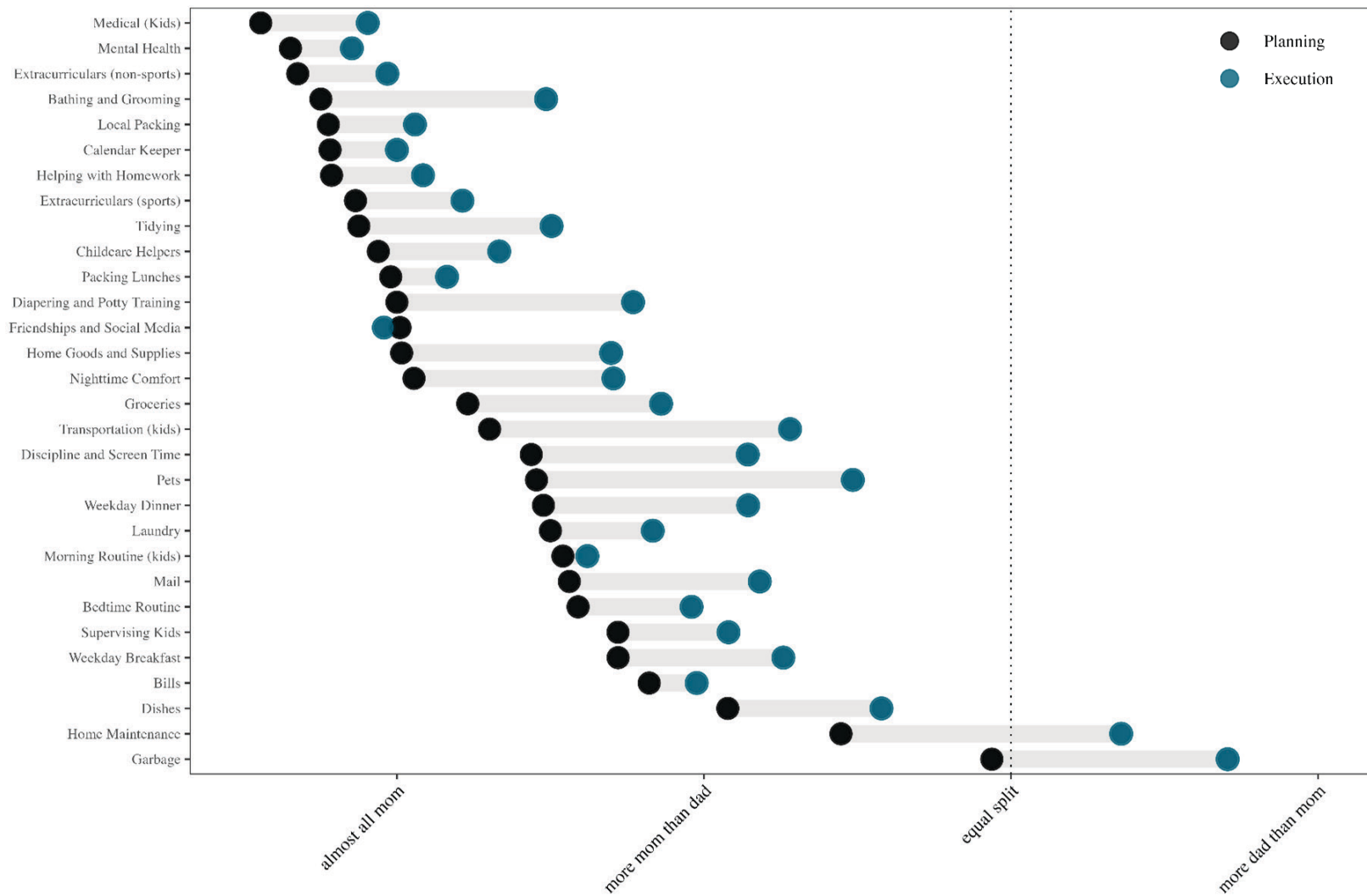
Division of Labor - Cohort 1



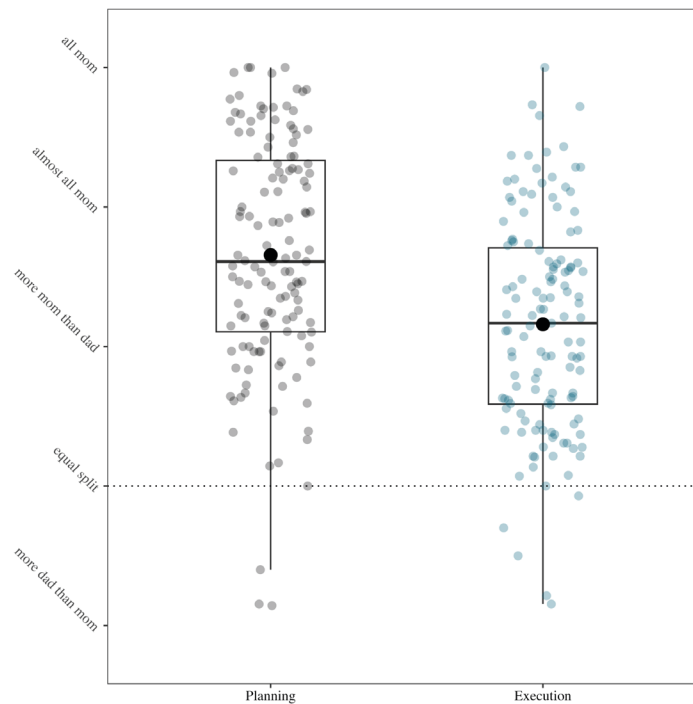
Division of Household Labor Summary - Cohort 1



