

Can an egalitarian reform in the parental leave system reduce the motherhood labor penalty? Some evidence from Spain



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José Andrés Fernández Cornejo

Lorenzo Escot Mangas

Cristina Castellanos García

Daniel Franco Romo

Universidad Complutense de Madrid

Research group “Economic Analysis of Diversity and Equality Policies”

<https://www.ucm.es/aedipi>

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Main research objective

We would like to show empirically how the introduction of egalitarian reforms of parental leave (that give new leaves to fathers) may help reduce gender inequality in the labor market (a reduction in the motherhood penalty).

Policy reform (new leave to fathers)



Fathers' total duration of childbirth leave



Fathers' involvement in childcare



Reduction in motherhood labor penalty

**Policy reform
(new leave
to fathers)**



**Fathers' total
duration of
childbirth leave**

Natural experiments:

Literature on natural experiments consisting in the introduction of a new leave for fathers:

Ekberg, J; Eriksson, R.; and Friebel, G. (2013): “Parental leave —A policy evaluation of the Swedish “Daddy-Month” reform”. *Journal of Public Economics*, 97, 131–143 <http://www.sciencedirect.com/science/article/pii/S0047272712001004>

Duvander, A. Z. and Johansson, M. (2012): “What are the effects of reforms promoting fathers’ parental leave use?”, *Journal of European Social Policy*, 22(3), 319-330 <http://esp.sagepub.com/content/22/3/319.abstract>

Escot, J., Fernández-Cornejo, J. A. and Poza, C. (2014): “Fathers’ use of childbirth leave in Spain. The effects of the 13-day paternity leave”, *Population Research and Policy Review*, 33(3), 419-453.

Arnalds, A. A. ; Eydal, G. B.; and Gíslason, I. V. (2013): “Equal rights to paid parental leave and caring fathers- the case of Iceland”, *Icelandic Review of Politics and Administration*, 9(2), 323-344 <http://dx.doi.org/10.13177/irpa.a.2013.9.2.4>

Basic empirical result:

“Men tend to respond well to the introduction of well paid and non-transferable leaves”

Castro, C. and Pazos, M., (2016): “Parental Leave Policy and Gender Equality in Europe”, *Feminist Economics*, 22(3), 51-73. <http://www.tandfonline.com/doi/abs/10.1080/13545701.2015.1082033>

Take-up of paternity leave in Spain (13-day paternity leave was introduced in March 2007).

	2008	2009	2010	2011	2012	2013	2014	2015
Total births (year)	519,779	494,997	486,575	471,999	454,648	425,715	427,595	419,109
Paternity leaves (processes)	279,756	273,024	275,637	269,715	245,867	237,988	235,678	238,806
% paternity leaves/births	53.8%	55.2%	56.6%	57.1%	54.1%	55.9%	55.1%	57.0%
Maternity leaves (processes)	359,160	340,512	332,557	324,405	298,732	288,842	281,151	278,389
% Maternity leaves/births	69.1%	68.8%	68.3%	68.7%	65.7%	67.8%	65.8%	66.4%

Source:

Instituto Nacional de Estadística (Movimiento Natural de la Población)

<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=/t20/e301/&file=inebase>

Seguridad Social

http://www.seg-social.es/Internet_1/Estadistica/Est/Otras_Prestaciones_de_la_Seguridad_Social/index.htm

Fathers' total
duration of
childbirth leave



Fathers'
involvement
in childcare

Some empirical evidence about this relation:

ICELAND: Arnalds, A. A. ; Eydal, G. B.; and Gíslason, I. V. (2013):
“Equal rights to paid parental leave and caring fathers- the case of Iceland”,
Icelandic Review of Politics and Administration, 9(2), 323-344
<http://dx.doi.org/10.13177/irpa.a.2013.9.2.4>

U.S.: Seward *et al.* (2006) <http://www.tandfonline.com/doi/abs/10.1080/13668800500421093#.UzLFOfkhDUI>
Nepomnyaschy and Waldfogel (2007) <http://www.tandfonline.com/doi/abs/10.1080/13668800701575077#.UzLFkfkhdUI>

U.K.: Tanaka and Waldfogel (2007) http://www.tandfonline.com/doi/abs/10.1080/13668800701575069#.UzLGE_khDUI

Sweden: Haas and Hwang (2007) <http://www.tandfonline.com/doi/abs/10.1080/13668800701785346#.UzLHTPKhdUI>
Duvander and Jans (2008) http://www.stressforskning.su.se/polopoly_fs/1.18719.1320939636!/WP6.pdf

Australia: Hosking *et al.* (2010) <http://onlinelibrary.wiley.com/doi/10.1111/j.1741-3737.2010.00766.x/abstract>

European Union: Meil (2011) <http://www.questia.com/library/journal/1G1-350681378/european-men-s-use-of-parental-leave-and-their-involvement>

Spain: Fernández-Cornejo, Escot, *et al.* (2016) <http://bit.ly/2aj1t3j>

Fathers' involvement in childcare



Reduction in motherhood labor penalty

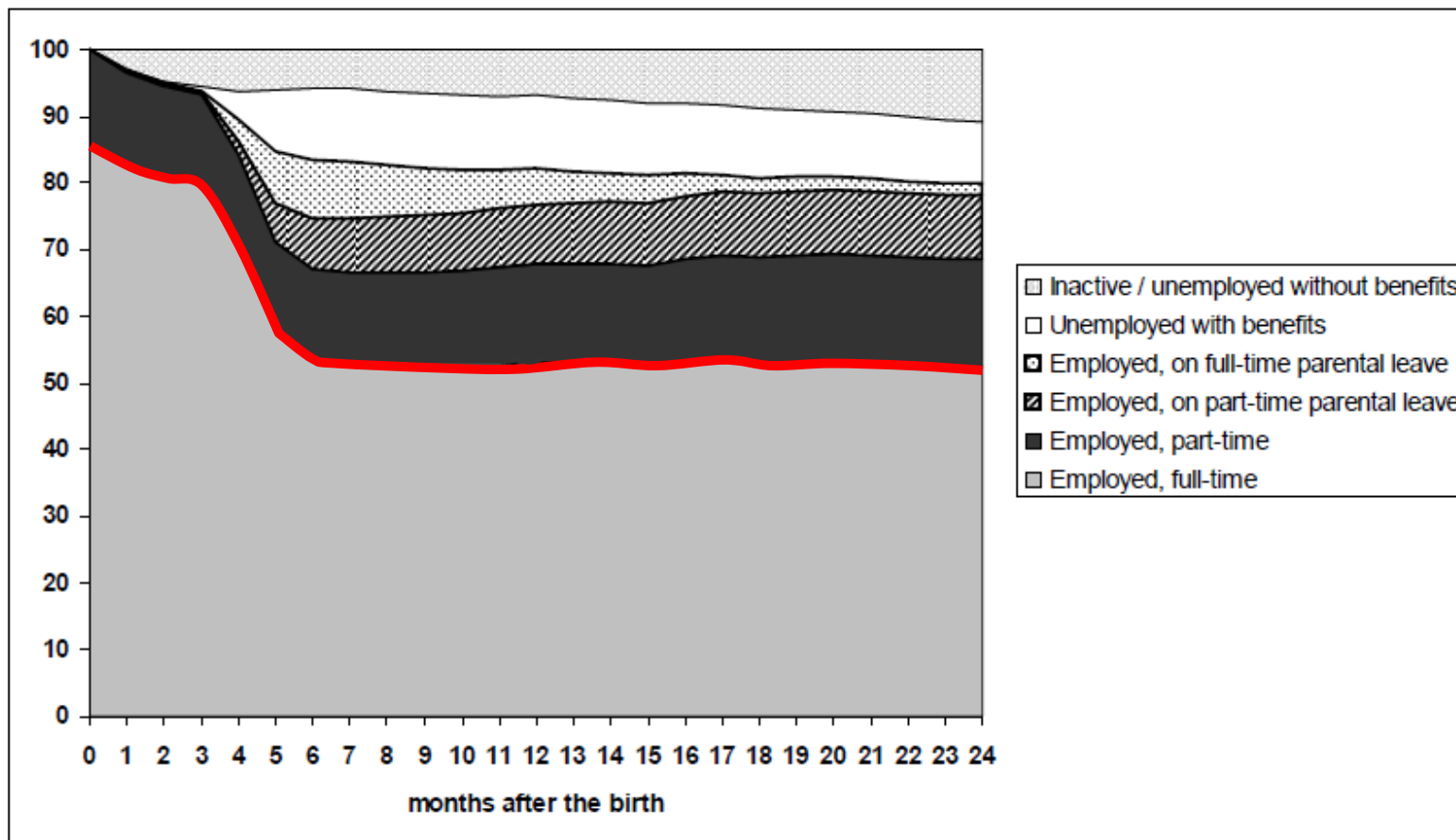
What happens after the birth of the baby:

	Mothers	Fathers
• Duration of leave	162,7 days	16,8 days
• Joined previous work after leave	84,2 %	94,3 %
(When returned to the work...)		
• Switched from working full-time to part-time work	15,1 %	2,3 %
• Cut working week a few hours (without switching to work part time)	22,7 %	1,7 %
• Requested to work with a more flexible schedule	9,4 %	3,7 %
• Requested a shift change in order to have a shift more compatible with childcare	6,3 %	2,2 %
• Switched from split to continuous work day	4,8%	0,3 %
• Began to use for the first time, or more than before, telecommuting (working from home)	3,1 %	2,6 %
N	1377	1522

"Survey on labor-family balance among couples in the region of Madrid", 2016, funded by Plan Nacional de I+D

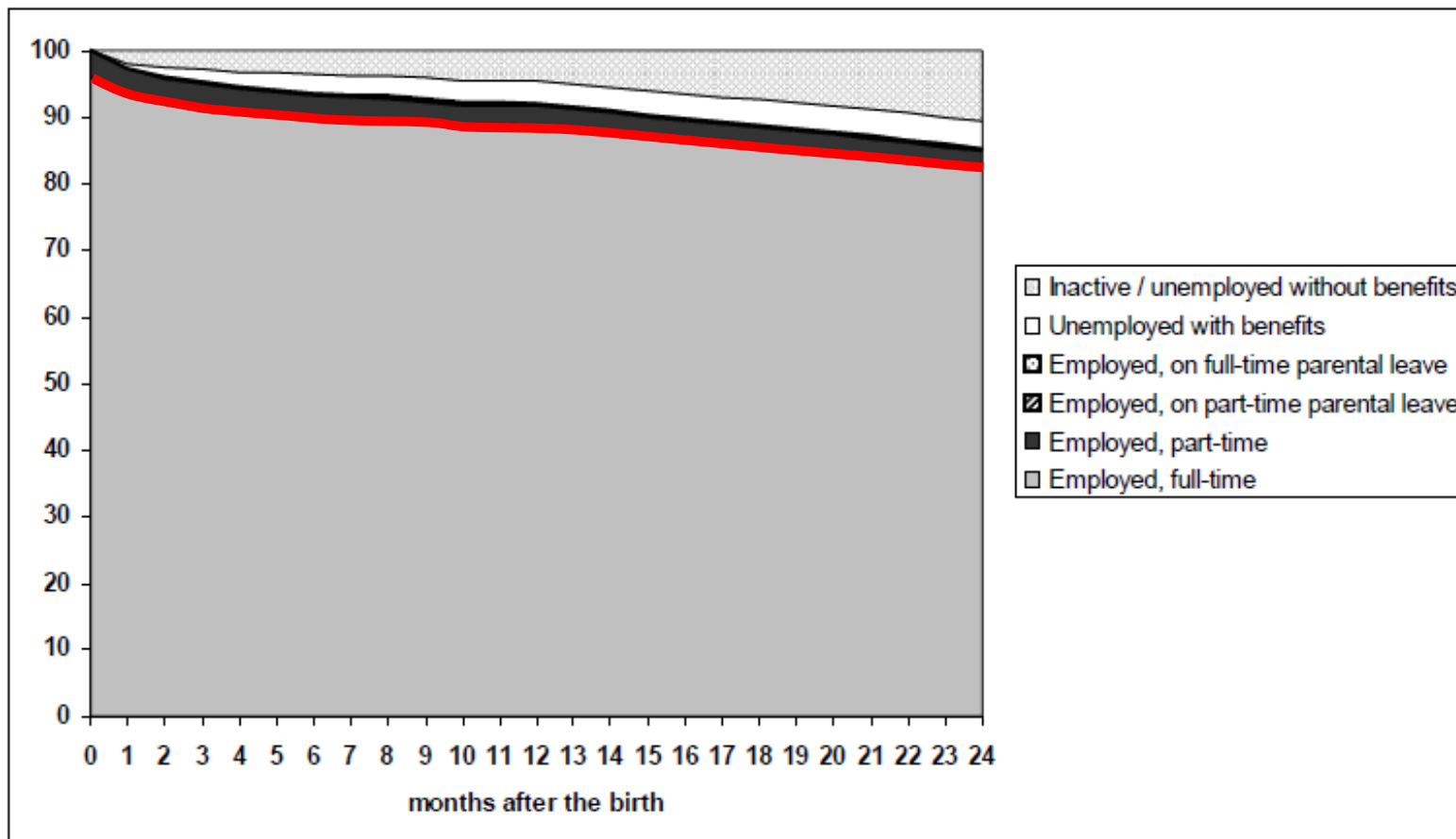
<http://bit.ly/1tjt88C> . Sub-samples of Wage earners mothers and fathers.

Mothers' evolving relationship with the labor market for those employed at the time of the birth of their first child. **Spain:** A cohort of children born in 2005 and 2006.



Fuente: Irene Lapuerta, El País, 2-June-2016 http://elpais.com/elpais/2016/06/23/media/1466694667_389361.html

Fathers' evolving relationship with the labor market for those employed at the time of the birth of their first child. **Spain:** A cohort of children born in 2005 and 2006.



Fuente: Irene Lapuerta, El País, 2-June-2016 http://elpais.com/elpais/2016/06/23/media/1466694667_389361.html

Some literature linking mother participation in labor market and father participation in childcare:

Raley, S. and Bianchi, S. M. and Wang, W. (2012): “When Do Fathers Care? Mothers’ Economic Contribution and Fathers’ Involvement in Child Care”, *American Journal of Sociology*, 117(5), 1422-1459.

Bonney, J. F. and Kelley, M. L. (1999): “A Model of Fathers' Behavioral Involvement in Child Care in Dual-Earner Families”, *Journal of Family Psychology*, 13(3), 401-415.

Some literature about motherhood penalty:

Budig, M.J. and Hodges, M. (2010): “Differences in Disadvantage: How the Wage Penalty for Motherhood Varies across Women’s Earnings Distribution”, *American Sociological Review*, 75 (5): 705–28.

Molina; J. A. and Montuenga, V. M. (2009): “The Motherhood Wage Penalty in Spain”. *Journal of Family Economic Issues*, (2009) 30, 237-251.

Ekberg, J; Eriksson, R.; and Friebel, G. (2013): “Parental leave —A policy evaluation of the Swedish “Daddy-Month” reform”. *Journal of Public Economics*, 97, 131–143

Our **hypothesized model** of the determinants of motherhood labor penalty

We assume that there are **two main driving forces** that simultaneously determine how housework (especially childcare) is divided between the couple.

