



Bringing It All Back Home. Social Class and Educational Stratification of Childcare in Britain, 1961-2015.

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Abstract

Childcare is one of the foundations of human development. An unequal distribution of childcare is an unequal distribution of life chances. This paper investigates the social stratification of parental childcare in the United Kingdom, focusing on class and education, from 1961 to 2015. The study shows that both mothers and fathers have increased their time spent on childcare, with a significant uptick between 1974 and 1983. I find a growing gap in childcare time between mothers with and those without a higher education degree. Regarding social class, the gap in childcare time between professional-class and working-class households has remained relatively constant throughout the period. The paper also explores fathers' involvement in childcare and shows that their childcare time is less stratified compared to mothers. The article discusses the potential mechanisms that could explain the polarisation of childcare in the UK.

Keywords: childcare; education; stratification; social class; polarisation

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1 Introduction

The time parents spend caring for their children has increased in the last few decades in most European countries and North America (Gauthier, Smeeding & Furstenberg, 2004; Gershuny, 2000). However, studies have noted that this growth has been unequal between households (Altintas, 2016; Sani & Treas, 2016). The time that parents spend with their children is an essential mechanism in the production and reproduction of inequalities (Bono et al., 2016; Ermisch, 2008; Fomby & Musick, 2018; Kalil & Mayer, 2016), thus investigating the social stratification in childcare is essential for understanding the early roots of life course inequalities.

Estimates of childcare by education and social class combined are largely missing for the UK. This paper contributes to the literature by providing estimates of childcare by social class and education for mothers and fathers covering the period 1961-2015, making this study

the most extensive analysis of the stratification of parental childcare in the UK, spanning 54 years.

While there is consensus in the literature that parents with advanced educational credentials (e.g. university degree) spend more time on childcare than other parents, it is unclear whether the gap in parental childcare has diverged over time or was already present in earlier periods. Furthermore, we do not know if this gap followed the same evolution for mothers as it does for fathers.

This paper investigates the following primary questions: How much has parents' time in childcare increased since the 1960s? Is there a disparity in childcare time between different social classes and levels of education? Have these discrepancies evolved throughout time? Does this differ by gender? This paper empirically answers these questions.

2 Literature Review

2.1 The Growth of Childcare

There is consensus that parents have increased the time they spend with their children since the 1960s (Bianchi, Robinson & Milkie, 2006; Gershuny & Sullivan, 2019). For instance, Bianchi, Robinson, and Milkie provide estimates of primary childcare in the USA during the period 1965-2000. They report an average of 10 hours for mothers and 3 hours for fathers of weekly care in 1965 and report an average of 13 hours for mothers and 7 hours for fathers in 2000, which corresponds to a percentage change of about 30% for women and 133% for men (Bianchi, Robinson & Milkie, 2006:p.63). Similar figures are reported by Gauthier et al., who studied childcare time in 16 countries (including the UK, USA, and France). They found a global average change of 35% increase for mothers during the same period (1960s-2000s) and the same average change for men of about 130% (Gauthier, Smeeding & Furstenberg, 2004:p.658).

One contentious issue concerns identifying exactly when the increase in childcare took place. Some studies found a U-shape pattern in childcare between the 1960s and 2000s, especially pronounced in the USA and to a lesser degree in the UK (Bianchi, Robinson & Milkie, 2006; Gauthier, Smeeding & Furstenberg, 2004). In the 1970s, Bianchi et al. found that childcare decreased in the 1970s-1980s and increased again in the 1990s. However, other work has found a steady increase in childcare in the US (Altintas, 2016), the UK (Sullivan & Altintas, 2019) and elsewhere (Sani & Treas, 2016).

2.2 The Stratification of Childcare

Most time-use studies use education as the central stratifying factor of care. The general finding is that parents with a high level of education, generally understood as a university degree, spend significantly more time than other parents providing care, either in the form of routine care (i.e. cleaning, feeding, etc.) or developmental care (i.e. reading, playing, teaching) (Gracia & Ghysels, 2017; Sayer, Gauthier & Furstenberg, 2004). This is true for mothers and fathers (Altintas & Sullivan, 2017). Developmental care is considered one of the most valuable inputs for early human capital development (Putnam, 2015).

The trend in childcare by education since the 1960s is less clear. Altintas estimated the time spent in developmental childcare for the period 1965-2013 in the US and found a growing gap between highly educated parents and other parents. This picture is somewhat consistent with the estimates of Ramey and Ramey during the period 1965-2007. Sani and Treas looked

at the trend in childcare by education in eleven countries (2016). The overall pattern emerging from their study is more of a constant gap, or trendless fluctuations, in childcare time between highly educated parents and others. They do not find strong evidence of growing educational polarisation in childcare. This finding is echoed by Wei for the Canadian context (2020). Studies focusing on the more recent period, namely 2003-2017, found that childcare time was converging by education (Prickett & Augustine, 2021). This is due to highly educated mothers having decreased their childcare time in more recent periods and mothers with low education levels continuing their increase in childcare time.

There are several reasons that could explain the difference in findings. As mentioned, childcare can be divided into several activities, such as cleaning, feeding, playing, and teaching, generally separated into “routine” forms of childcare (i.e. cleaning the child) and into “developmental” forms of childcare (i.e. teaching). Some studies often focus on only one type of childcare (Altintas, 2016). Another issue is due to the comparability of childcare across surveys. Some time-use categories, typically paid work, are more easily comparable across surveys (and contexts) than others. Childcare is particularly difficult to compare because the survey categories related to care can be very inconsistent between surveys (Folbre & Yoon, 2007). I will come back to this point in our analyses. Finally, the age of children considered also affects the estimates.

