
Mode Effects in the Measure on Housework Division

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Campus Condorcet, 24 November 2025

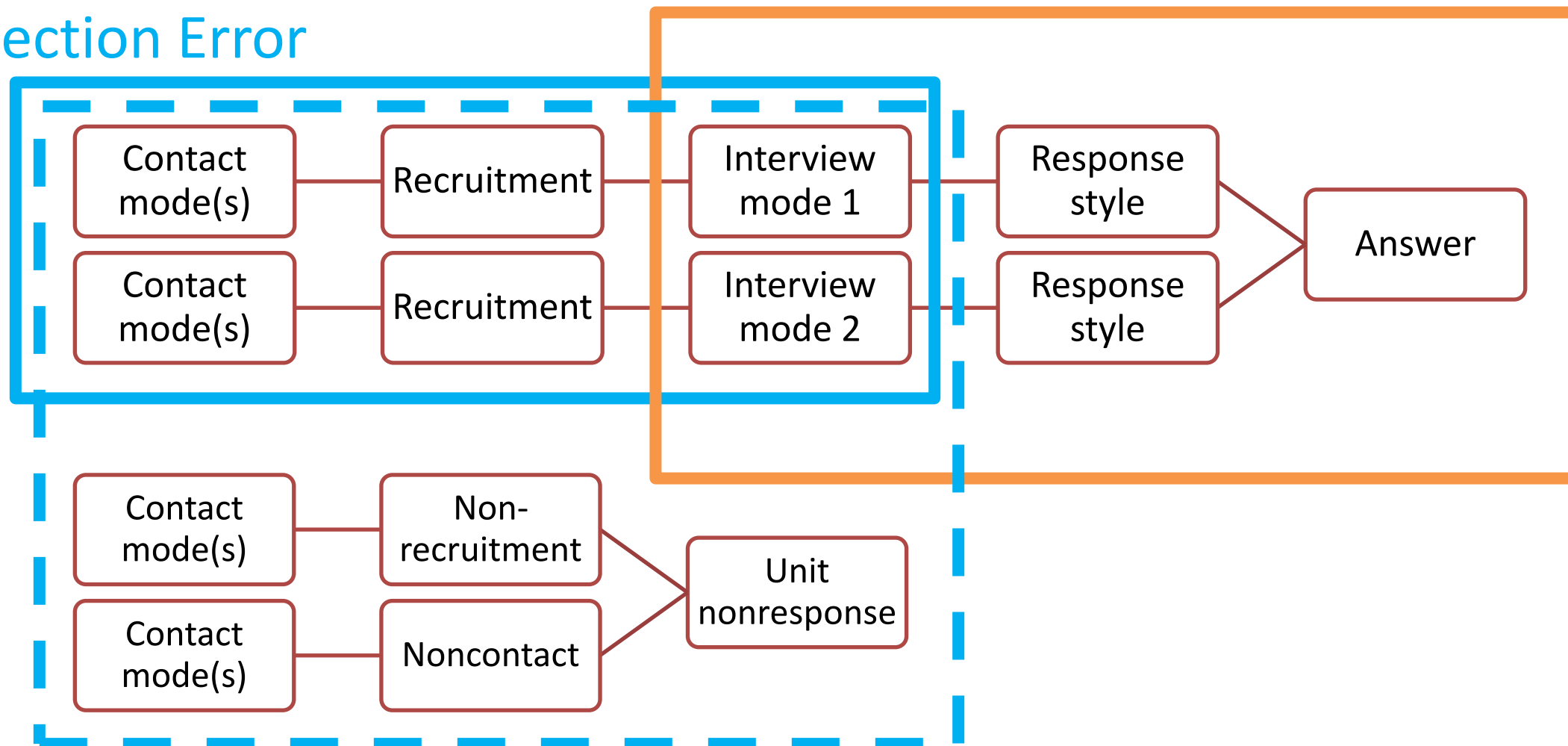
LifeObs – Workshop on Mode Effects



Mode Effects from a Conceptual Perspective

Selection Error

Measurement Error



Mode Effect & Gender Equality Measures

- In ERFI2:
 - ca. 8000 respondents in a cohabiting relationship
 - 17 questions using 6 substantive answer categories (always me, usually me, equally me and partner, usually partner, always partner, always or usually someone else) covering the division on
 - 8 items on household tasks
 - 5 items on childcare tasks if has (at least one) young child below six years plus help with homework if has (at least one) child over six years
 - 4 items on decision making

