

Mitigating the SES-based gap in early childcare enrollment in France: evidence from a mixed-methods, multi-arm experiment

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SciencesPo



Outline

- 1) Motivations
- 2) Background & the French context
- 3) Design
- 4) Empirical strategy
- 5) Main results

Motivations

Inequalities start in early childhood



(Carbuccia et al., 2020; Panico et al., 2015; Grobon, 2018; Heckman, 2006)



Attending high-quality **early childcare** (e.g., daycare) is an **effective lever to reduce** the consequences of **inequalities** in early childhood

(Carbuccia et al., 2020; Berger et al., 2020; Melhuish et al., 2015; Van Huizen & Plantenga, 2013)

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Children's
development



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Motivations

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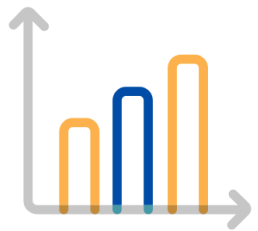


(Carbuccia et al., 2020; Panico et al., 2015; Grobon, 2018; Heckman, 2006)



Attending high-quality **early childcare** (e.g., daycare) is an **effective lever to reduce** the consequences of **inequalities** in early childhood

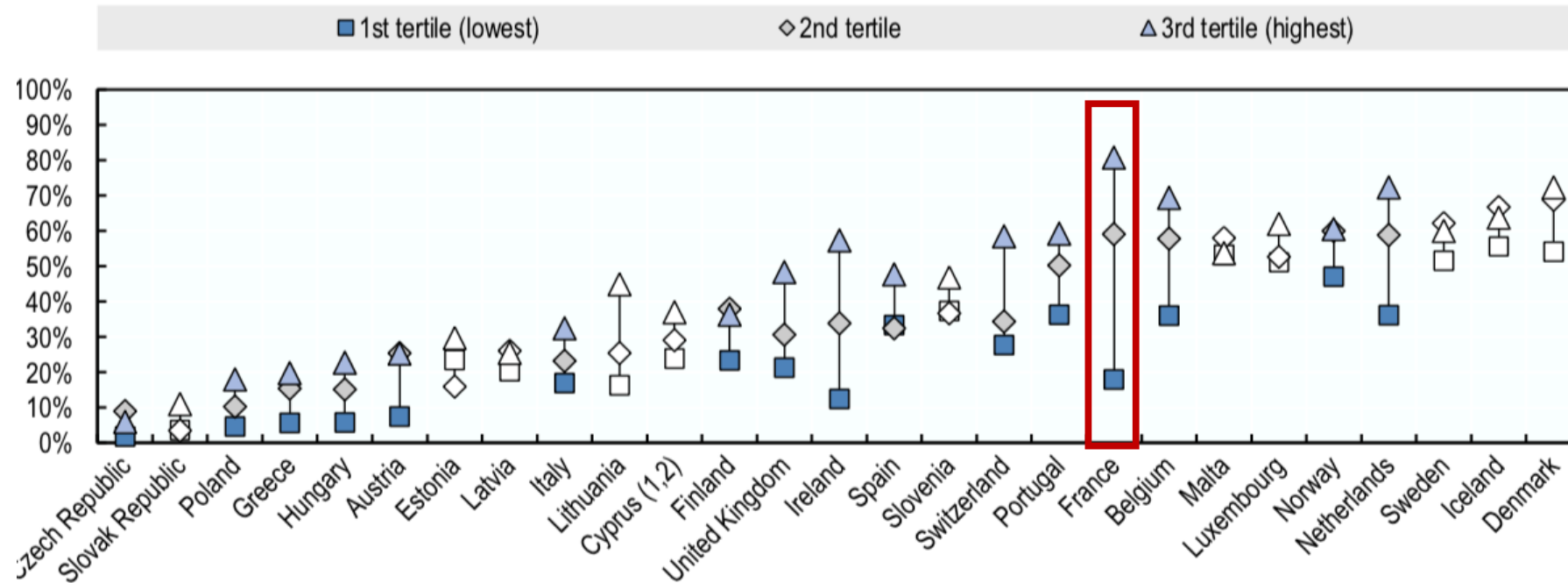
(Carbuccia et al., 2020; Berger et al., 2020; Melhuish et al., 2015; Van Huizen & Plantenga, 2013)



But... **early childcare enrollment gap**

(Eurydice, 2019; OECD, 2016; Vandenbroeck, 2013; Collombet, 2018)

The early childcare enrollment gap

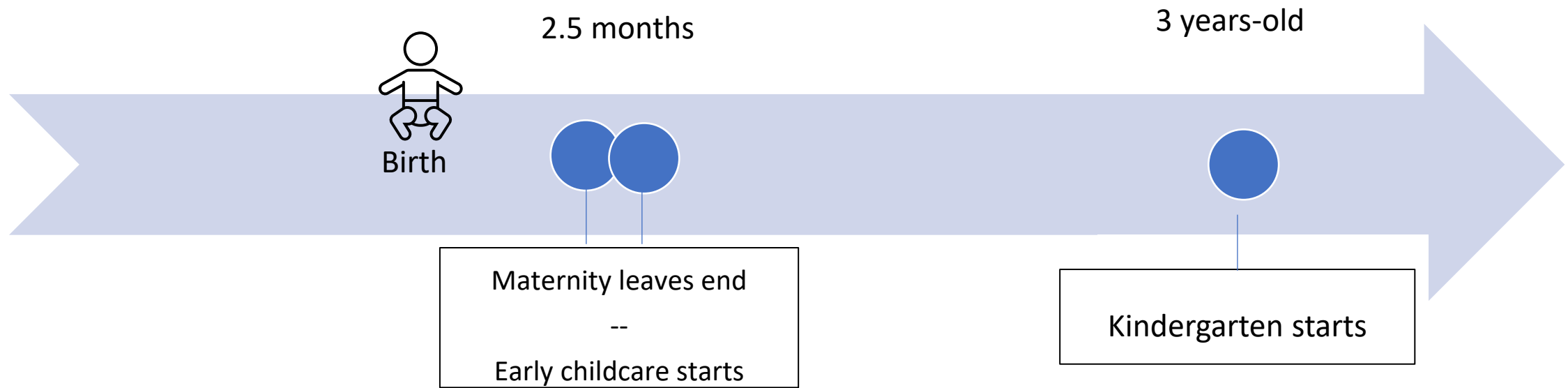


Participation rates in early childcare by equivalised disposable household income tercile, for children under three (from OECD, 2016)

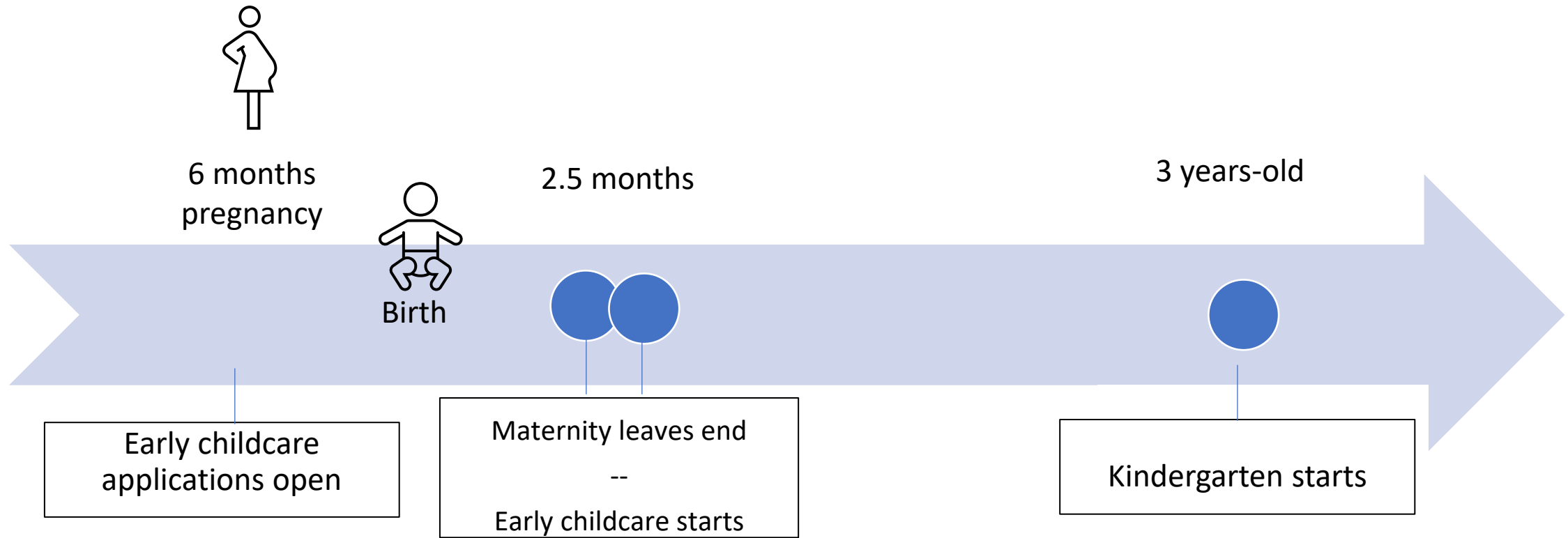
The French system - Timeline



The French system - Timeline



The French system - Timeline



How to account for the SES-gap on the demand-side?

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- Information barriers

How to account for the SES-gap on the demand-side?

- Information barriers

Fatoumata, Ivorian mother arrived in 2018. She has one-year-old twins.

*"Well, the problem is that when **you're not informed**. They tell you about daycare, but after that, you don't know. That's the problem **when you're a Black woman, you arrive, you don't know. They tell you daycare, daycare, but they don't inform you more than that.** You're not informed. [...] No, and even I went to do the simulation with the social worker. I put in my taxes, and when I calculated, it was a hundred and some euros for each child with diapers and meals. And then, when I got the spot, it's even much less. **That's why I was surprised. When the director told me 'Here's what you will pay.' I was shocked. I don't pay for diapers, I don't pay for meals, I don't pay for the food.** »*

How to account for the SES-gap on the demand-side?

- Information barriers
- Friction costs, administrative burden & cognitive overload

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Clarisse « *For us, daycare really isn't the problem. **We don't have the mental space for that. When you don't have housing, you don't think about which facility you'll take your child to long after birth because you don't have a home.*** »

Can we mitigate the SES-gap through cost-effective interventions?

- Information barriers
- Friction costs, administrative burden & cognitive overload

Can we mitigate the SES-gap through cost-effective interventions?

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- Friction costs, administrative burden & cognitive overload



Information provision through text messages, reminders

Can we mitigate the SES-gap through cost-effective interventions?

- Information barriers



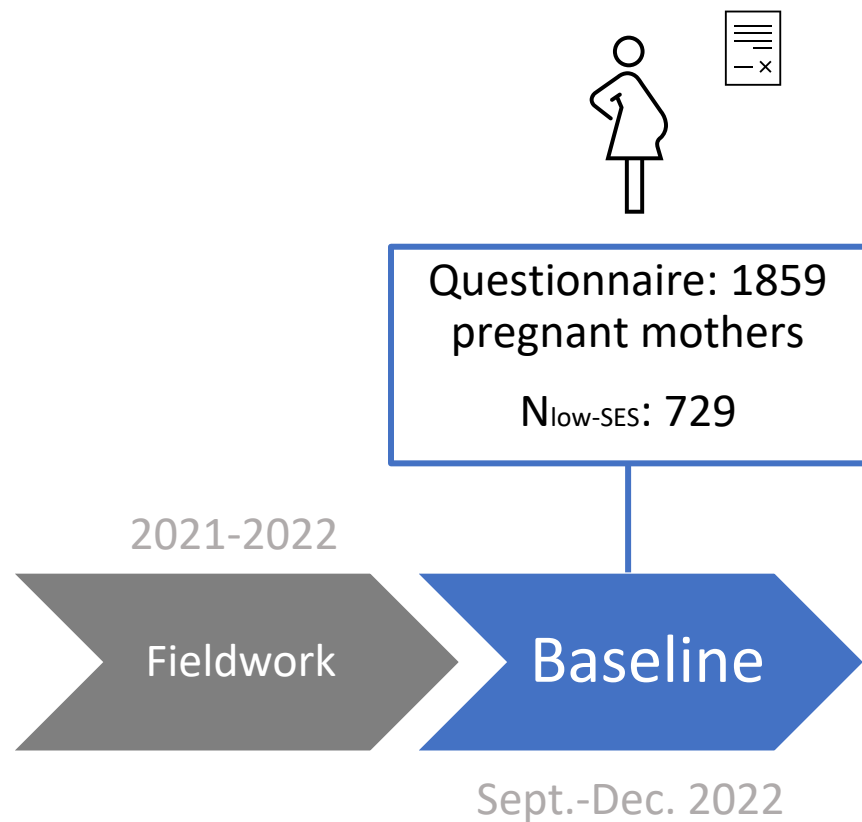
Information provision through text messages, reminders

- Friction costs, administrative burden & cognitive overload

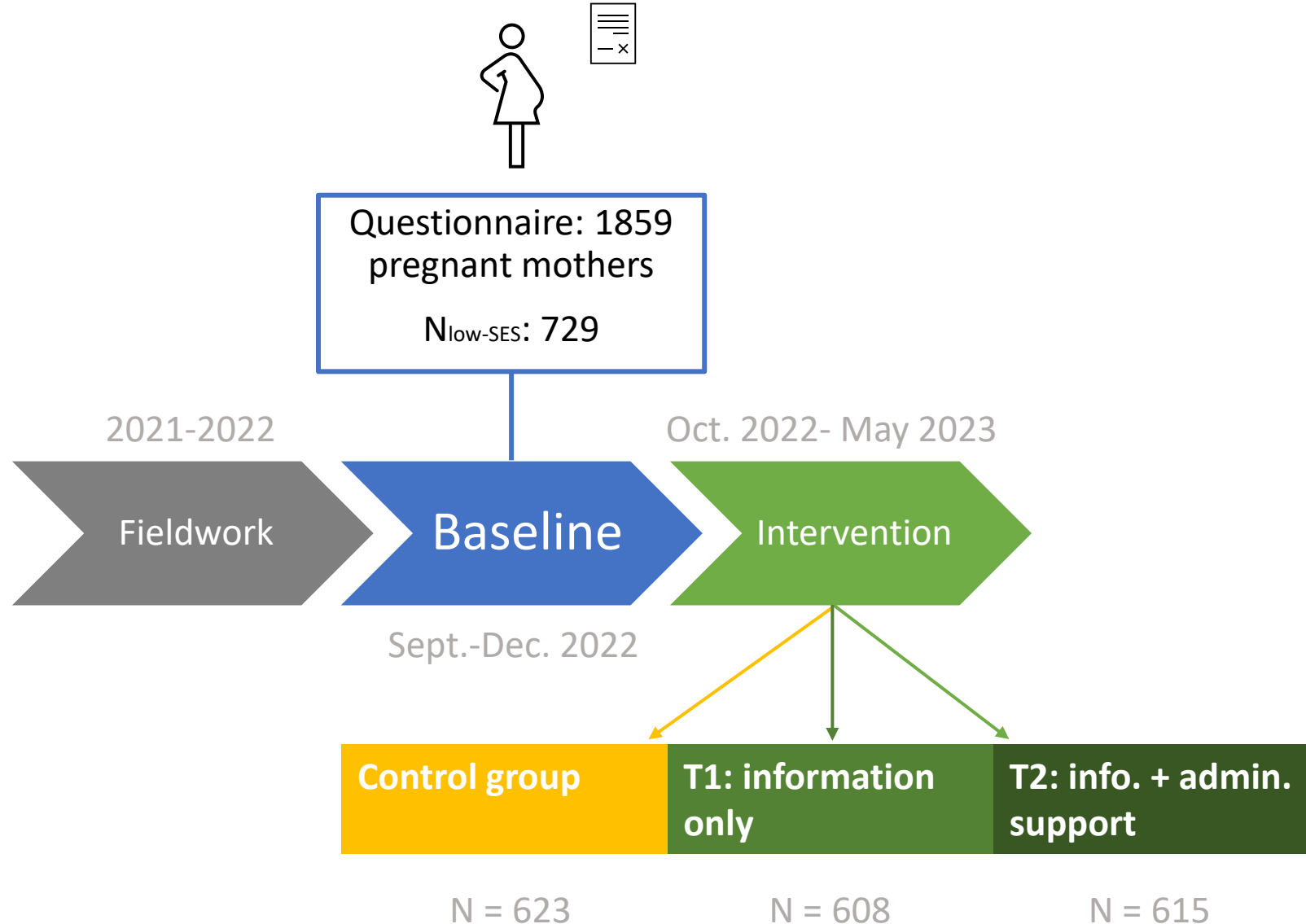


Personalized administrative support

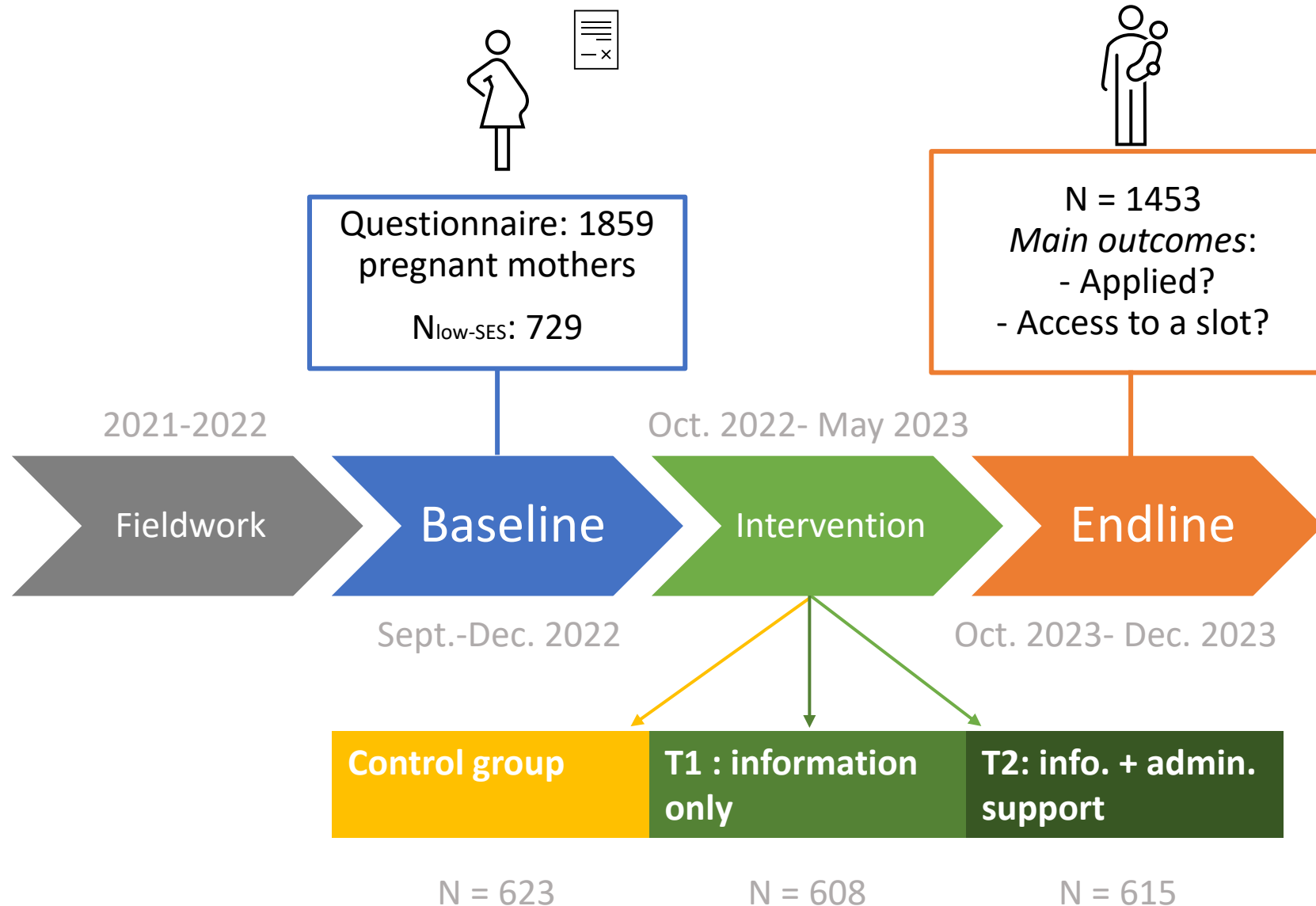
The Randomized Controlled Trial



The Randomized Controlled Trial



The Randomized Controlled Trial



Information treatment

The Randomized Controlled Trial – Information treatment

Which early childcare solution best fits my needs?



What are its cost and where to find it?



Looking for part-time care? Focus on the halte-garderies



How to apply to a place in early childcare and who can help me?