3 Theoretical Framework

What motivates parents to invest in their children, and why do some invest more than others? Several theories have been put forward to explain both the growth in childcare and the stratification of care. The most prominent theory is the cultural theory of intensive motherhood (Hays, 1996). Intensive motherhood is an ideal of motherhood based on an extreme form of attention to children’s needs from the mother. This theory contextualises the growth of care time in a cultural and normative shift in what constitutes good parenting and especially good mothering. Hayes situates the development of the intensive mothering ideology after WWII with influential childrearing books such as Dr Spock’s “The Common Sense Book of Baby and Child Care” (1946), which became one of the best-sellers of the 20th century.

The shift in childrearing practices is part of a longer historical transformation of the place of children in society. A “revolution in sensibility” happened in Western societies beginning in the 18th century (Aries, 1980). This revolution transformed how we viewed children and the type of care and attention they require (Aries, 1962). This sensibility towards children was also accelerated by the First Demographic Transition and the fall in child mortality (Shorter, 1975). The transformation of the economy throughout the 20th century towards a human capital-intensive economy also played a role in the social transformation of childhood, where investing more in fewer children gradually made more sense in the new economy (Becker, 1981).

An element of distinction also permeates the changes in family practices. Upper-class families have always tried to distinguish themselves from the lower classes by adopting new practices that are diffused to the rest of society, triggering a new wave of distinctive practices (Frauenfelder, 2009; Young & Willmott, 1974). On this point, Sani and Treas write, “Intensive parenting practices confirm their privileged social status by differentiating them from parents in lower social classes. Of course, ideas and behaviour that take root among the privileged are known to diffuse eventually to the less advantaged” (2016:p.4). Therefore, parenting is not just

a rational investment strategy but also a class marker (Bourdieu & Passeron, 1990). Certainly, parents input what is more traditionally understood as “human capital”, typically knowledge that will be rewarded in education and the labour market, but they also input “cultural capital” (Bourdieu, 1984), which embodies class values and distinction tastes. Bourdieusian theory is the basis of Lareau’s work on parenting styles (2003). She describes the distinction between the middle-class child-rearing philosophy of “concerted cultivation” and the working-class philosophy of “natural growth”. While natural growth lets children grow and explore the world in an unsupervised and informal fashion, concerted cultivation is a parenting style where the children are highly supervised by parents and various institutions (especially extra-curricular artistic and social institutions). Due partly to the sparse nature of the data (time-use surveys are generally collected decades apart), these theories have not been empirically tested. One exception is the work of Ramey and Ramey.

Ramey and Ramey proposed a theory of parental competition called the “Rug Rat Race” (2010) to fit more closely with the historical timing of the increase in childcare in the US. The idea of the Rug Rat Race is that competition for admission to top universities has dramatically increased, but the supply of places did not follow the uptick (Bound, Hershbein & Long, 2009). Parents, aware of this tightening of competition, as well as the increasing returns on education, are spending more and more time helping and caring for their children in the hope of securing a spot in a top university (Ramey & Ramey, 2010; Sacks & Stevenson, 2010).

Ramey and Ramey frame their theory around college preparation and university competition (2010:p.22). But the idea can be applied more generally to include an increase in competition in the labour market for professional jobs (Kalleberg, 2011) and to the decrease in (upward) social mobility since the 1970s in Britain and the US (Breen & Müller, 2020; Bukodi & Goldthorpe, 2018).

3.1 The Rug Rat Race in the British Context

The British educational system is one of the most stratified in Europe, characterised by a clear hierarchy of universities, with Oxford and Cambridge at the top. Therefore, there is heightened competition for these schools. Tertiary educational expansion took place after the 1960s. In 1961, there were 31 universities in the UK, with about 120,000 university students (Robbins, 1963). Now, there are more than 160 universities and almost 2.6 million students, with 560 thousand undergraduate students (Bolton, 2021). The expansion of tertiary education sharply increased in the 1990s (Blanden & Machin, 2004:p.233).

Although the number of universities increased, the number of “Oxbridge” universities remained the same. It is not possible to create elite universities on demand. In 1961, Oxford and Cambridge combined hosted about 15% of the university students’ population (Robbins Report p.15). Now, the number of students educated at Oxford and Cambridge is below 3% of the student population (Oxford and Cambridge totalled about 50,000 in 2019, over the 2.6 million students). This is a clear illustration of the competition for top universities. Even in recent years, official statistics for Oxford University show that while the number of applications is increasing every year, the admission rates are diminishing (Oxford University, 2021).

Besides education, the number of top jobs has also not met the supply of qualified applicants. It is important to understand this point in the context of the falling rate of absolute social mobility. Absolute social mobility refers to the share of people who are in a different class than their parents, while relative mobility measures the strength of the association between parents’ class and children’s class. Absolute mobility is affected by the shape of the

class structure. After WWII, there was a large expansion of white-collar positions. This expansion of “rooms at the top” increased absolute mobility (Bukodi & Goldthorpe, 2018). However, after the 1970s, this growth started to stagnate, and downward mobility increased. In other words, the growth of “good jobs” slowed down. Parents who experienced upward mobility, thanks to this expansion of “rooms at the top”, did not see their own children having the same mobility chances (Bukodi & Goldthorpe, 2018). Avoiding downward mobility has become more demanding over time in Britain.