Division of Labor - Cohort 2



Division of Household Labor Summary - Cohort 2



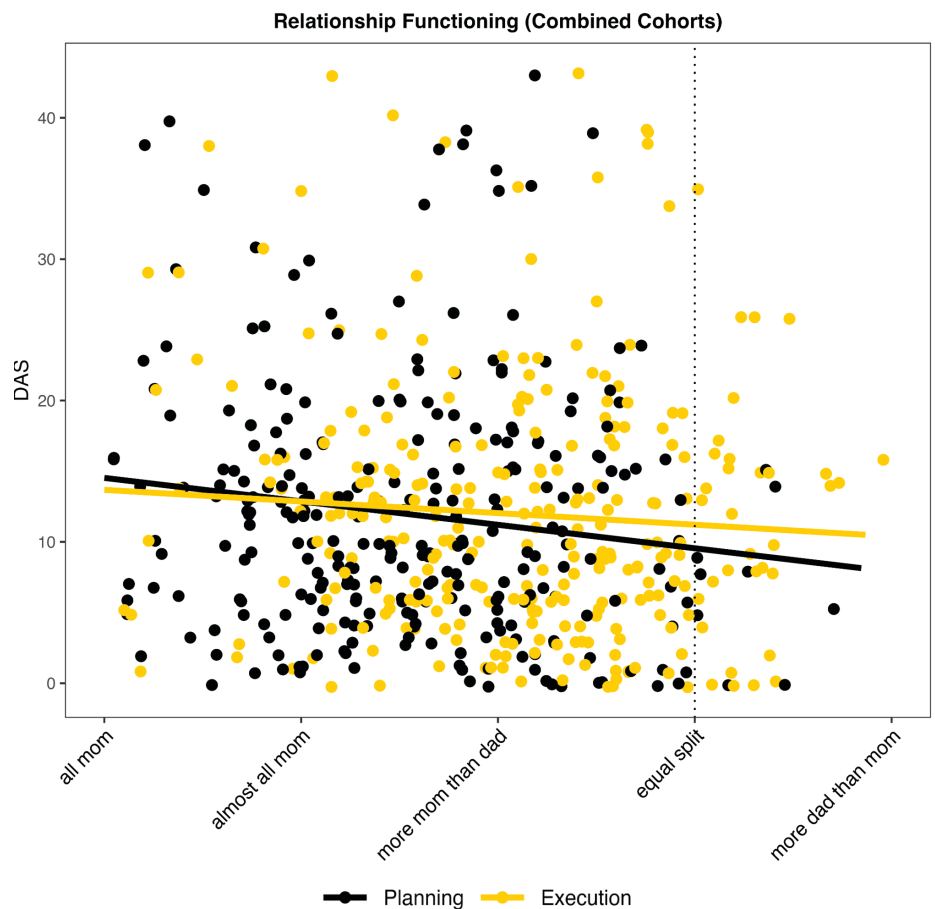
Fair Play Cards Have Meaningful Links with Overall Well-Being

We tested associations between participants’ Fair Play card ratings and their scores on each of the mental health and well-being measures in the survey. For each analysis, we tested three Fair Play scores: the Planning score, the Execution score, and the Total score (Planning and Execution combined). We performed bivariate correlations and used a two-tailed test of statistical significance, which means that we calculated the strength of the association between our constructs and deemed associations “significant” if the relationship was strong enough that the likelihood of an association emerging by chance could be estimated as less than 5%.

Below are the significant findings related to well-being from the baseline survey data from both cohorts:

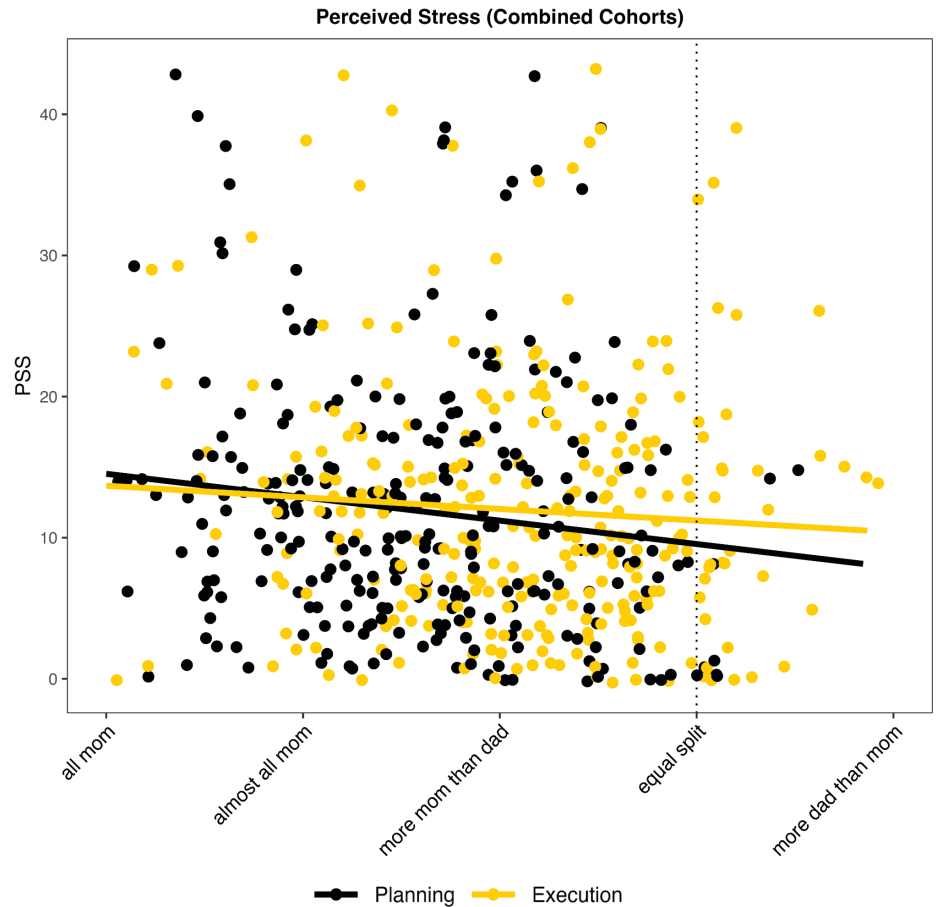
Relationship Quality

All three Fair Play scores were associated with Dyadic Adjustment Scale scores: when mothers held more cards, they were significantly less satisfied with their relationship with their partners.



