

Parental leave system design impacts on its gendered use: Paternity leave introduction in Spain

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Abstract

Objective: The article evaluates the 2007 introduction of nontransferable and fully paid paternity leave in Spain.

Background: Previous research has focused on paternity leave reforms, especially in the Nordic and continental countries. This article studies characteristics of the parental leave system design, including transferability, payment, and purpose of different types of leave for mothers and fathers in a Mediterranean country.

Method: We use a quasi-experimental approach based on a sample of heterosexual dual-earner couples with children born before and after the paternity leave introduction. We estimate differences in differences regression models.

Results: The 2007 reform caused a significant increase in fathers’ number of days of parental leave. Most fathers used the whole nontransferable and fully paid paternity leave, but they hardly used transferable or unpaid leave. Mothers used all of these, especially paid leave.

Conclusion: The number of nontransferable fully paid days of parental leave provided by law approximates the actual number of days most fathers used.

Implications: The policy design matters. A design of equal, nontransferable, and fully paid leave for each parent is necessary for equal use by fathers and mothers—and thus for gender equality in families and work.

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KEYWORDS

dual-earner couples, early childhood, family policy and law, father involvement, gender roles, parental leave

How public policies deal with childcare impacts on gender equality within families and in the labor market. Providing affordable and high-quality childcare and education services and the parental leave system (PLS) are vital policies to improve female labor market participation (Castellanos-Serrano, 2020). However, the impacts of both policies on men's involvement in childcare point in opposite directions. The PLS can directly increase men's available time for childcare, whereas childcare services may increase the time to participate in the labor market (Castellanos-Serrano & Perondi, 2022). Today, the PLS, overwhelmingly aimed at mothers, serves as a structural reinforcement of traditional gender roles. Nevertheless, PLS reforms can be a first step in supporting the increase in men's involvement in childcare and, therefore, a shift men's behavior and gender roles (Bünning, 2015).

Using time for care is considered a key indicator for measuring gender equality in feminist theory, as reflected by the distribution of paid and unpaid work (Eydal et al., 2018). Having more days of paid parental leave (PPL) usually implies more time spent on childcare afterward (Almqvist & Duvander, 2014). Fernández-Cornejo et al. (2016) measured how using more days of parental leave (PL) was related to greater involvement in childcare over the 2 first years of a child's life in Spain, as is the case in Iceland (Arnalds et al., 2013). If most fathers generally take a significant portion of the PLS, this becomes the male norm of parenthood, and gender roles change little by little (Arnalds et al., 2022). When fathers spend more time in childcare, gender inequality is reduced, as care and work practices become less ruled by traditional gender norms. Thus, the objective of this article is to provide evidence on which kind of PLS reform and final design can transform men's behavior and promote equal use of the PLS. Some research has focused on PLS use by women and its consequences on their labor market participation (Akgunduz & Plantenga, 2013). Other studies examined men's use of PPL and its results for men's and women's participation in the labor market and the "stalled revolution" (Hook, 2006). That is, although many women work, most men do not act as autonomous caregivers. More recently, authors have been analyzing the ongoing but slow process of change in the gender division of labor and the transformation of gender social norms (Bünning, 2015; Goldscheider et al., 2015).

The number of days used by fathers and mothers and the impact of this duration on their subsequent involvement in childcare are key to evaluating the PLS and its effects on gender equality in family dynamics and the job market. The initial care period affects bonding and fathers' care involvement, which lasts over time (Almqvist & Duvander, 2014; Fernández-Cornejo et al., 2016; Haas & Rostgaard, 2011). An increase in men using the PLS goes against traditional gender roles. It reduces productive and reproductive gender gaps—that is, the gendered division of labor, one of the critical elements of gender inequality.

This article presents the concept of the PLS to overcome differences in terminology and characteristics that may distort analysis and comparisons across time and countries (Blum et al., 2018). It analyzes the change in a labor policy that significantly affects labor conditions, family and gender dynamics, fertility rates, and children's well-being (Akgunduz & Plantenga, 2013; Feldman & Gran, 2020). It evaluates the types of parental leave used, the extent of use, and who uses them. The PLS has recently been reviewed at the European Union level with the 2019 Work–Life Balance Directive, and future reforms in various countries are taking place or expected to take place to transpose the directive in the short term because it is mandatory. Spain completely reformed its PLS in 2021, becoming the first—and so far only—country in the world to provide equal, non-transferable, and fully paid parental leave for mothers and fathers. There is as yet no official database or evaluation of this 2019 reform. Jurado-Guerrero and Muñoz-Comet (2021) analyzed

parental leave use from 2008 to 2018, showing that most parents use all available paid parental leave regardless of social class, type of worker, type of contract, or education. However, there is a gap in how this trend originated, which is covered in this article. Why have the PLS reforms caused mass use by men in Spain but not in Germany? Evidence on policy design effects and impacts is urgently needed.

From an empirical point of view, it adds to the Nordic and continental cases that have evaluated their PLS reforms. This article describes which factors of their results are generalizable to other contexts, such as Mediterranean countries. It also constitutes, for the case of Spain, the first causal analysis that uses the number of days of leave as the unit of measurement. This article not only analyzes the percentage of fathers using the PLS (Escot et al., 2014) but also focuses on the study of the duration of the different types of leave. It is essential to discover the latter because lengthier leave periods could explain higher engagement in childcare (Arnalds et al., 2022).

BACKGROUND AND LITERATURE

The Spanish Context

The introduction of paternity leave in Spain was implemented in March 2007 by the Spanish Equality Act (the so-called *Ley Orgánica 3/2007 para la igualdad efectiva de mujeres y hombres*). Before this reform, debate on paternity leave was rare. Thus, this introduction surprised most parents, a factor that they did not consider in their decision-making process of having a child. However, as the 2007 Equality Act was conceived as a general and wider gender equality law, a subsequent broader political debate on gender roles, gender inequality in different areas, and the importance of male involvement in childcare took place in the media and in society in general. In this context, paternity leave was conceived as “the most innovative measure to foster work–life balance” and was introduced “to promote a more balanced share of family responsibilities.” It was presented as a gender policy that can contribute to changing gender roles, particularly men’s behavior. According to the last official Spanish survey on time use, conducted in 2009–2010, 74.7% of men spent 2 hours and 37 minutes a day involved in activities related to family and care, whereas 91.9% of women spent 4 hours and 29 minutes. Increasing the time men devote to care, as likely happens with those who take advantage of the PLS, reduces this gender gap and encourages a change in gender roles.

In 2007, the Spanish PLS involved different types of leave: maternity, paternity, breastfeeding, childbirth, and unpaid. The first four are similar in practical terms and are considered together as PPL; the last one is unpaid parental leave (UPL). The PLS design up to 2016 is described in Table 1.