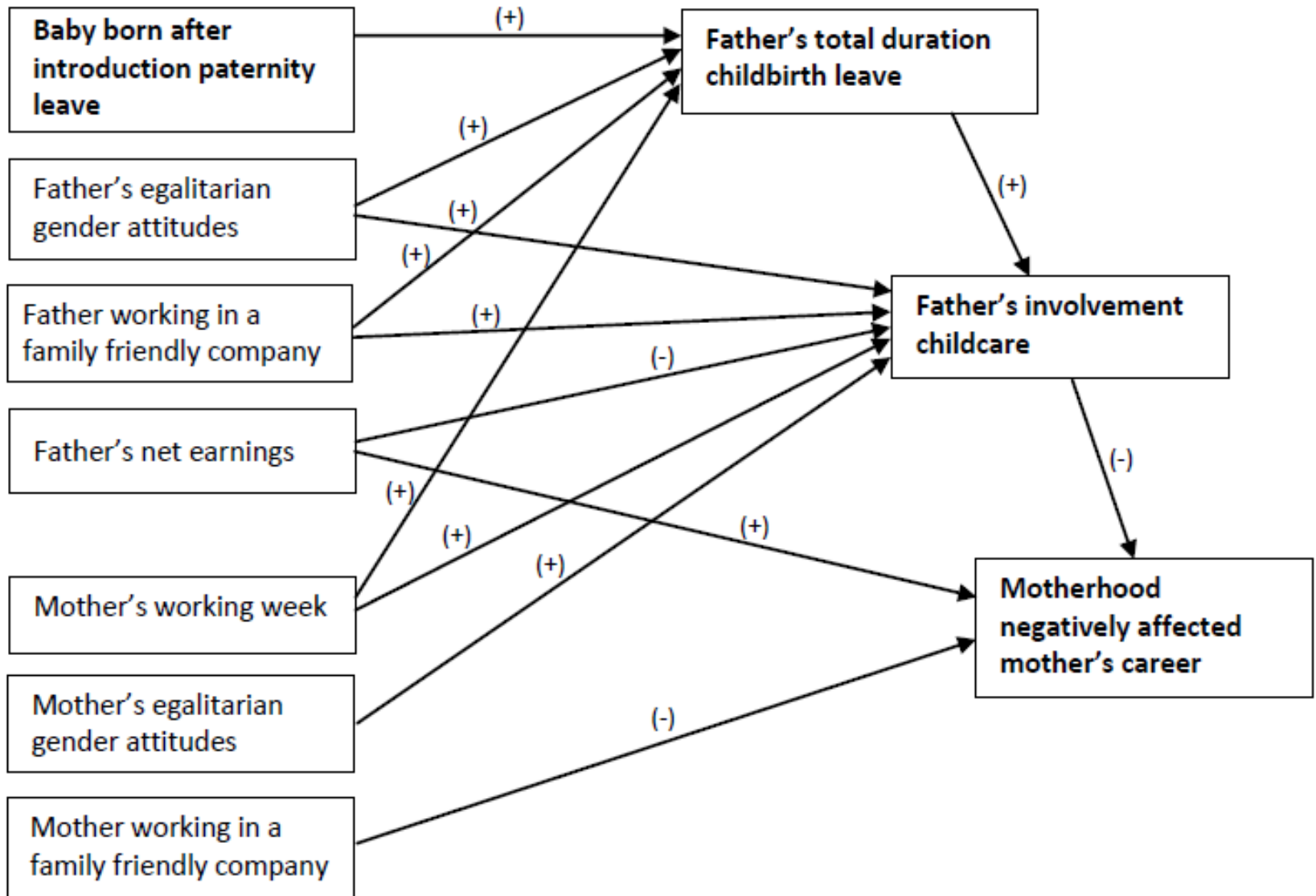
Economic incentives (and opportunity cost)

Gender norms (gender roles).

We base our hypothesized model in the **Identity Economics approach** (Akerloff and Kranton 2000, 2010)

Akerlof, G. A. and Kranton, R. E. (2000): “Economics and Identity”, *Quarterly Journal of Economics*, 115(3), 715-753. <http://qje.oxfordjournals.org/content/115/3/715.abstract>

Hypothesized model



Hypothesis 1. The fact that the father is actively involved in the care of his child is negatively related to the work penalty experienced by the mother

Hypothesis 2. The introduction of egalitarian reforms in the parental leave system (that give new leaves to fathers) help reduce gender inequality in the labor market

Hypothesis 3. The fact that the father and the mother have egalitarian gender attitudes is negatively related to the labor penalty experienced by the mother.

Hypothesis 4. The organizational and economic restrictions affect the motherhood labor penalty.

Data:



Data:

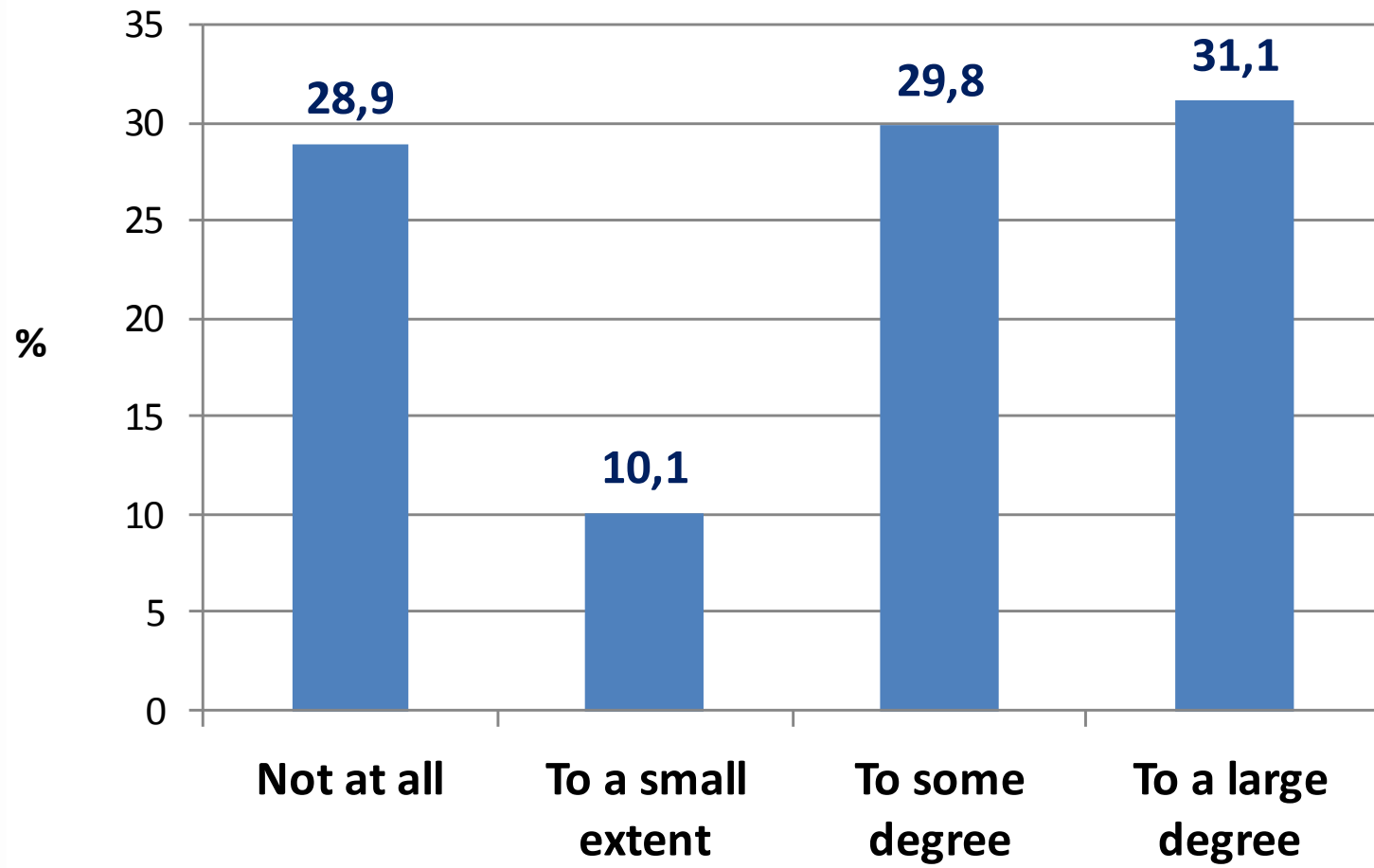
"**Survey on the use of parental leave and its labor consequences**", funded by the Spanish Institute of Women

<http://www.inmujer.gob.es/areasTematicas/estudios/estudioslinea2013/docs/EvaluacPermisoPaternidad.pdf>

- Survey of **fathers and mothers of children between 3 and 8 years old**. January-May **2012**. **Unit of analysis: the couple**.
- We distributed 2500 questionnaires to parents through a **random sample of primary schools and Kindergartens**.
- The questionnaire was divided into **three parts**: a first part devoted to the household (7 questions); a second part to the mother (39 questions); and a third part dedicated to the father (46 questions).
- A **final sample of 1130 households** completed the questionnaires.
- Thus from the initial sample we selected a **sub-sample of 795 heterosexual dual-earner couples** (at the time of the birth).