Tips and tricks to get a place



Videos:



Speaking english? Playlist in english [here](#)

قائمة التشغيل باللغة العربية [هنا](#)

Administrative support

Empirical strategy

Empirical strategy

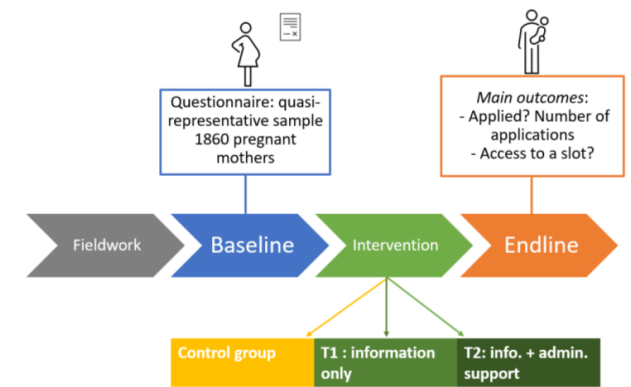
Intention-To-Treat

For our 2 interventions: $k = \{1: \text{information} ; 2: \text{information} + \text{admin support}\}$

$$Y_i^k = \beta Z_i^k + \sum_b \alpha_b B_i + u_i \quad i \in \bar{Z}$$

where

- i = household, B_i = stratification block
- Y_i = probability of {early childcare application / early childcare use}
- Z_i^1 = receiving information;
- Z_i^2 = receiving information + offer of admin support;
- standard errors are clustered by strata fixed-effects



IV regressions

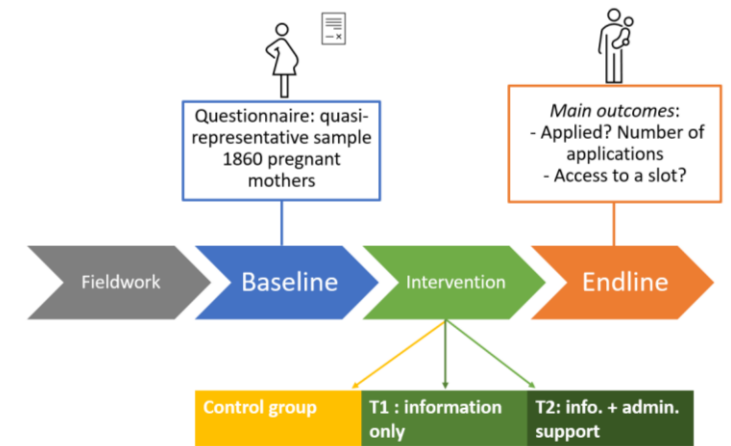
For our 2 interventions: $k = \{1: \text{videos}; 2: \text{videos} + \text{admin support}\}$

$$\hat{D}_i^k = \gamma Z_i^k \sum_b \alpha_b B_i + v_i$$

$$Y_i^k = \beta \hat{D}_i^k + \sum_b \delta_b B_i + u_i$$

where

- i = household, B_i = stratification block
- Y_i = probability of {early childcare application / early childcare use }
- Z_i^1 = receiving video; D_i^1 = watching video
- Z_i^2 = receiving video + offer of admin support; D_i^2 = receiving video + using admin support
- standard errors are clustered by strata fixed-effects



Main outcomes

- Probability of applying to early childcare: $P(\text{applying})$
- Probability of being enrolled early childcare: $P(\text{enrolled})$

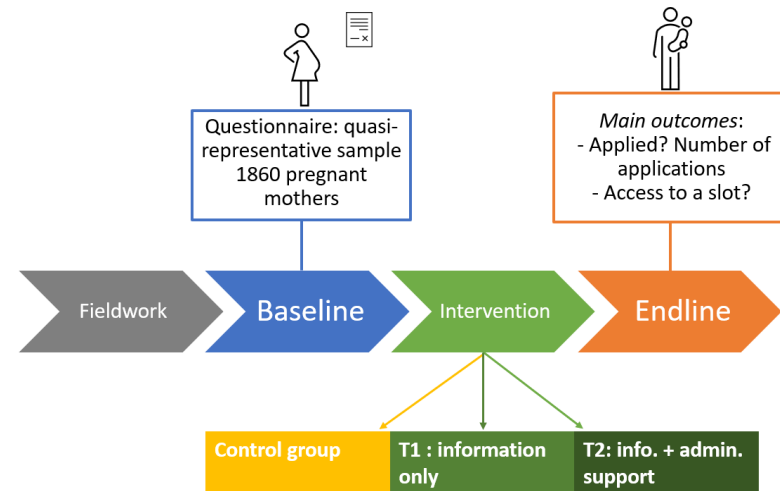


Westfall method to adjust for MHT (Bretz, Hothorn, Westfall, 2010)

Results

Heterogenous treatment effects

- 1) Information only
- 2) Information + administrative support



Information-only Applications

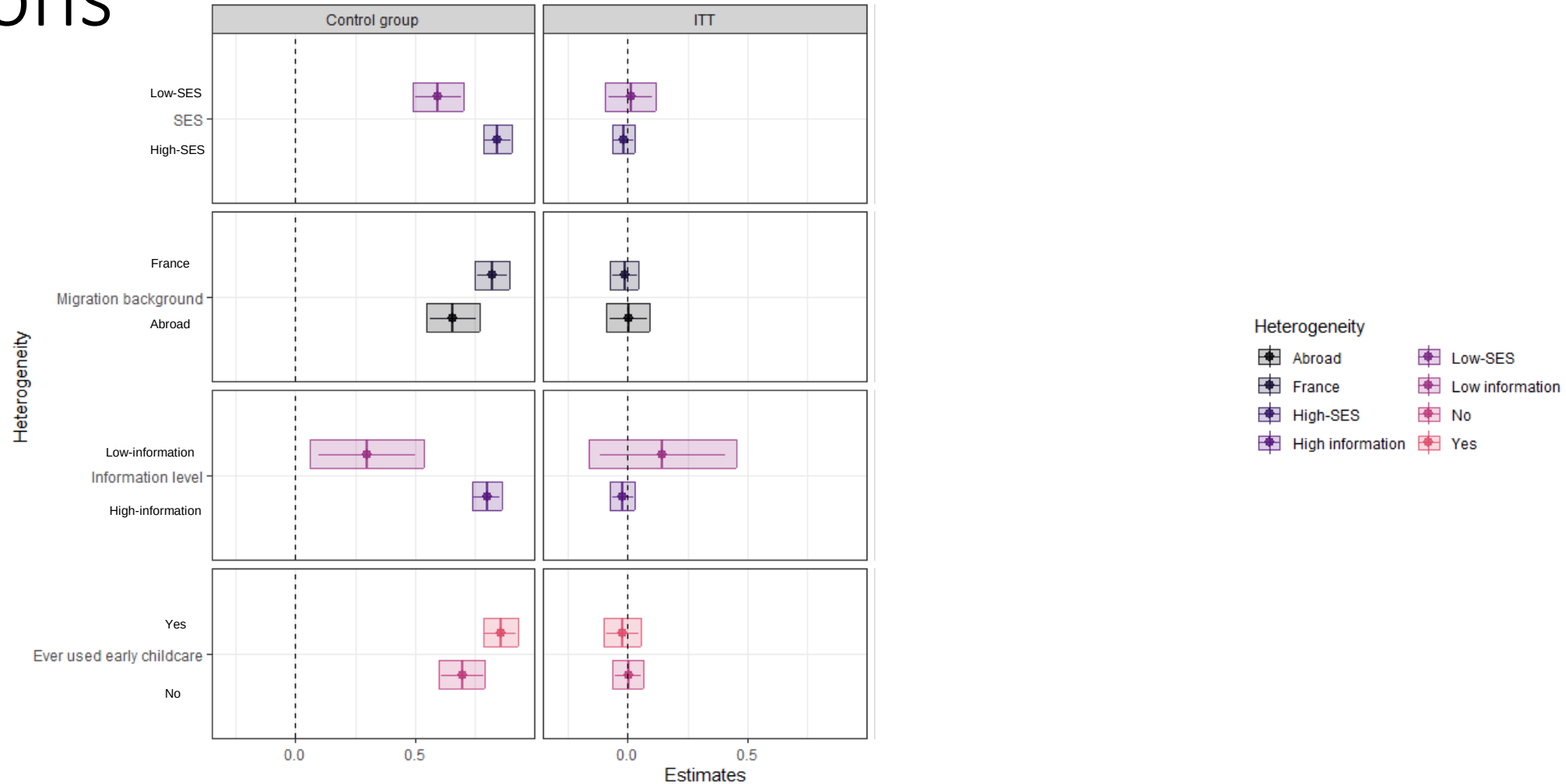
Heterogeneous ITT and ATT of the treatment on early childcare application



Sources: stacked database of pairwise comparisons.
 Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.
 Point indicates the ITT/ATT and the error bars indicate pointwise 95% CI.
 The Fixed effect model is estimated with block x wave x subsample fixed effects and inverse probability weighting.

Information-only Applications

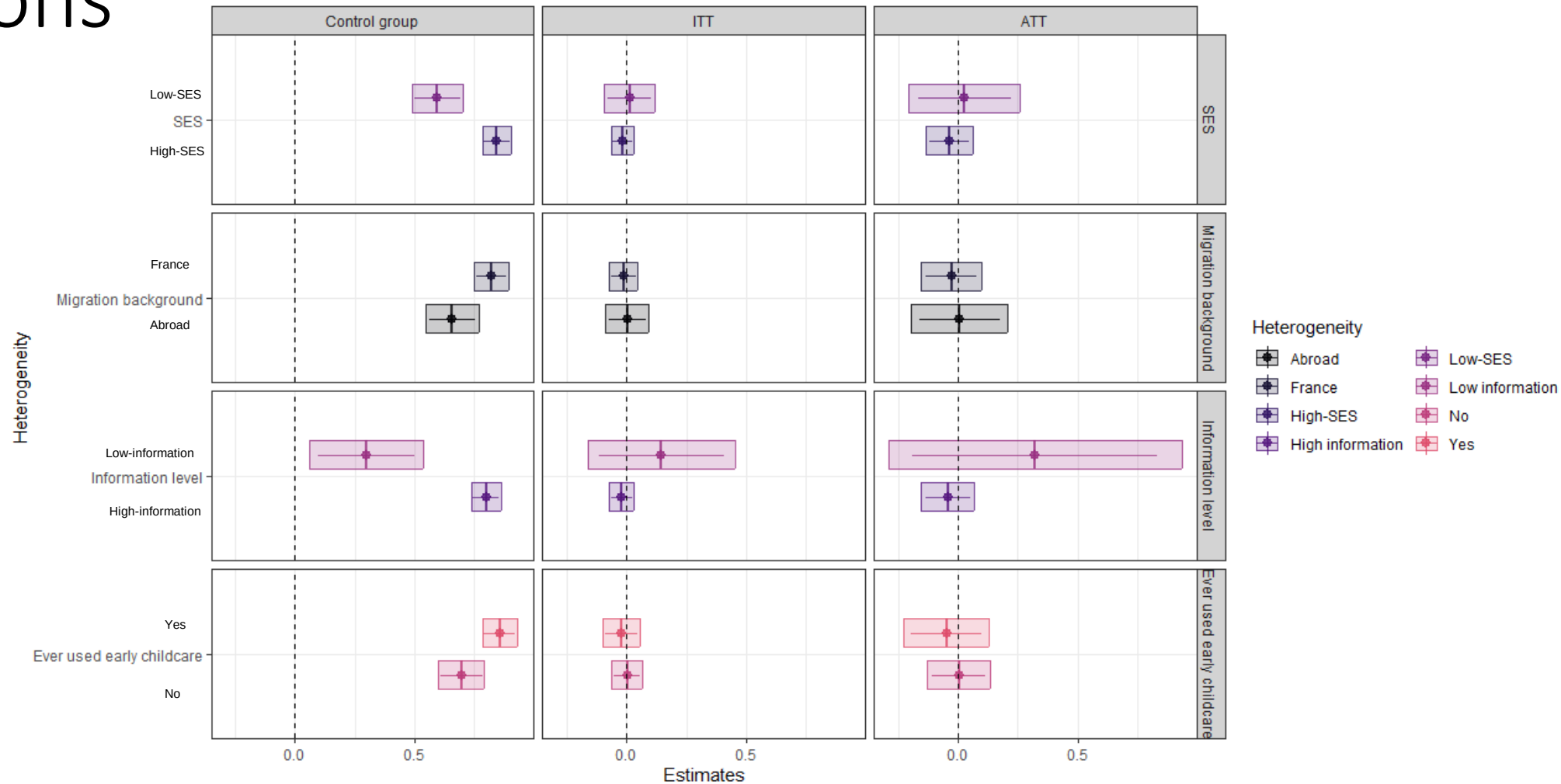
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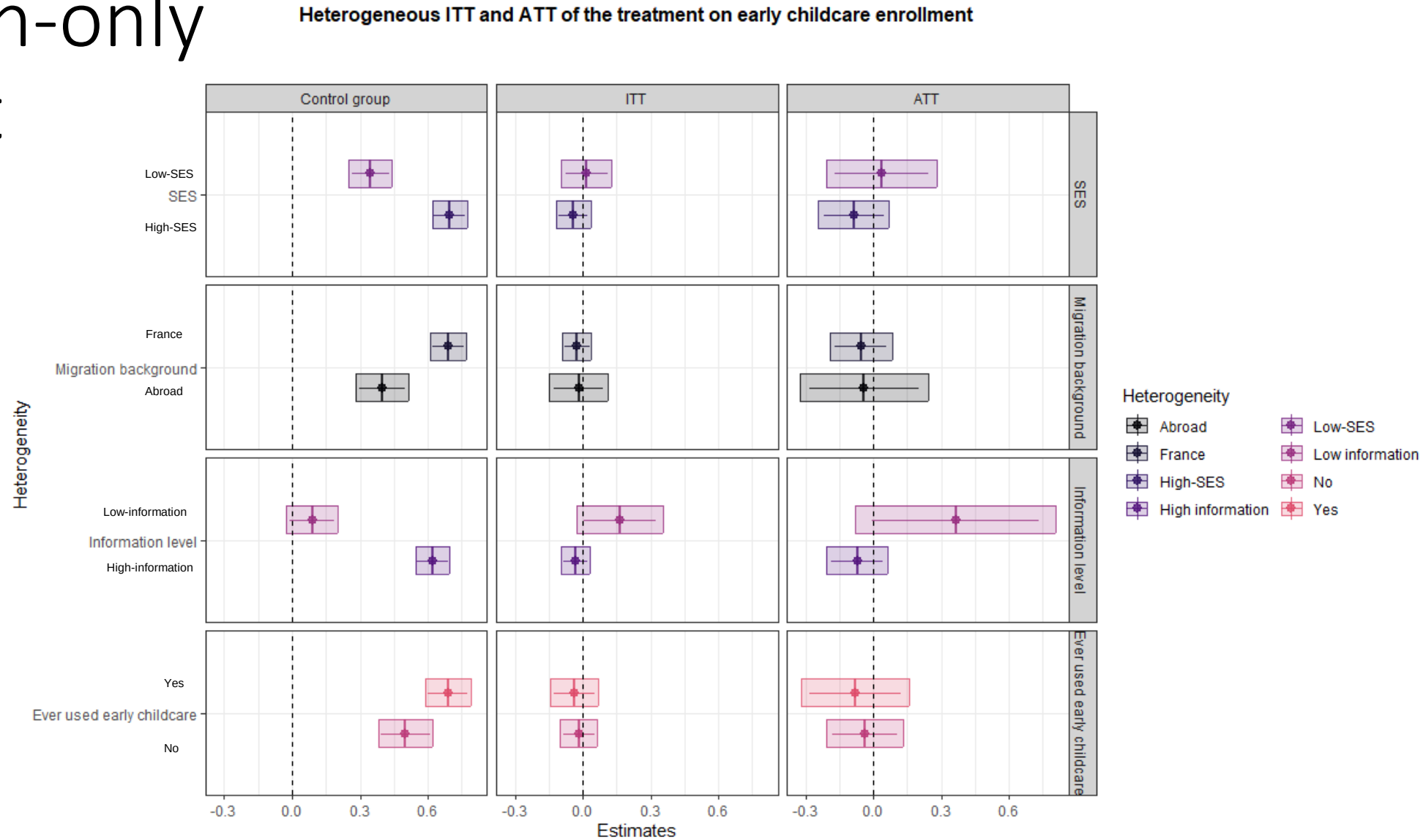
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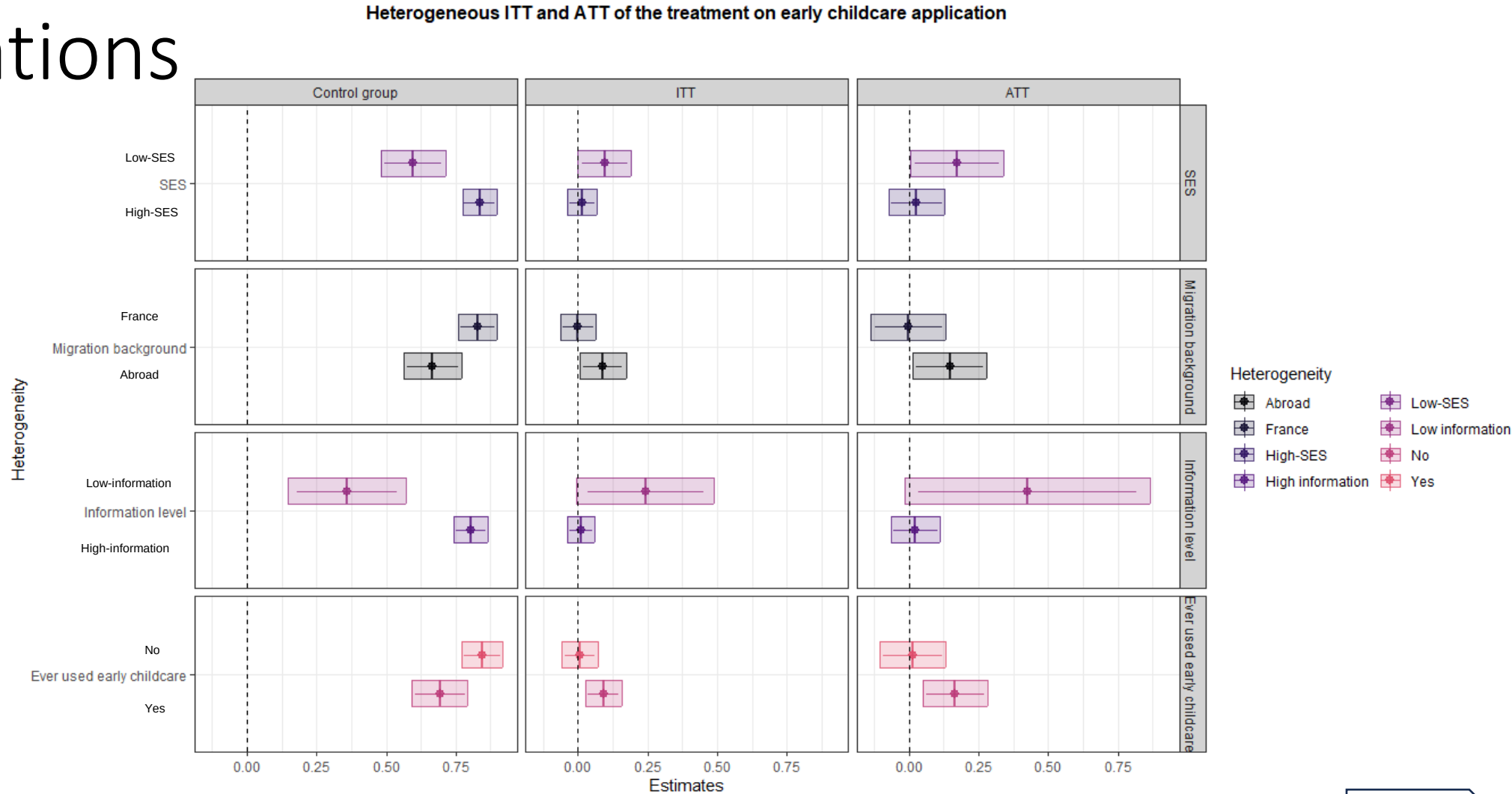
Information-only Enrollment



Sources: stacked database of pairwise comparisons.
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Information+administrative
support

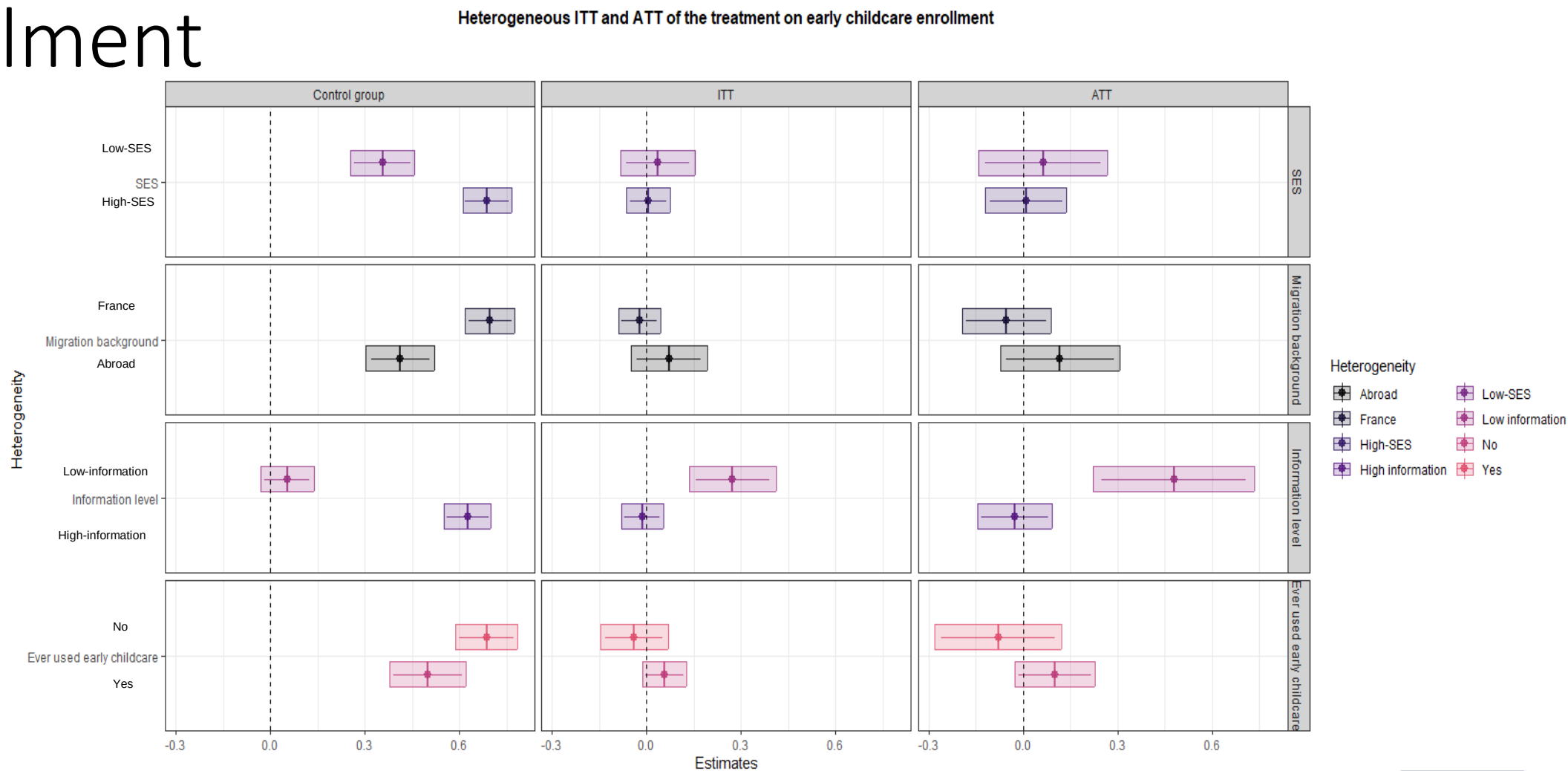
Info. + support Applications



Sources: stacked database of pairwise comparisons.
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Tables

Info. + support Enrollment



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Tables

Take-Home messages

- Access to early childcare has the potential to mitigate inequalities in early childhood, but there are **inequalities** in access.
- **Demand-side considerations** go far beyond simple preferences.
- **Expanding the supply of affordable places** is crucial.
- Meanwhile, **providing information is not enough** to mitigate the SES gap in early childcare application because of the administrative burden. Considering the **administrative burden** of application is important.
- But after applications, considering how the **available slots are allocated** is also crucial.