Survey Design – ERFI2 in 2024

- **Concurrent mixed-mode design (Web vs. telephone) of ERFI2**
 - Self-administered vs. interviewer-administered
- 4 different mode of contact depending on Fideli database



Announcement letters



Announcement e-mails



Announcement SMS



Phone call(s)



Hotline



Webpage



M [redacted]
[redacted]

Aubervilliers, le 5 février 2024

Monsieur [redacted],

L'Institut national d'études démographiques (Ined), organisme public de recherche scientifique, réalise une **importante étude par questionnaire** sur les relations familiales et intergénérationnelles en France métropolitaine (Erfi 2). Cette étude est reconnue d'intérêt général et de qualité statistique par le Conseil national de l'information statistique (Cnis). Elle fait partie d'un **projet international lancé par l'ONU** au début des années 2000, pour lequel une première enquête avait été réalisée dans vingt pays.

Depuis, les relations au sein des familles, entre conjoints et entre générations ont continué à se transformer. Les familles recomposées sont plus fréquentes. Les jeunes font des études plus longues et ont des difficultés à trouver un emploi et un logement. Avec l'allongement de l'espérance de vie, il est de plus en plus courant d'avoir à aider une personne âgée dans son entourage.

Pour mieux connaître ces changements, l'ined réalise aujourd'hui cette nouvelle enquête auprès d'un échantillon de personnes choisies au hasard à partir du Fichier démographique des logements et des individus. **Vous êtes l'une d'entre elles.**

COMMENT RÉPONDRE AU QUESTIONNAIRE ?

Vous pouvez répondre au questionnaire **par Internet** ou **par téléphone**, à l'aide de vos codes.

Identifiant : [redacted]

Mot de passe : [redacted]

PAR INTERNET

Connectez-vous dès maintenant

- Sur le site <https://erfi2-ined.fr> (avec vos codes)
- Ou scannez directement ce QR code :