3.2 Summary and Research Questions

The aim of this study is to provide estimates of childcare by education and social class in Britain during the period 1961-2015. It is unclear if the gap between families in different social classes and between those with advanced education and those without has increased, decreased, or stayed constant over time. Furthermore, we do not know whether the patterns of change differ for mothers and fathers. I illustrated the three main hypothesised patterns in Figure 1.

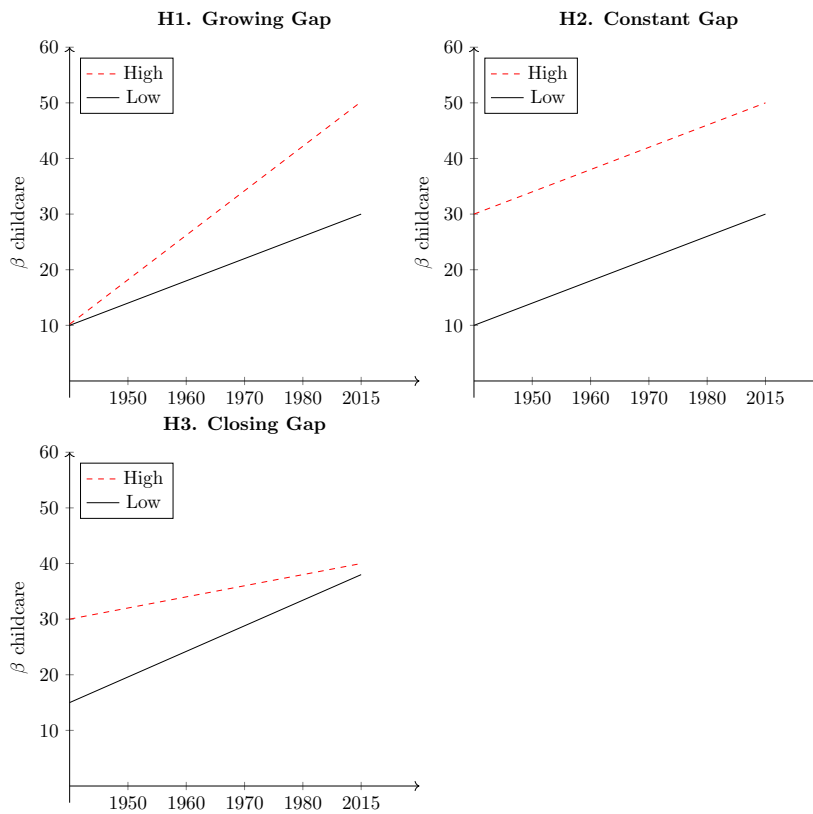


Figure 1. Three Hypothesised Historical Patterns of Parental Childcare Stratification

Mathematically, let β_H^{1960} represents the average childcare time for high-status (or high-education) parents in 1960, β_H^{2015} represents the average childcare time in 2015 for the same group, and β_L^{1960} represents the average childcare time for low-status parents in 1960; then, we can formalise the three hypotheses as follows

		1960	2015
H1	Growing Gap	$\beta_H^{1960} - \beta_L^{1960} = 0,$	$\beta_H^{2015} - \beta_L^{2015} > 0$
H2	Constant Gap	$\beta_H^{1960} - \beta_L^{1960} = \delta,$	$\beta_H^{2015} - \beta_L^{2015} = \delta$
H3	Closing Gap	$\beta_H^{1960} - \beta_L^{1960} > 0,$	$\beta_H^{2015} - \beta_L^{2015} = 0$

The Growing Gap hypothesis (H1) states that the gap between class and education was null in the 1960s and has opened since then. The Constant Gap hypothesis (H2) states that the gap, denoted δ , has been the same in both periods. Finally, the Closing Gap hypothesis (H3) states that the gap was different from 0 in earlier periods and is now approaching 0.

I will test these three patterns for mothers and fathers separately and for developmental childcare (i.e. teaching) and all forms of childcare. Because I do not have strong reasons to believe that these patterns will differ for fathers and mothers, I hypothesise that the patterns are the same for both parents.

4 Data and Methods

To estimate the trends in childcare, I use the United Kingdom Time-Use Surveys 1961, 1974, 1983, 2000 and 2015. All of the surveys are nationally representative surveys of the British population. However, these surveys have been collected by different institutions following different protocols. I present in detail the surveys in the Online Appendix and discuss their differences in section B of the Online Appendix. Because of the complexity of the harmonisation process, I refer extensively to the Online Appendix in this section and only discuss here the main points to alleviate the reading of this section.

4.1 Sample Characteristics

I selected all parents with children aged less than 12 years old. I included single mothers but removed the few single fathers from the final sample. The final analytical sample is made of 4586 parents, 2570 mothers and 2016 fathers. The number of cases is distributed as follows across surveys: 749 cases for 1961, 821 for 1974, 228 for 1983, 1535 for 2000 and 1253 for 2015. I detail how I arrived at these numbers in the Online Appendix, Section F. Table F.1 and F.2 in the Online Appendix show the total sample of adults (18-65 years old) for each survey and the final sample of parents.

I also encourage the reader to look at sections B and D of the Online Appendix discussing the comparability issues of the different surveys.