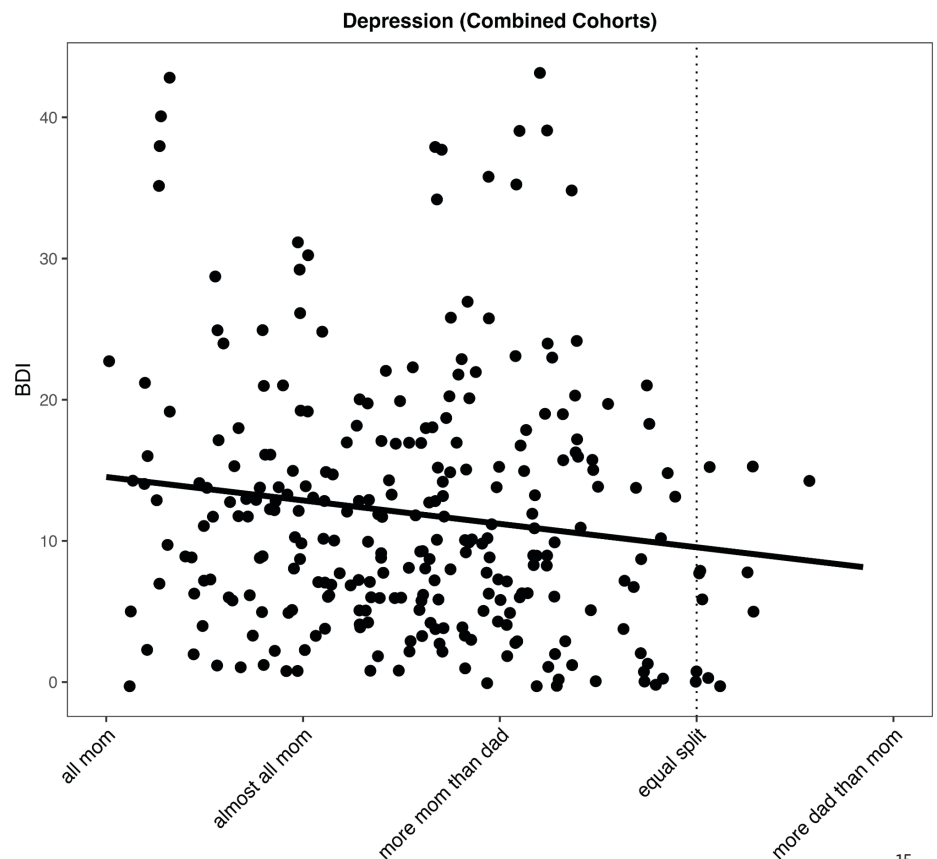
Perceived Stress

All three Fair Play scores were associated with the Perceived Stress Scale score: when mothers held more cards, they reported more perceived stress.



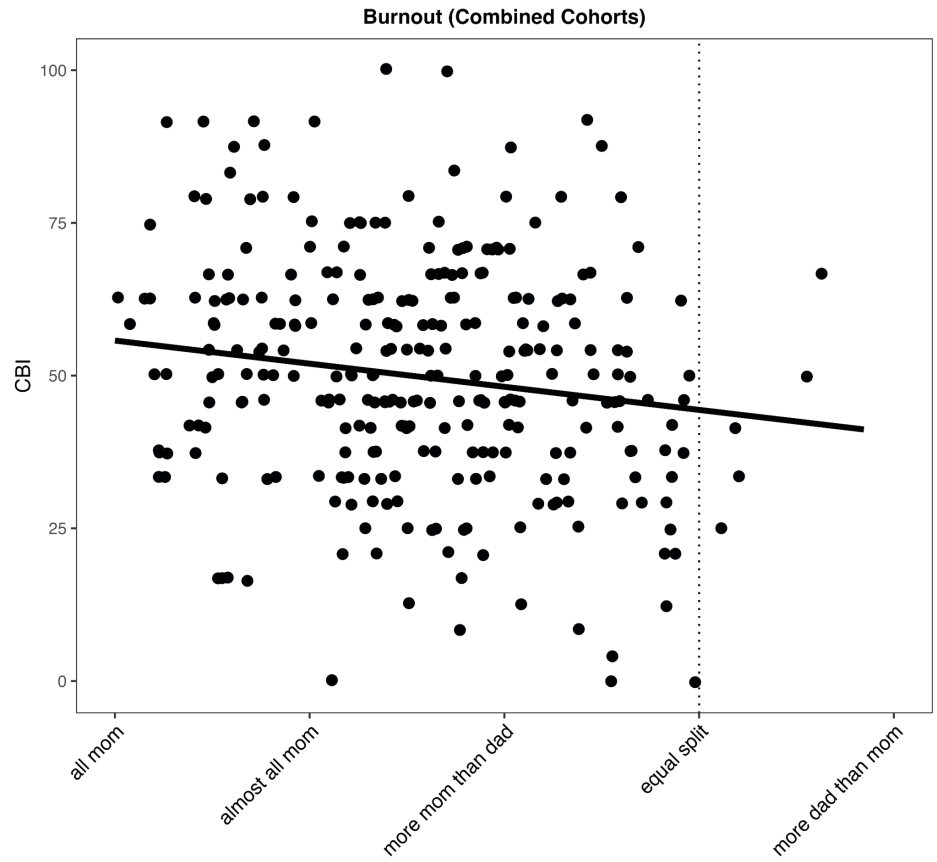
Depression

The Beck Depression Inventory was significantly associated with Planning only: when mothers engaged in more cognitive household labor, they reported more depressive symptoms. The Execution score and Total score were not associated with perceived stress.