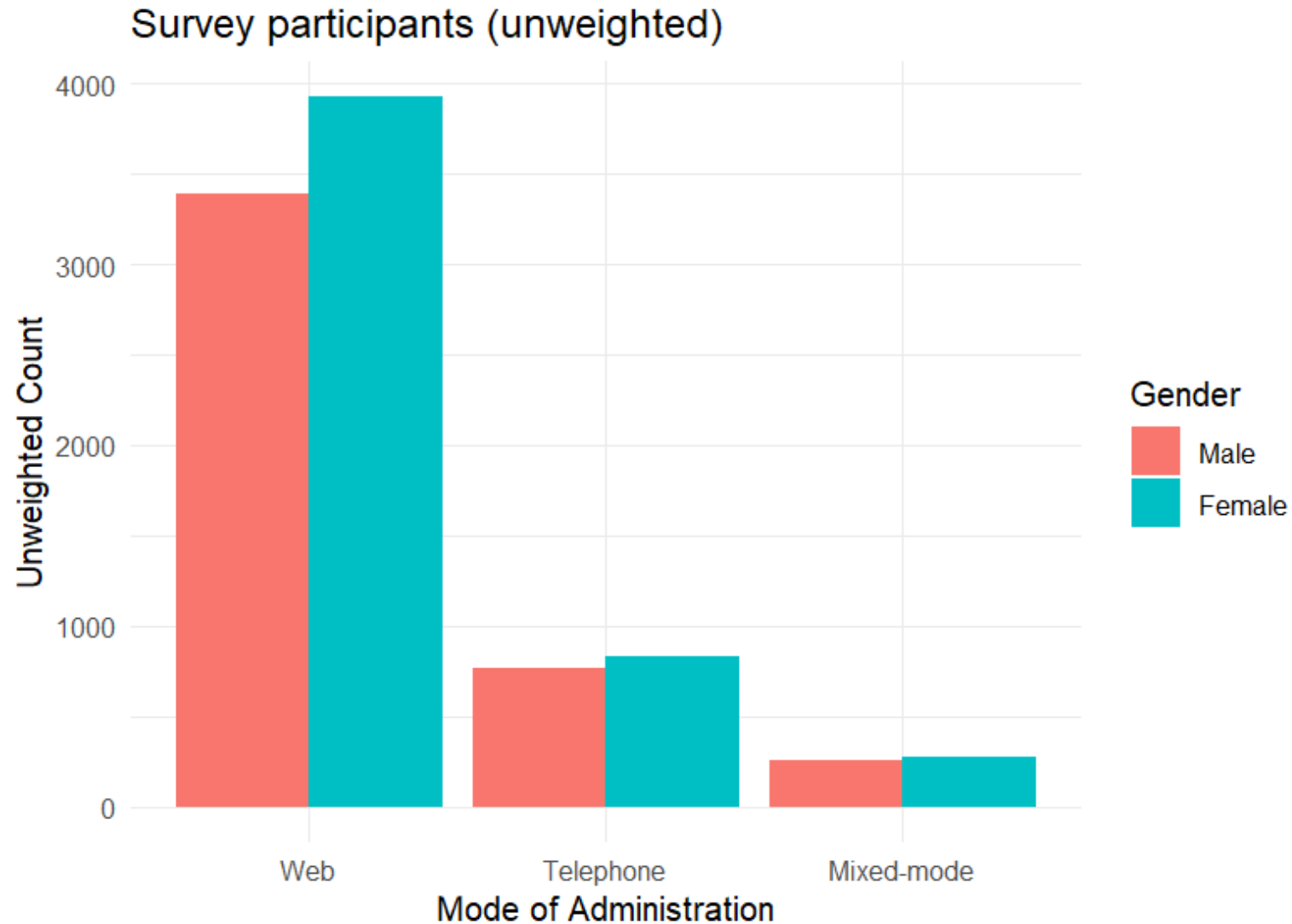
PAR TÉLÉPHONE

Nous vous appellerons dans quelques jours pour vous proposer de répondre par téléphone.

Vous pouvez prendre rendez-vous dès maintenant

- En appelant le **0 800 710 638** (appel gratuit)
- Ou sur le site <https://erfi2-ined.fr> (avec vos codes)

Survey Participation



Questions on Division of Household Tasks

The next questions are about who does what in your household. Please indicate who does the following tasks in your household.

- ☐ Always me
- ☐ Usually me
- ☐ Equally me & partner
- ☐ Usually partner
- ☐ Always partner
- ☐ Someone else
- ☐ Refusal
- ☐ Don't know

- | |
|---------------------------------------|
| 1. Preparing daily meals |
| 2. Doing the dishes / dishwasher |
| 3. Grocery shopping |
| 4. Laundry |
| 5. Vacuuming / cleaning the house |
| 6. Small repairs |
| 7. Bills & keeping financial records |
| 8. Organising joint social activities |

Screenshot of Erfi2 questionnaire

- Question displayed individually (or in pairs), no item battery
- Vertical alignment of answer categories

63 Enquête Erfi 2

✕ Sauvegarder et fermer

SECTION 2/9 : Concernant vos relations et vos enfants...

Nous voudrions maintenant vous poser quelques questions concernant vos relations passées et les enfants que vous avez peut-être eus. Il est très important pour nous de savoir quels événements ont eu lieu et quand pour mieux comprendre votre histoire.

Sans compter votre relation actuelle (si vous en avez une), avez-vous auparavant vécu en couple avec quelqu'un ou avez-vous déjà été marié(e) ?

☐ Oui

☐ Non

☐ Refus

Précédente

Suivante

Propensity Score Matching to Calculate Mode Effects

- Estimates each respondent's probability of responding via telephone (CATI) rather than via the Web, given observed characteristics.
- Covariates include socio-demographics from Fideli database: standard of living, sex, age, region, household situation, income type, available contact information.
- Area of common support: Distributions of propensity scores are compared across modes to identify the overlap region, where both Web and CATI respondents have similar scores.
- Analyses are restricted to this overlap to allow credible counterfactual comparisons.

- **Nearest neighbor matching :**
 - Penalty added using the propensity score (caliper = 0.1).
 - Exact matching imposed on sex.
- **Outcome estimation:**
 - The “treatment” is responding **by telephone**.
 - Matching compares “treated” units (phone respondents) with comparable “untreated” units (Web respondents).
 - Produces the **Average Treatment Effect on the Treated (ATT)** = the effect of answering on the phone instead of via the Web.