4.2 Class and Education Harmonisation

In this paper, I use social class at the household level, not at the individual level. To do so, I use the highest class in the household. My targeted social class schema was the National Statistical Socio-Economic Classification (NS-SEC) (Rose, Pevain & O'Reilly, 2005). The NS-SEC in its short form is generally made up of five social classes. However, because the occupational codes for 1961 and 1974 were not sufficiently detailed, I had to settle for a three-class schema resembling as much as possible the NS-SEC division of (1) Class I – managerial/professional class, (2) Class II – intermediate class, and (3) Class III – working class. I removed the few self-employed households because of the impossibility of identifying them in earlier surveys. I also removed the very few unemployed households. Please see section E of the Online Appendix for a detailed explanation of my coding procedure.

In Tables F.6 and F.7 of the Appendix, I show the distribution of the three-class schema used throughout this paper and a more detailed four-class schema only constructed for the 1983-2015 surveys.

I decided to analyse education based on the dichotomy between people holding a higher education degree and others. Here, higher education means everything above A-levels in the British educational system, including university degrees and higher education degrees in

vocational fields like nursing. I decided this because the sample size was too small for a more fine-grained classification, and that information was not available for earlier surveys. The distribution of education is shown in Table F.8 (Online Appendix).

4.3 Outcomes and Modelling Strategy

I analyse two main types of childcare. I use a measure summing up all forms of childcare (feeding, cleaning, etc.) and a measure focusing on “developmental” Childcare (Altintas, 2016). Developmental childcare is composed of activities such as reading, teaching and playing.

My main explanatory variables are the survey/year, household social class, and education. I use the following control variables: the age of the youngest child (0-4 and 5-11), the number of dependent children, and the day of the week (weekdays and weekends). OLS regression is used to model these relationships.

I present a series of figures displaying the predicted values for the regression models interacting social class \times period and education \times period, controlling for the age of the youngest child, number of dependent children and day of the week. I present the full regression tables in the Online Appendix, Section G. I also show a formal ANOVA analysis comparing the three regression models. The models are

$$\text{Model 1: NULL} \quad y = \alpha + \beta_1 \text{Time} + Z\gamma + \varepsilon$$

$$\text{Model 2: Additive} \quad y = \alpha + \beta_1 \text{Time} + \beta_2 \text{Class} + Z\gamma + \varepsilon$$

$$\text{Model 3: Multiplicative} \quad y = \alpha + \beta_1 \text{Time} \times \beta_2 \text{Class} + Z\gamma + \varepsilon$$

With $\beta_1 \text{Time}$ denoting the period, $\beta_2 \text{Class}$ denoting social class (or education) and $Z\gamma$ the control variables.

I also conducted post hoc pairwise comparisons to test which groups or pairs of groups are statistically significantly different from one another (Lenth & Lenth, 2017). The pairwise comparisons are conducted on the regression models. The results are shown in the Online Appendix.

To understand better the pattern of associations between class and education on childcare during this period, I perform separately two regressions, one for the grouped period of 1961-1974 and one for the grouped period of 2000-2015. In this way, I can evaluate their relative importance, such as the increasing or decreasing role of class and education. I show several regressions introducing the variables one by one. In the first model, I introduce social class. In the second model, I introduce education. In the third model, I simultaneously introduce class and education. In the fourth model, the regression includes class, education, a measure of working hours (not shown in the table), and a control for single parenthood status (only for mothers). I also conducted a sensitivity analysis excluding single mothers from all my analyses and found no difference.

5 Results

Figure 2 shows the average time in childcare (all forms of care) (left) and developmental childcare (right) by sex and by year. Both types of childcare have increased for mothers and fathers since the 1960s. For mothers, childcare increased from 96 minutes on average per day in 1961 and reached 162 minutes on average per day in 2015, while fathers started at 18 minutes of childcare on average per day in 1961 and reached an average of 71 minutes in 2015. This represents almost a 300% increase for fathers and a 68% increase for mothers. In terms of equality between mothers and fathers, the care ratio was 5.3 (96/18) in 1961 and declined to a ratio of 2.2 (162/71) in 2015.

Regarding developmental childcare, the average daily mother time was 15 minutes in 1961 and increased to 44 minutes in 2015, while father time was 5 minutes in 1961 and reached 26 minutes in 2015. This translates to a 193% increase for mothers and to an increase of over 400% for fathers. Here again, the gender ratio declined from 3 to 1.7 in 2015.