“Motherhood negatively affected mother’s career”

“In your opinion, being a mother, has impaired or slowed your career advancement?”



“Father’s involvement in childcare (14 non-playful activities)”

We asked the mother and the father about who performed **18 childcare activities**.
The response options were:

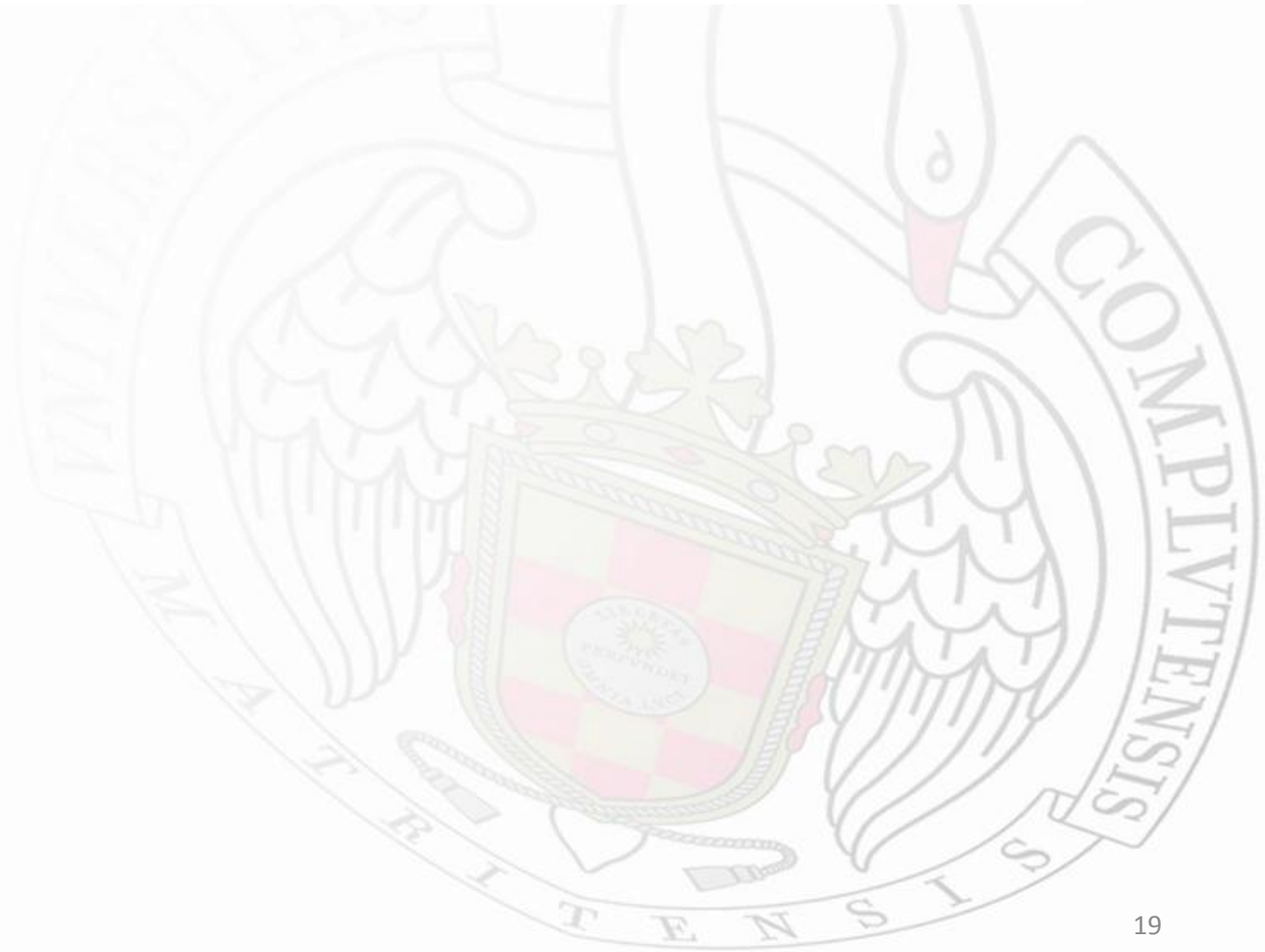
1	2	3	4	5
Mother mostly	Mother rather more	Same	Father rather more	Father mostly

If the average score is near to “**1**”, the participation of the fathers in this activity is very low; if the average score is near to **5**, the participation of the fathers in this activity is very high; “**3**” means equality.

In the day-to-day, between zero and two years of the child, which of the members of the couple was in charge of the following activities?	Average score of mother’s and father’s opinion		
	N	Mean	
h) Washing child’s clothes	766	1.640	Non-Playful
g) Buying child’s clothes	764	1.709	Non-playful
b) Cooking child’s food	772	1.740	Non-playful
i) Organizing housework and childcare	770	1.839	Non-playful
c) Feeding the child	768	1.956	Non-playful
o) Taking child to the doctor	770	2.094	Non-playful
a) Buying child's food	772	2.138	Non-playful
q) Taking care of the child when he/she becomes ill at school/nursery	762	2.175	Non-playful
n) Comforting child when tired or ill	769	2.229	Non-playful
d) Changing diapers	767	2.301	Non-playful
p) Getting up at night	764	2.323	Non-playful
f) Putting child to bed	764	2.328	Non-playful
r) Dropping/ picking up child at school	753	2.427	Non-playful
l) Reading books to child	763	2.519	Playful
e) Bathing child	769	2.573	Non-playful
k) Taking child to the park	772	2.661	Playful
m) Teaching child something new	760	2.736	Playful
j) Playing with child at home	771	2.844	Playful

“Father’s involvement in childcare (14 non-playful activities)”

The measure is the average score of the 14 non-playful activities.
(Cronbach's alpha=0.883).



“Father’s total duration of childbirth leave”

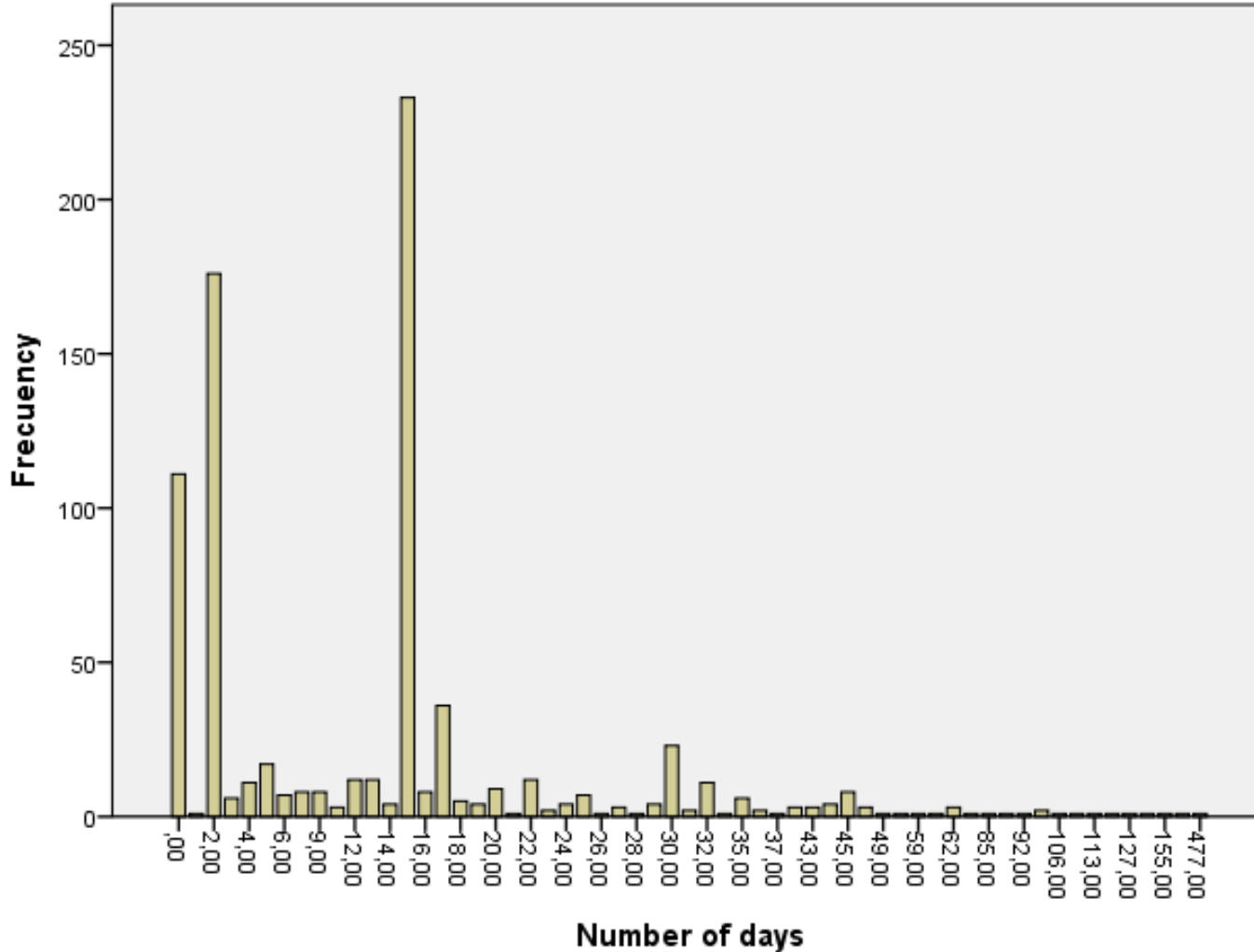
Full sample.