Heterogeneity Over Question Items

	Preparing meals	Doing the dishes / dishwasher	Grocery shopping	Vacuuming	Doing the laundry	Small repairs in and around the house	Paying bills & keeping financial records	Organising joint social activities
1. Always me	0,017	0,027	0,020	0,005	0,030	0,064	0,033	0,007
2. Usually me	0,021	-0,003	-0,039	-0,043	-0,022	-0,058	-0,043	-0,049
3. Equally me and partner	-0,013	-0,010	0,056	0,009	-0,011	-0,041	0,033	0,079
4. Usually partner	-0,010	-0,024	-0,036	0,002	-0,022	-0,036	-0,026	-0,019
5. Always partner	-0,007	0,012	0,008	0,015	0,027	0,076	0,016	0,001
6. Always or usually someone else	0,004	0,012	0,002	0,025	0,010	0,011	0,004	-0,001
8. Refusal	-0,011	-0,011	-0,010	-0,011	-0,011	-0,013	-0,013	-0,014
9. Don't know	-0,001	-0,002	-0,001	-0,002	-0,002	-0,004	-0,004	-0,004

Colour scheme: Coloured ATTs are significant effects ($p < 0.05$) with negative ATTs in orange and positive ATTs in green colour.

Complementary Mode Effects – Substantive Answers

	Grocery shopping		Paying bills & keeping financial records	
	Males	Females	Males	Females
1. Always me	0,027	0,013	0,040	0,027
2. Usually me	-0,025	-0,052	-0,022	-0,064
3. Equally me and partner	0,053	0,059	0,047	0,019
4. Usually partner	-0,050	-0,022	-0,057	0,003
5. Always partner	0,013	0,003	0,009	0,023
6. Always or usually someone else	0,002	0,002	0,002	0,006

Colour scheme: Coloured ATTs are significant effects ($p < 0.05$) with negative ATTs in orange and positive ATTs in green colour.

Male-Specific Mode Effects – Substantive Answers

	Preparing meals		Doing the dishes / dishwasher		Doing the laundry	
	Males	Females	Males	Females	Males	Females
1. Always me	0,018	0,016	0,023	0,030	0,008	0,052
2. Usually me	0,046	-0,002	0,043	-0,047	-0,009	-0,035
3. Equally me and partner	0,011	-0,037	-0,005	-0,015	-0,014	-0,007
4. Usually partner	-0,041	0,018	-0,053	0,004	-0,033	-0,011
5. Always partner	-0,021	0,006	0,009	0,015	0,056	-0,001
6. Always or usually someone else	0,005	0,003	0,002	0,021	0,012	0,008

*Colour scheme: Coloured ATTs are significant effects ($p < 0.05$)
with negative ATTs in orange and positive ATTs in green colour.*

Female-Specific Mode Effects – Substantive Answers

	Vacuuming	
	Males	Females
1. Always me	0,015	-0,004
2. Usually me	-0,012	-0,073
3. Equally me and partner	-0,018	0,035
4. Usually partner	-0,003	0,006
5. Always partner	0,011	0,018
6. Always or usually someone else	0,027	0,023

Colour scheme: Coloured ATTs are significant effects ($p < 0.05$) with negative ATTs in orange and positive ATTs in green colour.

Gender-heterogeneity – Substantive Answers

	Small repairs in and around the house		Organising joint social activities	
	Males	Females	Males	Females
1. Always me	0,122	0,007	0,002	0,012
2. Usually me	-0,100	-0,019	-0,026	-0,072
3. Equally me and partner	-0,030	-0,051	0,060	0,098
4. Usually partner	0,015	-0,083	-0,014	-0,025
5. Always partner	-0,004	0,153	0,000	0,002
6. Always or usually someone else	0,017	0,006	0,002	-0,003

Colour scheme: Coloured ATTs are significant effects ($p < 0.05$) with negative ATTs in orange and positive ATTs in green colour.






Combined Mode Effects – Item Nonresponse

	Preparing meals		Doing the dishes / dishwasher		Grocery shopping					
	Males	Females	Males	Females	Males	Females				
8. Refusal	-0,018	-0,005	-0,016	-0,006	-0,016	-0,005				
9. Don't know	-0,002	0,000	-0,003	-0,001	-0,003	0,002				
	Vacuuming		Doing the laundry		Small repairs in and around the house		Paying bills & keeping financial records		Organising joint social activities	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
8. Refusal	-0,016	-0,006	-0,016	-0,006	-0,018	-0,008	-0,013	-0,012	-0,019	-0,009
9. Don't know	-0,003	0,000	-0,003	0,000	-0,002	-0,006	-0,006	-0,002	-0,005	-0,003

Colour scheme: Coloured ATTs are significant effects ($p < 0.05$) with negative ATTs in orange and positive ATTs in green colour.