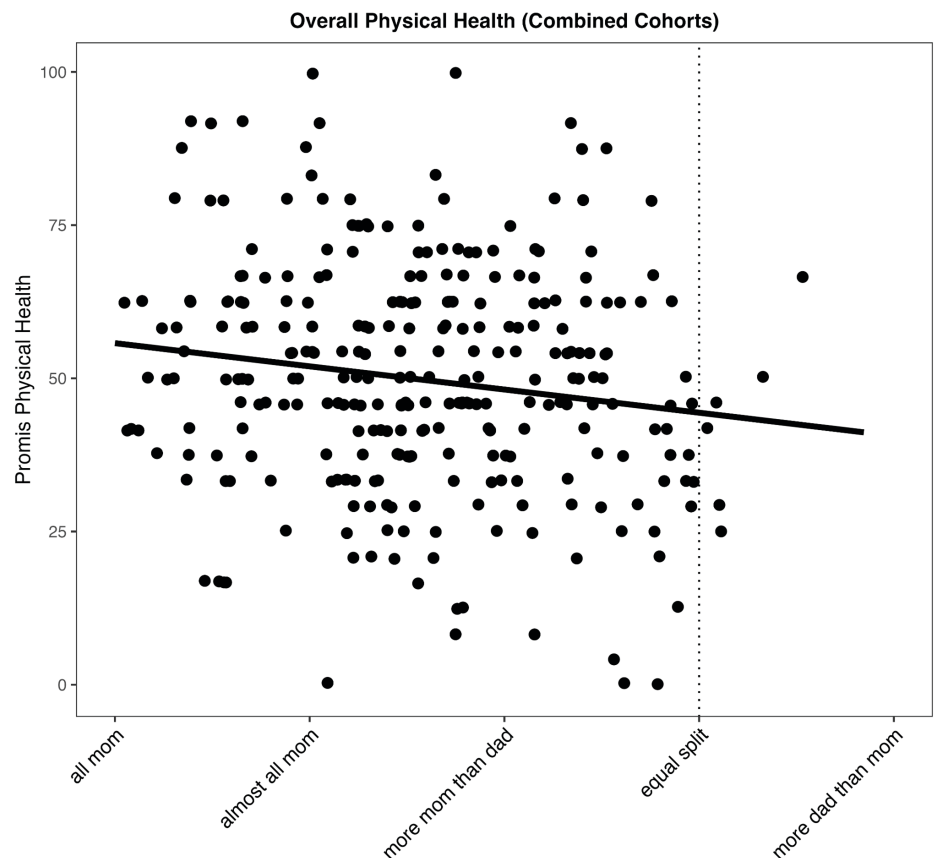
Burnout

The Copenhagen Burnout Inventory was significantly associated with Planning only: when mothers engaged in more cognitive household labor, they reported more symptoms of exhaustion, overwhelm, and burnout. However, the work burnout scale of the Copenhagen Burnout Inventory, which specifically assessed feelings of burnout at the workplace, was not significantly associated with Fair Play Cards. The Execution score and Total score were not associated with either personal or workplace burnout.