Average total duration of leaves:

Fathers: 14,5 days

Mothers: 144,6 days

Father's total duration of leave



“Baby born after introduction paternity leave”

is a **dichotomous variable** (1=yes; 0=no) indicating that the reference child was born after March 2007 (the date of the introduction of the 13-day paternity leave).



“Egalitarian gender attitudes”

Instrument developed from **9 questions** addressed to the father and to the mother.

“To what extent do you agree or disagree with each of these statements?”

Likert scale 0-5, where “0=Strongly disagree” and “5=Strongly agree”.

Example of 3 items:

- “I consider it far more unpleasant to hear a woman who swears and says offensive words rather than to hear a man doing the same” (reverse scoring);
- “A working mother can establish as warm and secure relationship with her children as a mother who does not work”;
- “A man may be as qualified as a woman to care for his baby and connect emotionally with him”

The measure is the average score of these 9 items

(Cronbach's alpha= 0.732 for mothers and 0.747 for fathers).

“Working in a family-friendly company”

Instrument developed from **2 questions**

“indicate to what degree the company or organization where you worked met the following aspects when your baby was born”.

Likert scale 0-10, where “0=not at all” and “10=totally”.

Two items

- “My company was a family-friendly company in the sense that it facilitated the reconciliation of work and family life of the staff”
- “The managers of my company were aware of the importance of the reconciliation policies”.

The measure is the average score of these 2 items

Cronbach's alpha= 0.916 for the mother and 0.905 for the father).

“Father’s net earnings”

It is the monthly net income of the father.

There are **8 categories**: from (1) “Fewer than 600 Euros” to (8) “More than 4,000 Euros”.

“Mother’s working week”

It is the number of hours the mother worked per week at the time when the baby was born.

We also used 5 control variables. None of these five variables had a statistically significant effect, and therefore they were not included in the path analysis subsequently developed.

Some descriptive results:



“Father’s total duration of childbirth leave”

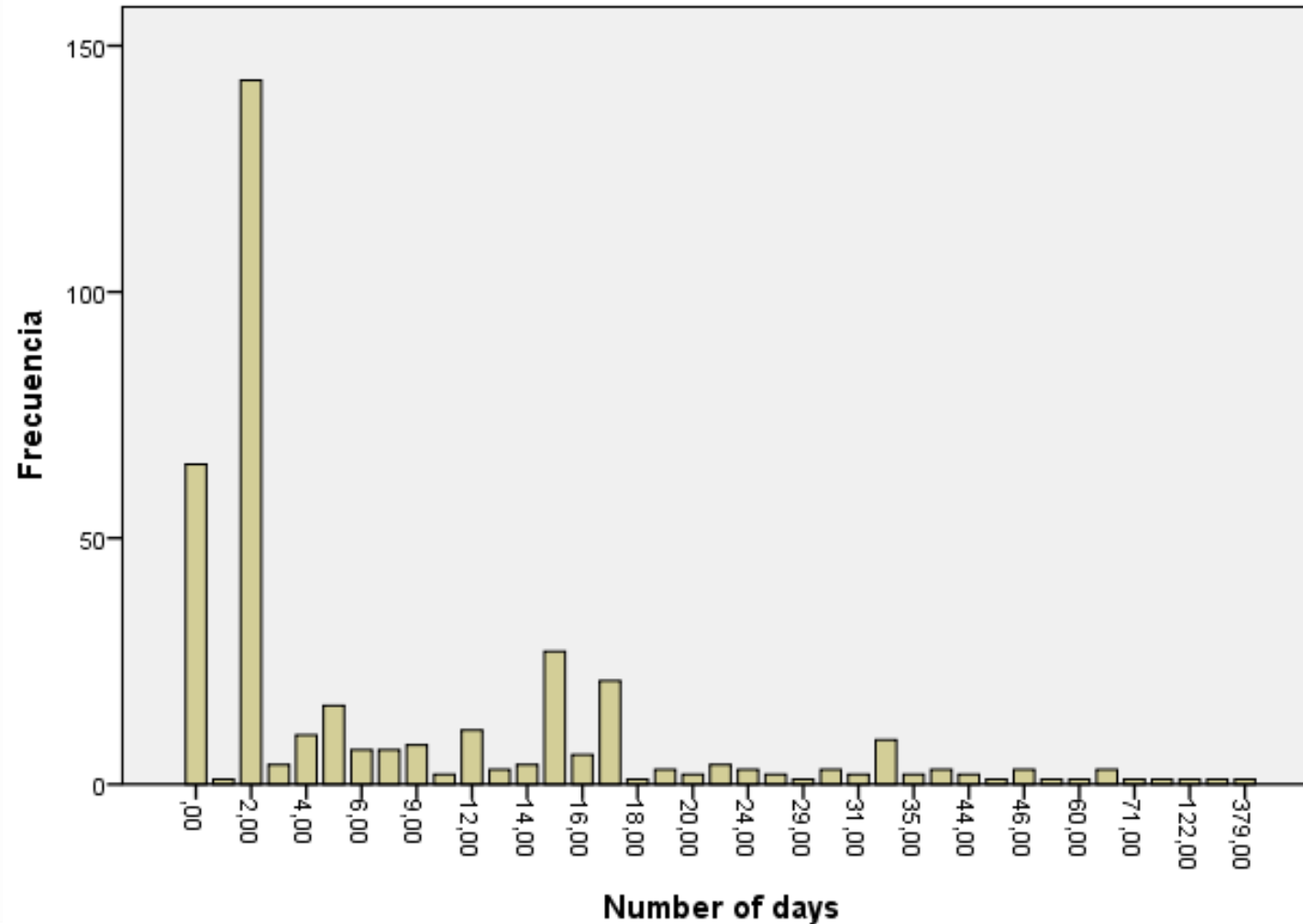
Baby born **before** March 2007.