Analysing Gender-Specific Response Patterns

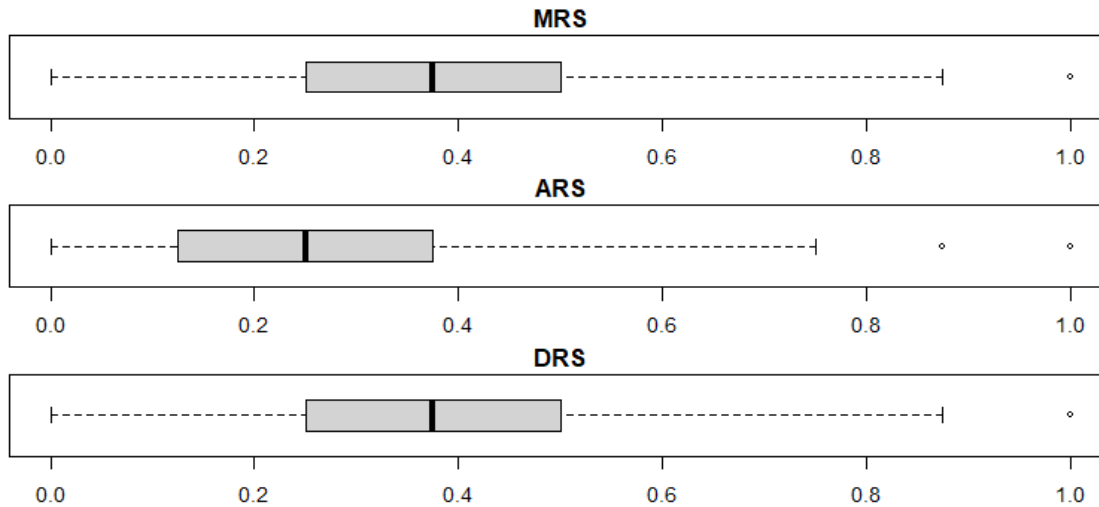
Substantive answer categories
on HH internal division

-  Always me
-  Usually me
-  Equally me & partner
-  Usually partner
-  Always partner

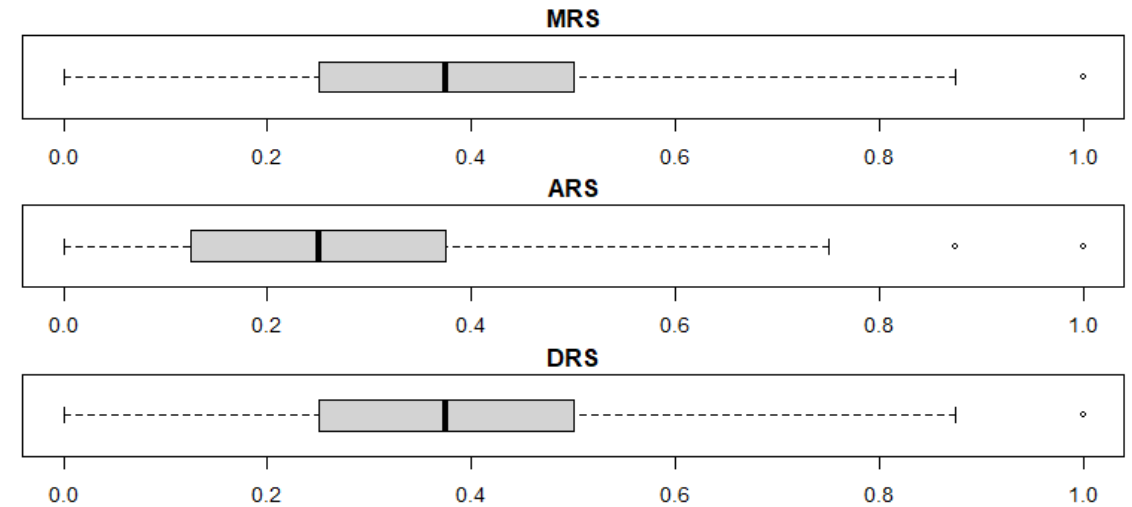
- Calculating response patterns using resquin-package in R which calculates
 1. proportion of items per respondent pertaining to a response style
 2. Boxplots on distribution of response styles across all respondents
- DRS = disacquiescence response style
= ego-leaning
- MRS = middle response style = equal division
- ARS = acquiescence response style
= partner-leaning