Maternity and paternity leave were paid at 100% of income, financed by the Social Security system, with a ceiling of €3,642 a month in 2016. The Spanish monthly average wage was €1,929.70 (€1,677.60 for women and €2,160.40€ for men) in 2016. The 90th percentile of monthly wages was €3,488.00 (€3,097.30 for women and €3,795.30 for men) in 2016 (Instituto Nacional de Estadística, 2018). Thus, most parents were paid 100% of their income, and there were strong economic incentives to take both maternity and paternity leave. Maternity leave already amounted to 112 day (16 weeks) on a full-time basis and was fully paid from 1994. Six weeks (42 days) were mandatory for the mother, and the remaining 10 weeks (70 days) could be transferred to the father, although it was an individual mother’s right to decide this matter. Thirteen days of paternity leave, which was introduced in 2007, together with the previously existing 2-day childbirth leave, summed to the right of 15 fully paid days for fathers, which was nontransferable. This length of time was maintained until January 2017. In addition, before and after the 2007 reform, some companies offered extra days of paternity or maternity leave

TABLE 1 Characteristics of parental leave system in Spain up to 2016

| Characteristics of parental leave system in Spain | | | | | | | | |
|---|-----------------------|--------------------------|----------------|-----------------|---------------------|--------------|----------------------|----------------------|
| Type of leave | Available no. of days | Intense use ^a | Change in 2007 | Transferability | Remuneration | Care purpose | Potential use by men | Included in variable |
| Maternity leave (initial 6 weeks) | 42 | 37.8 | No | No | Fully paid | Yes | No | PPL |
| Maternity leave (10 weeks) | 70 | 63.0 | No | Yes | Fully paid | Yes | Yes | PPL |
| Breastfeeding leave | 14–28 ^b | 12.6 | No | Yes | Fully paid | Yes | Yes | PPL |
| Childbirth leave | 2 | 1.8 | No | No | Fully paid | Yes | Yes | PPL |
| Paternity leave | 13 | 11.7 | Yes | No | Fully paid | Yes | Yes | PPL |
| Annual leave/holidays | 30 | 27.0 | No | No | Fully paid | No | Yes | H |
| UPL (full job protection) | 253 | 215.1 | No | No | Unpaid ^c | Yes | Yes | UPL |
| UPL (reduced job protection) | 983 | 884.7 | No | No | Unpaid ^c | Yes | Yes | UPL |
| Extra PPL ^d | Unknown | — | Unknown | No | Fully paid | Yes | Sometimes | PPL |

Note: Fully paid by Social Security; more than 90% of population earn income below payment ceiling. H = holidays; PPL = paid parental leave; UPL = unpaid parental leave.

^aNinety percent of available days.

^bDepending on collective agreements and sectors: 14–28.

^cLow lump sums in some regions over some years (see more in Lapuerta, 2013).

^dProvided for and paid by particular employers. There are no available data, and this can widen the range of PPL and total time values before and after the 2007 reform.

beyond the general labor law, financed from their budget. Paternity leave in the public sector has covered 15 days since 2006.

Employers fully paid for the 2-day childbirth leave for fathers and the breastfeeding leave, which could be used by either the mother or the father. This leave, consisting of a reduction of 1 hour per day, could be accumulated in some sectors, resulting in a leave lasting from 2 to 4 weeks depending on the collective agreement. Finally, UPL for childcare (*excedencia* in Spanish) is an individual and nontransferable right for all employees (mothers and fathers) that lasts for up to 3 years. It allows the employee to return to the same job during the first year without affecting pension accrual. Before 2007, fathers already had this individual UPL.

Administrative data show that in 2016, the average PPL taken by mothers was 113.13 days. Public administration institutions do not provide data on the average duration of paternity leave (Seguridad Social, 2022a, 2022b). Slightly more than 1% of maternity leave was transferred to fathers in 2018 (Seguridad Social, 2022b). This proportion has been stable since 2005 (Escot et al., 2014). Compared with the majority use of PPL, only 7% of mothers and 0.3% of fathers used UPL in 2008 (Escot et al., 2014).

Empirical background

Men spend less time than women caring for their children (Escot et al., 2014; Organisation of Economic Co-operation and Development, 2012). Specialization, opportunity costs, and gender roles are economic and sociological theories that attempt to explain this differential behavior between fathers and mothers. However, variables such as relative or absolute earnings and parents' gender role attitudes do not seem to offer a clear explanation of the unbalanced care work distribution and the shift toward a more traditional division of labor after couples have their first child (Schober, 2013). A broader use of paternity leave could be a mechanism to counteract this inertia, as was the case in Iceland (Arnalds et al., 2013). More parents shared care equally once nontransferable PPL reserved for fathers, known as fathers' quota, was implemented (Arnalds et al., 2022).

In several countries with different forms of parental leave for men and women with varying lengths of time, the different forms of leaves are used in diverse ways, and there is a strong relationship between design and use (Arnalds et al., 2013; Blum et al., 2018; Duvander & Haas, 2018). The design refers to the main PLS characteristics according to the law: subject of the rights (father, mother, or family), their level of payment, transferability, number of days, simultaneity, degree of flexibility in use, and so on.

Nordic countries were the first to introduce PPL for fathers. Sweden introduced the same parental leave for fathers and mothers in 1973 to make rights individual. Then, and for the first time in welfare states, a transferable labor right could be exchanged at will according to the couple's wishes. This made parental leave an exception in the rights within the welfare state (Castellanos-Serrano, 2019).

The different number of days taken by fathers and mothers is probably a structural factor reinforcing differentiated gender roles within the family sphere and the employment market (Arnalds et al., 2022; Castro-Garcia & Pazos-Morán, 2016). The different lengths and forms of PL for fathers and mothers reinforces gender stereotypes in many ways: through the exemplifying effect, by imposing stiffer restrictions on the work–life balance of fathers (individual costs), and by not allowing men enough time to gain experience as co-responsible parents. Providing different amounts of time to learn the childcare tasks contributes to amplifying fathers' perceptions of the costs of being identified as a primary caregiver (Akerlof & Kranton, 2010).

The relevant contribution to the existing literature on parental leave and gender equality comes from the effort to discover whether there is a causal relationship between the design of a PLS, considering the characteristics of each kind of parental leave, and its gendered use, beyond

the welfare context and the particular name used in a given country. This is a step to analyze how legal inequalities (differences in paternity and maternity leave or the use of particular characteristics within the PLS that do not work as gender-neutral) reinforce traditional gender roles and how they can be changed to reduce gender inequality.