Thanks for your attention!



Some references...

- Archambault, J., Côté, D., & Raynault, M.-F. (2019). Early Childhood Education and Care Access for Children from Disadvantaged Backgrounds : Using a Framework to Guide Intervention. *Early Childhood Education Journal*.
- Berger, L., Solaz, A., & Panico, L. (2020). The Impact of Center-Based Childcare Attendance on Early Child Development : Evidence from the French Elfe Cohort, *Demography*.
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- Pungello, E. P., & Kurtz-Costes, B. (1999). Why and How Working Women Choose Child Care : A Review with a Focus on Infancy. *Developmental Review*, 19(1), 31-96.
- Skattebol, J. (2016). Taking advantage of early childhood education and care : The priorities of low-income families in their children's early years. *Families, Relationships and Societies*, 5(1), 109-125.



... And thanks to them !!

FONDATION
ARDIAN

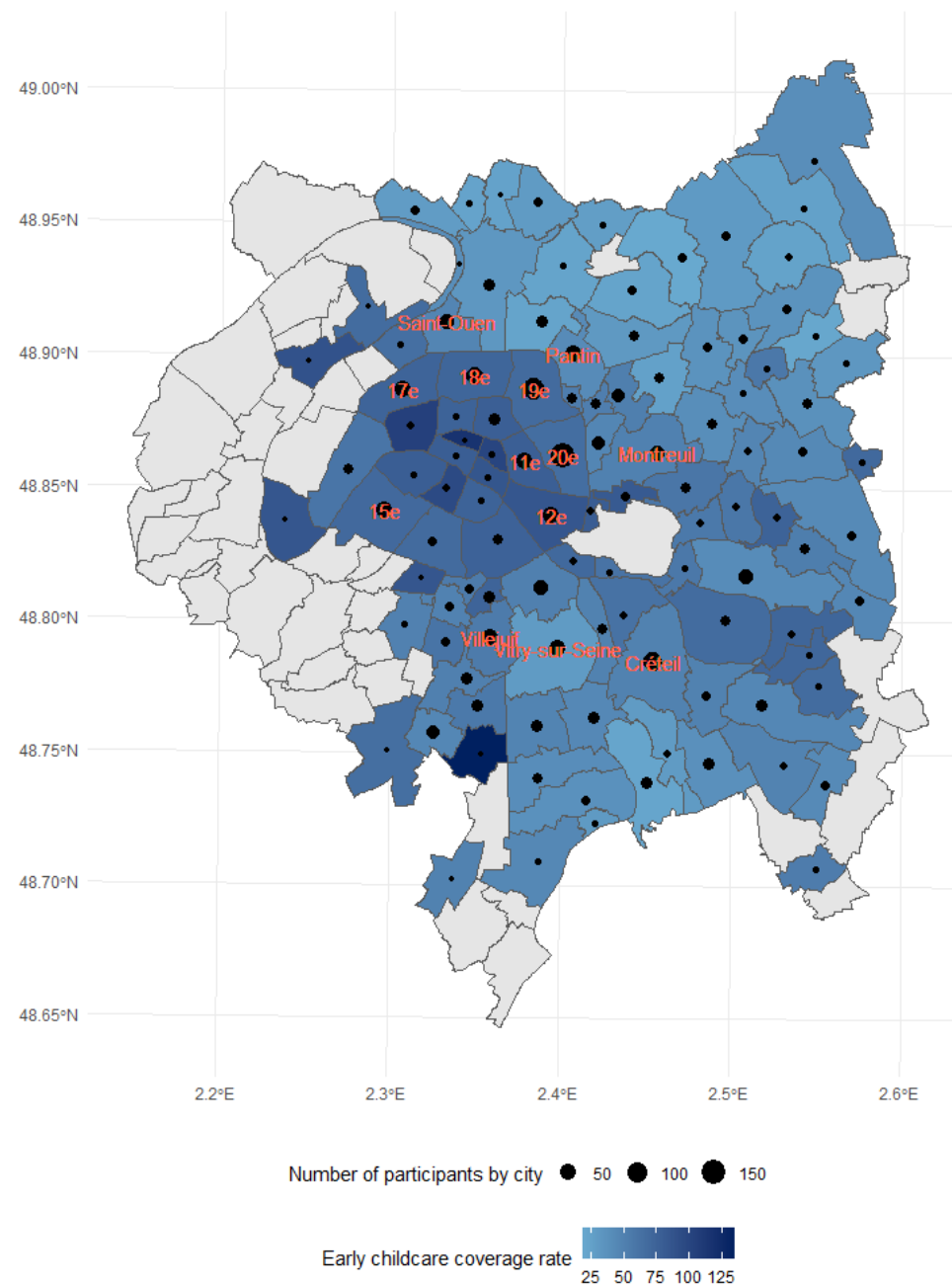


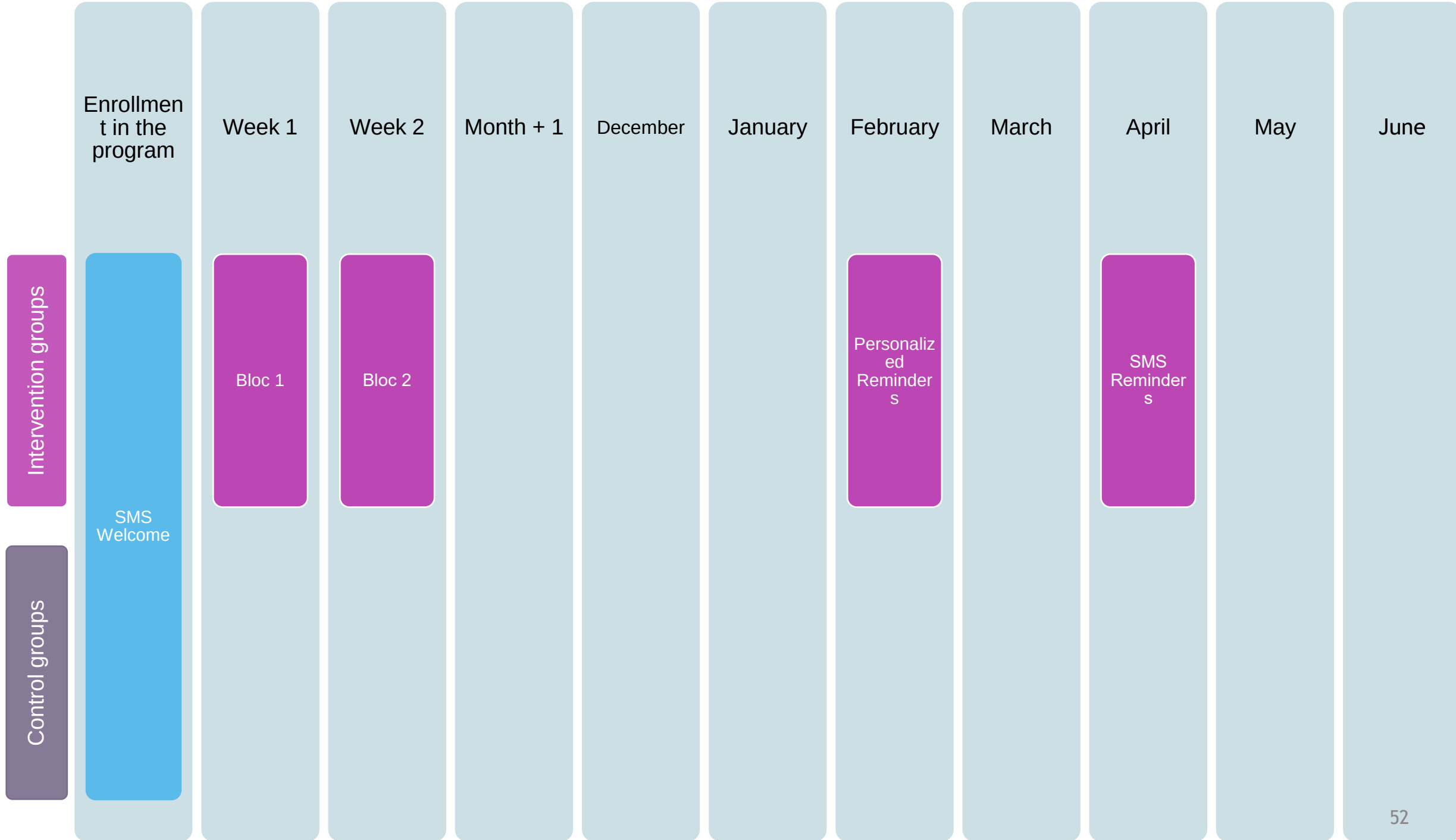
And them!

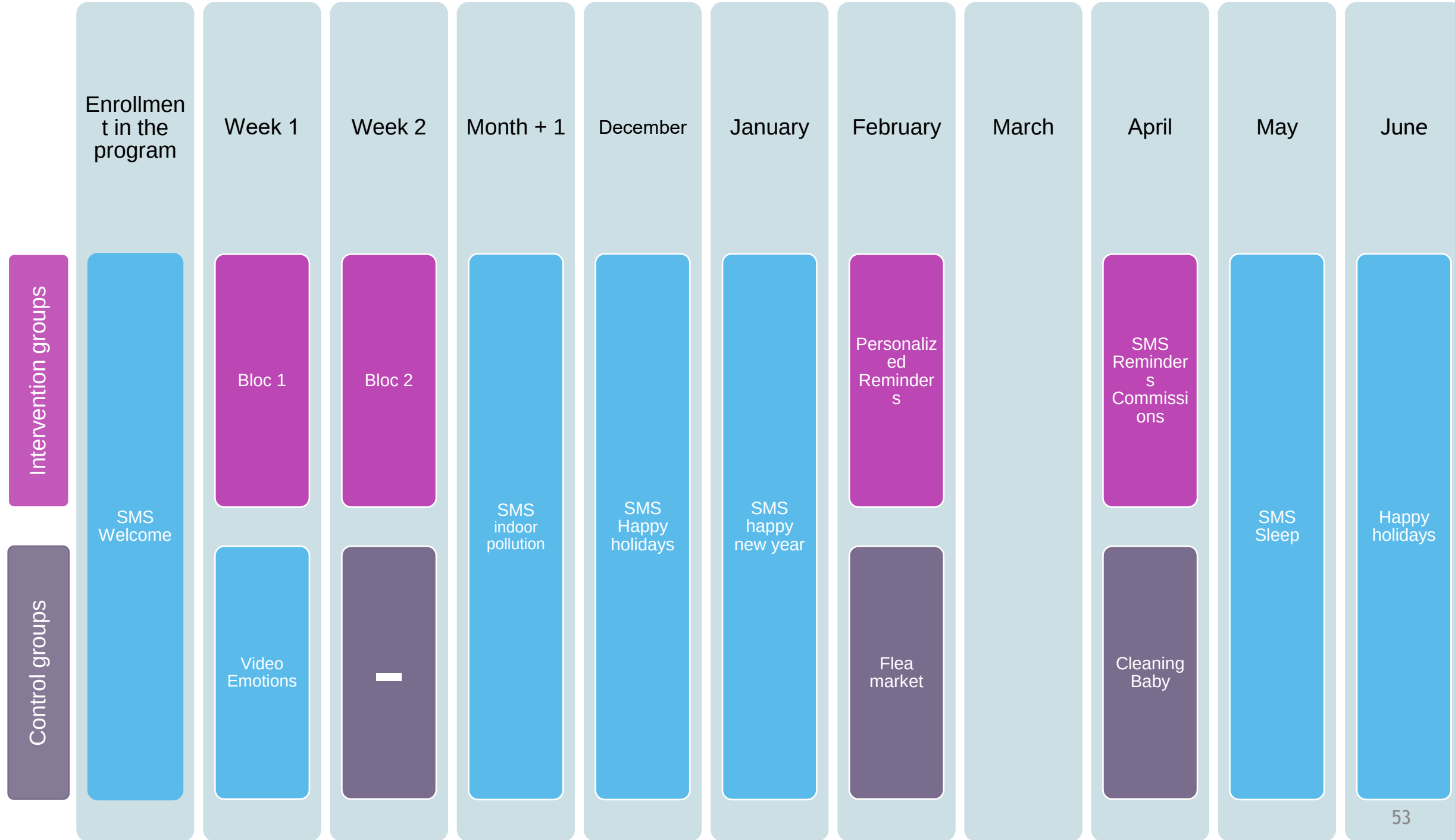


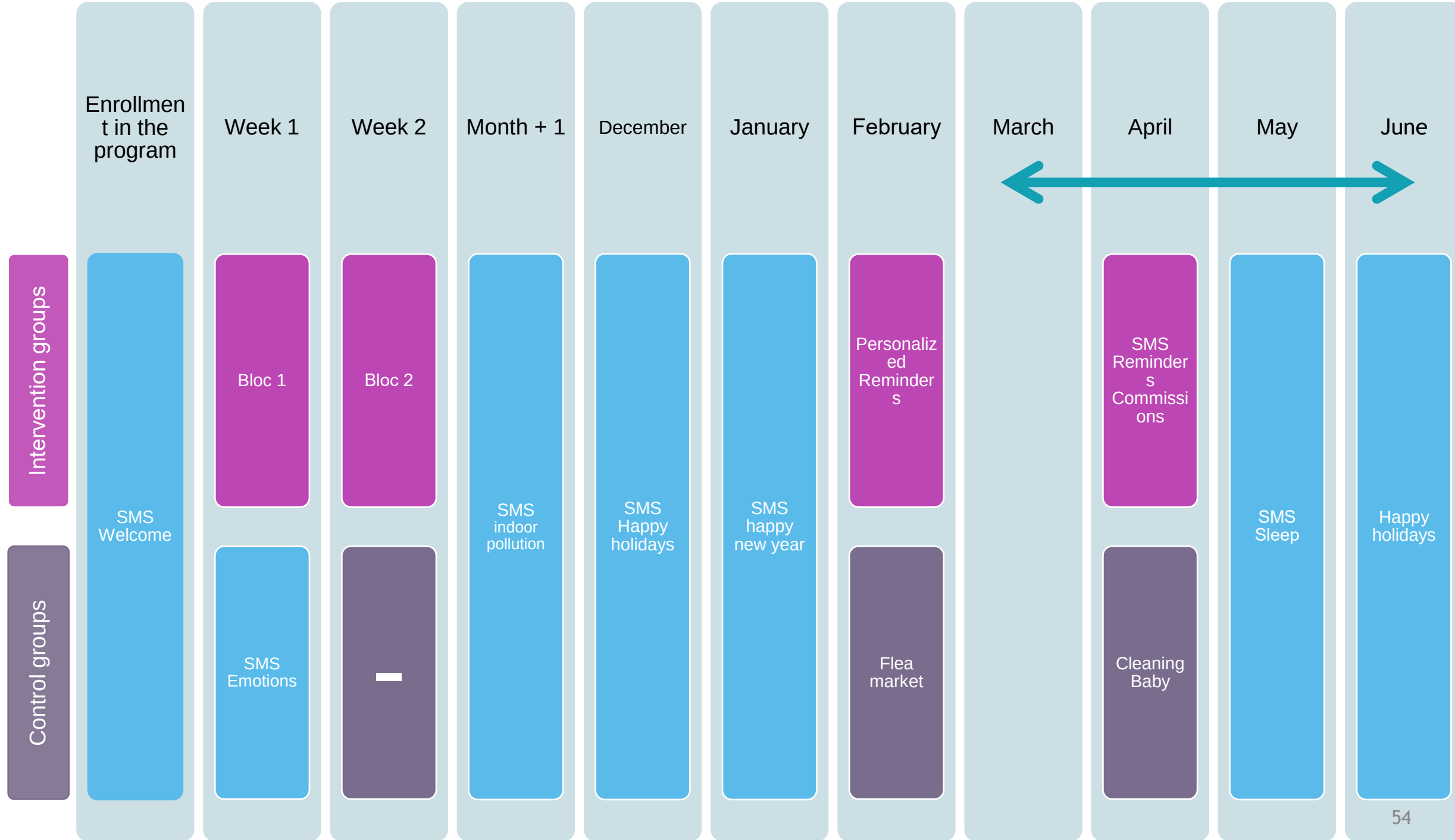
Appendix

- [Balance checks](#)
- [Differential attrition](#)
- [Weights](#)
- [Who are the compliers?](#)
- [Who are the low-informed?](#)
- [Employment](#)
- [Mechanisms](#)
- [Information take-up](#)
- [Additive effects](#)
- [Daycare](#)

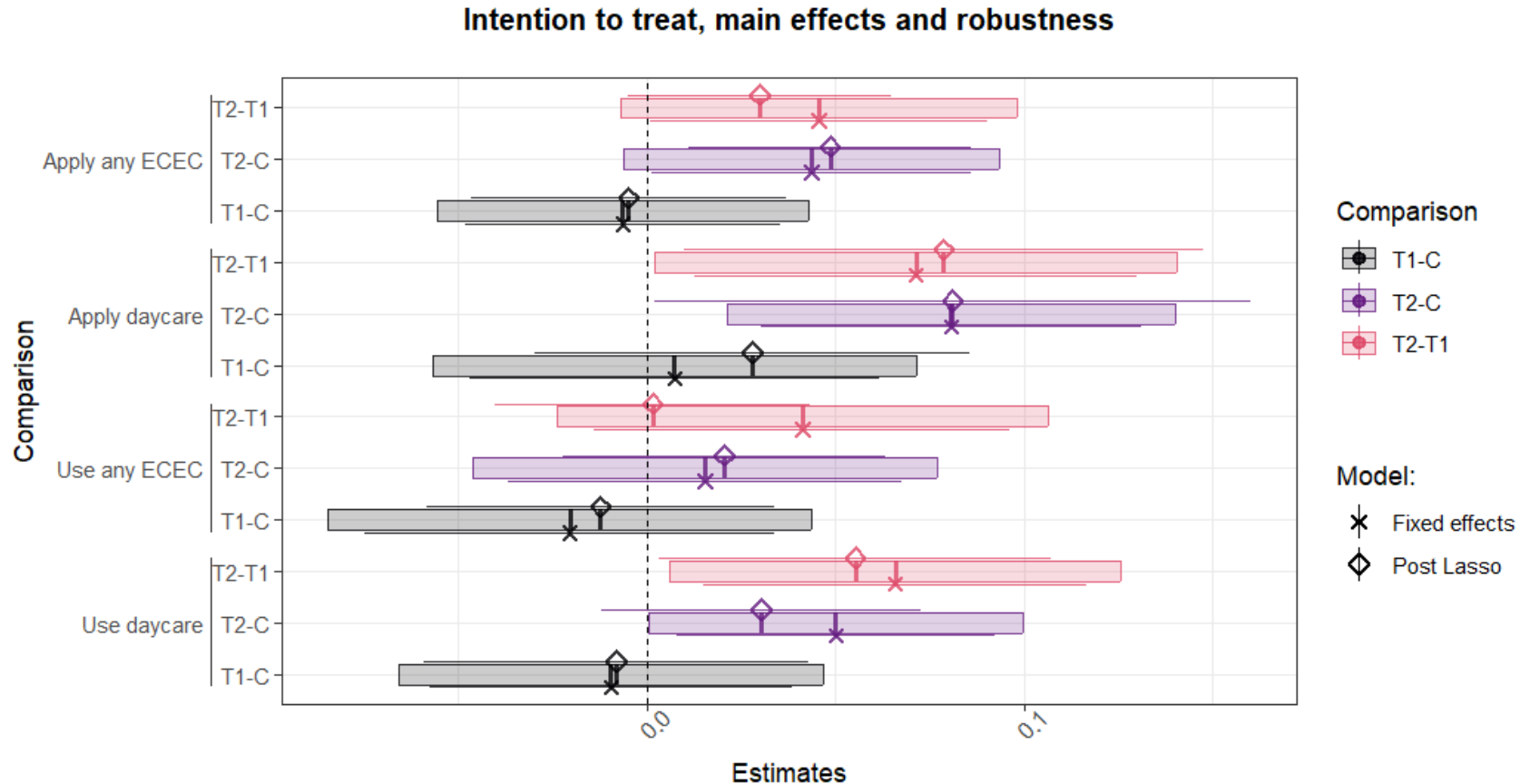








ITT General Population: Robustness



Sources: stacked database of pairwise comparisons.
 Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.
 Point indicates the ITT and the error bars indicate pointwise 95% CI.
 Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.
 The Fixed effect model is estimated with block x wave x subsample fixed effects and inverse probability weighting.
 The Post-lasso use demeaned covariates selected in a first step by cross validation and
 and estimated with OLS with these variables and interactions with the treatment and inverse probability weighting.