Average total duration of leaves:

Fathers: 10,5 days

Mothers: 154,6 days

Father's total duration of leave (before)



“Father’s total duration of childbirth leave”

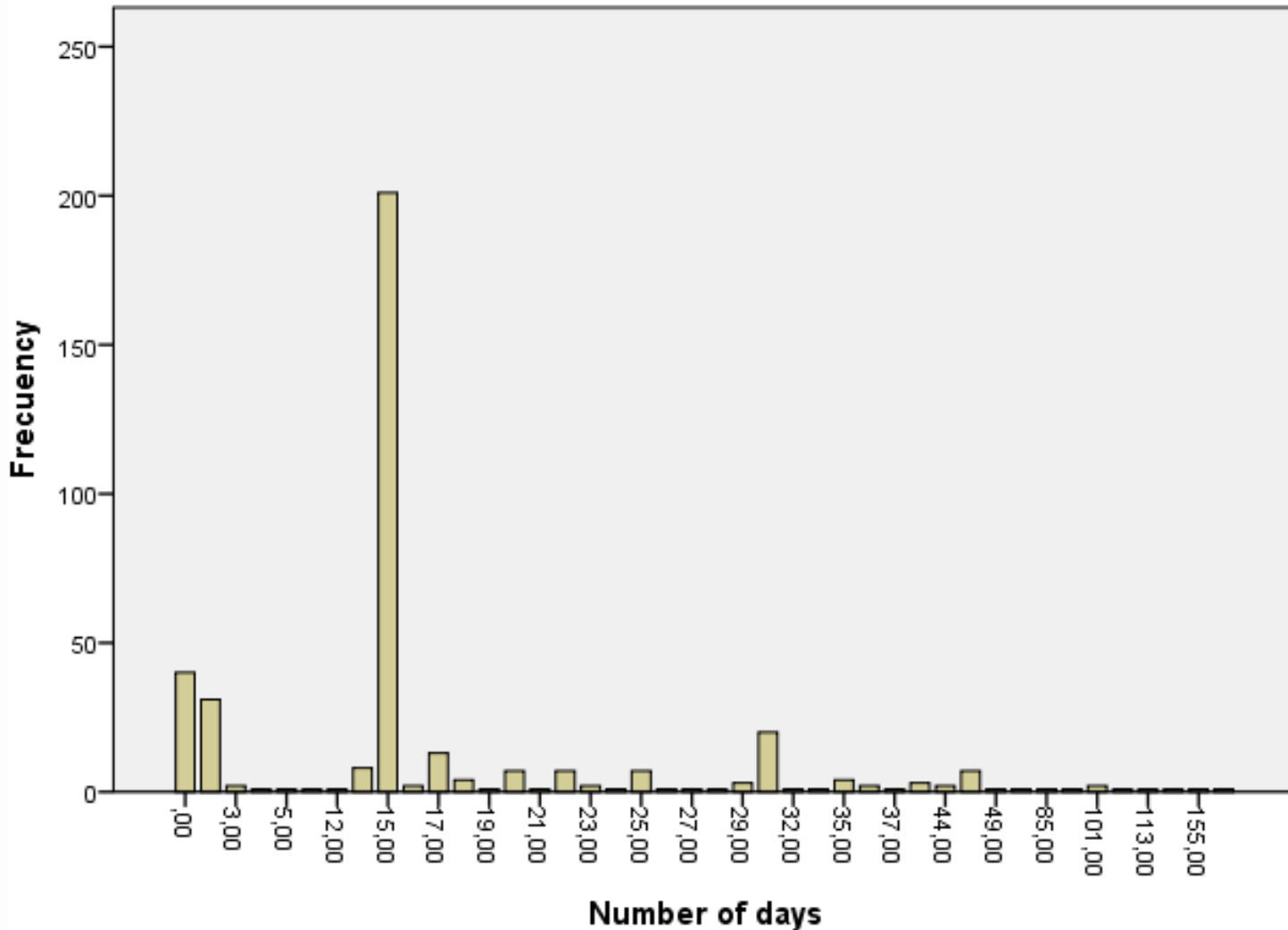
Baby born **after** March 2007.

Average total duration of leaves:

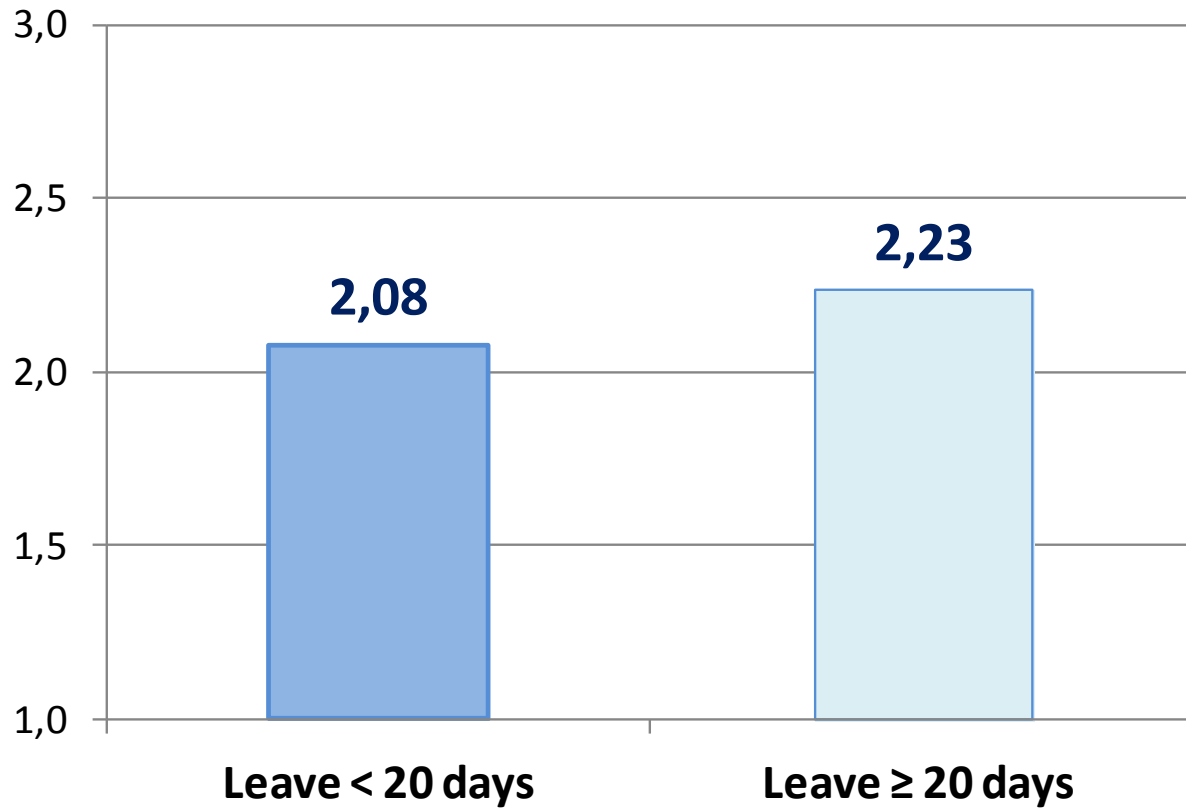
Fathers: 18,5 days

Mothers: 137,0 days

Father's total duration of leave



"Father's involvement in childcare (14 non-playful activities)". Average scores

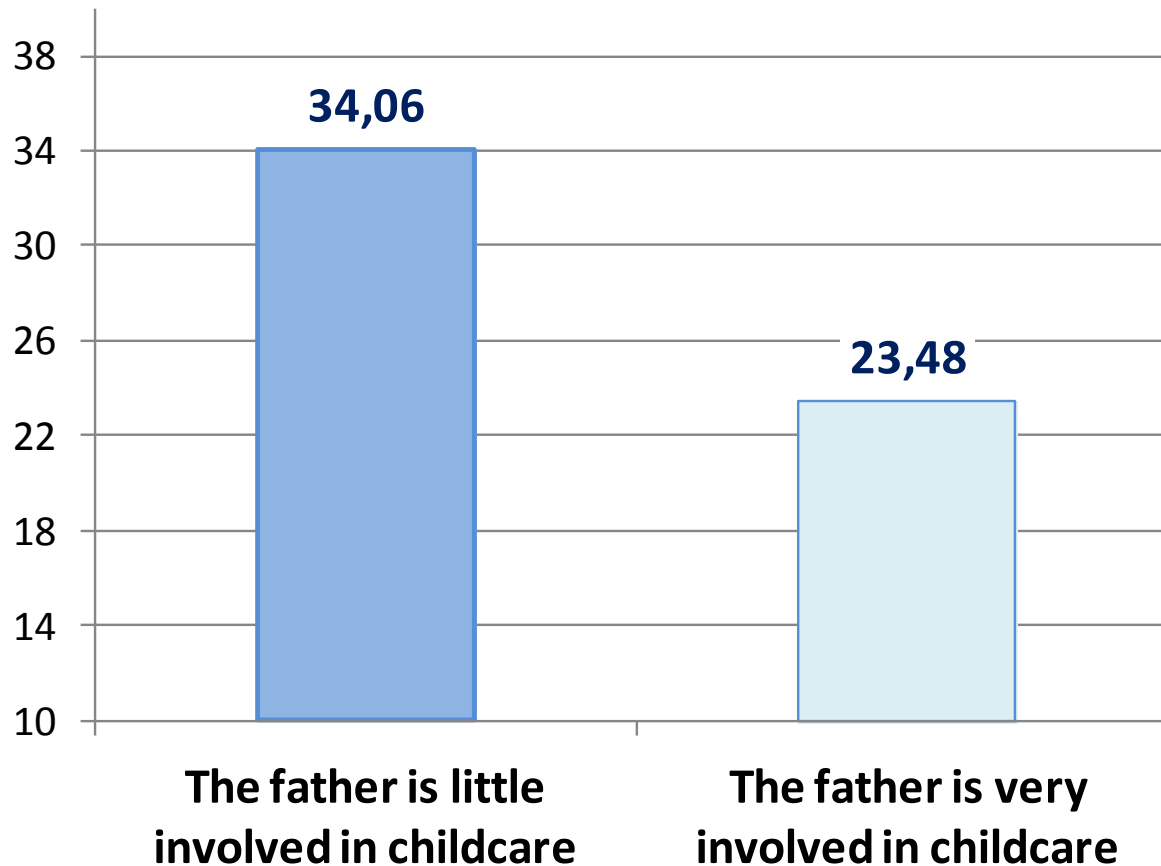


$r = 0.126^{*}$**

t-test = 2.77

(p = 0.006)

% Mothers that think that motherhood "to a large degree" negatively affected their careers



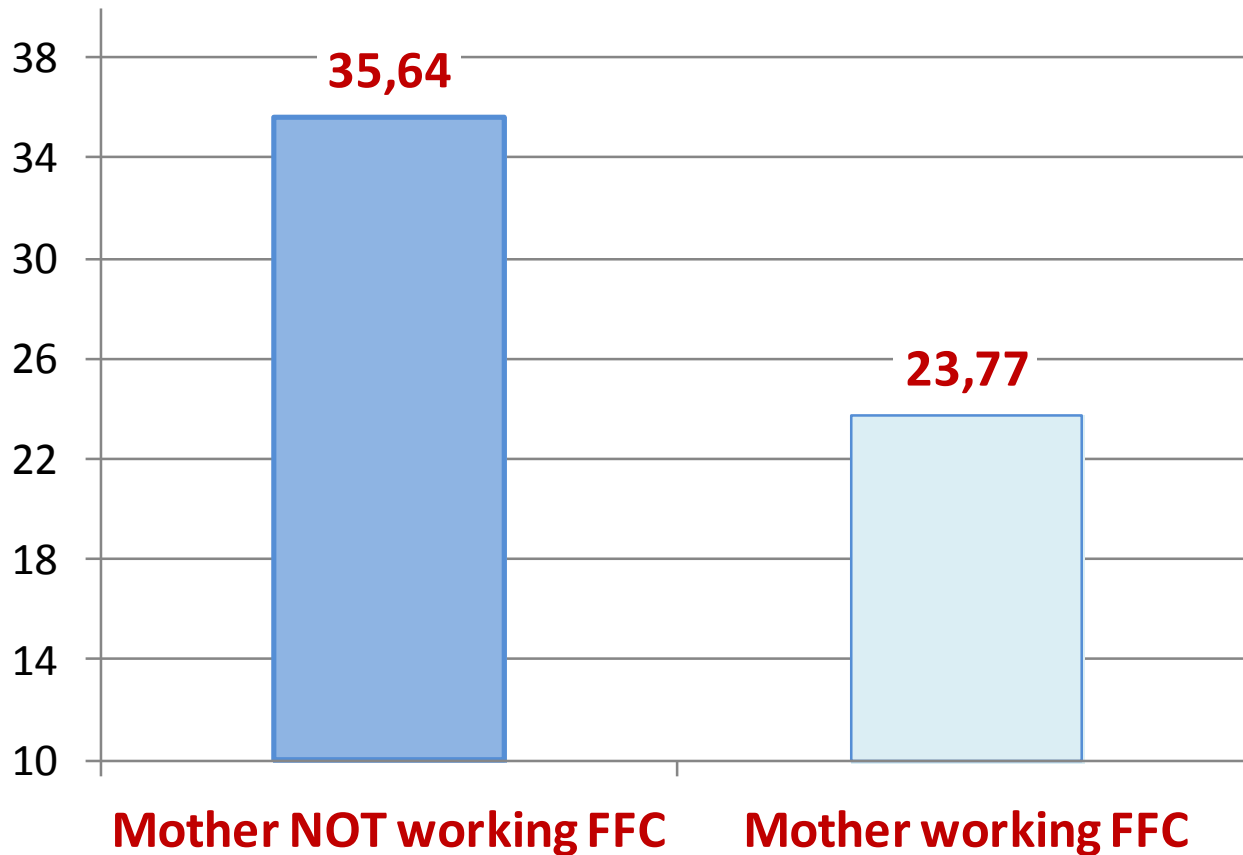
$r = -0.144^{***}$

t-test = -3.72

(p = 0.000)

Note: we assume that the father is very involved in child care if the score obtained in the instrument "Father's involvement in childcare" is equal or greater than its percentile 80.

% Mothers that think that motherhood "to a large degree" negatively affected their careers