Fathers' quotas are widely used in Nordic countries. Is this kind of leave (fully paid and nontransferable) intensively used in Spain, a Mediterranean country? Despite the different welfare and gender regimes of Spain and Nordic countries, using more extended parental leave is related to greater involvement by fathers in child care (Arnalds et al., 2022), so we want to test the previous step: Has the change in the law caused the change in men's behavior when using parental leave, and is this change not due to another cause, such as changes in individual characteristics or societal evolution. H1 refers to causality:

H1: The increase in the legal number of nontransferable fully paid days of PL reserved for fathers (treatment) causes an intense and widespread increase in the actual number of paid leave days used by fathers (outcome) beyond their individual and partner's social, economic, or labor characteristics. This is not the case for holidays and unpaid leave.

We use four indicators referring to leave use: PPL, holidays (H), UPL, and the total number of days of leave (T), which is the sum of the previous three, so the actual practice of the PLS could be observed and measured for the first time in Spain. To operationalize the hypotheses, we consider an "intense or substantial" use to be when resources used are more than 90% of those available. We consider a "widespread or generalized" use to be when more than 70% of each group (men or women) uses it. Moreover, we consider that reaching both use levels corresponds to a social norm favorable to using these types of leave. Which kinds of leaves are used, for how long and who uses them seems to be closely related to maintaining and changing gender roles and the corresponding impacts on the frequency of family models in society (Eydal & Roostgard, 2015).

The change in the number of days of leave used by fathers is especially relevant because evidence shows that taking more extended leave tends to foster the subsequent involvement of fathers in childcare (Arnalds et al., 2013, 2022; Duvander & Jans, 2008; Fernández-Cornejo et al., 2016, 2018; Kotsadam & Finseraas, 2011).

This article is based on the concept of the PLS (Andersen, 2018; Castellanos-Serrano 2019, 2022). Analyzing the whole system highlights the relationship that exists in practice among the various kinds of leave. All can be used to meet different needs, such as to protect mother's and newborn child's health and to allow childcare within families. These needs are intertwined most of the time. Moreover, while the terminology and characteristics in each country and across time differ, purposes are similar (Blum et al., 2018). The concept of PLS includes maternity, paternity, breastfeeding, parental, birth, and childcare leave, from fully paid to unpaid, to individual or family rights, to transferable or nontransferable types of leave. Different types of PLS design, given the current gender context, can shape two relevant aspects: social norms about appropriate time away from the labor market for men and women and the likelihood of making financially meaningful sacrifices. We aim to see the PLS effects on our sample, including any gender biases in leave use that may exist, as Andersen (2018) did for Denmark.

The PLS design impacts on fathers' transgression costs (i.e., the costs of acting against the social norm of women as the primary caregivers; Akerlof & Kranton, 2010). The cost of changing the use of PLS will be lesser on a social scale and at an individual level if some factors reduce the transgression costs, as could result from the introduction of a new law extending leave for fathers. In most European countries, the PLS is designed in a way that provides very different incentives for mothers and fathers. Although leave may be potentially equal in some contexts, at least formally, transferability may limit the possibility of an equal use to a great

extent in contexts where gendered use is well established. Thus, we propose examining how the legal PLS design sets use standards. We establish hypotheses on the gendered effect of the main PLS characteristics: H2 on transferability, H3 on payment level, and H4 on purpose.

H2: Transferability influences men's and women's behavior differently. Non-transferable and fully paid PL is used by most parents—fathers and mothers—for its whole duration. Most men do not use a significant part of the transferable parts of leaves, whereas most women use most of the transferable parts of fully paid parental leave.

On the other hand, the PLS may determine the likelihood of making financially meaningful sacrifices to care for children by men and women. In the Nordic countries, fathers respond to the so-called daddy months or father's quota (Arnalds et al., 2013; Avdic & Karimi, 2018; Castro-Garcia & Pazos-Morán, 2016; Ekberg et al., 2013; Haas & Rostgaard, 2011). Although these results are widely seen in countries where gender equality policies and culture are widely established, there is no such robust evidence in the Mediterranean or Southern European countries. In the Nordic countries, changes to PLS policy led to changes in fathers' behavior. Most fathers use PPL reserved for them when individual leave is nontransferable and highly paid. In contrast, international evidence confirms that if leave is a "family" or a transferable entitlement, it is overwhelmingly used by mothers (Blum et al., 2018; Castro-Garcia & Pazos-Morán, 2016). Similarly, when PPL is not highly paid, due to low payment replacement or low ceilings, even if it is nontransferable and paid, as is the case after the 2007 German reform, most men do not use it, although the reform enhances the use of leave (Bünning, 2015). Being highly paid is key in the decision to use the leave, particularly for men, in Nordic countries and Central Europe (Castro-Garcia & Pazos-Morán, 2016). Lapuerta (2013) observed that men hardly used UPL, whereas this research studied whether fully paid leave is the main form of parental leave used in the Spanish context.

H3: Being fully paid is critical for the general use of parental leave, and more so for men. UPL is used by a minority of the population, mainly women. Generally, men do not use UPL.

Moreover, annual leave (holidays) used jointly with parental leave can be considered part of the PLS or a different type of leave with which it can be compared. Adding vacation time to leave time can serve to extend time with the baby. Usually, holidays amount to 30 calendar days in Spain.

H4: Time resources not explicitly intended for childcare, even nontransferable and fully paid ones such as holidays, are not used in their entirety by most parents to extend the time to care for babies after the PPL is used, especially among men.

This article compares the proportion of parents and the number of days used for each kind of leave, bearing in mind whether it is well paid or not, transferable or nontransferable, and whether they are legally legitimate resources for care or other aims, such as resting.

Several researchers from Sweden, Iceland, and Germany have examined how the introduction of nontransferable paid paternity leave shapes the allocation of leave-taking among men and women (Arnalds et al., 2013; Avdic & Karimi, 2018; Bünning, 2015; Ekberg et al., 2013). However, this kind of study was not yet possible in Mediterranean countries due to the lack of available data. For Spain, Fernández-Cornejo et al. (2018) presented a significant positive correlation and focused their attention on the impacts or long-term effects of the wider use of leave. In contrast, this article provides a causality analysis, considering the extent to which men's increased use of PPL is due to the change in the design of the PLS and not to any other factors.

This is a first step in the analysis of the change in men's behavior. Moreover, the analysis with four indicators to measure the number of days men use allows us to see what works and what does not, for whom, and to what extent. Thus, it enables a better understanding of the mechanisms by which the policy changes the context and people's behavior.