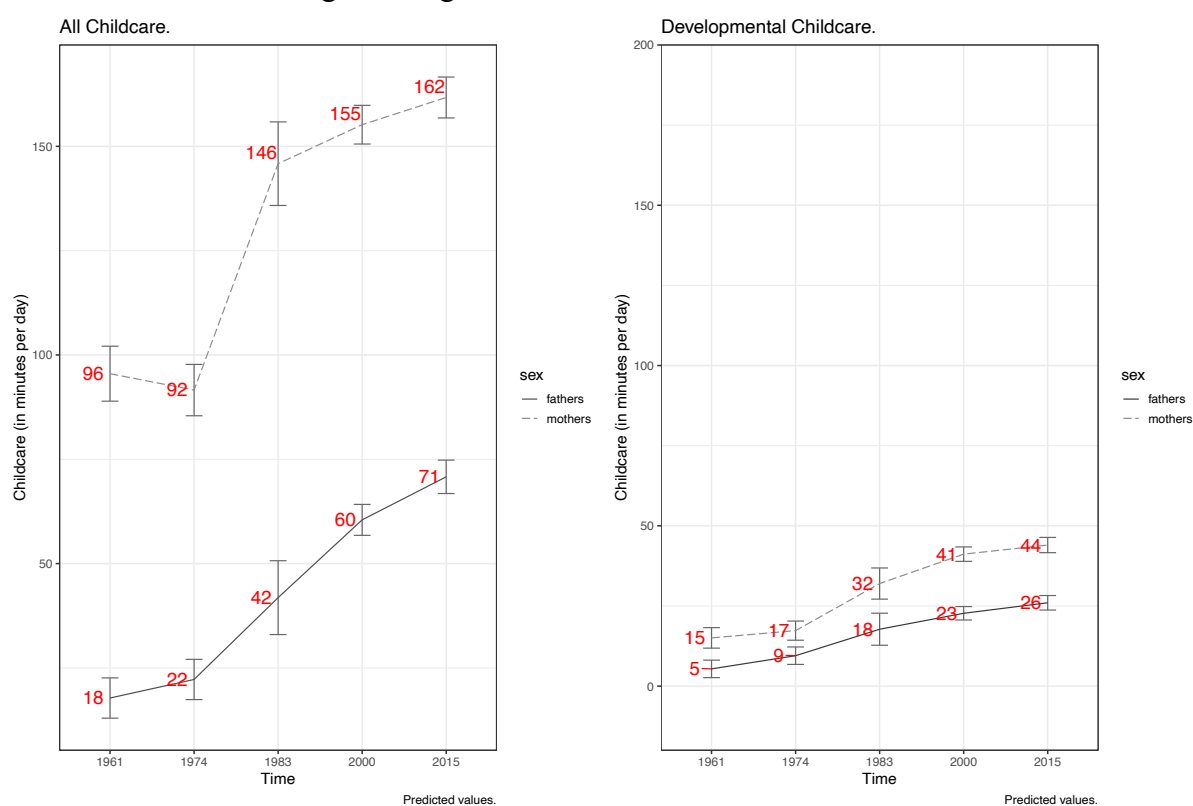


Figure 2. Predicted Values from OLS regressions of Childcare for Mothers and Fathers, 1961-2015. The predicted values are adjusted for the day of the week (reference weekdays) and the age of the youngest child (reference under five years old).

I present graphs of the predicted values (with 95% CI) for childcare from the OLS model interacting year and class and the OLS model interacting year and education (with smoothing applied to help read the figure). I present this model (i.e. the multiplicative model) as a descriptive way to display the different averages with the advantage of incorporating control variables. However, as discussed below, this model may not be the most parsimonious, and some interaction parameters are not statistically significant. The full regression tables are shown in the Online Appendix.

I display the predicted values by social class on the top panel and for education on the bottom panel. The predicted values control for the age of the youngest child, the number of children and the day of the week. The categories of references for predicting the values are parents with children aged less than five years old, two children and weekdays.

5.1 Childcare Regression Models

Childcare time increased for mothers of all social classes and educational groups between 1961 and 2015. Mothers in Class I (professional/salariat) spent 112 minutes of childcare on average in 1961, compared to 91 minutes for those in Class III (working class), resulting in a gap of 21 minutes (pairwise comparison p-value of 0.313). However, by the 1980s, this gap had grown to 36 minutes (pairwise comparison p-value of 0.002). In 2015, mothers in Class I did 171 minutes of childcare on average, while mothers in Class III did 150 minutes, which is a gap of 20 minutes (pairwise comparison p-value of 0.002). We can question whether the 21-minute gap in 1961 is statistically insignificant due to the small sample size, particularly when compared to the 20-minute gap in 2015, which is significant.