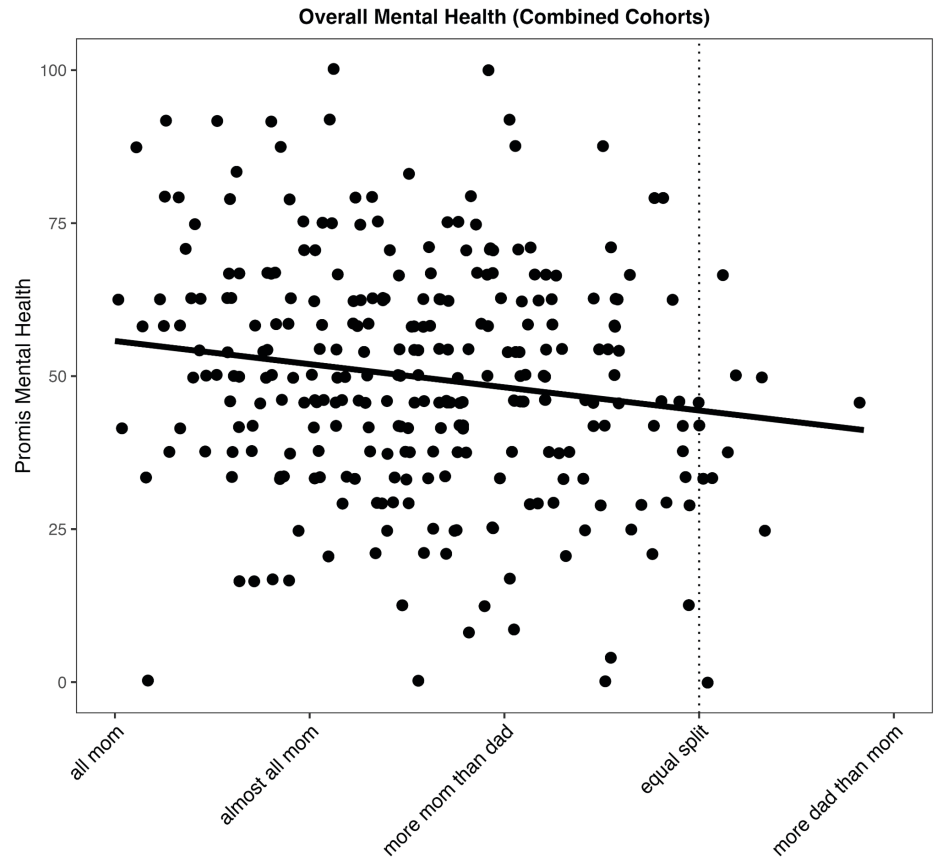
Physical Health

The physical health scale of the PROMIS Global Health Measure was significantly associated with Planning only, which suggests that when participants held more cards, they reported worse physical health. The Execution score and Total score were not associated with physical health.



Mental Health

The mental health scale of the PROMIS Global Health Measure was significantly associated with Planning only, which suggests that when participants held more cards, they reported worse overall mental health. The Execution score and Total score were not associated with physical health.



Sleep

The Fair Play scores were not significantly associated with the PROMIS Sleep Scale.



Cortisol

Cortisol was not significantly associated with any of the Fair Play scores or with any of the measures of health listed above.





Intervention Results

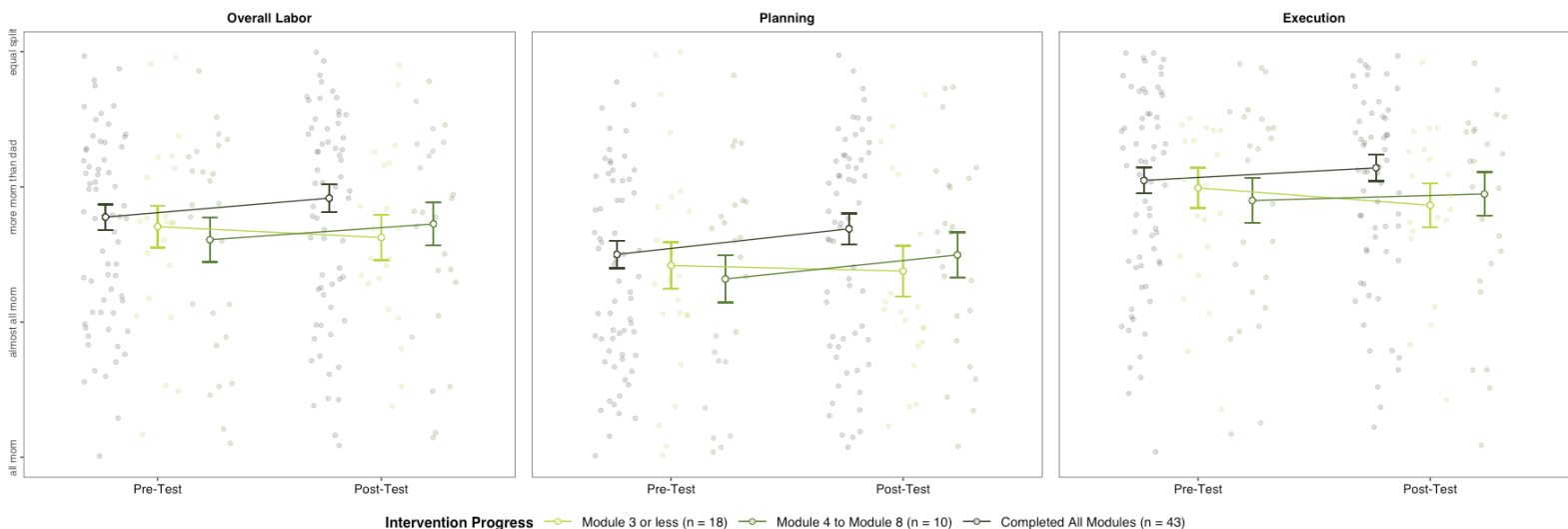
When analyzing the results from our follow-up survey, our team asked three main research questions:

1. Can the Fair Play Method successfully shift households to a more equitable division of both cognitive and instrumental domestic labor?
2. Are shifts in the division of labor linked with better health and well-being outcomes?
3. Is the intervention engaging enough to get participants motivated to start and finish the course?

Research Question 1: Determining if the Fair Play Method results in a more equitable division of cognitive and instrumental domestic labor

As shown in the figure below, participants from Cohort 1 who completed more of the intervention showed a more equitable division of overall, cognitive, and instrumental labor from baseline to follow-up. We did not see a significant change in division of labor for Cohort 2. This lack of change may be attributed to small sample size.

Intervention Progress Predicts Change in Division of Labor



Research Question 2: Testing the effect of changes in the division of labor on women's stress, health, well-being, and relationship satisfaction

We calculated a Fair Play difference score by subtracting the pretest Fair Play score from the post-test Fair Play score. A positive difference indicates that the participant's division of labor became more egalitarian after starting the intervention, while a negative difference indicates that they became less egalitarian.