A significant part of the PLS literature points out that both the individual's and their partner's socioeconomic characteristics (level of education, earnings, labor situation, age, etc.) determine the use of the PLS, especially for men (Geisler & Kreyenfeld, 2011). However, these factors have been unable to explain the significant gender differences in the use of the PLS, especially in families where women are better qualified and earn more than men (Castellanos-Serrano, 2016). We consider these factors to add evidence in this regard. Further, this study provides the first causal analysis of how design features of a PLS directly affect the number of days of PPL that is used in Spain. This makes it possible to progress in an international comparison of a Mediterranean country, in a welfare regime still described as pro-family or male breadwinner/female caregiver, but with the characteristic of being a country where dual-earner couples are frequent and on the rise. Escot et al. (2014) analyzed the change in the take-up rates due to the leave reform in Spain. However, they did not examine the number of days used. This article overcomes this gap.

METHOD

Database and sample

The database in this article is the survey of the use of parental leave and its labor consequences (*Encuesta sobre el uso de los permisos parentales y sus consecuencias laborales 2012*). The microdata and questionnaire are available online (Escot et al., 2012; Fernández-Cornejo et al., 2016). The target population for the survey is fathers and mothers living in Madrid and its metropolitan area with children aged between 3 and 8 (born between 2005 and 2008). This ad hoc survey used a sampling by two-stage conglomerates with stratification in the first stage. Its sampling error is $\pm 2.91\%$. Data included household and both parents' information, including parents' leave take-up rate before and after the 2007 reform.

We use the subsample of parents working as wage-earners or self-employed at the time of the birth, so they had the right to PPL. Moreover, they answered the questions related to the number of days used of each kind of leave by each parent. This makes a subsample of 1,782 parents (960 fathers and 822 mothers). Moreover, it includes the socioeconomic characteristics of both parents, which are often used as factors that may be associated with the level of use of PPL, especially for fathers (Ekberg et al., 2013; Jurado-Guerrero & Muñoz-Comet, 2021), and which should be considered to guarantee that pre- and post-treatment groups are balanced.

Empirical strategy

First, we wanted to test Hypothesis 1 about causality. We used an empirical strategy similar to that proposed in the literature evaluating public policies based on the use of observational data (Cerulli, 2015; Ekberg et al., 2013; Heckman & Smith, 1995; Khandker et al., 2010). We tested not only the correlation between the policy being applied and the frequency and duration with which fathers use parental leave but also the causality direction. We tested whether the reform, and not other factors, is what led more fathers to take lengthier leave (Heckman & Smith, 1995). These causal inference methods are based on the existence of a control group (mothers) with which to compare the findings of the treatment group (fathers) affected by policy change (introduction of paternity leave).

The introduction of 13-day paternity leave in March 2007 provided a case of a natural experiment for parental policies in Spain. A natural experiment (or quasi-experiment) occurs when a change in policy or law results in a difference in the rules of the game in which individuals operate (Escot et al., 2014; Imbens & Wooldridge, 2009; Meyer, 1995). In our case, fathers whose children were born immediately after the reform are treated differently from those born immediately before it. This does not occur with mothers because legislation on maternity leave was not modified. Therefore, mothers are considered the control group. That is, sex is the assignment rule to treatment.

In this quasi-experiment, we compare outcomes (days of leave) between the control group and treatment groups before and after the reform. This means that we make a double comparison, which is why this kind of model is called differences in differences (DiD).

People in each group may not be homogeneous and have different incentives to use the various elements of the PLS for different lengths of time (outcome) before and after the reform. This may include a set of problems in identifying the impact factor of the PLS reform. To deal with the so-called selection bias and common trend assumption, we have to control this by using a series of observed covariates or confounders (Gertler et al., 2016). Using a DiD model, we can control potential selection bias even with unobserved confounders (Khandker et al., 2010). Additionally, to ensure the common trend assumption, we use a short period: 3 years before and 3 years after the treatment (Cerulli, 2015, p. 93).

The severe global economic crisis started after the 2007 reform, and profound political changes in Spain may have caused structural changes, which could have affected the results. However, Jurado-Guerrero and Muñoz-Comet (2021) found that the economic crisis and recovery did not change social gaps in PPL uptake. Furthermore, we made robust checks to ensure that the parallel trend assumption holds. We also did validity checks using a “placebo” treatment group (Meyer, 1995).

Finally, in this natural experiment, there is not thought to be any self-selection problem. The endogamy problem is only found in rare cases in which the parents had decided to postpone having a baby to be entitled to PPL (9 months before the change in March 2007). However, these cases are highly unlikely (even less so in the sample) because paternity leave was announced as coming into force in March 2007.

Variables

Four dependent variables (the outcome variables) were analyzed. These indicate how much time parents devote to childcare by using leave and are absent from the labor market because of a birth or adoption. These four variables are expressed in number of days used after the birth or adoption. The outcome variables are as follows:

- PPL (fully paid parental leave): duration of paid leave used (birth, paternity, maternity, and breastfeeding)
- H (holidays): use of holidays or annual leave in addition to PL
- UPL (unpaid parental leave): duration of unpaid leave used (*excedencia* is the Spanish term)
- T (total time): duration of all leave used plus holidays ($T = PPL + H + UPL$)

We use three dichotomous explanatory variables to measure the impact of the PLS reform on these outcome variables (Brambor et al., 2006). The regression analysis of DiD has at least three main explanatory variables, which are dichotomous:

1. “Treatment” reflects policy change, the introduction of 13-day paternity leave in Spain. It identifies two periods, pre-reform, when the birth took place before March 2007 (Treatment = 0) and post-reform (Treatment = 1) since April 2007.

2. “Male” identifies fathers (male = 1), which is the treatment group and mothers (male = 0), corresponds to the control group.
3. “Treatment × Male” is the interaction between “Treatment” and “Male” variables. It identifies fathers whose children were born after March 2007 (Treatment × Male = 1) and the rest (Treatment × Male 0). The estimated coefficient of this interaction is the one that isolates the effect of the treatment on the treatment group. That is the effect of the introduction of paternity leave on fathers’ use of it (Cerulli, 2015; Gertler et al., 2016; Khandker et al., 2010).

Moreover, the main factors considered in the literature explaining different uses of PLS are also introduced to consider heterogeneity between men and women before and after the PLS reform. These factors act as confounders as they may be related to gender rules and the number of days used (Table 2).

Regression models

We used Stata 14 for the statistical analysis and regression models. In this case, the DiD estimator of the effect of the treatment was obtained from a regression model to estimate how the variables treatment and male and their interaction (Treatment × Male) help explain the probable duration of the leave used by parents. In this regard, this type of DiD model is associated with the literature of comparative quantitative political science and their multipliable interaction models. In comparative politics, the aim is to compare a conditional hypothesis—that is, a relationship between two variables: The time during which the leave was used and the introduction of 13-day paternity leave depends on the value of the other variable, the parent’s sex (Brambor et al., 2006). H: an increase in X (the duration of the paternity leave established by law) is associated with an increase in Y (the duration of the leave used), when the parent meets condition z (the parent is a man) but not when he does not meet condition z (the parent is a woman). Consequently, the equation to estimate to contrast hypothesis 1 would be as follows:

$$Y = \beta_0 + \beta_1 \text{Treatment} + \beta_2 \text{Male} + \beta_3 \text{Treatment} * \text{Male} + u \quad (1)$$

$$\text{For women : } Z = 0 (I) \rightarrow Y = \beta_0 + \beta_1 \text{Treatment} + u$$

$$\text{For men : } Z = 1 (I) \rightarrow Y = (\beta_0 + \beta_2) + (\beta_1 + \beta_3) \text{Treatment} + u$$

Here, Y (“duration of the leave”) is the explained variable, and u is a purely random variable. β_3 measures the effect of the treatment only on males (vs. females) and thus measures the impact of the treatment on those treated.