Cognitive and behavioral factors

Cognitive factors driving intention to apply

- Level of information → Perceived accessibility, affordability, quality, & application tricks
- Beliefs and social norms
- Motivations to use childcare
- Level of trust
- Decision heuristics

Behavioral factors hindering application

- Cognitive, social and temporal resources available
- Administrative and linguistic proficiency
- Sludges and friction costs



Structural factors

Affordability

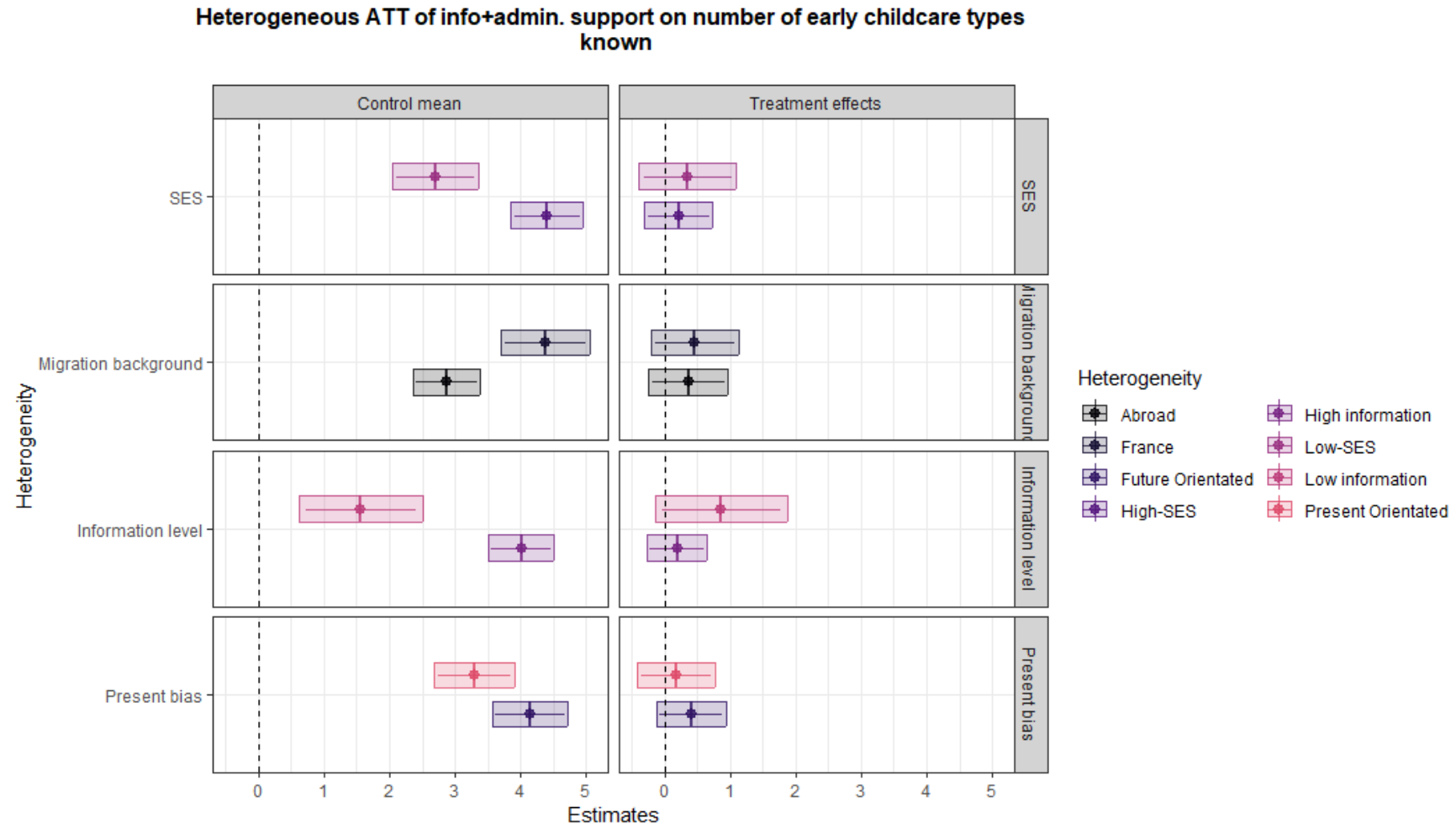
- Fees
- Subsidies
- Opportunity costs

Accessibility

- Proximity
- Shortages (lack of places)
- Admission criteria
- Functioning (e.g., opening hours)
- Bureaucratic requirements

Mechanims

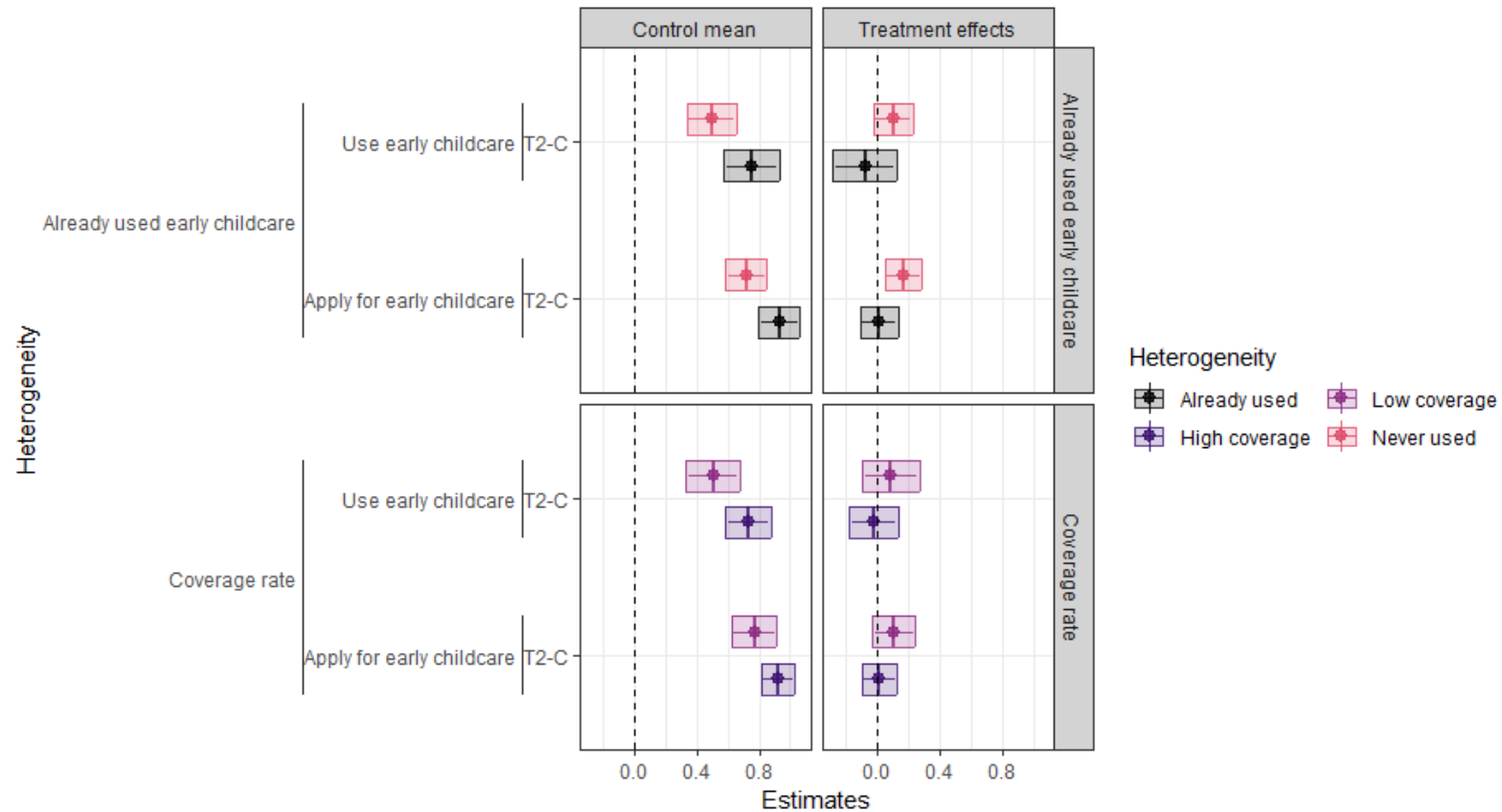
No effect on generic information level



Sources: stacked database of pairwise comparisons.
 Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.
 Point indicates the ATT and the error bars indicate pointwise 95% CI.
 The Fixed effect model is estimated with block x wave x subsample fixed effects and inverse probability weighting.

But the effects are concentrated on newcomers and low coverage areas

Heterogeneous ATT of the info+admin. support treatment on early childcare application and access



Sources: stacked database of pairwise comparisons.

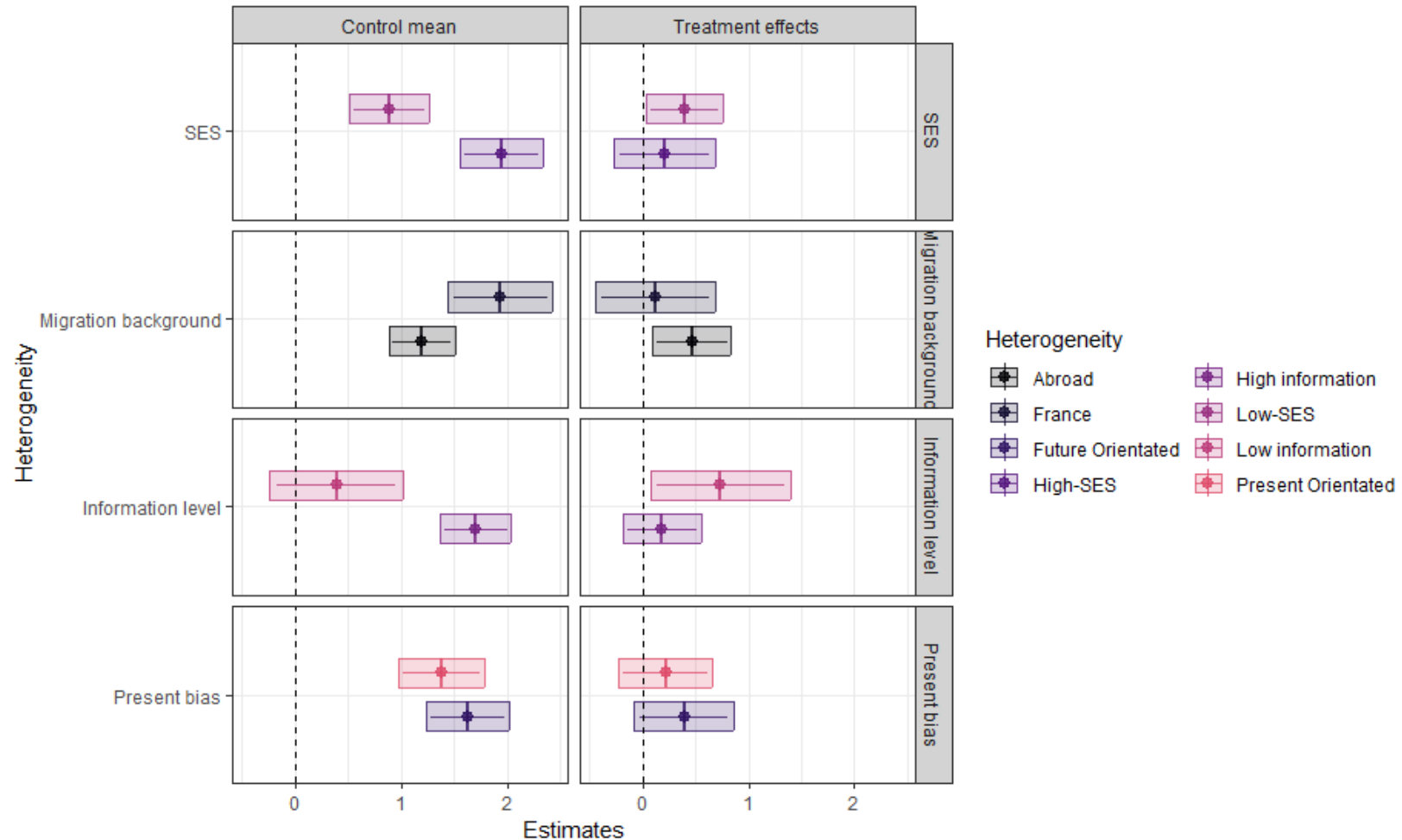
Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Point indicates the ATT and the error bars indicate pointwise 95% CI.

The Fixed effect model is estimated with block x wave x subsample fixed effects and inverse prob:

They applied to more early childcare types

Heterogeneous ATT of info+admin. support on number of early childcare types applied to



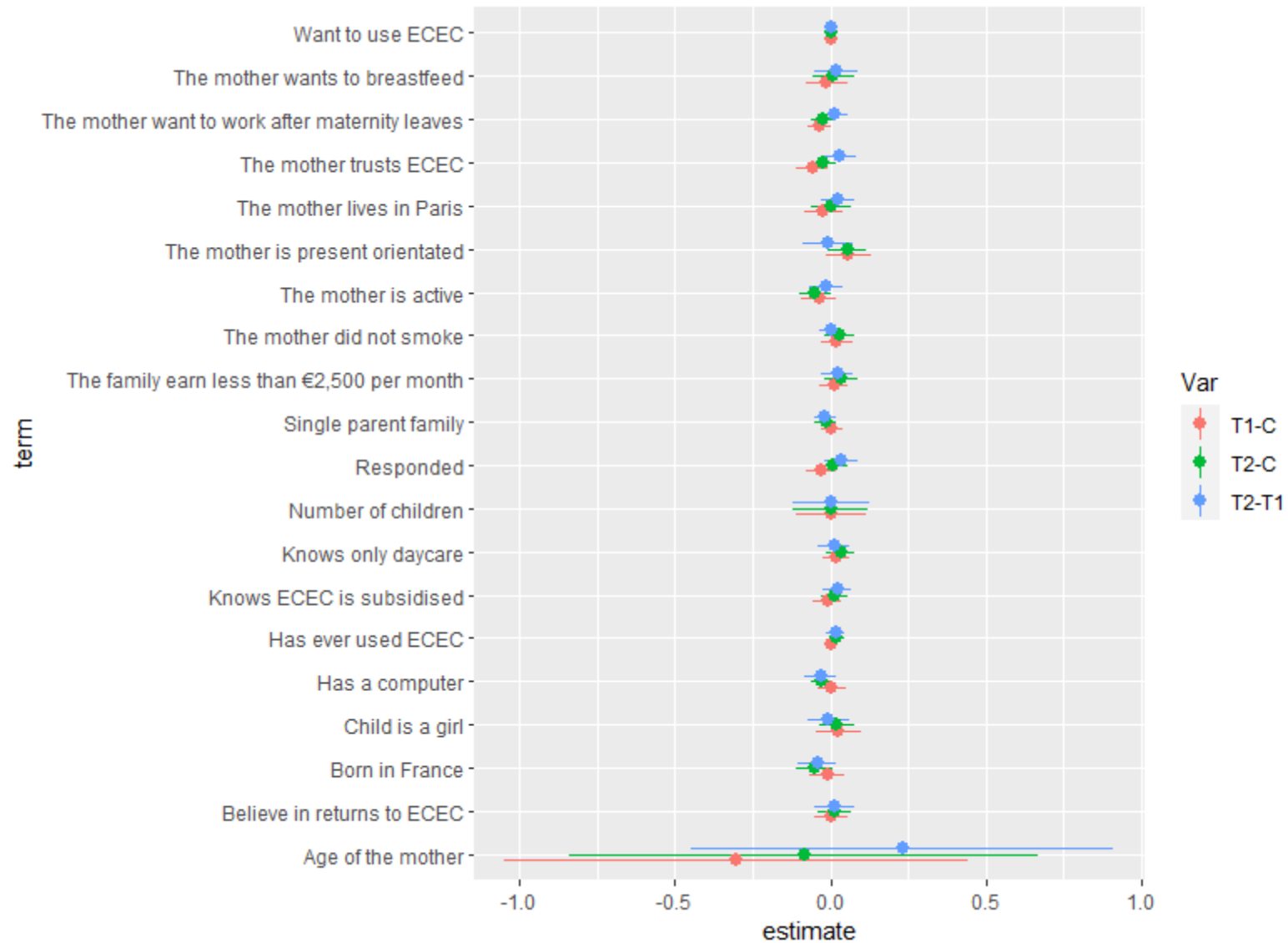
Sources: stacked database of pairwise comparisons.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Point indicates the ATT and the error bars indicate pointwise 95% CI.

The Fixed effect model is estimated with block x wave x subsample fixed effects and inverse probability weighting

Balance checks



Some sanity checks

- Balanced RCT

Variable	Overall ¹	Treatment Received		Control ¹	p-value ²
		Info only (T1) ¹	Info + admin. support (T2) ¹		
Single parent family	8.6% (159)	9.0% (56)	9.3% (57)	7.5% (46)	0.46
Age of the mother	32.28 (5.62)	32.39 (5.66)	32.11 (5.60)	32.32 (5.61)	0.66
Number of children	0.99 (1.16)	1.00 (1.19)	0.99 (1.10)	1.00 (1.18)	0.95
Born in France	53% (984)	55% (344)	54% (331)	50% (309)	0.17
The mother has a post-secondary education	61% (1,120)	60% (376)	61% (371)	61% (373)	0.99
The mother is active	70% (1,291)	73% (452)	69% (422)	68% (417)	0.16
The mother want to work after maternity leaves	89% (1,641)	91% (565)	87% (532)	88% (544)	0.14
The family earn less than €2,500 per month	18% (332)	17% (103)	18% (107)	20% (122)	0.31
Has a computer	85% (1,564)	85% (532)	86% (523)	83% (509)	0.25
The mother is present orientated	47% (861)	43% (268)	49% (297)	48% (296)	0.091*
The mother did not smoke	84% (1,326)	82% (433)	84% (445)	85% (448)	0.51
The mother wants to breastfeed	57% (1,054)	57% (357)	56% (340)	58% (357)	0.72
Has ever used ECEC	40% (745)	40% (247)	40% (242)	42% (256)	0.73
Want to use ECEC	81% (1,491)	80% (499)	81% (494)	81% (498)	0.91
Knows ECEC is subsidised	82% (1,515)	82% (509)	81% (494)	83% (512)	0.61
Knows only daycare	16% (297)	14% (90)	16% (99)	18% (108)	0.33
Believe in returns to ECEC	28% (513)	27% (169)	27% (167)	29% (177)	0.79
The mother trusts ECEC	81% (1,502)	84% (522)	79% (479)	81% (501)	0.061*
The mother lives in Paris	37% (692)	38% (239)	36% (219)	38% (234)	0.63
ECEC coverage is high	41% (750)	40% (252)	41% (249)	40% (249)	0.99
Child is a girl	52% (774)	50% (257)	53% (257)	52% (260)	0.66

¹ % (n); Mean (SD)

² *p<0.1; **p<0.05; ***p<0.01

Differential attrition and weights

Model of the probability of responding to the follow-up survey		
	(1)	(2)
<i>T1</i>	-0.029 (0.182) [-0.071, 0.014]	
<i>T2</i>	0.007 (0.747) [-0.036, 0.049]	
$1 \cdot T1 + 1 \cdot T2 = 0$		-0.022 (0.552) [-0.094, 0.050]
<i>Num.Obs.</i>	1849	1849
<i>R2</i>	0.054	0.054
<i>R2 Adj.</i>	0.009	0.009
<i>R2 Within</i>	0.001	0.001
<i>R2 Within Adj.</i>	0.000	
<i>AIC</i>	2020.9	2020.9
<i>BIC</i>	2495.8	2495.8
<i>Log.Lik.</i>		-924.455
<i>RMSE</i>	0.40	
<i>Std.Errors</i>	by: StrataWave	
<i>FE: StrataWave</i>	X	

* p < 0.1, ** p < 0.05, *** p < 0.01 using point-wise p-value. Adjusted p-value and confidence intervals account for simultaneous inference using the Holm-Bonferroni correction. Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