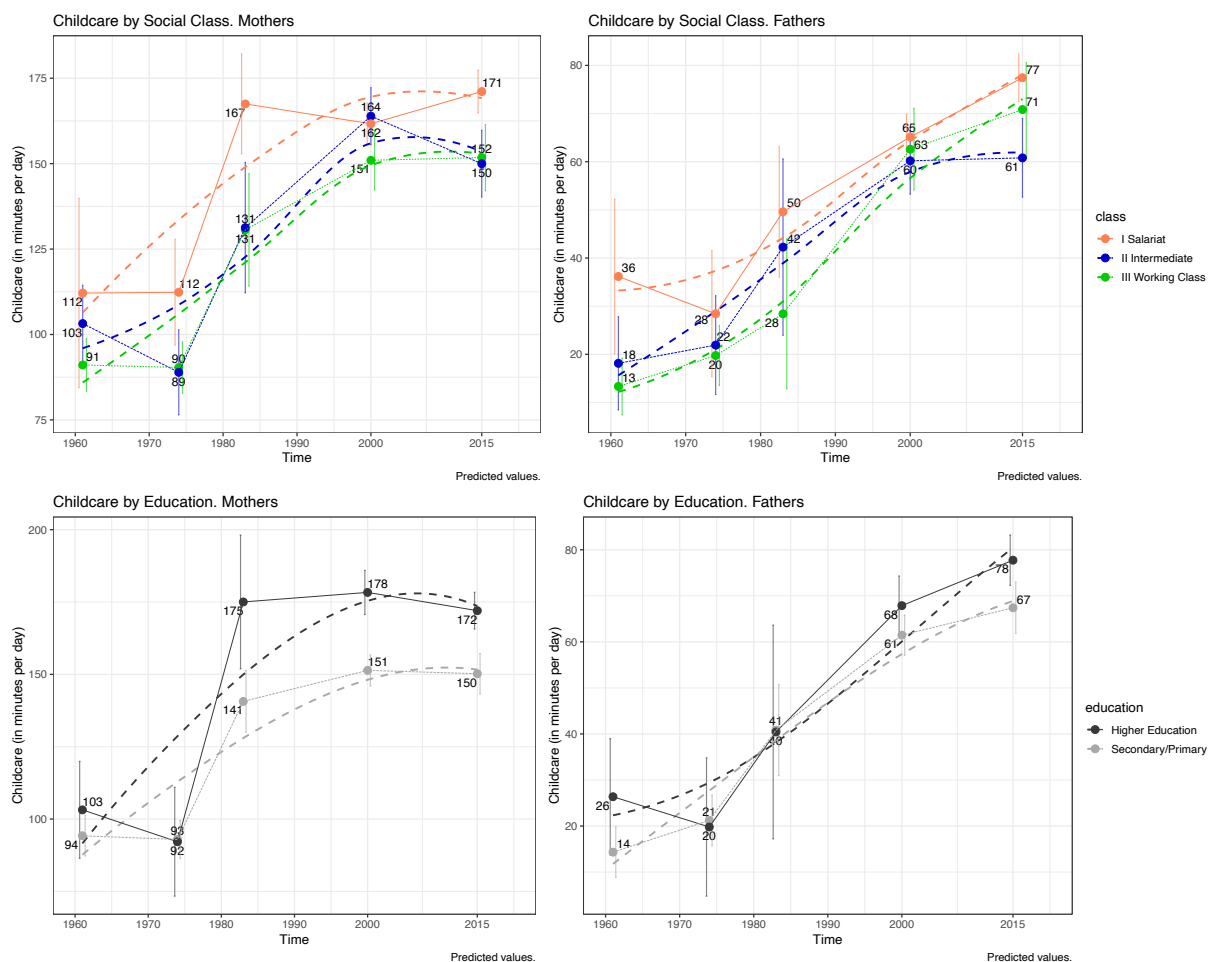


Figure 3. Predicted Values from OLS regressions of Childcare for Mothers and Fathers by Class and Education, 1961-2015. The predicted values are adjusted for the day of the week (reference weekdays), the number of children, and the age of the youngest child (reference under five years old).

For education, starting in the 1980s, we observe a growing disparity between mothers with higher levels of education and those without. In 1961, the 10-minute gap between the two groups was not statistically significant, whereas in 2015, the gap widened significantly, reaching approximately 20 minutes (p -value < 0.001).

We can conclude that there has been a growing gap in childcare between mothers with higher education and those without since the 1960s. The conclusion is less definitive for social class. However, the regression models show a good fit for the multiplicative model for both class and education, suggesting it is the most appropriate model.

The patterns of childcare for fathers are less straightforward. The gap between fathers with and without education seems to have been narrowed in the 1980s before expanding again. The pairwise comparisons show that the gap is statistically significant for 1961, 2000, and 2015 (p -values of 0.072, 0.08, and 0.006, respectively) but not for 1974 and 1983. However, the goodness of fit would reject the multiplicative model.

Regarding class and childcare, there appears to be little disparity in time spent in childcare between fathers of different social classes, except for 1961, where fathers of Class I spent significantly more time than other fathers. We have an average of 36 minutes for fathers in Class I and an average of 13 minutes for fathers in Class III in 1961, which corresponds to a gap of 23 minutes (which is a gap similar to mothers). In 2015, I found 77 minutes of childcare for fathers in Class I and 71 minutes for fathers in Class III, which corresponds to a gap of 6 minutes. Already by the year 2000, the gap had closed completely. Thus, from 1961 to 2015, we have an increase of 41 minutes (113%) for fathers in Class I and an increase of 58 minutes (446%) for fathers in Class III.

However, the goodness of fit analysis suggests that class and period do not interact significantly enough to use a multiplicative model over a simple additive model for fathers.

5.2 Developmental Childcare Regression Models

In Figure 4, we have the results for developmental childcare.

For developmental childcare, the gaps (i.e. effect sizes) are smaller than when considering all types of childcare. Small effect sizes combined with relatively small sample sizes make it difficult to detect real group differences. This is something to bear in mind.

For mothers, the gap between women in Class I and Class III does not follow a clear pattern. The gap hovers around 8 to 10 minutes, with some periods reaching statistical significance (e.g. 1974, 2000) but not in others (e.g. 1961, 1983). The goodness of fit fails to reach statistical significance for the multiplicative model, favouring the simpler additive model instead.

However, there is a clear widening gap in developmental childcare time between mothers with and those without a degree. In 2015, the difference was approximately 9 minutes per day, which equates to approximately 1 hour per week or almost 55 hours per year. The goodness-of-fit test results somewhat support the multiplicative model (ANOVA p -value of 0.11).