First, we conducted data analysis to estimate which regression models better fits the observed data and type of variables. Finally, we use a generalized linear model form of regression analysis to model truncated count data (number of days). We present a regression in two steps. In the first step, the logistic regression models to estimate the propensity to take positive leave. In the second step, we present zero-truncated negative binomial (ZTNB) regression models to show the number of days used by those parents who take at least 1 day of each type of leave. We calculate both models for all dependent variables to estimate the significance of the interaction parameter Male × Treatment, which includes the impact effect of the PLS reform in both the propensity to take leave and the number of days taken once the decision to take leave is chosen.

TABLE 2 Explanatory and background variables (*N* = 1,782)

| Variables | Values | Yes | No | Variables | Yes | No |
|------------------------------------|--------------------------------|-------|---------|--------------------------------|---------|---------|
| Male | | 960 | 822 | Immigrant | 248 | 1,534 |
| Treatment | | 900 | 882 | Immigrant partner | 295 | 1,487 |
| Treatment × Male | DV: 1 = yes; 0 = no | 479 | 1,303 | Directive position | 132 | 1601 |
| Self-employed | | 153 | 1,606 | Partner works at childbirth | 1,475 | 244 |
| Self-employed partner | | 122 | 1,597 | Both partners w/ univ. degree | 473 | 1,290 |
| Temporary contract | | 250 | 1,382 | Public sector | 286 | 1,433 |
| Part time | | 172 | 1,537 | Partner works at public sector | 292 | 1,226 |
| Partner works part time | | 153 | 1,566 | Twins | 52 | 1,730 |
| | | | (A) (B) | Values | (A) (B) | |
| | 1. Less than primary education | 31 | 31 | Age (A) | 21–25 | 14 18 |
| | 2. Primary education | 147 | 133 | | 26–30 | 87 82 |
| Level of education (A) | 3. Secondary education | 223 | 200 | | 31–35 | 334 330 |
| | 4. Initial VT | 179 | 175 | | 36–40 | 744 750 |
| Partner's level of education (B) | 5. Advanced VT | 164 | 162 | Partner's age (B) | 41–45 | 478 439 |
| | 6. Senior high school | 329 | 309 | | 46–50 | 102 85 |
| | 7. Basic univ. degree | 276 | 273 | | 51–55 | 14 12 |
| | 8. Higher degree univ. | 417 | 422 | | 56–60 | 8 6 |
| Earnings at birth (A) | 1. <600 € | 81 | 310 | School zones | | Obs |
| | 2. 600–1,000 € | 372 | 341 | | 1 | 146 |
| | 3. 1,001–1,500 € | 595 | 521 | | 2 | 115 |
| Partner's earnings at birth (B) | 4. 1,501–2,000 € | 356 | 322 | | 3 | 209 |
| | 5. 2,001–2,500 € | 169 | 154 | | 4 | 188 |
| | 6. 2,501–3,000 € | 88 | 78 | | 5 | 173 |
| | 7. 3,001–4,000 € | 46 | 39 | | 6 | 209 |
| | 8. >4,000 € | 33 | 25 | | 7 | 222 |
| Organization size (no. of workers) | 1. <10 | 374 | | | 8 | 195 |
| | 2. Between 10 and 50 | 366 | | | 9 | 182 |
| | 3. Between 51 and 250 | 286 | | | 10 | 143 |
| | 4. Between 251 and 500 | 124 | | | | |
| | 5. >500 workers | 570 | | | | |
| | | | | Obs | M | SD |
| WW at birth | No. of hours worked per week | 1,651 | 40.11 | 8.55 | | |
| Partner's WW at birth | | 1,616 | 33.77 | 16.11 | | |
| No. of children | | 1,782 | 1.84 | 0.68 | | |

Note: DV = dichotomous variables; Obs = observed; univ. = university; VT = vocational training; WW = working week.

RESULTS

The proportion of mothers and fathers who take up PPL, H, UPL, and T, as well as the mean time used for users and the whole group of mothers and fathers, are presented in Table S1 and Table S2 in supplementary materials with link below. The proportion of fathers using PPL

increased from 82.8% to 89.8% ($p < .001$), and the number of days used increased by 7 after the reform ($p < .001$). The proportion of mothers did not change, but the number of days increased by 4. The proportion of fathers using H decreased ($p < .05$), but the number of days increased by 3 ($p < .01$). Mothers did not change how they use H (Table S1). Fathers did not change their UPL use, whereas the proportion of mothers using it decreased from 19% to 12% ($p < .006$) and the number of days dropped from 243 days to 175 ($p < .05$). In total, fathers using the PLS rose from 82.7% to 88.3% ($p < .02$) and increased by 8 days on average ($p < .001$) (Table S2). The proportion of mothers did not change before and after the treatment, and the total number of days dropped by 19 ($p < .03$).

Table 3 and Supplemental Table S3 provide evidence that the 2007 reform has increased the proportion and number of days of PPL used by fathers. The global fit of the logistic and ZTNB regression models used for the four dependent variables is statistically significant ($p < .001$ for all). The coefficients for the beta parameters Treatment \times Male are statistically significant for the variables PPL, H, and T, controlled by confounders ($p < .05$ in Supplemental Table S3 and $p < .001$ for PPL and T and $p < .01$ in Table 3). This means that the 2007 reform has caused the changes observed: an increase in the proportion of PPL and T users and a reduction in the H users for care purposes (Supplemental Table S3). The reform has also increased the number of PPL, H, and T days used by fathers among those using each type of leave (Table 3). All these results are controlled by the relevant background variables because the set of these variables included is also statistically significant in the eight models ($p < .001$ for all). Individually, almost all control variables are not statistically significant, and the significant ones have a reduced size effect. This analysis is not included for space reasons.