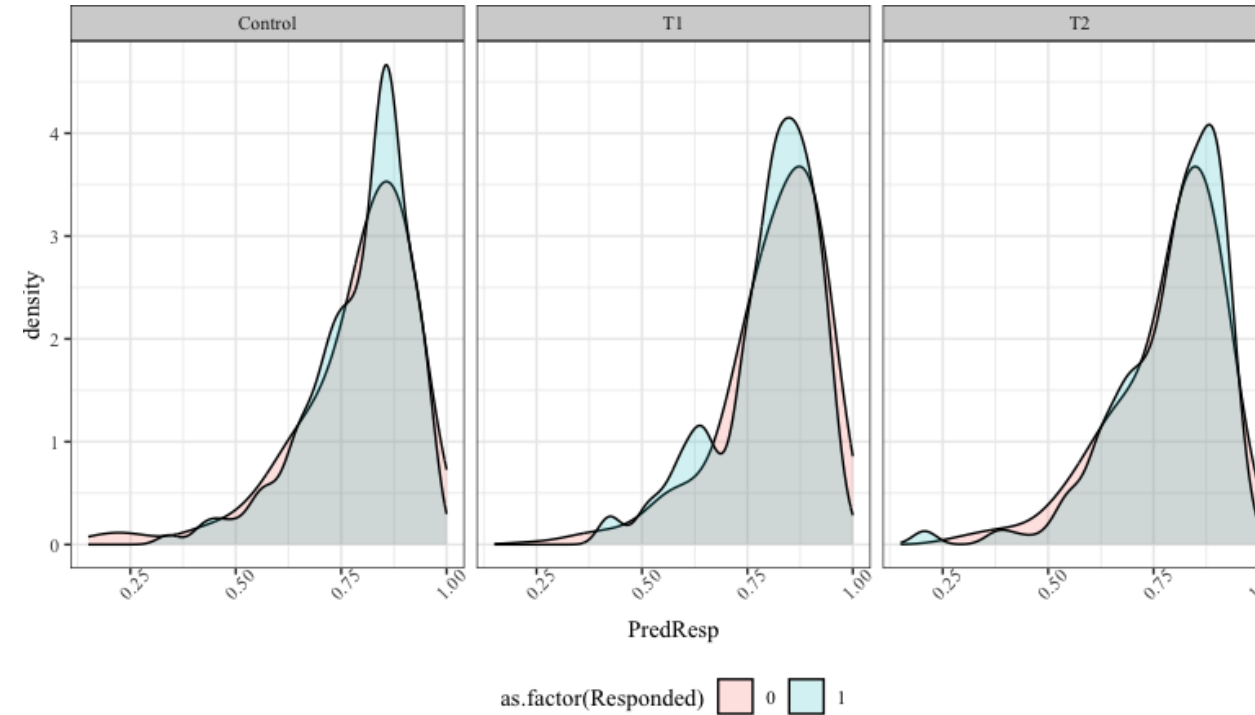
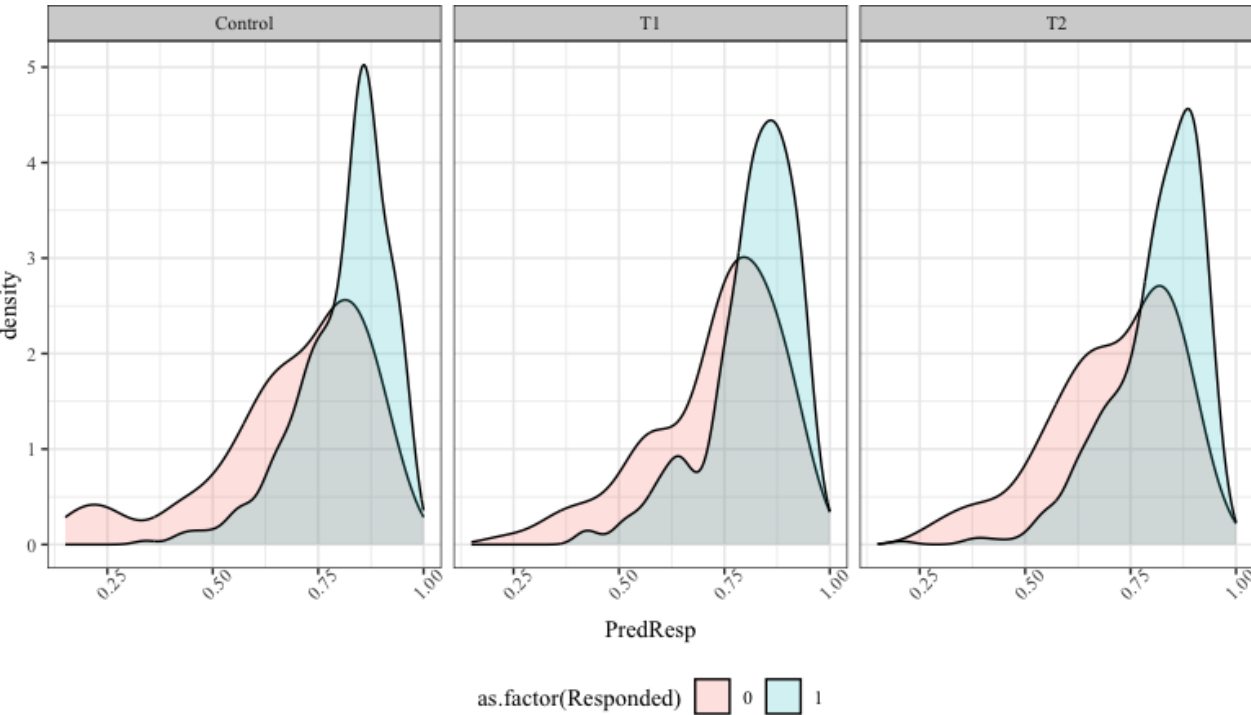
Notes:

	Control mean	Differential Attrition
<i>T1-C</i>	0.79 (0.02) [0.75, 0.83] adj.p.val. = 0.000	-0.03 (0.02) [-0.08, 0.02] adj.p.val. = 0.291
<i>T2-C</i>	0.79 (0.02) [0.76, 0.83] adj.p.val. = 0.000	0.01 (0.02) [-0.04, 0.06] adj.p.val. = 0.695
<i>T2-T1</i>	0.76 (0.02) [0.73, 0.80] adj.p.val. = 0.000	0.04 (0.02) [-0.02, 0.09] adj.p.val. = 0.259
<i>Num.Obs.</i>	3698	3698
<i>R2</i>	0.670	0.076
<i>R2 Adj.</i>	0.646	0.007
<i>Fixed effects</i>	X	X
<i>Chi 2</i>		4.01
<i>P-value</i>		0.260

It worked!

	Control mean	Differential Attrition	Weighted difference
T1-C	0.79 (0.02)	-0.03 (0.02)	0.00 (0.03)
	[0.75, 0.83]	[-0.08, 0.02]	[-0.07, 0.06]
	adj.p.val. = 0.000	adj.p.val. = 0.290	adj.p.val. = 0.962
T2-C	0.79 (0.02)	0.01 (0.02)	-0.01 (0.03)
	[0.76, 0.83]	[-0.04, 0.06]	[-0.09, 0.07]
	adj.p.val. = 0.000	adj.p.val. = 0.673	adj.p.val. = 0.954
T2-T1	0.76 (0.02)	0.04 (0.02)	-0.01 (0.03)
	[0.73, 0.80]	[-0.02, 0.09]	[-0.08, 0.06]
	adj.p.val. = 0.000	adj.p.val. = 0.256	adj.p.val. = 0.962
Num.Obs.	3698	3698	3698
R2	0.670	0.077	0.041
R2 Adj.	0.646	0.009	-0.030
Fixed effects	X	X	X
Chi 2		4.41	0.43
P-value		0.220	0.934
Sources: stacked database of pairwise comparisons. Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level. Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method. Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.			

Propensity score and weighting for non-response



Who are the Endline respondents

	Baseline (N=1849)		Endline (N=1453)		Diff. in Means	Std. Error
	Mean	Std. Dev.	Mean	Std. Dev.		
T1	0.33	0.47	0.32	0.47	-0.01	0.02
T2	0.33	0.47	0.34	0.47	0.01	0.02
Control	0.34	0.47	0.34	0.47	0.00	0.02
Single parent family	0.09	0.28	0.08	0.27	-0.01	0.01
Age of the mother	32.28	5.62	32.35	5.63	0.07	0.20
Number of children	0.99	1.16	0.99	1.14	0.00	0.04
Born in France	0.53	0.50	0.57	0.50	0.03**	0.02
The mother is active	0.70	0.46	0.73	0.45	0.03*	0.02
The mother want to work after maternity leaves	0.89	0.32	0.89	0.31	0.00	0.01
The family earn less than €2,500 per month	0.18	0.38	0.16	0.37	-0.02	0.01
Has a computer	0.85	0.36	0.87	0.34	0.02*	0.01
The mother is present orientated	0.47	0.50	0.44	0.50	-0.02	0.02
The mother did not smoke	0.84	0.37	0.83	0.37	0.00	0.01
The mother wants to breastfeed	0.57	0.50	0.59	0.49	0.02	0.02
Has ever used early childcare	0.40	0.49	0.41	0.49	0.01	0.02
Want to use early childcare	0.81	0.40	0.82	0.39	0.01	0.01
Knows early childcare is subsidised	0.82	0.38	0.83	0.37	0.01	0.01
Knows only daycare	0.16	0.37	0.15	0.35	-0.01	0.01
Believe in returns to early childcare	0.28	0.45	0.28	0.45	0.00	0.02
The mother trusts early childcare	0.81	0.39	0.82	0.38	0.01	0.01
The mother lives in Paris	0.37	0.48	0.38	0.48	0.00	0.02
* = p<.1, ** = p<.05, *** = p<.01 We compute the average of baseline characteristics from the initial sample and among those in the endline. Standard errors account for individual repeated pairs of observations.						

Who are the T2 compliers ?

Comparison of baseline and compliers to T2 samples						
	Baseline (N=1849)		Took-up the support (N=292)		Diff. in Means	Std. Error
	Mean	Std. Dev.	Mean	Std. Dev.		
Single parent family	0.09	0.28	0.09	0.29	0.00	0.02
Born in France	0.53	0.50	0.44	0.50	-0.09***	0.03
The mother has tertiary education	0.61	0.49	0.60	0.49	-0.01	0.03
Age of the mother	32.28	5.62	32.27	5.47	-0.01	0.35
Number of children	0.99	1.16	0.99	1.27	0.00	0.08
The mother is active	0.70	0.46	0.72	0.45	0.02	0.03
The mother want to work after maternity leaves	0.89	0.32	0.93	0.25	0.04***	0.02
The family earn less than €2,500 per month	0.18	0.38	0.17	0.38	0.00	0.02
Has a computer	0.85	0.36	0.80	0.40	-0.05*	0.02
The mother is present orientated	0.47	0.50	0.51	0.50	0.05	0.03
The mother did not smoke	0.84	0.37	0.85	0.35	0.02	0.02
The mother wants to breastfeed	0.57	0.50	0.62	0.49	0.05	0.03
Has ever used ECEC	0.40	0.49	0.40	0.49	0.00	0.03
Want to use ECEC	0.81	0.40	0.89	0.31	0.08***	0.02
Knows ECEC is subsidised	0.82	0.38	0.83	0.38	0.01	0.02
Knows only daycare	0.16	0.37	0.18	0.39	0.02	0.02
Believe in returns to ECEC	0.28	0.45	0.30	0.46	0.02	0.03
The mother trusts ECEC	0.81	0.39	0.84	0.37	0.03	0.02
The mother lives in Paris	0.37	0.48	0.39	0.49	0.02	0.03

* = p<.1, ** = p<.05, *** = p<.01

Sources: Premier pas

We compute the average of baseline characteristics from the initial sample and among those in the follow-up.
Standard errors account for individual repeated pairs of observations.

Who are the low-informed?

Comparison of general and low-informed samples						
	Baseline (N=1849)		Low informed (N=227)		Diff. in Means	Std. Error
	Mean	Std. Dev.	Mean	Std. Dev.		
Single parent family	0.09	0.28	0.17	0.38	0.09***	0.03
Born in France	0.53	0.50	0.16	0.37	-0.37***	0.03
The mother has tertiary education	0.61	0.49	0.29	0.45	-0.32***	0.03
Age of the mother	32.28	5.62	30.78	6.82	-1.50***	0.47
Number of children	0.99	1.16	0.84	1.27	-0.15*	0.09
The mother is active	0.70	0.46	0.39	0.49	-0.31***	0.03
The mother want to work after maternity leaves	0.89	0.32	0.83	0.38	-0.06**	0.03
The family earn less than €2,500 per month	0.18	0.38	0.40	0.49	0.22***	0.03
Has a computer	0.85	0.36	0.54	0.50	-0.30***	0.03
The mother is present orientated	0.47	0.50	0.63	0.48	0.16***	0.03
The mother did not smoke	0.84	0.37	0.87	0.34	0.04	0.03
The mother wants to breastfeed	0.57	0.50	0.52	0.50	-0.05	0.04
Has ever used ECEC	0.40	0.49	0.09	0.29	-0.31***	0.02
Want to use ECEC	0.81	0.40	0.57	0.50	-0.23***	0.03
Knows ECEC is subsidised	0.82	0.38	0.33	0.47	-0.48***	0.03
Knows only daycare	0.16	0.37	0.47	0.50	0.31***	0.03
Believe in returns to ECEC	0.28	0.45	0.17	0.38	-0.11***	0.03
The mother trusts ECEC	0.81	0.39	0.68	0.47	-0.13***	0.03
The mother lives in Paris	0.37	0.48	0.37	0.48	-0.01	0.03

* = $p < .1$, ** = $p < .05$, *** = $p < .01$

Sources: Premier pas

We compute the average of baseline characteristics from the initial sample and among those in the follow-up.

Standard errors account for individual repeated pairs of observations.

Employment

Average treatment effect on the treated on employment				
	<i>Reduced her activity</i>	<i>Want to work</i>	<i>Work Full Time</i>	<i>Active Endline</i>
<i>T2-C</i>	-0.16*** (0.06) [-0.29, -0.03] adj.p.val. = 0.013	-0.03 (0.10) [-0.25, 0.18] adj.p.val. = 0.730	0.00 (0.07) [-0.14, 0.15] adj.p.val. = 0.980	-0.05 (0.05) [-0.15, 0.06] adj.p.val. = 0.317
<i>T2-T1</i>	0.07 (0.07) [-0.10, 0.23] adj.p.val. = 0.382	0.15 (0.10) [-0.06, 0.37] adj.p.val. = 0.189	-0.02 (0.07) [-0.18, 0.14] adj.p.val. = 0.941	0.14** (0.06) [0.02, 0.26] adj.p.val. = 0.024
<i>Avg. cfct.</i>	0.43 (0.07) [0.29, 0.58]	0.94 (0.09) [0.74, 1.13]	0.78 (0.05) [0.66, 0.90]	0.64 (0.04) [0.54, 0.73]
<i>Num.Obs.</i>	1007	843	1049	1946
<i>R2</i>	0.148	0.227	0.158	0.250
<i>R2 Adj.</i>	0.009	0.034	0.023	0.179
<i>Fixed effects</i>	X	X	X	X
<i>Chi 2</i>	11.35	6.33	0.14	12.88
<i>P-value</i>	0.003	0.042	0.934	0.002

Sources: stacked database of pairwise comparisons.

*= $p < .1$, **= $p < .05$, ***= $p < .01$ based on point-wise p-value.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.

Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Average treatment effects on the treated estimated jointly for both comparison by instrumenting administrative support in each comparison sample by assignment to T2 (centred by the pairwise instrument propensity score) interacted with the comparison sample dummy and block x wave x

Main tables

Information only: Applications

	Group	SES		Migration background		Information level		Temporal orientation		
Information-only		Control mean	ITT	Control mean	ITT	Control mean	ITT	Control mean	ITT	
	Present Orientated							0.66*** (0.04)	0.05 (0.04)	
									[0.57, 0.75]	[-0.04, 0.14]
									adj.p.val. = 0.000	adj.p.val. = 0.393
	Future Orientated							0.82*** (0.03)	-0.04 (0.03)	
									[0.75, 0.89]	[-0.10, 0.02]
									adj.p.val. = 0.000	adj.p.val. = 0.311
	High information					0.80*** (0.03)	-0.02 (0.02)			
						[0.74, 0.86]	[-0.07, 0.03]			
						adj.p.val. = 0.000	adj.p.val. = 0.644			
	Low information					0.30*** (0.10)	0.15 (0.13)			
						[0.06, 0.53]	[-0.16, 0.46]			
						adj.p.val. = 0.009	adj.p.val. = 0.562			
	Abroad			0.66*** (0.05)	0.00 (0.04)					
				[0.55, 0.77]	[-0.09, 0.09]					
				adj.p.val. = 0.000	adj.p.val. = 1.000					
	France			0.82*** (0.03)	-0.01 (0.03)					
				[0.75, 0.89]	[-0.07, 0.05]					
				adj.p.val. = 0.000	adj.p.val. = 0.897					
	High-SES	0.66*** (0.05)	0.00 (0.04)							
		[0.55, 0.77]	[-0.09, 0.09]							
		adj.p.val. = 0.000	adj.p.val. = 1.000							
	Low-SES	0.82*** (0.03)	-0.01 (0.03)							
		[0.75, 0.89]	[-0.07, 0.05]							
		adj.p.val. = 0.000	adj.p.val. = 0.897							
	Num.Obs.		2906	2906	2906	2906	2906	2906	2906	2906
R2		0.537	0.316	0.574	0.393	0.556	0.358	0.571	0.386	
R2 Adj.		0.493	0.250	0.487	0.270	0.485	0.256	0.484	0.261	
Fixed effects		X	X	X	X	X	X	X	X	

Sources: stacked database of pairwise comparisons.

*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level. Adjusted p-value and confidence intervals account for simultaneous inference. Joint significance test of null effect using Chi-2 test

Information only: Enrollment

	SES		Migration background		Information level		Temporal orientation	
	Control mean	ITT	Control mean	ITT	Control mean	ITT	Control mean	ITT
Information-only	Present Orientated						0.42*** (0.04)	0.06 (0.05)
							[0.32, 0.53]	[-0.05, 0.18]
							adj.p.val. = 0.000	adj.p.val. = 0.387
	Future Orientated						0.69*** (0.04)	-0.08** (0.03)
							[0.60, 0.78]	[-0.15, 0.00]
							adj.p.val. = 0.000	adj.p.val. = 0.055
	High information				0.62*** (0.03)	-0.03 (0.03)		
					[0.54, 0.70]	[-0.10, 0.03]		
					adj.p.val. = 0.000	adj.p.val. = 0.435		
	Low information				0.09* (0.05)	0.16** (0.08)		
					[-0.03, 0.20]	[-0.03, 0.36]		
					adj.p.val. = 0.180	adj.p.val. = 0.10		
Information-only	Abroad		0.40*** (0.05)	-0.02 (0.05)				
			[0.28, 0.51]	[-0.15, 0.11]				
			adj.p.val. = 0.000	adj.p.val. = 0.967				
	France		0.69*** (0.04)	-0.03 (0.03)				
			[0.61, 0.77]	[-0.09, 0.04]				
			adj.p.val. = 0.000	adj.p.val. = 0.631				
	High-SES	0.70*** (0.03)	-0.04 (0.03)					
		[0.62, 0.77]	[-0.12, 0.03]					
		adj.p.val. = 0.000	adj.p.val. = 0.402					
	Low-SES	0.35*** (0.04)	0.02 (0.05)					
		[0.25, 0.44]	[-0.09, 0.13]					
		adj.p.val. = 0.000	adj.p.val. = 0.947					
Num.Obs.	2906	2906	2906	2906	2906	2906	2906	2906
R2	0.537	0.316	0.574	0.393	0.556	0.358	0.571	0.386
R2 Adj.	0.493	0.250	0.487	0.270	0.485	0.256	0.484	0.261
Fixed effects	X	X	X	X	X	X	X	X

Sources: stacked database of pairwise comparisons.

*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level. Adjusted p-value and confidence intervals account for simultaneous inference.

Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Info. + Administrative support: Applications

Information + administrative support	Group		SES		Migration background		Information level		Temporal orientation	
			Control mean	ITT	Control mean	ITT	Control mean	ITT	Control mean	ITT
	Present Orientated								0.84*** (0.03)	-0.02 (0.02)
									[0.78, 0.90]	[-0.07, 0.03]
									adj.p.val. = 0.000	adj.p.val. = 0.653
	Future Orientated								0.60*** (0.05)	0.01 (0.05)
									[0.49, 0.70]	[-0.09, 0.12]
									adj.p.val. = 0.000	adj.p.val. = 0.969
	High information						0.80*** (0.03)	0.01 (0.02)		
							[0.74, 0.87]	[-0.04, 0.06]		
							adj.p.val. = 0.000	adj.p.val. = 0.850		
	Low information						0.36*** (0.09)	0.24** (0.10)		
							0.80*** (0.03)	0.01 (0.02)		
							[0.74, 0.87]	[-0.04, 0.06]		
	Abroad				0.67*** (0.05)	0.09** (0.04)				
					[0.56, 0.77]	[0.00, 0.17]				
					adj.p.val. = 0.000	adj.p.val. = 0.036				
	France				0.83*** (0.03)	0.00 (0.03)				
					[0.76, 0.90]	[-0.07, 0.06]				
					adj.p.val. = 0.000	adj.p.val. = 1.000				
	High-SES		0.67*** (0.05)	0.09** (0.04)						
			[0.56, 0.77]	[0.00, 0.17]						
			adj.p.val. = 0.000	adj.p.val. = 0.036						
	Low-SES		0.83*** (0.03)	0.00 (0.03)						
			[0.76, 0.90]	[-0.07, 0.06]						
			adj.p.val. = 0.000	adj.p.val. = 1.000						
Num.Obs.			2906	2906	2906	2906	2906	2906	2906	2906
R2			0.537	0.316	0.574	0.393	0.556	0.358	0.571	0.386
R2 Adj.			0.493	0.250	0.487	0.270	0.485	0.256	0.484	0.261
Fixed effects			X	X	X	X	X	X	X	X

Sources: stacked database of pairwise comparisons.

*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level. Adjusted p-value and confidence intervals account for simultaneous inference. Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Info. + Administrative support: Enrollment

	SES		Migration background		Information level		Temporal orientation	
	Control mean	ITT	Control mean	ITT	Control mean	ITT	Control mean	ITT
Information + administrative support	Present Orientated						0.44*** (0.05)	0.05 (0.05)
							[0.34, 0.55]	[-0.06, 0.16]
							adj.p.val. = 0.000	adj.p.val. = 0.600
	Future Orientated						0.68*** (0.04)	0.00 (0.03)
							[0.59, 0.76]	[-0.08, 0.08]
							adj.p.val. = 0.000	adj.p.val. = 1.000
	High information				0.63*** (0.03)	-0.01 (0.03)		
					[0.55, 0.70]	[-0.08, 0.05]		
					adj.p.val. = 0.000	adj.p.val. = 0.891		
	Low information				0.05 (0.04)	0.27*** (0.06)		
					[-0.03, 0.14]	[0.13, 0.41]		
					adj.p.val. = 0.302	adj.p.val. = 0.000		
	Abroad		0.41*** (0.05)	0.07 (0.05)				
			[0.30, 0.52]	[-0.05, 0.19]				
			adj.p.val. = 0.000	adj.p.val. = 0.371				
	France		0.70*** (0.03)	-0.02 (0.03)				
			[0.62, 0.78]	[-0.09, 0.04]				
			adj.p.val. = 0.000	adj.p.val. = 0.701				
	High-SES	0.69*** (0.04)	0.00 (0.03)					
		[0.61, 0.77]	[-0.06, 0.07]					
		adj.p.val. = 0.000	adj.p.val. = 0.991					
	Low-SES	0.36*** (0.05)	0.03 (0.05)					
		[0.25, 0.46]	[-0.08, 0.15]					
		adj.p.val. = 0.000	adj.p.val. = 0.784					
Num.Obs.	2906	2906	2906	2906	2906	2906	2906	2906
R2	0.537	0.316	0.574	0.393	0.556	0.358	0.571	0.386
R2 Adj.	0.493	0.250	0.487	0.270	0.485	0.256	0.484	0.261
Fixed effects	X	X	X	X	X	X	X	X

Sources: stacked database of pairwise comparisons.