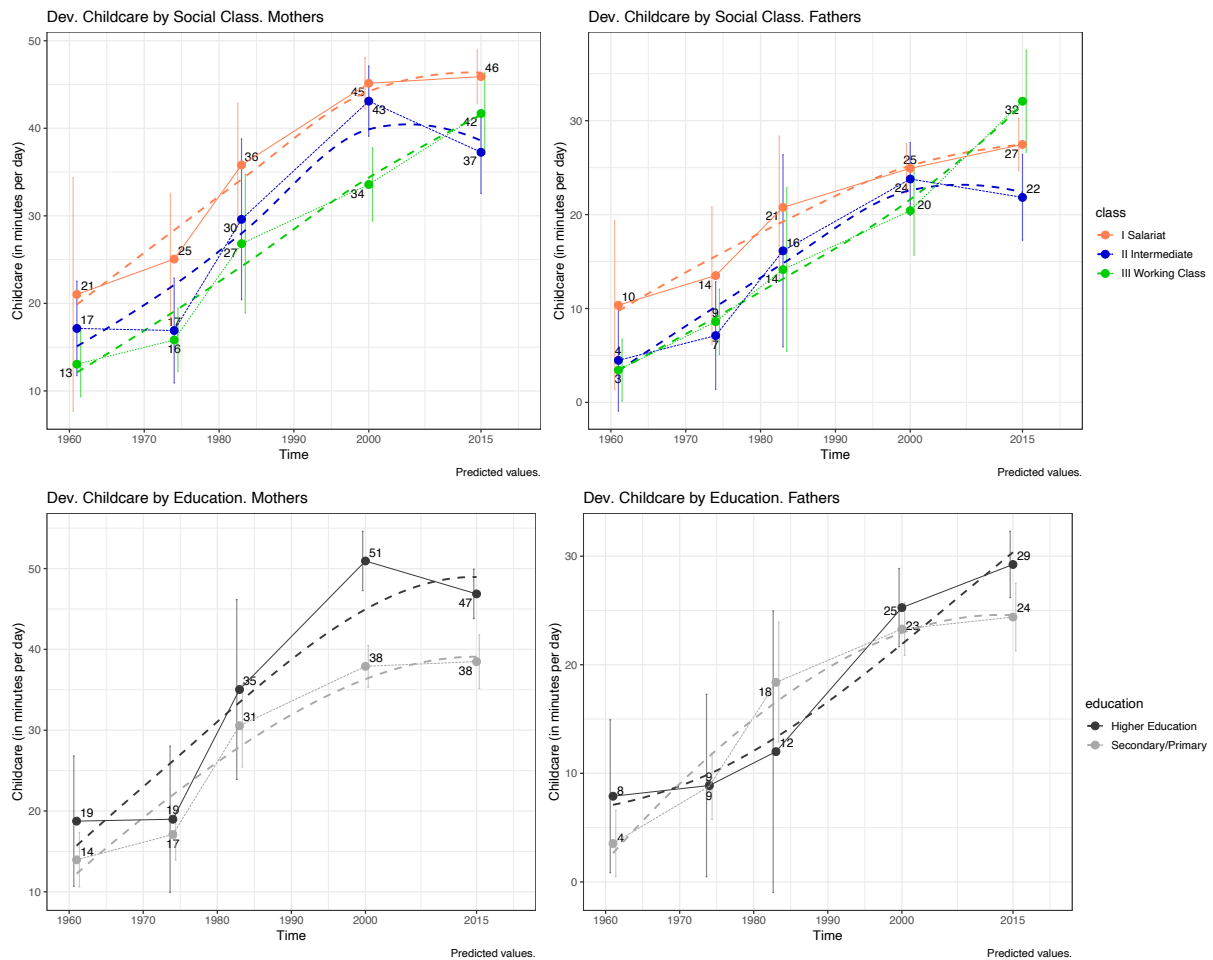


Figure 4. Predicted Values from OLS regressions of Developmental Childcare for Mothers and Fathers by Class and Education, 1961-2015. The predicted values are adjusted for the day of the week (reference weekdays) number of children, and the age of the youngest child (reference under five years old).

We find very little difference in developmental childcare time among fathers in different groups, except for a 5-minute gap (p -value < 0.05) in 2015 between fathers with a degree and those without. Fathers' developmental childcare time is not as highly stratified as mothers' care time.

5.3 Separate Regressions (1970s, 2000s)

To further understand the pattern of associations among childcare, class, and education, I compare the regression coefficients for class and education on childcare for the earlier periods (grouped from 1961 to 1974) to the later periods (grouped from 2000 to 2015). I present four regression tables, one for childcare and one for developmental childcare, for both mothers and fathers. Each table displays four regression models separately for the period from 1961 to 1974 (the 1970s) and 2000 to 2015 (the 2000s).

The first two models introduce one explanatory variable at a time (education in Model 1 and social class in Model 2). Model 3 includes both social class and education. Finally, Model 4 introduces a dummy variable indicating if the household is a single parent (only for mothers, as there is no single father in my sample) and a time-use measure of paid working time (not shown in the table).

Social class is associated with childcare in both periods in Model 2. Working-class mothers in the 1970s spent approximately 21 minutes less on childcare and 9 minutes less on developmental childcare compared to those in Class I. In the 2000s, working-class mothers spent roughly 14 fewer minutes on childcare and 8 fewer minutes on developmental care than mothers in the professional class. However, in the period 2000-2015, when social class and education are included in the same regression model (in Model 3 and Model 4), the association between social class and childcare disappears. In the earlier period, 1961-1974, social class was associated with childcare in all the models, while education was not.

The same pattern is true for fathers. Social class is associated with both types of childcare in 1961-1974 but is not anymore in 2000-2015. Inversely, education is associated with childcare in 2000-2015 but not in the earlier periods.

This suggests the growing importance of education for the stratification of childcare in more recent times.

Table 1 OLS Regression on Mother’s Childcare Time, 1961-1974 and 2000-2015.