The parameters calculated in the eight models, specifically the estimated coefficients (β_i of Equation 1), are not directly interpretable regarding the effect size but only the sign and its statistical significance. Because the effect size is critical to test the hypotheses, Table 4 presents a summary of responses as an individual average, including the proportion of each leave-user and nonuser and the mean number of days (outcome variable) for each gender group (users and total). These responses controlled by background variables are all statistically significant except for the UPL used by fathers, according to the results from Supplemental Tables S3 and Table 3. Both means of users and total are relevant to analyze social norms related to the intense and widespread use of each leave for men and women. When the use is intense and widespread, the “mean days of leave when users” is close to the “total mean days of leave” because this total includes users and nonusers of each group analyzed. The following results on the mean number of days and proportions are extracted from Table 4, and contrasts of difference included are provided in the text.

Before the 2007 reform, there was a statistically significant difference ($p < .02$) between the proportion of mothers (97.8%) and fathers (91.2%) using PPL. After the reform, there is no such a difference. Moreover, the reform caused an increase of 8 days in the number of PPL days used. The difference in the number of days used by fathers before (7.6) and after (16.1) the reform is statistically significant ($p < .001$), whereas there is no difference for mothers. Nearly all men, 97.4%, used about 16 days after the reform, which indicates an intense and widespread use of the PPL. In contrast, fewer men use holidays after the reform (a reduction from 22.7% to 16.2%), and those using H take leave for 13.8 days after the reform, with an increase of fewer than 3 days of the 30 available. Consistent with H1, there is not a widespread and intense use or change in use of H. Most men do not use UPL.

Most men do not use transferable PPL, whereas women used 113.1 days, covering almost the whole transferable and nontransferable part of the maternity leave (112 days). The increase in the PPL of men is thus due to nontransferable paternity leave, which supports H2.

UPL was used by 9.4% of mothers (11.2% before the reform and 7.9% after) and 0.4% of fathers. There was a significant decrease in mothers’ number of UPL days (from 217.9 days before to 108.1 days after the reform). Still, as whole groups, the means are 15.2 days for

TABLE 3 Step 2: Zero truncated negative binomial regression, positive days of leave controlling for background variables ($N = 1,176$)

| Dependent variable | Paid leave | | | Holidays | | | Unpaid leave | | | Total time ^a | | |
|-----------------------|------------------|-------|--------------------|------------------|-------|--------------------|-----------------|-------|--------------------|-------------------------|---------|--------------------|
| | B | BR SE | dP/dx _i | B | BR SE | dP/dx _i | B | BR SE | dP/dx _i | B | BR SE | dP/dx _i |
| Treatment | 0.048* | 0.024 | 1.58 | -0.092 | 0.050 | -1.73 | -0.701** | 0.253 | -107.56 | -0.117* | 0.05025 | -5.21 |
| Male | -2.672*** | 0.087 | -88.92 | -0.816*** | 0.096 | -15.34 | -0.632 | 0.670 | -97.02 | -2.739*** | 0.09421 | -121.71 |
| Treatment × Male | 0.697*** | 0.084 | 23.21 | 0.319*** | 0.104 | 6.01 | -0.225 | 1.074 | -34.52 | 0.815*** | 0.09867 | 36.21 |
| Constant | 4.172*** | 0.434 | | 3.332*** | 0.562 | | 8.563** | 2.836 | | 3.977*** | 0.50635 | |
| Alpha | 0.183*** | 0.031 | | 0.134*** | 0.016 | | 0.224*** | 0.045 | | 0.399*** | 0.02938 | |
| Log pseudo-likelihood | | | -4,777.108 | | | -1,575.587 | | | -530.7621 | | | -5,469.662 |
| N Obs | 1142 | | 450 | | | 94 | | | 1.176 | | | |
| Pseudo-R ² | 0.174 | | 0.0656 | | | 0.1138 | | | 0.1316 | | | |
| AIC | 9,704.215 | | 3,295.174 | | | 11,77.524 | | | 11,089.324 | | | |

| JS test | χ^2 | df | p | χ^2 | df | p | χ^2 | df | p |
|-----------------------|-----------|----|-------|----------|----|-------|----------|----|-------|
| Full model | 13,697.55 | 74 | 0.000 | 5.70E+08 | 72 | 0.000 | 6.10E+07 | 58 | 0.000 |
| Independent variables | 1,954.1 | 3 | 0.000 | 83.5 | 3 | 0.000 | 12.25 | 3 | 0.007 |
| Background variables | 137.57 | 71 | 0.000 | 249.06 | 70 | 0.000 | 6.60E+07 | 58 | 0.000 |

Note. Treatment = 13-day nontransferable fully paid paternity leave in Spain coded as 0 before and 1 after; Male = 1 if male and 0 if female; interactions are included to estimate causal effects on males. Controls are male, treatment, Male × Treatment, self-employed partner, temporary contract, part time, partner works part time, immigrant partner, directive position, partner works at childbirth, both partners with university degree, public sector, partner works at public sector, twins, level of education, partner's level of education, earnings at birth, partner's earnings at birth, size of the organization, working week at birth, partner's working week at birth, number of children, age, partner's age, and school zones. AIC = Akaike's information criterion; AUC = area under the receiver operating curve; dP/dx_i = marginal effect on probability to take positive leave at mean; JS test = joint significance test; pseudo-R² = McFadden's R²; R SE = robust standard error, N Obs = number of observations.

^aTotal time = paid leave + holidays + unpaid leave.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Bold data indicate statistical significance.

TABLE 4 Summary of mean number of days and proportions of PLS use by sex and kind of leave before and after the 2007 reform. (N= 1176)