Mode Effects in Response Styles

- Phone

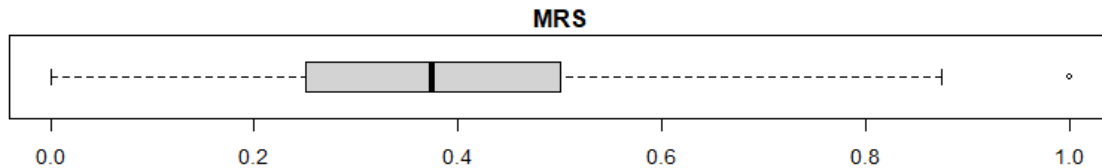


- Web

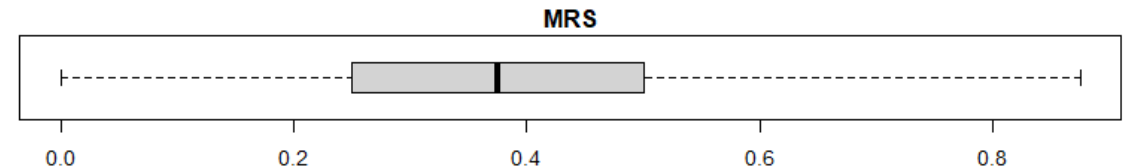


Mode Effects in Middle Response / Equality

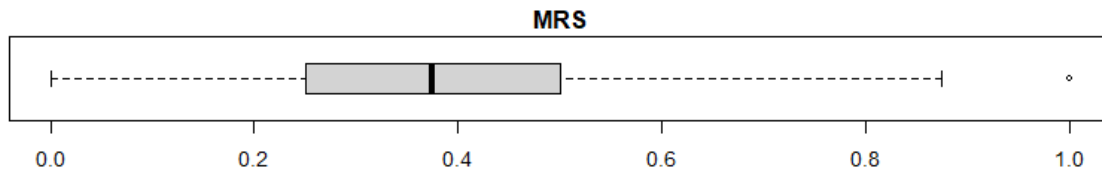
- Male respondents on phone



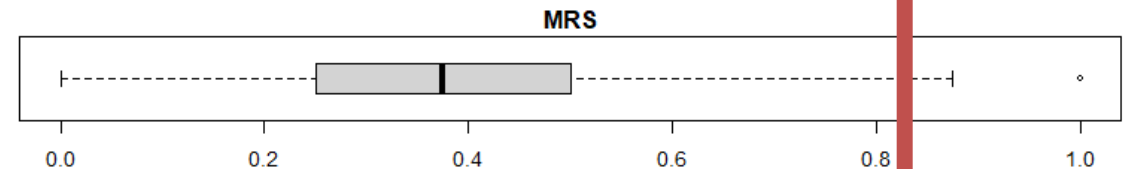
- Female respondents on phone



- Male respondents on Web

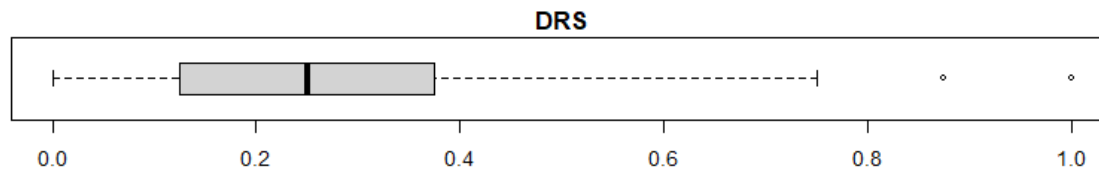


- Female respondents on Web

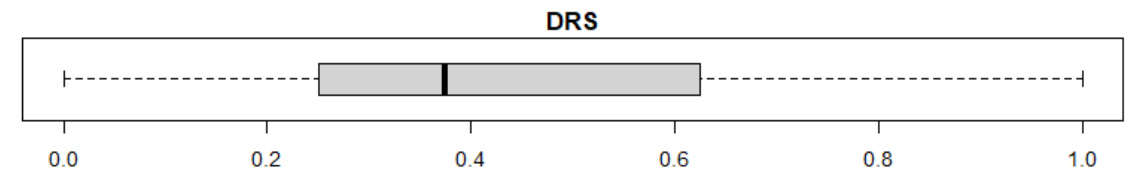


Mode Effects in Response Styles for Ego-Leaning

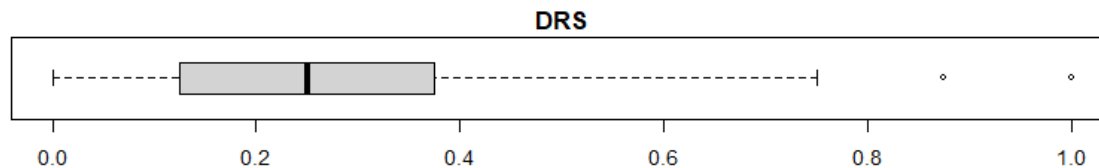
- Male respondents on phone



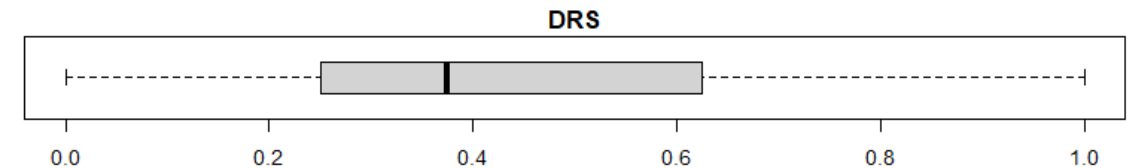
- Female respondents on phone



- Male respondents on Web

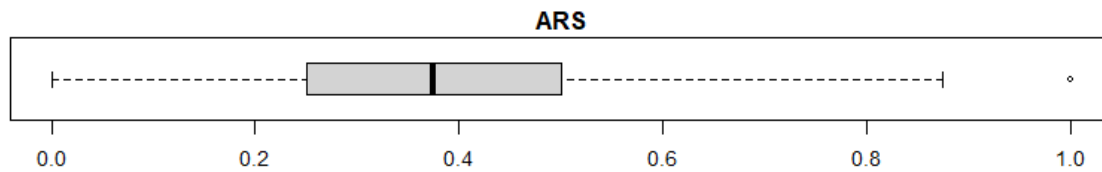


- Female respondents on Web



Mode Effects in Response Styles for Partner-Leaning

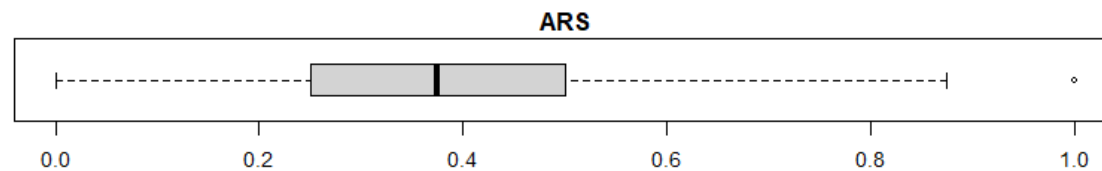
- Male respondents on phone



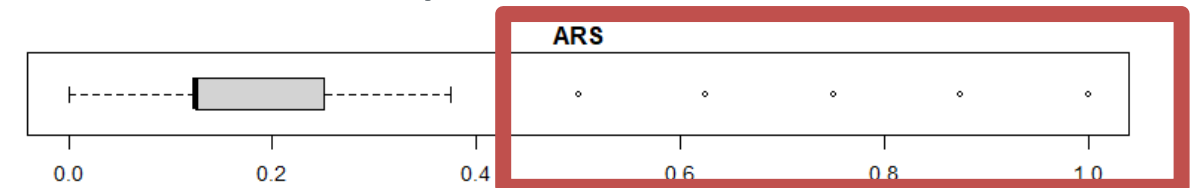
- Female respondents on phone



- Male respondents on Web



- Female respondents on Web



Main Conclusions

- Higher female survey participation in both modes
- Mode effect heterogeneity across questions and gender in substantive answers
- Mode effects in item nonresponse mostly driven by male respondents
- Mode differences in response styles more in female respondents

- Analysing differentiation between extreme response styles (ALWAYS me or partner) and question items
- Extending investigation to outsourcing HH tasks and systematic item nonresponse
- Explanatory model with demographics and other controls
- Expanding analysis to two remaining item batteries on division of childcare tasks and financial HH decisions
- Gender-of-interviewer analysis, including interaction with the respondent gender -> gender-driven social desirability

Thank you for your attention!

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