Cohort 1

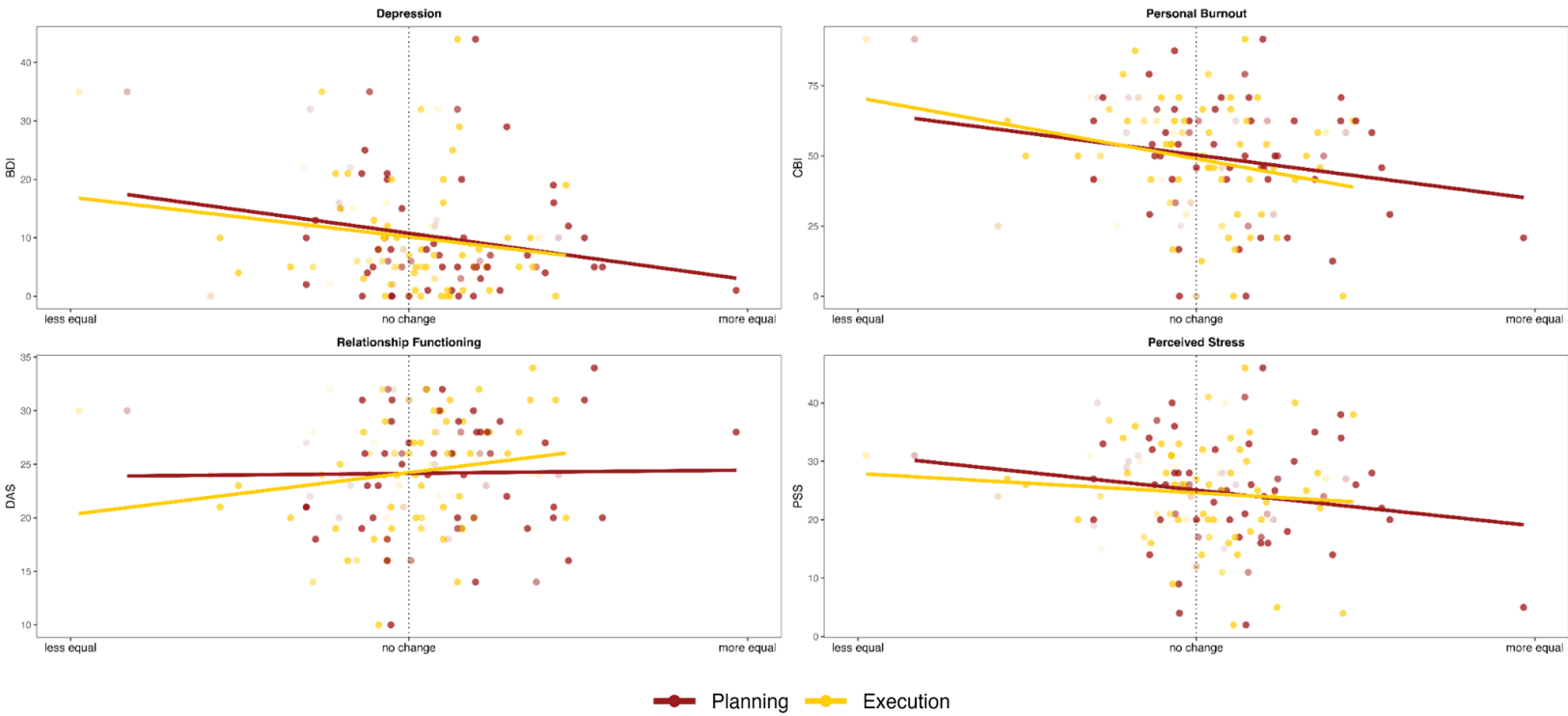
Higher difference scores for cognitive labor, suggesting greater improvement in the division of the mental load, were associated with fewer depressive symptoms and lower stress at follow-up, controlling for baseline levels of depression and stress. Higher difference scores for instrumental labor, suggesting greater improvement in the execution of household tasks, were associated with higher relationship functioning at follow-up. We did not find an effect for changes in the division of labor leading to improvements in personal burnout, overall PROMIS mental and physical health scores, or cortisol levels for Cohort 1. The absence of change in cortisol levels is likely due to the small sample size and timing issues. Given the subtle nature of cortisol effects and the high rates of attrition in the intervention, detecting changes was particularly challenging. A future follow-up with a larger sample and longer timescale could potentially reveal changes in cortisol levels after participants complete the intervention.