| | % Nonusers | % Users | Mean days of leave (users) | Total mean days of leave |
|-------------------------------|------------|---------|----------------------------|--------------------------|
| Paid leave | | | | |
| Nontreatment (before reform) | 2.7 | 97.3 | 26.6 | 25.9 |
| Treatment (after reform) | 1.3 | 98.7 | 40.5 | 40.0 |
| Female | 1.1 | 98.9 | 113.1 | 111.8 |
| Male | 2.8 | 97.2 | 11.2 | 10.9 |
| Nontreatment × Female | 2.2 | 97.8 | 110.3 | 107.9 |
| Nontreatment × Male | 8.8 | 91.2 | 7.6 | 7.0 |
| Treatment × Female | 2.0 | 98.0 | 115.6 | 113.4 |
| Treatment × Male | 2.6 | 97.4 | 16.1 | 15.6 |
| Holidays | | | | |
| Nontreatment (before reform) | 67.5 | 32.5 | 18.8 | 6.1 |
| Treatment (after reform) | 70.0 | 30.0 | 19.1 | 5.7 |
| Female | 50.3 | 49.7 | 23.7 | 11.8 |
| Male | 80.8 | 19.2 | 12.4 | 2.4 |
| Nontreatment × Female | 53.5 | 46.5 | 24.9 | 11.6 |
| Nontreatment × Male | 77.3 | 22.7 | 11.0 | 2.5 |
| Treatment × Female | 47.3 | 52.7 | 22.7 | 12.0 |
| Treatment × Male | 83.8 | 16.2 | 13.8 | 2.2 |
| Unpaid leave | | | | |
| Nontreatment (before reform) | 98.9 | 1.1 | 209.3 | 2.4 |
| Treatment (after reform) | 97.4 | 2.6 | 102.4 | 2.6 |
| Female | 90.6 | 9.4 | 161.7 | 15.2 |
| Male | 99.6 | 0.4 | 78.1 | 0.3 |
| Nontreatment × Female | 88.8 | 11.2 | 217.9 | 24.4 |
| Nontreatment × Male | 99.9 | 0.1 | 115.8 | 0.2 |
| Treatment × Female | 92.1 | 7.9 | 108.1 | 8.5 |
| Treatment × Male | 99.1 | 0.9 | 45.9 | 0.4 |
| Total time^a | | | | |
| Nontreatment (before reform) | 2.8 | 97.2 | 37.5 | 36.5 |
| Treatment (after reform) | 1.2 | 98.8 | 51.5 | 50.9 |
| Female | 1.1 | 98.9 | 151.6 | 149.9 |
| Male | 2.5 | 97.5 | 15.0 | 14.6 |
| Nontreatment × Female | 1.2 | 98.8 | 161.2 | 159.3 |
| Nontreatment × Male | 5.2 | 94.8 | 10.4 | 9.9 |
| Treatment × Female | 1.1 | 98.9 | 143.4 | 141.9 |
| Treatment × Male | 1.3 | 98.7 | 20.9 | 20.7 |

Note. Paid leave, holidays, unpaid leave, and total leave (outcome variables) measured by number of days controlling for background variables. Responses at the individual average (logistic and ZTNB regressions). ZTNB = zero-truncated negative binomial.

^aTotal time = paid leave + holidays + unpaid leave.

mothers and 0.3 days for fathers, far from the 253 available days of full job protection. As hypothesized (H3), UPL is not commonly used, especially for men, as a proportion and by number of days.

Almost half of the mothers and less than 20% of fathers use H jointly with the PL. Men using H to provide childcare do this for a mean of 12.4 days and women for 23.7. This represents a mean of 2.4 days used by the fathers and 11.8 days by the mothers. There is no widespread and intense use of H, which supports H4.

Considering the total time used by mothers and fathers (T), there was a reduction in the difference in the proportion and number of days used by men and women, changing from a difference of 149.4 days before the reform to 121 days after the reform (for the whole gender group, but values are similar for users). PLS use after the reform is less gender biased in general, especially in using PPL.

In sum, the use of fully paid, nontransferable parental leave is the only kind of leave that aligns with the design of the policy almost perfectly for men and women.

DISCUSSION

Evidence shows that most fathers use all the available time of fully paid leave when it is nontransferable, regardless of their socioeconomic circumstances. However, they hardly use transferable leave or UPL. Mothers also extensively use fully paid parental leave, whether transferable or nontransferable. They use unpaid leave and other time resources, such as holidays, to a lesser extent and with a more variable pattern, but they use them more than fathers do. The significant reduction in mothers' use of unpaid leave after the 2007 reform may be caused by various reasons: the PLS reform, its impact on men's PPL use, the economic crisis, or a combination of those or other unobserved factors. However, this causality analysis cannot provide the answer because men do not serve as control group for women because the rules of the game have changed for men. After the reform, some men slightly increased their use of H to care for their children, but men did not use UPL because of the PLS reform. This suggests that the burden still falls disproportionately on women when it comes to making actual economic sacrifices to care for children. Thus, the 2007 PLS reform did not substantially alter the underlying likelihood that men make financial sacrifices to care for children. Still, it encouraged their involvement in childcare by providing of a kind of parental leave extensively used by men. The 2007 reform was the initial step for further PLS reforms in Spain since 2017.

Paternity leave—nontransferable fully paid leave reserved for fathers—conveys a social and legal legitimization of the paternal role as a figure in the private space to care for his children from birth. Furthermore, when properly designed, this “daddy quota” guards against pressures from employers and family members over whether it is suitable to use this type of leave personally or whether some other family member (mothers) should use them. Using parental leave allows fathers to interact with their children from the start of their lives. Nontransferable leave reduces the transgression costs of using the leave in a social context where childcare is not assigned to men but to women (Akerlof & Kranton, 2010).

Fully paid leave enables the person who provides childcare to carry on with the same role as an economic provider. This characteristic is essential for the general use of the PLS for both fathers and mothers. However, the gender roles and the traditional men's role as a primary economic provider make the full payment decisive in men's use of it (Castro Garcia & Pazos-Morán, 2016). More and more women also play the role of economic providers. Being fully paid also helps reduce the risk of poverty for parents and children. Gender roles are not fixed in time and individual decisions on using parental leave may evolve (Escot et al., 2014; Jurado-Guerrero & Muñoz-Comet, 2021).

This article only applies to the 2007 reform that introduced a 15-day PPL. There may be doubts as to whether the results would be similar in the case of more extended leave periods. However, despite the limited data available, official data on 2021 PPL use points to mass use of the 16 weeks currently available by most fathers (Castellanos-Serrano, 2022; Seguridad Social 2022a, 2022b). This supports the importance of the policy design for its use by men. This

mechanism to change fathers' behavior and increase their use of PPL, exemplified in father quotas prevailing in the Nordic countries, is also working in Spain, a Mediterranean country. The article supports the idea that the differential use by men and women of PLS disappears when the leave has the characteristics described: equal for men and women, nontransferable, and fully paid. It shows what kind of reform would encourage gender equality in the use of parental leave.

Limitations and future research

This article does not include gender attitudes, which is a limitation to analyze gender impacts. However, the main limitation is that the analysis did not consider the characteristic of using the PPL alone or concurrently with the other parent. "Simultaneity" is likely an aspect that contributes to the maintenance of gender inequality in Spain. Gender roles may have advanced from the father as the "main economic provider" to the father as "economic provider and care helper" and from the mother as "main caregiver" to the mother as "main caregiver and provider." In countries such as Sweden, parents cannot be together on PPL simultaneously for more than 1 month, so this characteristic has not been extensively analyzed. Time granted for PPL helps to create competence and confidence in caring (Hosking et al., 2010). Moreover, it promotes gender equality in the couple's division of labor, especially when care is carried out independently, as *solo care*, and for long periods (Bünning, 2015). All this promotes fathers' affective bonding, competence, and long-term involvement. Solo care for fathers is fundamental in this learning and gender transformative process (Bünning, 2015; Castro Garcia, 2017; González & Jurado-Guerrero, 2015). Thus, the potential gender impact of the Spanish 2007 and 2019 PLS reforms may have been smaller than expected due to the maintenance of important degrees of simultaneity in the design, and, thus, in their use. More research on this characteristic of the PLS design is needed.