*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level. Adjusted p-value and confidence intervals account for simultaneous inference. Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Info. + Administrative support: Applications

Information + administrative support	Group	SES		Migration background		Information level		Temporal orientation	
		Control mean	ATT	Control mean	ATT	Control mean	ATT	Control mean	ATT
	Present Orientated							0.76*** (0.06)	0.14** (0.07)
								[0.62, 0.90]	[-0.01, 0.29]
								adj.p.val. = 0.000	adj.p.val. = 0.066
	Future Orientated							0.87*** (0.05)	0.03 (0.05)
								[0.76, 0.98]	[-0.08, 0.15]
								adj.p.val. = 0.000	adj.p.val. = 0.969
	High information					0.90*** (0.04)	0.02 (0.04)		
						[0.82, 0.99]	[-0.07, 0.11]		
						adj.p.val. = 0.000	adj.p.val. = 0.803		
	Low information					0.27 (0.21)	0.42** (0.20)		
						[-0.21, 0.74]	[-0.02, 0.86]		
						adj.p.val. = 0.377	adj.p.val. = 0.061		
	Abroad			0.75*** (0.06)	0.15** (0.06)				
				[0.60, 0.89]	[0.01, 0.28]				
				adj.p.val. = 0.000	adj.p.val. = 0.030				
	France			0.91*** (0.06)	0.00 (0.06)				
				[0.79, 1.04]	[-0.14, 0.13]				
				adj.p.val. = 0.000	adj.p.val. = 0.999				
	High-SES	0.89*** (0.05)	0.03 (0.05)						
		[0.79, 1.00]	[-0.07, 0.13]						
		adj.p.val. = 0.000	adj.p.val. = 0.770						
	Low-SES	0.70*** (0.08)	0.17** (0.08)						
		[0.52, 0.88]	[0.00, 0.34]						
		adj.p.val. = 0.000	adj.p.val. = 0.043						
Num.Obs.		1946	1946	1946	1946	1946	1946	1946	1946
R2		0.482	0.313	0.550	0.395	0.508	0.355	0.521	0.383
R2 Adj.		0.432	0.247	0.458	0.272	0.430	0.254	0.423	0.258
Fixed effects		X	X	X	X	X	X	X	X
Mean F-stat 1st stage		297	297	313	313	349	349	287	287

Info. + Administrative support ATT: Enrollment

	Group	SES		Migration background		Information level		Temporal orientation	
		Control mean	ATT	Control mean	ATT	Control mean	ATT	Control mean	ATT
T2-C	Present Orientated							0.49*** (0.08)	0.09 (0.09)
								[0.31, 0.67]	[-0.11, 0.28]
								adj.p.val. = 0.000	adj.p.val. = 0.497
	Future Orientated							0.69*** (0.07)	0.00 (0.07)
								[0.54, 0.84]	[-0.15, 0.16]
								adj.p.val. = 0.000	adj.p.val. = 0.999
Information + administrative support	High information					0.68*** (0.05)	-0.03 (0.05)		
						[0.57, 0.79]	[-0.15, 0.09]		
						adj.p.val. = 0.000	adj.p.val. = 0.840		
	Low information					-0.06 (0.13)	0.48*** (0.11)		
						[-0.36, 0.23]	[0.22, 0.73]		
						adj.p.val. = 0.867	adj.p.val. = 0.000		
	Abroad			0.46*** (0.07)	0.12 (0.09)				
				[0.30, 0.63]	[-0.07, 0.31]				
				adj.p.val. = 0.000	adj.p.val. = 0.299				
	France			0.75*** (0.06)	-0.05 (0.06)				
				[0.63, 0.88]	[-0.19, 0.09]				
				adj.p.val. = 0.000	adj.p.val. = 0.620				
	High-SES	0.73*** (0.06)	0.01 (0.06)						
		[0.60, 0.86]	[-0.12, 0.14]						
		adj.p.val. = 0.000	adj.p.val. = 0.986						
	Low-SES	0.40*** (0.08)	0.06 (0.09)						
		[0.23, 0.57]	[-0.14, 0.27]						
		adj.p.val. = 0.000	adj.p.val. = 0.721						
Num.Obs.		1946	1946	1946	1946	1946	1946	1946	
R2		0.482	0.313	0.550	0.395	0.508	0.355	0.521	0.383
R2 Adj.		0.432	0.247	0.458	0.272	0.430	0.254	0.423	0.258
Fixed effects		X	X	X	X	X	X	X	X
Mean F-stat 1st stage		297	297	313	313	349	349	287	76 287

Sources: stacked database of pairwise comparisons. *= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

Mechanisms

Knowledge

Average effects on information level at endline					
<i>Heterogeneity</i>		<i>Number of ECEC known</i>		<i>Global info. level</i>	
		ITT	ATT	ITT	
<i>T2-C</i>	Sup	0.11 (0.12)	0.11* (0.07)	0.00 (0.06)	0.01 (0.13)
	Sup	[-0.16, 0.38]	[-0.03, 0.26]	[-0.14, 0.15]	[-0.27, 0.29]
	Sup	adj.p.val. = 0.596	adj.p.val. = 0.151	adj.p.val. = 0.997	adj.p.val. = 0.997
	Bac	0.19 (0.18)	0.16* (0.09)	-0.16 (0.11)	-0.30 (0.22)
	Bac	[-0.21, 0.60]	[-0.04, 0.37]	[-0.42, 0.09]	[-0.78, 0.19]
	Bac	adj.p.val. = 0.489	adj.p.val. = 0.140	adj.p.val. = 0.274	adj.p.val. = 0.306
<i>T2-T1</i>	Sup	0.04 (0.15)	0.12* (0.07)	0.00 (0.06)	0.00 (0.13)
	Sup	[-0.29, 0.38]	[-0.04, 0.28]	[-0.15, 0.14]	[-0.29, 0.28]
	Sup	adj.p.val. = 0.950	adj.p.val. = 0.181	adj.p.val. = 1.000	adj.p.val. = 1.000
	Bac	0.06 (0.20)	0.14 (0.10)	-0.05 (0.10)	-0.10 (0.19)
	Bac	[-0.39, 0.51]	[-0.10, 0.37]	[-0.28, 0.17]	[-0.52, 0.32]
	Bac	adj.p.val. = 0.950	adj.p.val. = 0.352	adj.p.val. = 0.840	adj.p.val. = 0.842
<i>Num.Obs.</i>		1946	1933	1946	1946
<i>R2</i>		0.261	0.244	0.113	0.107
<i>R2 Adj.</i>		0.190	0.171	0.027	0.021
<i>Fixed effects</i>		X	X	X	X
<i>Mean F-stat 1st stage</i>			277		297

Sources: Stacked database of pairwise comparisons.

*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.

Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Mechanisms

Total number of applications done						
	<i>T2-C</i>		<i>T2-T1</i>		<i>T1-C</i>	
	Basic	Post-Lasso	Basic	Post-Lasso	Basic	Post-Lasso
<i>Z</i>	0.147* (0.077)	0.177** (0.080)	0.128* (0.072)	0.091 (0.065)	0.020 (0.079)	0.099 (0.082)
	[-0.006, 0.301]	[0.020, 0.334]	[-0.015, 0.270]	[-0.038, 0.219]	[-0.137, 0.177]	[-0.061, 0.260]
<i>Num.Obs.</i>	987	987	959	959	960	960
<i>R2</i>	0.294	0.251	0.275	0.133	0.291	0.190
<i>R2 Adj.</i>	0.229	0.226	0.205	0.125	0.223	0.177

Sources: Premiers pas, follow-up databases, pairwise comparisons.

Basic specification run OLS on a treatment dummy and block x wave fixed effects.

Post-lasso use coefficients of an OLS regression of the outcome on a treatment dummy, the de-meaned covariates and interactions. Covariates were selected by a lasso regression with lambda minimising the RMSE chosen by 10-fold cross validation.

Cluster-robust standard errors adjusted at the block level in parenthesis ; point-wise 95% confidence intervals in brackets.

Mechanisms

- They applied more to associative and public daycare

Apply to associative daycare						
	<i>T2-C</i>		<i>T2-T1</i>		<i>T1-C</i>	
	Basic	Post-Lasso	Basic	Post-Lasso	Basic	Post-Lasso
<i>Z</i>	0.049*** (0.018)	0.026 (0.017)	0.048 (0.120)	0.013 (0.107)	0.012 (0.021)	0.010 (0.019)
	[0.013, 0.085]	[-0.007, 0.059]	[-0.191, 0.287]	[-0.196, 0.222]	[-0.029, 0.054]	[-0.028, 0.048]
<i>Num.Obs.</i>	987	987	959	959	960	960
<i>R2</i>	0.104	0.308	0.249	0.508	0.101	0.110
<i>R2 Adj.</i>	0.020	0.285	0.176	0.451	0.016	0.105

Sources: Premiers pas, endline databases, pairwise comparisons.

The dependent variable equals 1 if the person reports applying to any formal ECEC.

Basic specification run OLS on a treatment dummy and block x wave fixed effects.

Post-lasso use coefficients of an OLS regression of the outcome on a treatment dummy, the de-meaned covariates and interactions. Covariates were selected by a lasso regression with lambda minimising the RMSE chosen by 10-fold cross validation.

Cluster-robust standard errors adjusted at the block level in parenthesis ; point-wise 95% confidence intervals in bracklets.

Mechanisms

- They applied more to associative and public daycare

Apply to public daycare						
	<i>T2-C</i>		<i>T2-T1</i>		<i>T1-C</i>	
	Basic	Post-Lasso	Basic	Post-Lasso	Basic	Post-Lasso
<i>Z</i>	0.042* (0.023)	0.054** (0.022)	0.044 (0.030)	0.056** (0.025)	-0.003 (0.029)	-0.002 (0.028)
	[-0.004, 0.088]	[0.011, 0.096]	[-0.015, 0.102]	[0.006, 0.106]	[-0.061, 0.055]	[-0.058, 0.053]
<i>Num.Obs.</i>	987	987	959	959	960	960
<i>R2</i>	0.232	0.395	0.230	0.314	0.220	0.275
<i>R2 Adj.</i>	0.161	0.351	0.156	0.287	0.146	0.252

Sources: Premiers pas, endline databases, pairwise comparisons.

The dependent variable equals 1 if the person reports applying to any formal ECEC.

Basic specification run OLS on a treatment dummy and block x wave fixed effects.

Post-lasso use coefficients of an OLS regression of the outcome on a treatment dummy, the de-meaned covariates and interactions. Covariates were selected by a lasso regression with lambda minimising the RMSE chosen by 10-fold cross validation.

Cluster-robust standard errors adjusted at the block level in parenthesis ; point-wise 95% confidence intervals in brackets.

Videos: quantitative insights



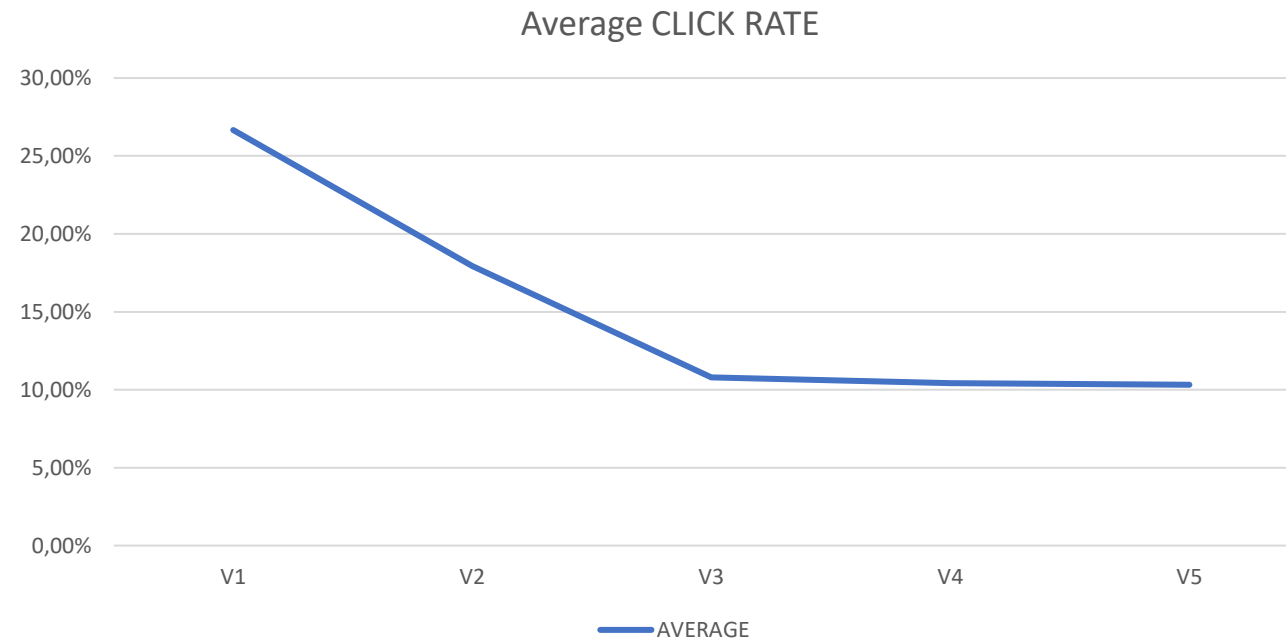
Projet Premiers Pas

@projetpremierspas5564

38 abonnés

- *Mean number of clics on the video link*

	V1: childcare types	V2: costs	V3: halte garderie	V4: how to register	V5: tips & trocks	Reminders (N=5)
Clicks (%)	26,7%	17,9%	10,8%	10,4%	10,3%	3,52%



Videos: quantitative insights



Projet Premiers Pas

@projetpremierspas5564

38 abonnés

- *Mean number of clics on the video link (FR)*

	V1: childcare types	V2: costs	V3: halte garderie	V4: how to register	V5: tips & trocks	Reminders
Clicks (%)	25,78%	18,02%	11,22%	12,19%	11,36%	3,52%

- *YouTube Engagment*

- 38 subscriptions



@krotoumekonate3713 • il y a 1 mois

Merci pour ses informations qui vont être utiles pour mes démarches

	V1: childcare types	V2: costs	V3: halte garderie	V4: how to register	V5: tips & trocks	N total
Views	367	214	144	184	131	1 3040
Likes	37	21	12	19	14	103
Comments	6	3	0	0	4	13

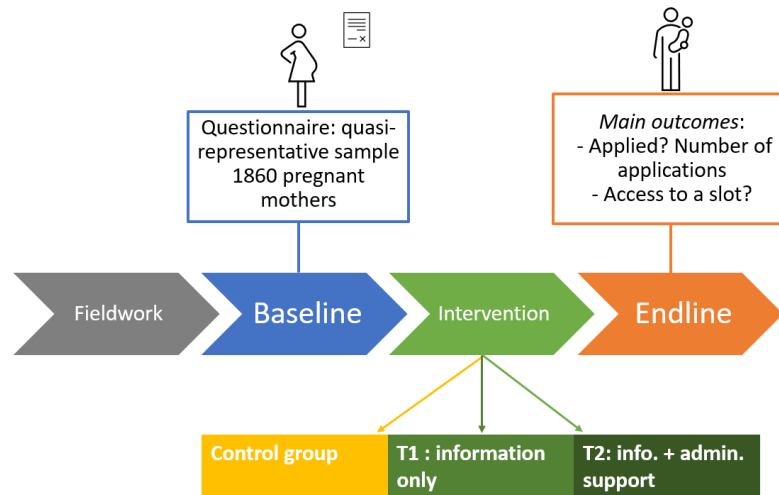
Intersectional approach: Migration X Educ

- early childcare:

We lack power but the effects seem concentrated on mothers born abroad.

Average effects on application and access to ECEC by migration background						
	<i>BirthPlace</i>	<i>Education</i>	<i>Applied for ECEC</i>		<i>Use ECEC</i>	
			ITT	ATT	ITT	ATT
<i>T2-C</i>	Abroad	Higher	0.06 (0.04)	0.11 (0.08)	0.05 (0.07)	0.09 (0.12)
	Abroad	Higher	[-0.03, 0.16]	[-0.05, 0.28]	[-0.10, 0.20]	[-0.18, 0.35]
	Abroad	Higher	adj.p.val. = 0.239	adj.p.val. = 0.242	adj.p.val. = 0.703	adj.p.val. = 0.702
	Abroad	Lower	0.11** (0.06)	0.17* (0.09)	0.09 (0.08)	0.14 (0.12)
	Abroad	Lower	[-0.02, 0.24]	[-0.03, 0.38]	[-0.08, 0.26]	[-0.13, 0.42]
	Abroad	Lower	adj.p.val. = 0.095	adj.p.val. = 0.116	adj.p.val. = 0.416	adj.p.val. = 0.430
	France	Higher	-0.01 (0.03)	-0.03 (0.06)	-0.02 (0.03)	-0.05 (0.07)
	France	Higher	[-0.07, 0.05]	[-0.15, 0.10]	[-0.09, 0.05]	[-0.19, 0.10]
	France	Higher	adj.p.val. = 0.863	adj.p.val. = 0.865	adj.p.val. = 0.736	adj.p.val. = 0.740
	France	Lower	0.03 (0.08)	0.09 (0.20)	-0.03 (0.06)	-0.08 (0.17)
	France	Lower	[-0.14, 0.20]	[-0.35, 0.53]	[-0.17, 0.11]	[-0.46, 0.30]
	France	Lower	adj.p.val. = 0.882	adj.p.val. = 0.881	adj.p.val. = 0.867	adj.p.val. = 0.867
<i>T2-T1</i>	Abroad	Higher	0.08* (0.04)	0.13* (0.07)	0.15** (0.06)	0.24** (0.11)
	Abroad	Higher	[-0.02, 0.18]	[-0.02, 0.28]	[0.01, 0.29]	[0.00, 0.49]
	Abroad	Higher	adj.p.val. = 0.128	adj.p.val. = 0.105	adj.p.val. = 0.038	adj.p.val. = 0.053
	Abroad	Lower	0.09* (0.05)	0.14* (0.09)	0.06 (0.07)	0.10 (0.11)
	Abroad	Lower	[-0.03, 0.21]	[-0.05, 0.34]	[-0.09, 0.22]	[-0.15, 0.36]
	Abroad	Lower	adj.p.val. = 0.174	adj.p.val. = 0.184	adj.p.val. = 0.597	adj.p.val. = 0.591
	France	Higher	0.03 (0.02)	0.06 (0.05)	0.01 (0.04)	0.02 (0.07)
	France	Higher	[-0.02, 0.08]	[-0.05, 0.17]	[-0.07, 0.09]	[-0.15, 0.18]
	France	Higher	adj.p.val. = 0.375	adj.p.val. = 0.363	adj.p.val. = 0.966	adj.p.val. = 0.966
	France	Lower	0.03 (0.09)	0.09 (0.26)	0.07 (0.07)	0.19 (0.21)
	France	Lower	[-0.17, 0.24]	[-0.49, 0.68]	[-0.10, 0.23]	[-0.28, 0.67]
	France	Lower	adj.p.val. = 0.927	adj.p.val. = 0.925	adj.p.val. = 0.615	adj.p.val. = 0.603
<i>Num.Obs.</i>			1946	1946	1946	1946
<i>R2</i>			0.448	0.459	0.392	0.395
<i>R2 Adj.</i>			0.335	0.348	0.267	0.270
<i>Fixed effects</i>			X	X	X	X

ITT General Population



	Applied to any early childcare	Applied Daycare	Use any early childcare	Use Daycare
T1-C	-0.01 (0.02) [-0.06, 0.04] adj.p.val. = 0.762	0.01 (0.03) [-0.06, 0.07] adj.p.val. = 0.787	-0.02 (0.03) [-0.08, 0.04] adj.p.val. = 0.679	-0.01 (0.02) [-0.07, 0.05] adj.p.val. = 0.694
T2-C	0.04** (0.02) [-0.01, 0.09] adj.p.val. = 0.100	0.08*** (0.03) [0.02, 0.14] adj.p.val. = 0.003	0.02 (0.03) [-0.05, 0.08] adj.p.val. = 0.679	0.05** (0.02) [0.00, 0.10] adj.p.val. = 0.036
T2-T1	0.05** (0.02) [-0.01, 0.10] adj.p.val. = 0.100	0.07** (0.03) [0.00, 0.14] adj.p.val. = 0.029	0.04 (0.03) [-0.02, 0.11] adj.p.val. = 0.298	0.07** (0.03) [0.01, 0.13] adj.p.val. = 0.026
Control mean	0.75 (0.03) [0.68, 0.82]	0.59 (0.03) [0.52, 0.65]	0.57 (0.04) [0.48, 0.65]	0.21 (0.02) [0.17, 0.26]
Num.Obs.	2906	2906	2906	2906
R2	0.364	0.228	0.315	0.122
R2 Adj.	0.304	0.154	0.250	0.039
Fixed effects	X	X	X	X
Chi 2	6.92	11.42	2.71	13.76
P-value	0.074	0.010	0.439	0.003

Sources: stacked database of pairwise comparisons.

*= $p < .1$, **= $p < .05$, ***= $p < .01$ based on point-wise p-value.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.

Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Average Treatment effect on the Treated

	Applied any early childcare	Applied Daycare	Use any early childcare	Use Daycare
T2-C	0.08** (0.04) [-0.01, 0.17] adj.p.val. = 0.068	0.15*** (0.05) [0.05, 0.26] adj.p.val. = 0.002	0.03 (0.05) [-0.08, 0.14] adj.p.val. = 0.560	0.10** (0.04) [0.00, 0.19] adj.p.val. = 0.022
T2-T1	0.09** (0.04) [-0.01, 0.18] adj.p.val. = 0.068	0.14** (0.05) [0.02, 0.26] adj.p.val. = 0.012	0.08 (0.05) [-0.04, 0.20] adj.p.val. = 0.236	0.13** (0.05) [0.02, 0.23] adj.p.val. = 0.017
Avg. cfct.	0.82 (0.04) [0.73, 0.91]	0.69 (0.05) [0.58, 0.81]	0.56 (0.05) [0.45, 0.67]	0.19 (0.04) [0.10, 0.28]
Num.Obs.	1946	1946	1946	1946
R2	0.378	0.255	0.314	0.120
R2 Adj.	0.319	0.184	0.248	0.037
Fixed effects	X	X	X	X
Chi 2	5.94	12.03	2.25	8.11
P-value	0.051	0.002	0.325	0.017

Sources: stacked database of pairwise comparisons.

*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.

Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Average treatment effects on the treated estimated jointly for both comparison by instrumenting administrative support in each comparison sample by assignment to T2 (centred by the pairwise instrument propensity score) interacted with the comparison sample dummy and block x wave x comparison fixed effects instrumenting themselves.

Avg. Cfct. indicates the untreated compliers' average and is estimated by TSLS with (1-D)*Y as an outcome, (1-D) as the treatment variable instrumented by the centred assignment.