Cohort 2

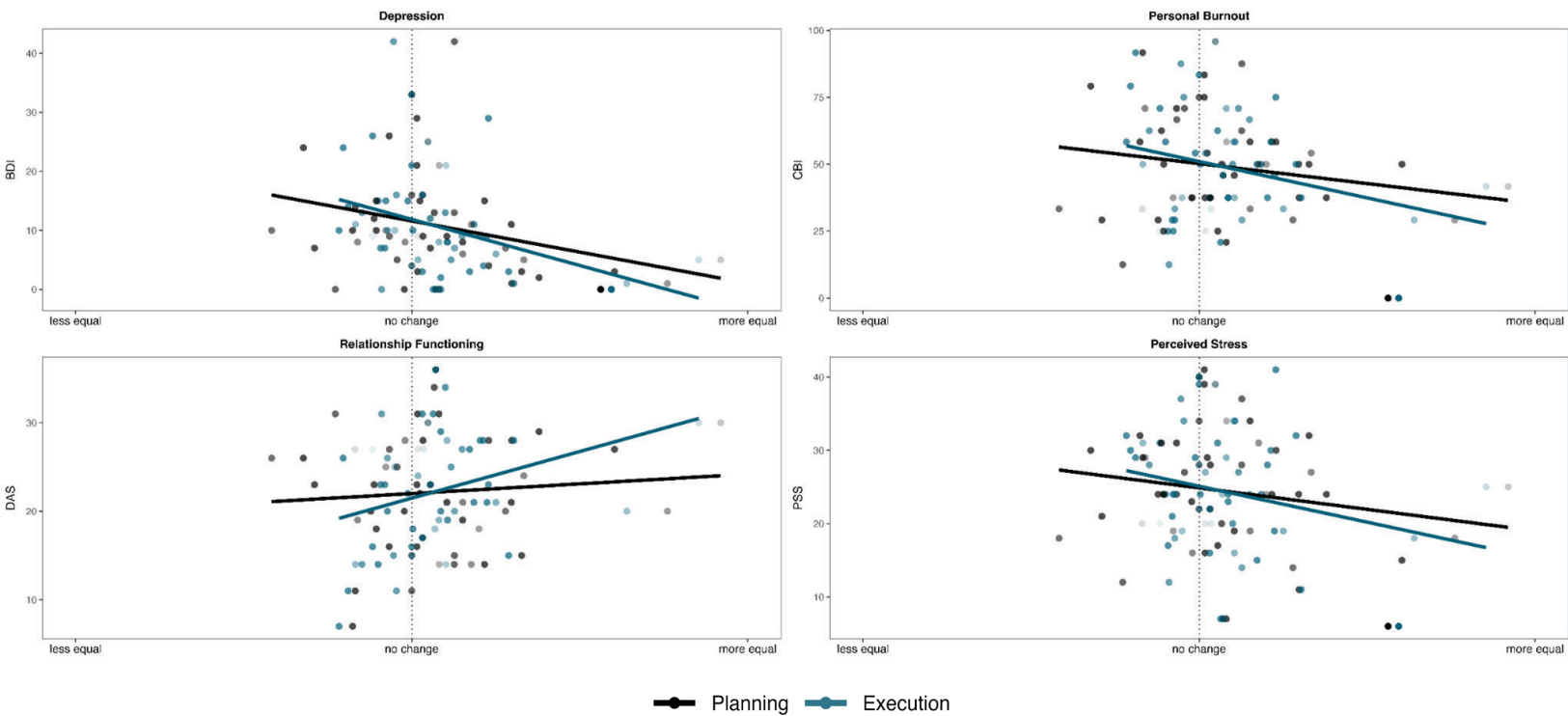
Higher difference scores for instrumental labor were associated with lower levels of burnout and improvement in relationship satisfaction, controlling for baseline levels of burnout and relationship satisfaction. We did not find an effect for changes in the division of instrumental labor leading to improvements in levels of depression, stress, overall PROMIS mental and physical health scores, or cortisol levels. The difference scores for cognitive labor and overall household labor did not show any significant results for cohort 2.



Change in Division of Labor from Pre- to Post-Intervention (Cohort 1)



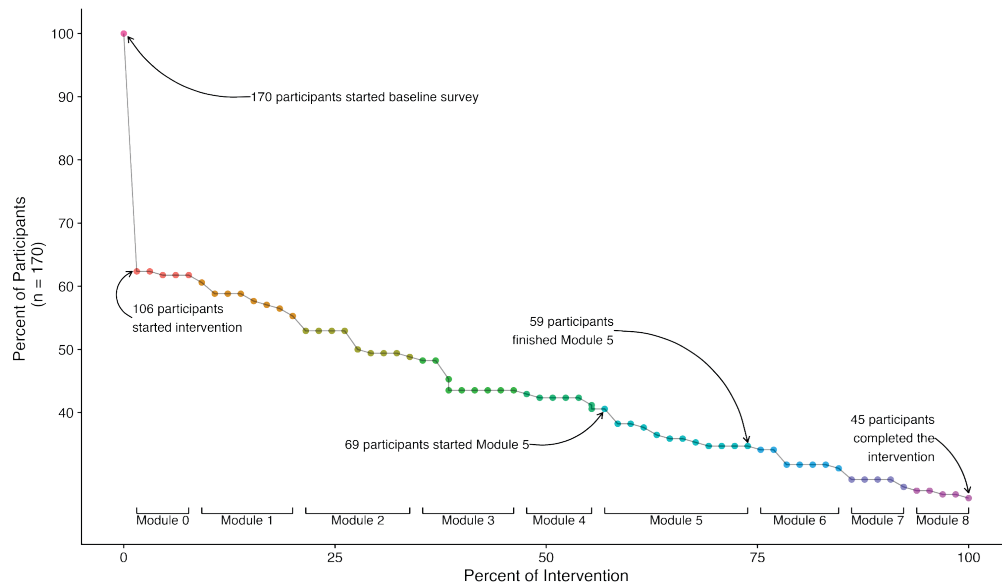
Change in Division of Labor from Pre- to Post-Intervention (Cohort 2)



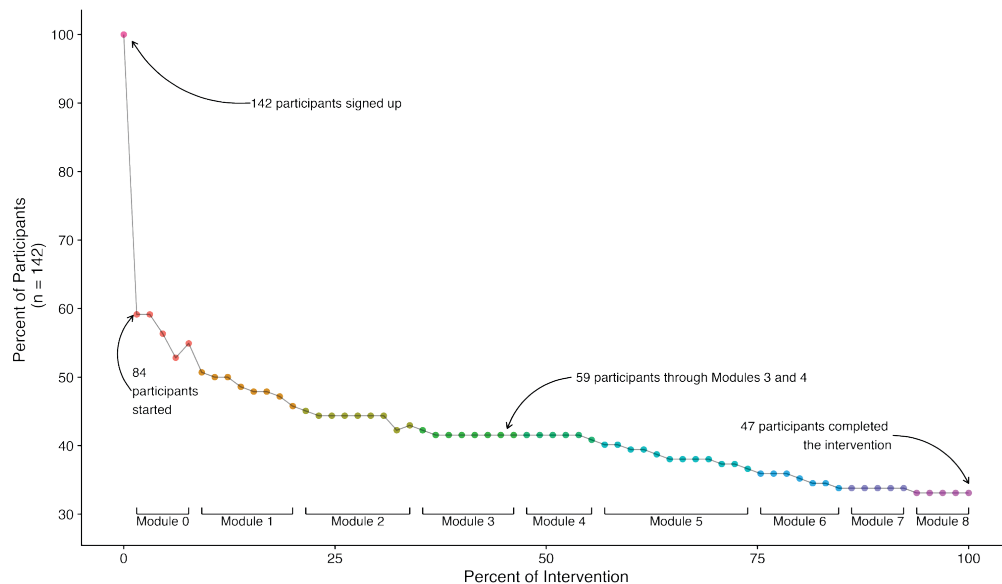
Research Question 3: Testing the intervention’s effectiveness in engaging and motivating participants