Implications

A PLS based on equal, nontransferable, and fully paid parental leave is expected to be an initial step toward an equal distribution of childcare from the very beginning. This would encourage fathers to take up parental leave and thus increase their involvement in childcare and reducing gender behavior in families (Fernández-Cornejo et al., 2018).

As of the January 1, 2021, in Spain there are no transferable parts of the PLS, and fathers and mothers have the same number of days of fully paid parental leave: 16 weeks. Mothers and fathers must take the mandatory 6 weeks simultaneously when the child is born. The other 10 weeks can be taken throughout the first year of the baby's life, with the employer's approval. However, despite this advance toward gender equality, a mandatory simultaneous use of 37.5% of PPL time and legal obstacles to the nonsimultaneous use of the remaining PPL time have hindered a fast and real advance toward changing gender roles. Currently, there is mass, widespread use by men of PPL regardless of its length in Spain (2, 4, 5, 8, 12, and 16 weeks; Castellanos-Serrano, 2022; Jurado-Guerrero & Muñoz-Comet, 2021; Seguridad Social, 2022b). Most men use the whole paid leave, as women have done for many years (Seguridad Social, 2022b). However, 75% of these fathers use the whole paid leave at the same time as the mother (Seguridad Social, 2022a). Thus, currently *solo care* is not a social norm, although caring autonomously is the most gender-transformative experience. Moreover, the time babies are cared at home has not generally increased, despite wide social childcare needs being unmet in Spain (Castellanos-Serrano, 2020; Castellanos-Serrano & Perondi, 2022).

Therefore, the Spanish law should change to improve the PLS design. It should promote *solo care* in the design or at least guarantee rights to use most of the paid leave time consecutively

between parents. Given that Spain is currently reforming the PLS again, the 2019 reform should be evaluated before further extensions are made, especially regarding the impacts of simultaneity. Simultaneity is a mechanism to maintain traditional gender roles (Castellanos-Serrano, 2022).

Path dependency about simultaneity in Spain may be as persistent as transferability is in Sweden. In 2017, in Sweden, where gender equality is embedded in public policies, only 18.4% of couples equally shared the time of PPL during the child's first 24 months (Duvander & Haas, 2018). Transferability remains a crucial feature in large parts of Sweden's PLS since it was introduced in 1973. Transferability is one of the mechanisms that maintains gender-unequal use of the PLS (Castro Garcia & Pazos-Morán, 2016). Sweden, Norway, Iceland, and Germany still largely have transferable paid leave, and parental leave is not fully paid. Ceilings on wage replacement play a significant role regarding the final payment. Low ceilings in Germany (Blum et al., 2018), temporary reductions of ceilings in Iceland (Arnalds et al., 2021), or lump sums over several months of PPL in Sweden (Ekberg et al., 2013) have shown men's high sensitivity of men regarding pay no matter how it is implemented. Not providing 100% income replacement is another mechanism to keep gender inequality in PLS use. The less the payment, the lower men's use of the PLS. Only small percentages of men use work-life balance measures involving financial costs across Europe (Castro Garcia & Pazos-Morán, 2016; Martínez-Pastor et al., 2022), and Spain is no exception. Most men will not use a form of UPL that has been proposed in the new reform currently in discussion within the so-called Spanish Law of Families, and this would increase gender inequality. Hence, this should be avoided in the forthcoming reform.

Thus, the ongoing PLS reform should first keep the characteristics working for gender equality: equal, nontransferable, and fully paid. Second, it should reformulate the design so that the right to nonsimultaneous and full-time use is guaranteed during most of the PPL period for all workers who become parents. In this way, *solo care* could become a social norm for men. This PLS design is expected to work to promote gender equality in different welfare regimes. In Spain, this reform would mean that most fathers provide childcare for at least 14 weeks independently, likely after mothers care for over their PPL.

Moreover, official administrative data should be available to evaluate the 2019 and ongoing reforms. In addition to these four characteristics (length, transferability, level of payment, and proportion of simultaneity), another two characteristics showing gendered use should be included in evaluation for future design improvement: parental leave use on a full- or part-time basis and use in one or two extended periods or in numerous shorter ones (Castellanos-Serrano, 2022).

Because countries have different PLS designs, international common indicators measuring these six characteristics for each kind of leave would be useful to advance in comparative research, evaluation, and design. For example, Sweden guarantees men's solo care by directly prohibiting more than 1 month of simultaneous use of parental leave, whereas Iceland guarantees freedom to use it. Spanish law obliges simultaneous use and does not legally guarantee alternative use on a full-time basis. What works better to promote men's childcare? The sooner the PLS reforms are evaluated and improved, the better for gender equality. When and how to implement this design in each country is a question of political will, linked to path dependency. The general European framework could also help by reducing transgression costs. Currently, the 2019 European Work-Life Balance Directive and Maternity Directive keep providing more highly paid days to mothers than to fathers. According to this article and other international evidence, this legal difference will maintain gender inequality in PLS use, which means a difference between men and women in childcare participation, with the corresponding family and labor market gender inequality. This should be modified to set equal standards for paternity and maternity leave.

Conclusions

One of the main objectives of labor and economic policy is to reduce gender inequality in childcare, in the family and in the labor market. Thus, a first step should be to reduce the different number of PPL days used by women and men. Moreover, encouraging nonsimultaneous use (by both parents) of leave time is also crucial to change gender roles (Bünning, 2015) and improve childrens wellbeing. To achieve this, laws need to equal the theoretical time of the fully paid nontransferable leave to which mothers and fathers are entitled. The evidence in Spain supports the international golden rule about PPL (Castro-García & Pazos-Morán, 2016). The PLS design must include three main characteristics at the same time: fully paid, non-transferable, and equal for men and women. Then parental leave will be used similarly by men and women. The welfare regime and individual socioeconomic characteristics do not play a significant role on its success. This kind of PLS reform works not only in the Nordic countries or contexts where gender equality is highly valued and mainstreamed, but also in a context such as the Mediterranean, where the welfare regime is mainly familial, and it is expected to work in other welfare regimes. Quotas for men, as nontransferable well paid leave rights, work. Therefore, this is a case in which the law can promote gender equality by quickly changing the behavior of most parents and, thus, culture, social norms, and gender roles.

To promote gender equality, a necessary, but not sufficient, condition is modification of each national law so that men and women have the right to the same fully paid and non-transferable number of days under the PLS. To encourage gender role transformation, most days should be nonsimultaneous. In this scenario, most fathers would use their leave time caring for babies in a similar way as mothers do. This necessary condition (to reduce gender inequality) is expected to work best if accompanied by universal high-quality childcare and education services and a shorter working week with full payment for all.

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