Migration X Educ

	Place of birth	Education	Applied for daycare		Use daycare	
			ITT	ATT	ITT	ATT
T2-C	Abroad	Higher-SES	0.12*** (0.05) [0.02, 0.23] adj.p.val. = 0.013	0.22*** (0.07) [0.06, 0.38] adj.p.val. = 0.005	0.07 (0.06) [-0.05, 0.20] adj.p.val. = 0.346	0.13 (0.10) [-0.09, 0.35] adj.p.val. = 0.345
		Lower-SES	0.05 (0.07) [-0.10, 0.20] adj.p.val. = 0.727	0.07 (0.11) [-0.16, 0.31] adj.p.val. = 0.732	0.03 (0.06) [-0.10, 0.17] adj.p.val. = 0.812	0.05 (0.10) [-0.16, 0.27] adj.p.val. = 0.812
	France	Higher-SES	0.04 (0.04) [-0.05, 0.13] adj.p.val. = 0.497	0.09 (0.08) [-0.10, 0.28] adj.p.val. = 0.484	0.10*** (0.03) [0.02, 0.17] adj.p.val. = 0.005	0.20*** (0.07) [0.05, 0.35] adj.p.val. = 0.007
		Lower-SES	0.10 (0.09) [-0.09, 0.30] adj.p.val. = 0.422	0.27 (0.22) [-0.22, 0.76] adj.p.val. = 0.396	-0.06 (0.05) [-0.18, 0.06] adj.p.val. = 0.493	-0.15 (0.15) [-0.49, 0.18] adj.p.val. = 0.528
T2-T1	Abroad	Higher-SES	0.08 (0.06) [-0.05, 0.22] adj.p.val. = 0.316	0.14 (0.10) [-0.07, 0.35] adj.p.val. = 0.260	0.11** (0.05) [0.00, 0.22] adj.p.val. = 0.038	0.19** (0.08) [0.01, 0.36] adj.p.val. = 0.039
		Lower-SES	0.07 (0.06) [-0.08, 0.21] adj.p.val. = 0.508	0.10 (0.10) [-0.12, 0.33] adj.p.val. = 0.508	0.06 (0.06) [-0.08, 0.19] adj.p.val. = 0.562	0.09 (0.09) [-0.12, 0.30] adj.p.val. = 0.544
	France	Higher-SES	0.08* (0.04) [-0.02, 0.18] adj.p.val. = 0.160	0.16* (0.09) [-0.04, 0.36] adj.p.val. = 0.137	0.08* (0.05) [-0.03, 0.19] adj.p.val. = 0.188	0.17* (0.10) [-0.05, 0.39] adj.p.val. = 0.174
		Lower-SES	0.04 (0.12) [-0.22, 0.30] adj.p.val. = 0.932	0.11 (0.33) [-0.64, 0.86] adj.p.val. = 0.930	0.00 (0.05) [-0.12, 0.11] adj.p.val. = 0.999	0.00 (0.15) [-0.34, 0.33] adj.p.val. = 0.999

Num.Obs.

R2

R2 Adj.

Fixed effects

Mean F-stat 1st stage

1946

0.300

0.156

X

1946

0.321

0.182

X

1946

0.179

0.010

X

1946

0.175

0.005

X

87

153

153

Heterogeneity

- 1) Education level (SES)
- 2) Migration background
- 3) Past early childcare use
- 4) Level of information at baseline

Education: early childcare

*Higher-SES =

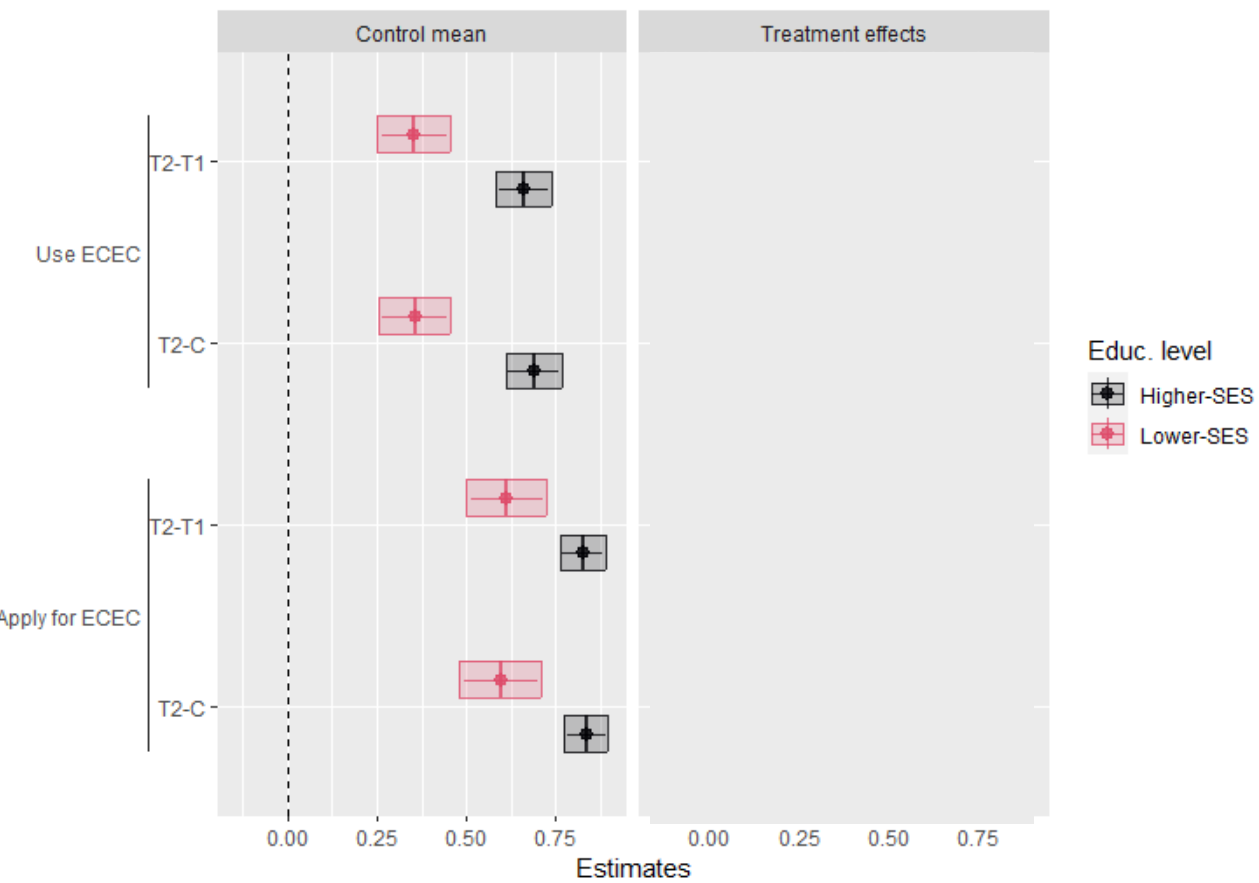
Tertiary

education

*Lower-SES =

No tertiary

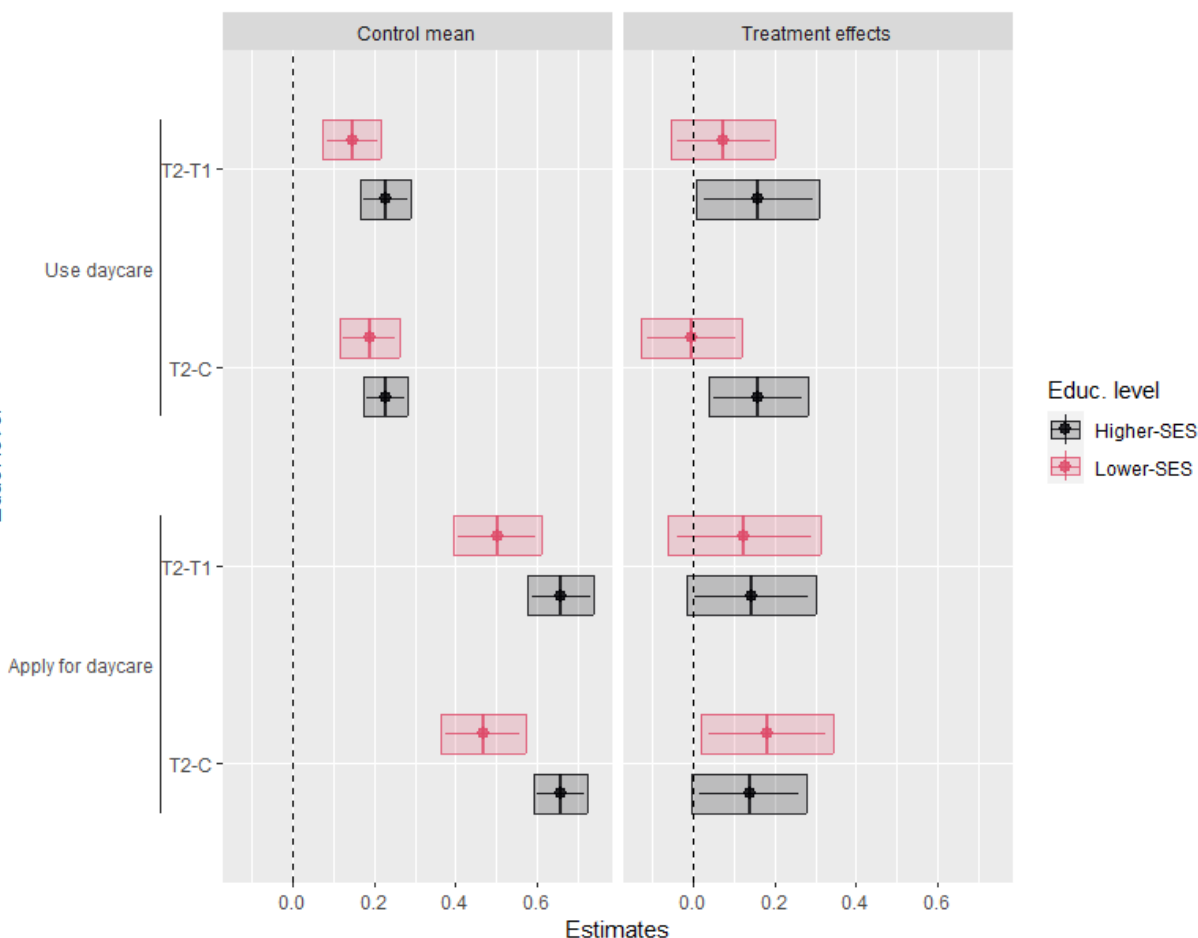
education



Sources: Stacked database of pairwise comparisons.
 Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.
 Point indicates the ITT and the error bars indicate pointwise 95% CI.
 The Fixed effect model is estimated with block x wave x subsample fixed effects and inverse probability weighting.
 The Post-lasso use demeaned covariates selected in a first step by cross validation and
 estimated with OLS with these variables and interactions with the treatment and inverse probability weighting.

Education level: daycare

ATT by education level on application and access to daycare
Stacked TSLS



Sources: Stacked database of pairwise comparisons.
Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Average effects on access to daycare by education level

	<i>Heterogeneity</i>	<i>Applied for daycare</i>		<i>Use daycare</i>	
		ITT	ATT	ITT	ATT
<i>T2-C</i>	Higher-SES	0.07** (0.03)	0.14** (0.06)	0.08*** (0.03)	0.16*** (0.05)
	Higher-SES	[0.00, 0.14]	[0.00, 0.28]	[0.02, 0.14]	[0.04, 0.28]
	Higher-SES	adj.p.val. = 0.070	adj.p.val. = 0.057	adj.p.val. = 0.005	adj.p.val. = 0.007
	Lower-SES	0.10** (0.04)	0.18** (0.07)	0.00 (0.03)	0.00 (0.06)
	Lower-SES	[0.01, 0.19]	[0.02, 0.34]	[-0.07, 0.07]	[-0.13, 0.12]
	Lower-SES	adj.p.val. = 0.022	adj.p.val. = 0.026	adj.p.val. = 0.997	adj.p.val. = 0.997
<i>T2-T1</i>	Higher-SES	0.07* (0.04)	0.14** (0.07)	0.08** (0.04)	0.16** (0.07)
	Higher-SES	[-0.01, 0.16]	[-0.01, 0.30]	[0.00, 0.16]	[0.01, 0.31]
	Higher-SES	adj.p.val. = 0.110	adj.p.val. = 0.083	adj.p.val. = 0.044	adj.p.val. = 0.036
	Lower-SES	0.07 (0.05)	0.13 (0.08)	0.04 (0.03)	0.07 (0.06)
	Lower-SES	[-0.03, 0.17]	[-0.06, 0.31]	[-0.03, 0.11]	[-0.06, 0.20]
	Lower-SES	adj.p.val. = 0.245	adj.p.val. = 0.249	adj.p.val. = 0.369	adj.p.val. = 0.369
	<i>Num. Obs.</i>	1946	1946	1946	1946
	<i>R2</i>	0.231	0.254	0.118	0.119
	<i>R2 Adj.</i>	0.157	0.183	0.033	0.034
	<i>Fixed effects</i>	X	X	X	X
	<i>Mean F-stat 1st stage</i>		297		297

Sources: stacked database of pairwise comparisons.

*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

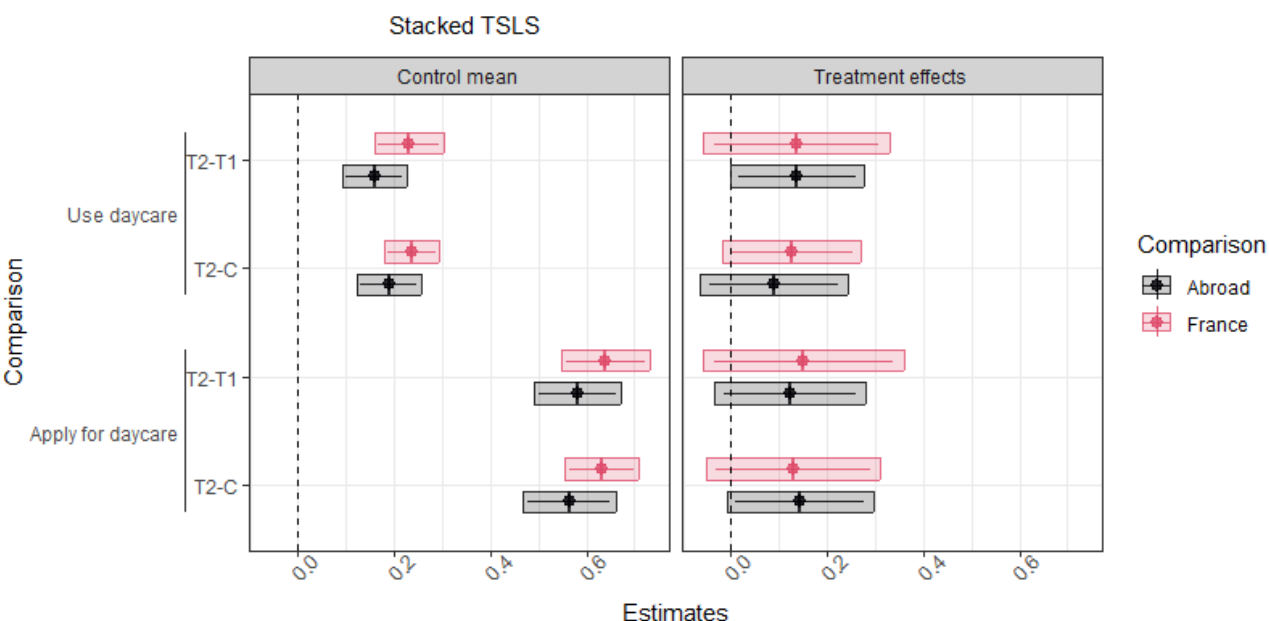
Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.

Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Migration background: Daycare

ATT by migration background on application and access to daycare



Sources: stacked database of pairwise comparisons.
Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.
Point indicates the ITT and the error bars indicate pointwise 95% CI.
Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.
The Fixed effect model is estimated with block x wave x subsample fixed effects and inverse probability weightit.
The Post-lasso use demeaned covariates selected in a first step by cross validation and estimated with OLS with these variables and interactions with the treatment and inverse probability weightit.

Average effects on access to daycare by place of birth of the mother

	<i>Heterogeneity</i>	<i>Applied for daycare</i>		<i>Use daycare</i>	
		ITT	ATT	ITT	ATT
<i>T2-C</i>	Abroad	0.09** (0.04)	0.14** (0.07)	0.05 (0.04)	0.09 (0.07)
	Abroad	[-0.01, 0.18]	[-0.01, 0.29]	[-0.04, 0.15]	[-0.06, 0.24]
	Abroad	adj.p.val. = 0.068	adj.p.val. = 0.068	adj.p.val. = 0.346	adj.p.val. = 0.346
	France	0.06 (0.04)	0.13 (0.08)	0.06* (0.03)	0.13* (0.06)
	France	[-0.03, 0.14]	[-0.05, 0.31]	[-0.01, 0.12]	[-0.02, 0.27]
	France	adj.p.val. = 0.225	adj.p.val. = 0.210	adj.p.val. = 0.103	adj.p.val. = 0.100
<i>T2-T1</i>	Abroad	0.07* (0.04)	0.12* (0.07)	0.08** (0.04)	0.14** (0.06)
	Abroad	[-0.02, 0.17]	[-0.03, 0.28]	[0.00, 0.17]	[0.00, 0.28]
	Abroad	adj.p.val. = 0.174	adj.p.val. = 0.157	adj.p.val. = 0.061	adj.p.val. = 0.053
	France	0.07 (0.04)	0.15 (0.09)	0.06 (0.04)	0.14 (0.09)
	France	[-0.03, 0.16]	[-0.06, 0.36]	[-0.03, 0.15]	[-0.06, 0.33]
	France	adj.p.val. = 0.223	adj.p.val. = 0.205	adj.p.val. = 0.230	adj.p.val. = 0.214
<i>Num.Obs.</i>		1946	1946	1946	1946
<i>R2</i>		0.299	0.319	0.177	0.177
<i>R2 Adj.</i>		0.157	0.180	0.010	0.010
<i>Fixed effects</i>		X	X	X	X
<i>Mean F-stat</i>			313		313
<i>1st stage</i>					

Sources: stacked database of pairwise comparisons.

*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

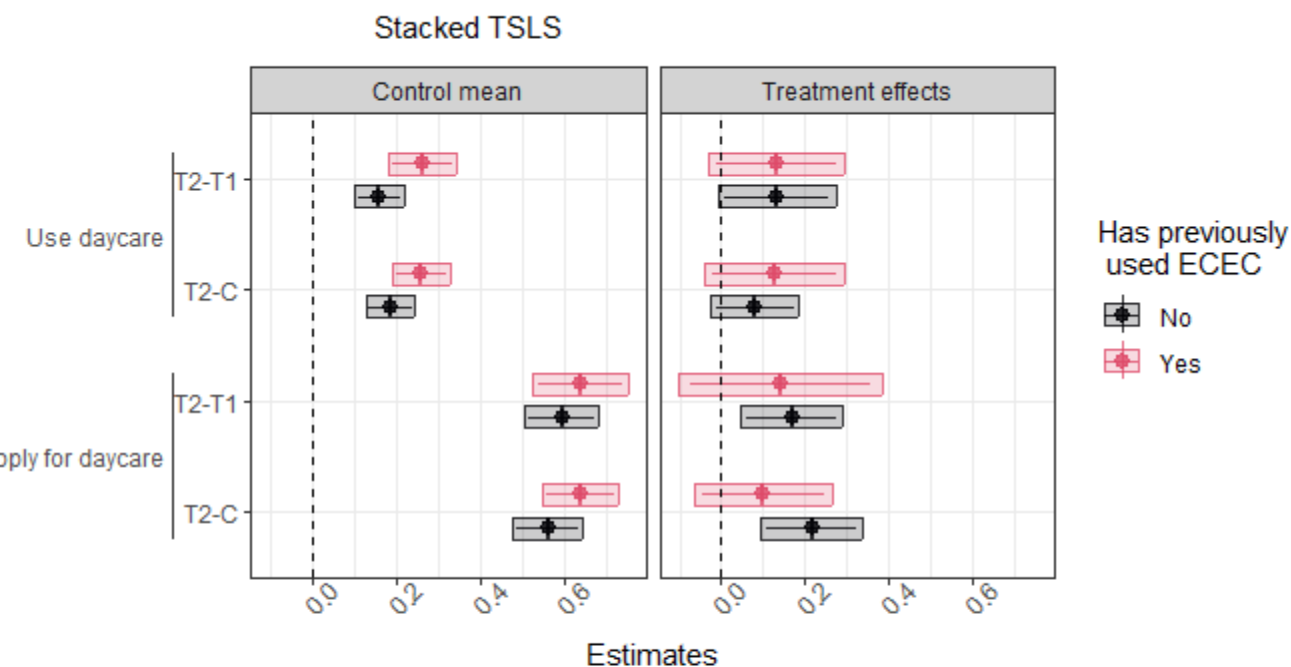
Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.⁹²

Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Past early childcare us Daycare

ATT by previous ECEC usage on application and access to daycare



Sources: stacked database of pairwise comparisons.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Point indicates the ITT and the error bars indicate pointwise 95% CI.

Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.