Of the 337 people who were invited to participate in the intervention, only 190 (56%) actually started the intervention. 128 people (38%) progressed through Module 4, but only 92 people (27%) completed the program. When tracking the drop-off in participation, we noted that the largest drop-off in participation occurred between sign-up and Module 2. There was a steady decline in participation until Module 6, after which the dropoff slightly decreased. The crux of the Fair Play Method—how to play the card game and reallocate cards—does not occur until session 5, which was completed by only 106 participants (31%). Due to this gradual rate of dropoff which was recorded across both cohorts, our findings should be interpreted with caution.

Cohort 1



Cohort 2



Participants' open-ended feedback indicated that they appreciated various aspects of the program. They mentioned that the program created a unique opportunity for meaningful conversations with their partner and introduced useful vocabulary for those discussions. Additionally, it recognized their often unnoticed efforts, validated their experiences, and enhanced their sense of self-worth. Below are examples of responses reflecting each of these themes:

Conversation Opportunity

"We have had more conversations about splitting up household and family tasks in a way that feels fair to us. My husband has been taking our oldest to preschool and I do pick up. This helps me maintain my 8 month olds schedule and get stuff done around the house."

"Giving language/confidence to discuss."

"A communication tool for alignment."

"Great tool for all marriages."

"Great alternative to marriage counseling."

Mental Load

"Recognizing that I spend A LOT of time planning for my kids significant mental health, physical health, and special needs, even if I'm not always the one taking them to the appointments. Recognizing I do contribute to the home, but without any control over execution. I recognized why I feel powerless."

"Acknowledging all the unseen work that is done and that all time is valuable."

"Taking a step back and looking more holistically at the tasks I do each day. It's not just the execution, but it's the planning, which takes up so much space."

"I like getting to have conversations with my husband about what my mental load is because he didn't realize just how much planning there is to every task in the home and with our children. It has allowed us to divide up that labor and he's been able to take some things off my plate to make our lives easier."

"My husband saw how many cards were mine and has taken over more responsibility."

New Vocabulary

"I found new vocabulary and labels for the sources of my frustrations and this feeling that a lot of women were going through the same things. The surveys actually made me realize how much I do. Never took inventory of things."

"Dealing and re-dealing the cards, discussion with partner about MSC."

"I thought it was helpful to break it up into the Planning and Execution—it was helpful to look at each task in that way."

"Owning both the Planning and Execution of tasks. Also setting clear Standard of Care models for delegated tasks."

"I have taken the concept of true ownership from Planning to Execution and shared that with my husband."

"The mindset shift, the CPE, dividing the cards. Trying to delegate entire tasks. The minimum standard of care concept."

Normalized Experience

"Validation of what I have been experiencing since having children."

"Eye-opening description of womanhood."

"I didn't realize this was so common in other parenting relationships."

"It made me feel more sane."

Self-worth (standing up for self, value of personal time)

"Learning that it's okay to have fun time for myself."

"Telling my partner what my needs are more often."

"This program makes you confident."

"I'm trying to be better at delegation and saying 'no' without feeling guilty."





Conclusions

Our baseline findings revealed that mothers consistently took on more household responsibilities than their partners, with an even larger share of cognitive household labor, also known as mental load. For every card in the deck, mothers reported handling more Planning (cognitive labor) than Execution (instrumental labor) compared to their partners. Mothers who carried a disproportionate share of overall domestic responsibilities experienced lower relationship satisfaction and increased perceived stress. The mental load, in particular, was associated with these negative outcomes, as well as increased depression symptoms, personal burnout, and reduced overall physical and mental health.

Our research evaluated the Fair Play Method, an innovative online intervention designed to promote a more equitable distribution of household responsibilities. In our first cohort, we discovered that greater progress through the intervention was linked to significant improvements in the division of both instrumental and cognitive labor. Additionally, Cohort 1 participants whose division of labor improved as a result of the intervention experienced reduced stress and depression, as well as better relationship quality.

In Cohort 2, we did not see a significant change in division of labor. However, when participants *did* experience changes to instrumental labor from baseline to follow-up, they also experienced reduced personal burnout and improved relationship satisfaction.

The study was limited by a small sample size, partly due to limited uptake of the intervention and high dropout rates. The predominantly White, educated sample of mothers also limits the generalizability of the findings. Despite these limitations, this study is groundbreaking in addressing the issue of unequal household labor and offers valuable insights into the potential of interventions to enhance women's health and well-being. This study is the first to analyze an intervention aiming to tackle the issue of inequitable household labor. It employed a longitudinal, two-group design and assessed not only household labor but also multiple measures of mental health and well-being.

This research has significant implications for interventions aimed at improving the health of women and families, as well as for programs and policies that seek to advance gender equity. In conclusion, our findings reinforce the idea that "the home is our most important organization" and suggest that shifting the balance of domestic labor can significantly enhance women's well-being.