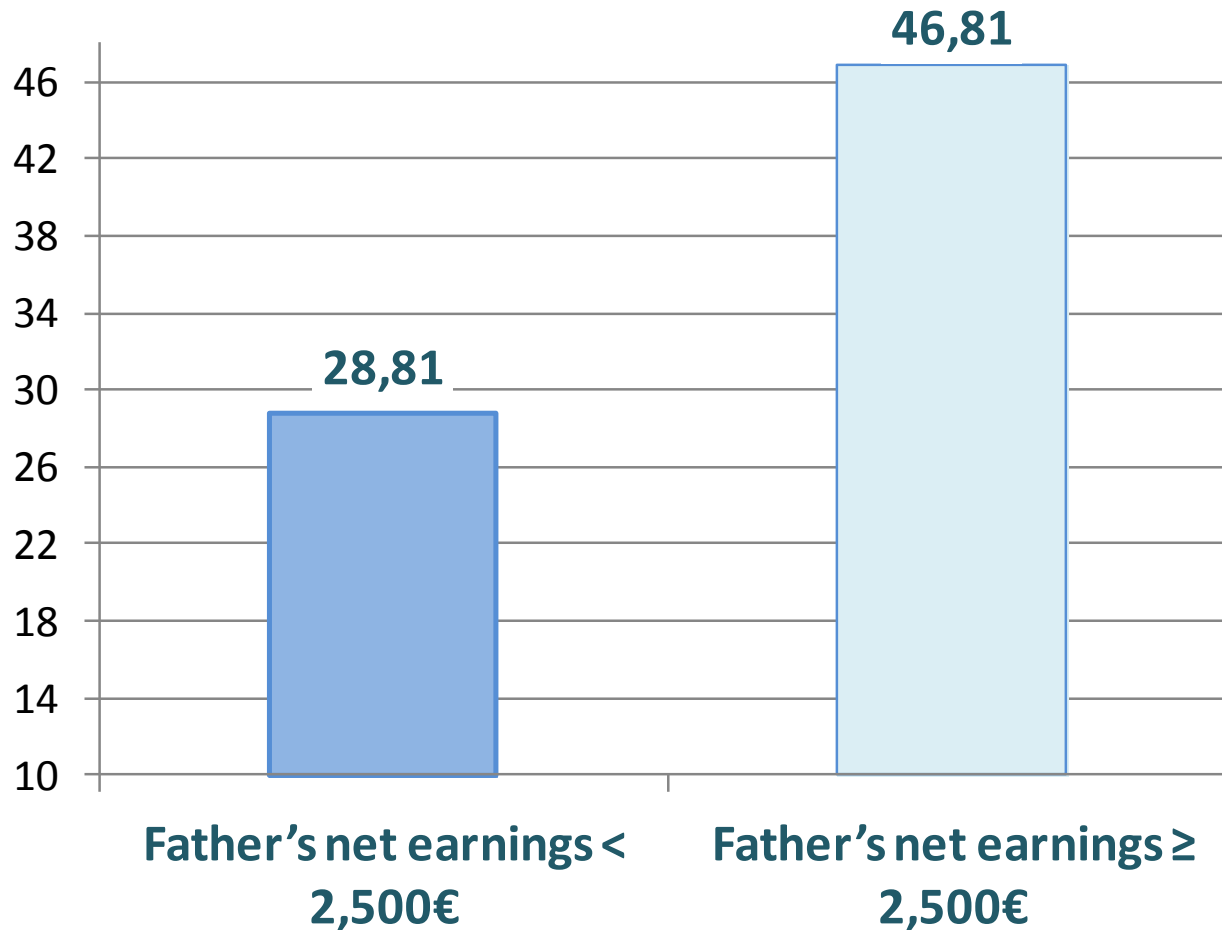
$r = -0.160^{***}$

t-test = -3.44

(p = 0.000)

Note: we assume that the mother works in a family friendly company if the score obtained in the instrument "Mother working in a family friendly company" is equal or greater than its percentile 80.

% Mothers that think that motherhood "to a large degree" negatively affected their careers



$r = 0.203^{***}$

t-test = 4.23

(p = 0.000)

Path analysis results



Path analysis was conducted with the **Amos 22.0** program in the **SPSS 22.0** software package.

Good fit to the data (final model):

$\chi^2=17.981$, $df=18$, $p=.457$

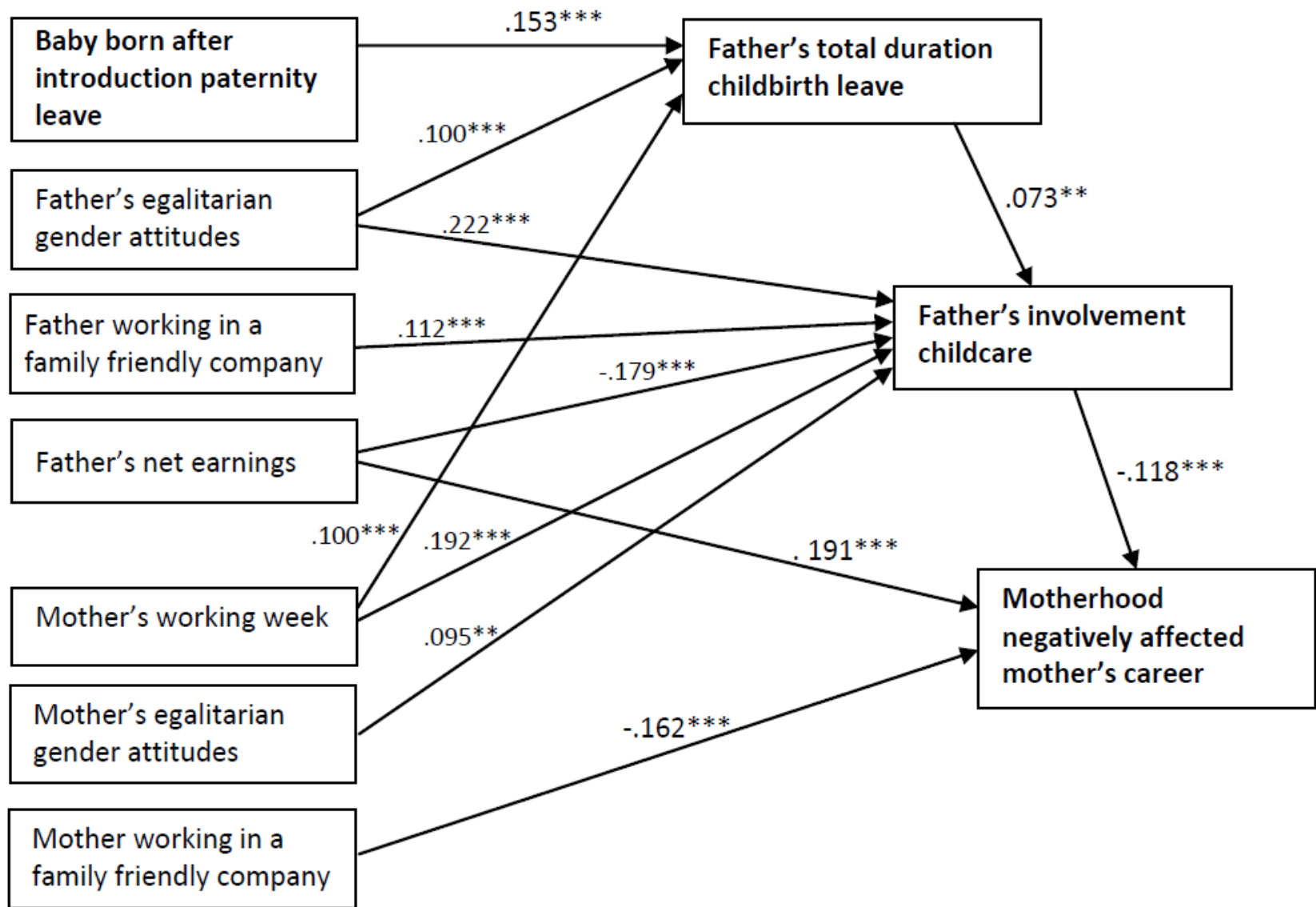
CMIN/DF=.999,

CFI=1.000,

RMSEA=.000.



Path analysis for the determinants of motherhood labor penalty (final model).



Notes: N = 795; *p < .1; **p < .05; ***p < .01. Standardized coefficients are provided for each path in the model tested.

Conclusions



Conclusions:

- In short, this study provides some empirical evidence that the introduction of egalitarian reforms in the parental leave system (that give new leaves to fathers) may help to reduce gender inequality in the labor market.
- In this paper we have obtained some evidence in favor of the hypotheses that when the father is actively involved in the care of his child the mother tends to experience less work penalty.

According to Kaufman (2013), there are three ways to explain why may a greater paternal involvement promote less motherhood penalty:

1. When men and women share tasks in one domain (e.g., at home), they are more likely to share tasks in another domain (labor market).
2. Men's greater participation in home life frees women to participate in public life.
3. Men who are more involved with their children are likely to raise girls and boys who have a greater sense of gender equality.

Given the characteristics of our sample our research may have provided evidence that acts through the second way.

- Gender attitudes and working conditions of both parents are also important (direct or indirect) determinants of motherhood penalty.

Policy implications:

- A public policy that aims to promote a significant advance in shared responsibility between mothers and fathers in childcare (and the advance in the elimination of motherhood penalty) needs to progressively equalize paternity leave with maternity leave: “Equal, non-transferable and well-paid parental leaves”.

For the case of Spain: proposal of a progressive evening up of paternity leave with maternity leave, in such a way that, in the end, both mother and father would enjoy 16 weeks of non-transferable (and well paid) leave.

- Advance in reconciliation policies applied by companies and public sector.
- Reconciliation policies must be effectively open to male workers (share responsibility between women and men in the use of reconciliation policies of companies)

Limitations of our research:

- Our data base is cross-sectional → Need to use longitudinal data.
- We use a “subjective perception” indicator of motherhood penalty → better an indicator of change in the earnings of the mother.

The background of the slide features a large, faint watermark of the University of Compiègne seal. The seal is circular and contains a central shield with a red and white checkered pattern. Above the shield is a crown, and below it is a banner with the Latin motto 'VERITAS LIBERABIT VOS'. The outer ring of the seal contains the text 'UNIVERSITAS COMPIEVTENSIS'.

**Thanks for your
attention!**