The Fixed effect model is estimated with block x wave x subsample fixed effects and inverse

The Post-lasso use demeaned covariates selected in a first step by cross validation and

and estimated with OLS with these variables and interactions with the treatment and inverse

Average effects on access to daycare by previous ECEC use					
Heterogeneity		Applied for daycare		Use daycare	
		ITT	ATT	ITT	ATT
T2-C	No	0.12*** (0.03)	0.22*** (0.05)	0.04* (0.03)	0.08* (0.05)
	No	[0.05, 0.19]	[0.09, 0.34]	[-0.01, 0.10]	[-0.02, 0.19]
	No	adj.p.val. = 0.000	adj.p.val. = 0.000	adj.p.val. = 0.151	adj.p.val. = 0.165
	Yes	0.05 (0.04)	0.10 (0.07)	0.06* (0.04)	0.13* (0.08)
	Yes	[-0.03, 0.14]	[-0.06, 0.26]	[-0.02, 0.15]	[-0.04, 0.29]
	Yes	adj.p.val. = 0.333	adj.p.val. = 0.321	adj.p.val. = 0.162	adj.p.val. = 0.182
T2-T1	No	0.09*** (0.03)	0.17*** (0.05)	0.07** (0.04)	0.13** (0.06)
	No	[0.02, 0.17]	[0.05, 0.29]	[-0.01, 0.15]	[-0.01, 0.27]
	No	adj.p.val. = 0.005	adj.p.val. = 0.004	adj.p.val. = 0.077	adj.p.val. = 0.070
	Yes	0.07 (0.06)	0.14 (0.11)	0.07* (0.04)	0.13* (0.07)
	Yes	[-0.06, 0.20]	[-0.10, 0.39]	[-0.02, 0.15]	[-0.03, 0.30]
	Yes	adj.p.val. = 0.380	adj.p.val. = 0.352	adj.p.val. = 0.135	adj.p.val. = 0.131
Num. Obs.		1946	1946	1946	1946
R ²		0.250	0.270	0.124	0.126
R ² Adj.		0.158	0.182	0.018	0.019
Fixed effects		X	X	X	X
Mean F-stat			300		300
1st stage					

Sources: stacked database of pairwise comparisons.

*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

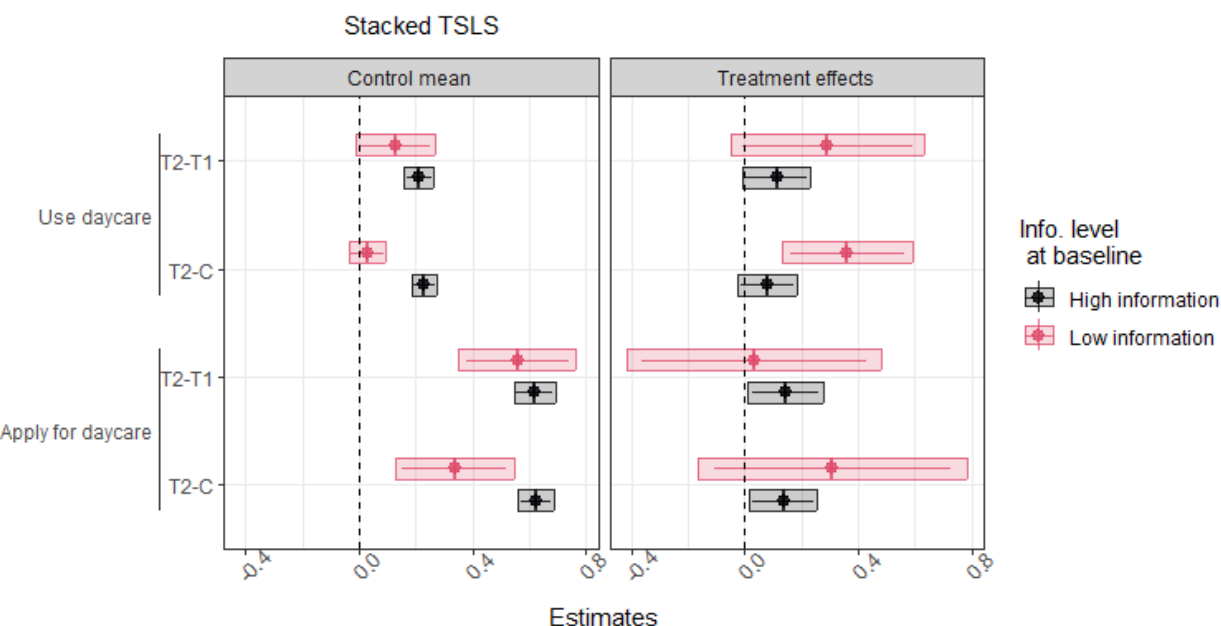
Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.

Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Level of information: daycare

ATT by knowledge at baseline on application and access to daycare



Sources: stacked database of pairwise comparisons.
Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.
Point indicates the ITT and the error bars indicate pointwise 95% CI.
Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.
The Fixed effect model is estimated with block x wave x subsample fixed effects and inverse probability weights.
The Post-lasso use demeaned covariates selected in a first step by cross validation and estimated with OLS with these variables and interactions with the treatment and inverse probability weights.

Average effects on access to daycare by level of information at baseline

	<i>Heterogeneity</i>	<i>Applied for daycare</i>		<i>Use daycare</i>	
		ITT	ATT	ITT	ATT
<i>T2-C</i>	High information	0.07** (0.03)	0.13** (0.05)	0.04* (0.02)	0.08* (0.05)
	High information	[0.01, 0.13]	[0.01, 0.26]	[-0.01, 0.09]	[-0.02, 0.18]
	High information	adj.p.val. = 0.031	adj.p.val. = 0.026	adj.p.val. = 0.160	adj.p.val. = 0.171
	Low information	0.18 (0.12)	0.31 (0.21)	0.21*** (0.05)	0.36*** (0.10)
	Low information	[-0.08, 0.44]	[-0.17, 0.78]	[0.08, 0.33]	[0.13, 0.59]
	Low information	adj.p.val. = 0.245	adj.p.val. = 0.273	adj.p.val. = 0.000	adj.p.val. = 0.001
<i>T2-T1</i>	High information	0.07** (0.03)	0.14** (0.06)	0.06** (0.03)	0.11** (0.05)
	High information	[0.00, 0.15]	[0.01, 0.28]	[-0.01, 0.12]	[-0.01, 0.23]
	High information	adj.p.val. = 0.041	adj.p.val. = 0.030	adj.p.val. = 0.080	adj.p.val. = 0.074
	Low information	0.02 (0.13)	0.03 (0.20)	0.18* (0.10)	0.29* (0.15)
	Low information	[-0.26, 0.30]	[-0.42, 0.48]	[-0.05, 0.42]	[-0.05, 0.63]
	Low information	adj.p.val. = 0.983	adj.p.val. = 0.983	adj.p.val. = 0.158	adj.p.val. = 0.111
<i>Num.Obs.</i>		1946	1946	1946	1946
<i>R2</i>		0.279	0.300	0.153	0.156
<i>R2 Adj.</i>		0.166	0.190	0.020	0.022
<i>Fixed effects</i>		X	X	X	X
<i>Mean F-stat 1st stage</i>			349		349

Sources: stacked database of pairwise comparisons.

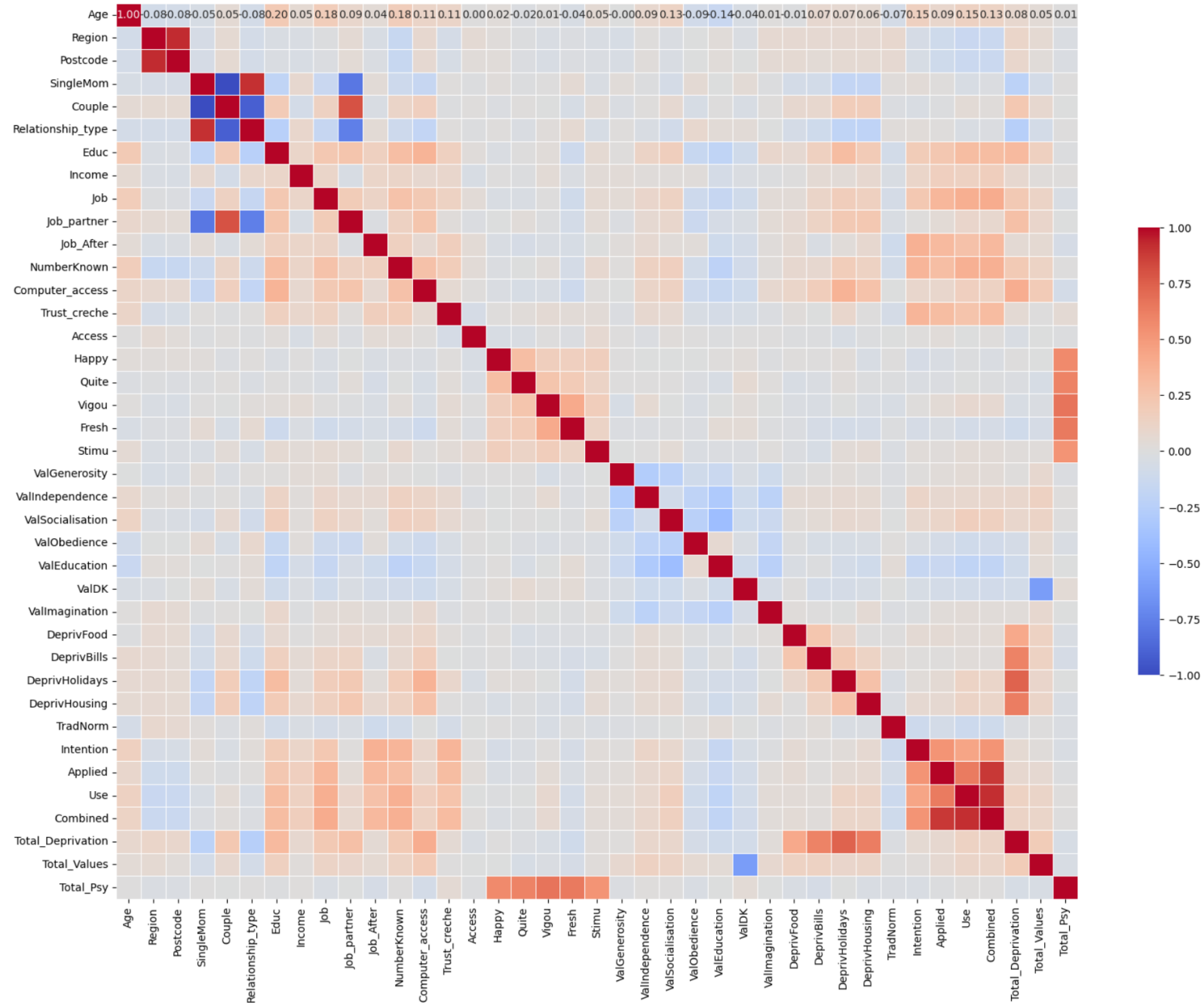
*= p<.1, **= p<.05, ***= p<.01 based on point-wise p-value.

Standard errors are cluster-heteroskedasticity robust adjusted at the block x wave level.

Adjusted p-value and confidence intervals account for simultaneous inference using the Westfall method.

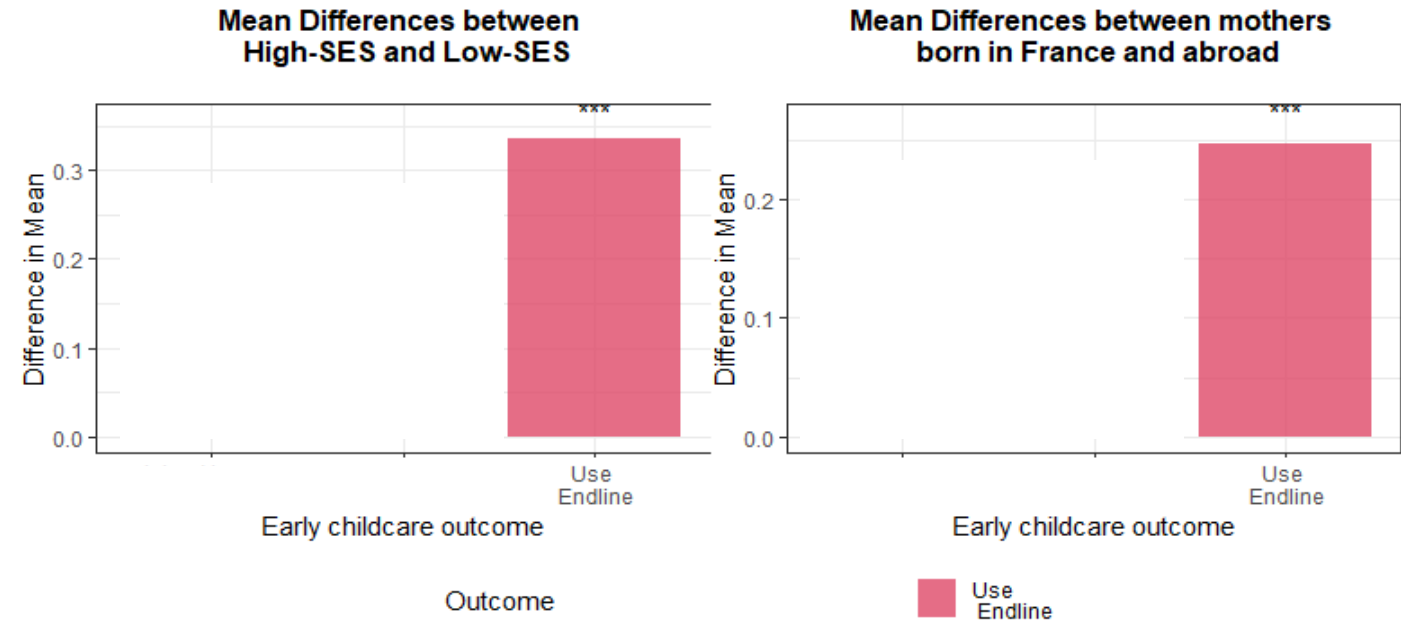
Joint significance test of null effect using Chi-2 test and p-value are reported at the bottom of the table.

Correlation Matrix



How to account for the SES-gap?

Demand-side

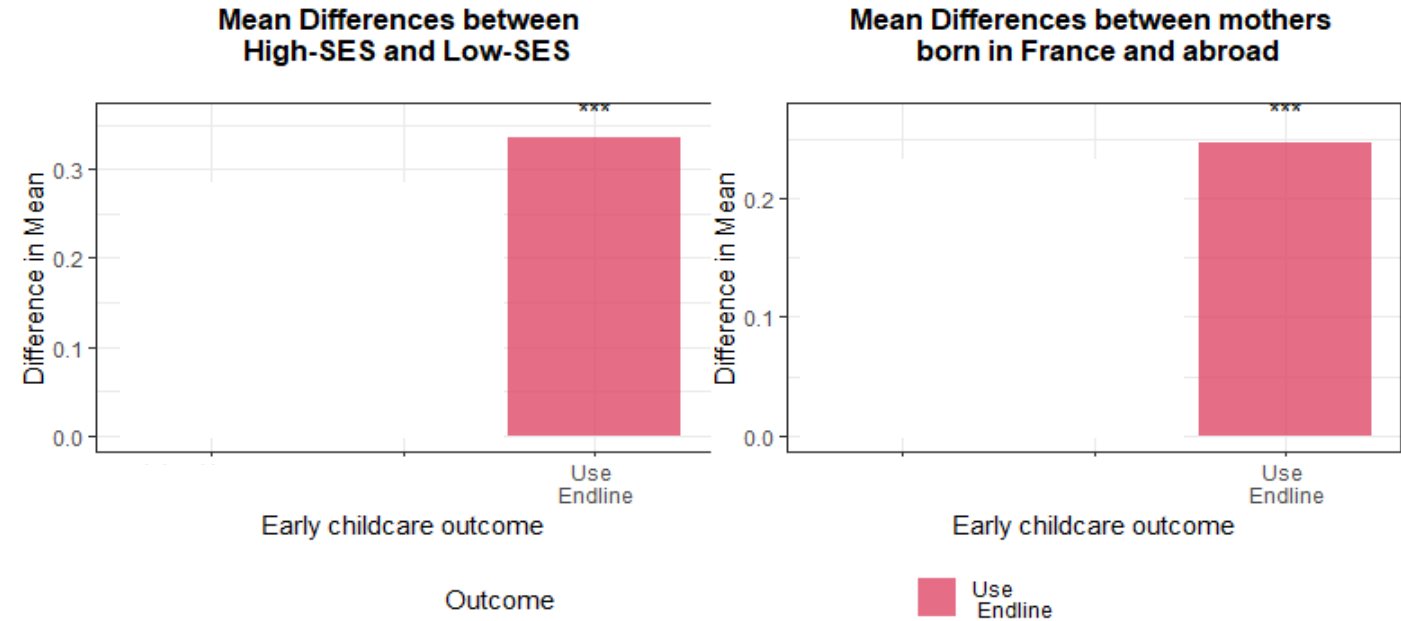


Stars: ***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$, ns: not significant difference in mean

How to account for the SES-gap?

Demand-side

- Preferences?

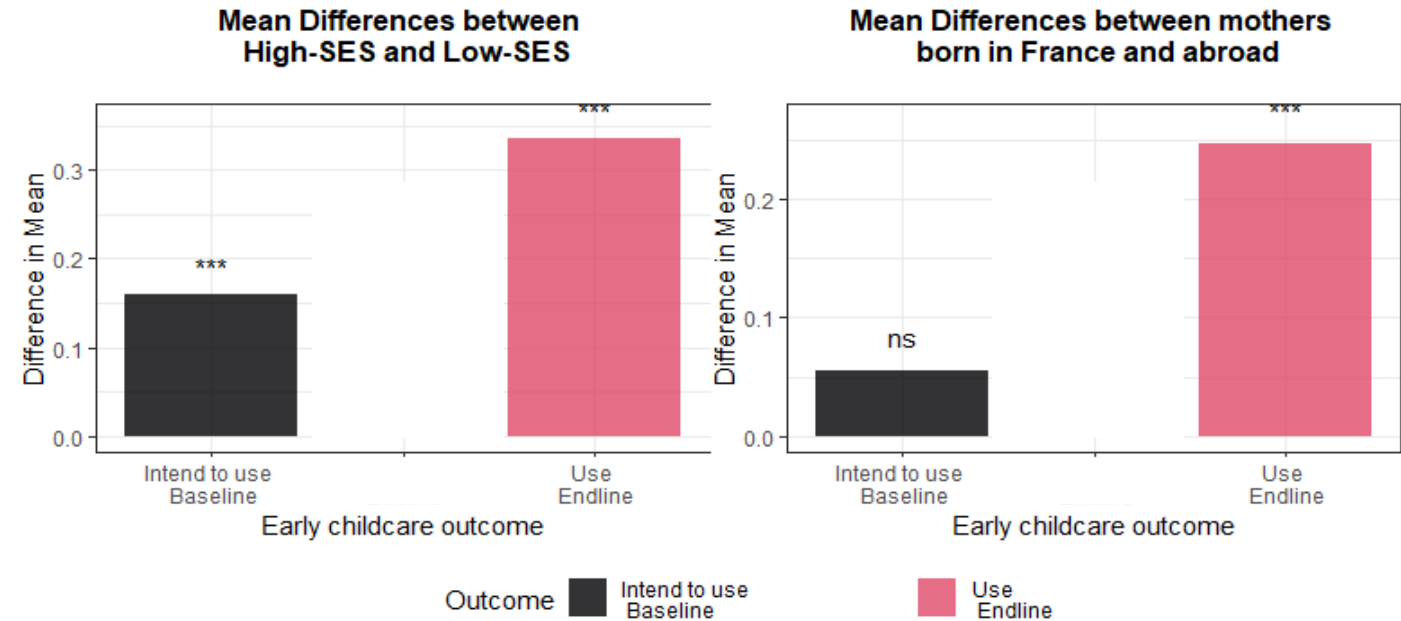


Stars: ***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$, ns: not significant difference in mean

How to account for the SES-gap?

Demand-side

- Preferences?

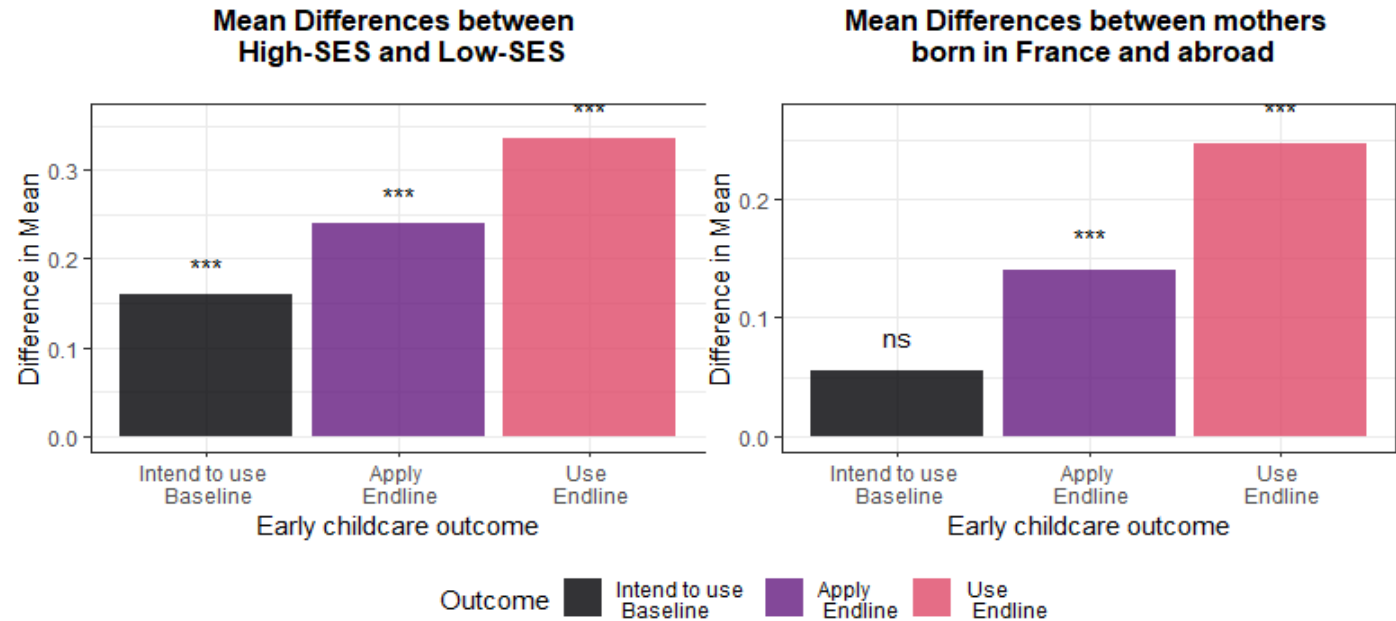


Stars: ***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$, ns: not significant difference in mean

How to account for the SES-gap?

Demand-side

- Preferences?
- Intention--action gap: low-SES households apply less, later, and to fewer facilities



Stars: ***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$, ns: not significant difference in mean