	1961-1974				2000-2015			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
University	3.95 (5.34)		-3.43 (5.58)	-1.91 (5.55)	23.70 (5.03)***		22.39 (5.44)***	25.89 (5.07)***
Intermediate		-15.89 (6.59)*	-16.51 (6.71)*	-15.52 (6.68)*		-8.61 (6.10)	-1.35 (6.27)	-1.78 (5.80)
Working Class		-21.14 (6.03)***	-22.34 (6.34)***	-21.09 (6.33)**		-14.49 (5.48)**	-4.33 (5.84)	-8.65 (5.80)
Single parents				-11.34 (5.07)*				-11.81 (5.54)*
Intercept	80.51 (4.68)***	98.06 (7.13)***	99.27 (7.48)***	101.21 (7.43)***	155.00 (6.69)***	172.01 (7.15)***	156.72 (7.48)***	194.48 (7.64)***
R2	0.27	0.28	0.28	0.30	0.19	0.18	0.19	0.29
N individuals	829	829	829	829	1602	1602	1602	1602

Note. ***p < 0.001; **p < 0.01; *p < 0.05, clustered standard errors in parenthesis. Model 4 controls for working hours. All models control for the day of the week, number of children and age of the youngest child.

Table 2 OLS Regression on Mother’s Developmental Childcare Time, 1961-1974 and 2000-2015.

	1961-1974				2000-2015			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
University	2.79 (1.68)		-0.48 (1.77)	-0.30 (1.77)	10.13 (2.39)***		8.83 (2.51)***	10.11 (2.46)***
Intermediate		-7.42 (2.29)**	-7.51 (2.36)**	-7.40 (2.36)**		-5.03 (2.67)	-2.16 (2.71)	-2.50 (2.66)
Working Class		-9.84 (2.17)***	-10.01 (2.31)***	-9.85 (2.32)***		-7.89 (2.77)**	-3.88 (2.85)	-5.98 (2.90)*
Single parents				-0.01 (1.85)				-2.45 (2.76)
(Intercept)	11.44 (1.32)***	19.70 (2.57)***	19.87 (2.72)***	20.08 (2.71)***	48.52 (3.40)***	56.39 (3.64)***	50.36 (3.69)***	63.63 (4.03)***
R2	0.07	0.11	0.11	0.11	0.08	0.07	0.08	0.08
N individuals	829	829	829	829	1602	1602	1602	1602

Note. ***p < 0.001; **p < 0.01; *p < 0.05, clustered standard errors in parenthesis. Model 4 controls for working hours. All models control for the day of the week, number of children and age of the youngest child.

Table 3 OLS Regression on Father’s Childcare Time, 1961-1974 and 2000-2015.

	1961-1974				2000-2015			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
University	6.05 (3.42)		-0.33 (3.28)	-1.09 (3.19)	10.42 (3.96)**		8.57 (4.36)	6.73 (4.09)
Intermediate		-8.85 (4.51)	-8.94 (4.40)*	-8.85 (4.32)*		-10.90 (4.32)*	-7.69 (4.63)	-7.39 (4.37)
Working Class		-13.41 (4.27)**	-13.57 (4.20)**	-12.62 (4.06)**		-5.27 (5.60)	-1.20 (5.97)	-7.01 (5.73)
(Intercept)	12.92 (1.97)***	24.75 (4.64)***	24.92 (4.49)***	35.68 (5.57)***	61.31 (5.59)***	69.30 (5.55)***	64.24 (6.03)***	108.21 (7.09)***
R2	0.08	0.10	0.10	0.13	0.10	0.10	0.10	0.20
N Clusters	741	741	741	741	1186	1186	1186	1186

***p < 0.001; **p < 0.01; *p < 0.05, clustered standard errors in parenthesis. Model 4 controls for working hours. All models control for the day of the week, number of children and age of the youngest child.

Table 4 OLS Regression on Father’s Developmental Childcare Time, 1961-1974 and 2000-2015.

	1961-1974				2000-2015			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
University	2.54 (1.63)		0.14 (1.69)	-0.12 (1.69)	3.89 (2.01)		3.72 (2.35)	3.08 (2.33)
Intermediate		-5.50 (2.17)*	-5.46 (2.22)*	-5.43 (2.22)*		-3.33 (2.47)	-1.93 (2.67)	-1.83 (2.61)
Working Class		-5.92 (2.07)**	-5.86 (2.21)**	-5.53 (2.19)*		-0.59 (2.78)	1.18 (3.13)	-0.84 (3.26)
(Intercept)	6.23 (1.28)***	11.86 (2.26)***	11.78 (2.53)***	15.46 (2.86)***	28.91 (3.09)***	31.59 (2.80)***	29.39 (3.37)***	44.71 (4.27)***
R2	0.05	0.06	0.06	0.06	0.08	0.08	0.08	0.12
N Clusters	741	741	741	741	1186	1186	1186	1186

***p < 0.001; **p < 0.01; *p < 0.05, clustered standard errors in parenthesis. Model 4 controls for working hours. All models control for the day of the week, number of children and age of the youngest child.

To better understand the changes in childcare, I show a few additional descriptions of changes in paid and unpaid work.

In Figure 5, we can observe a significant increase in paid work, on average, for women in professional and intermediate social classes between 1961 and 2015. Meanwhile, the average level of paid work for women in working-class households remained constant throughout this period. By 2015, women from working-class households were working substantially fewer hours than those from middle- and upper-class households. Concerning fathers, we can see a reversal of the class gradient of paid work. Traditionally, working-class men worked the most hours in the 1960s; however, in 2015, professional men had the longest hours.

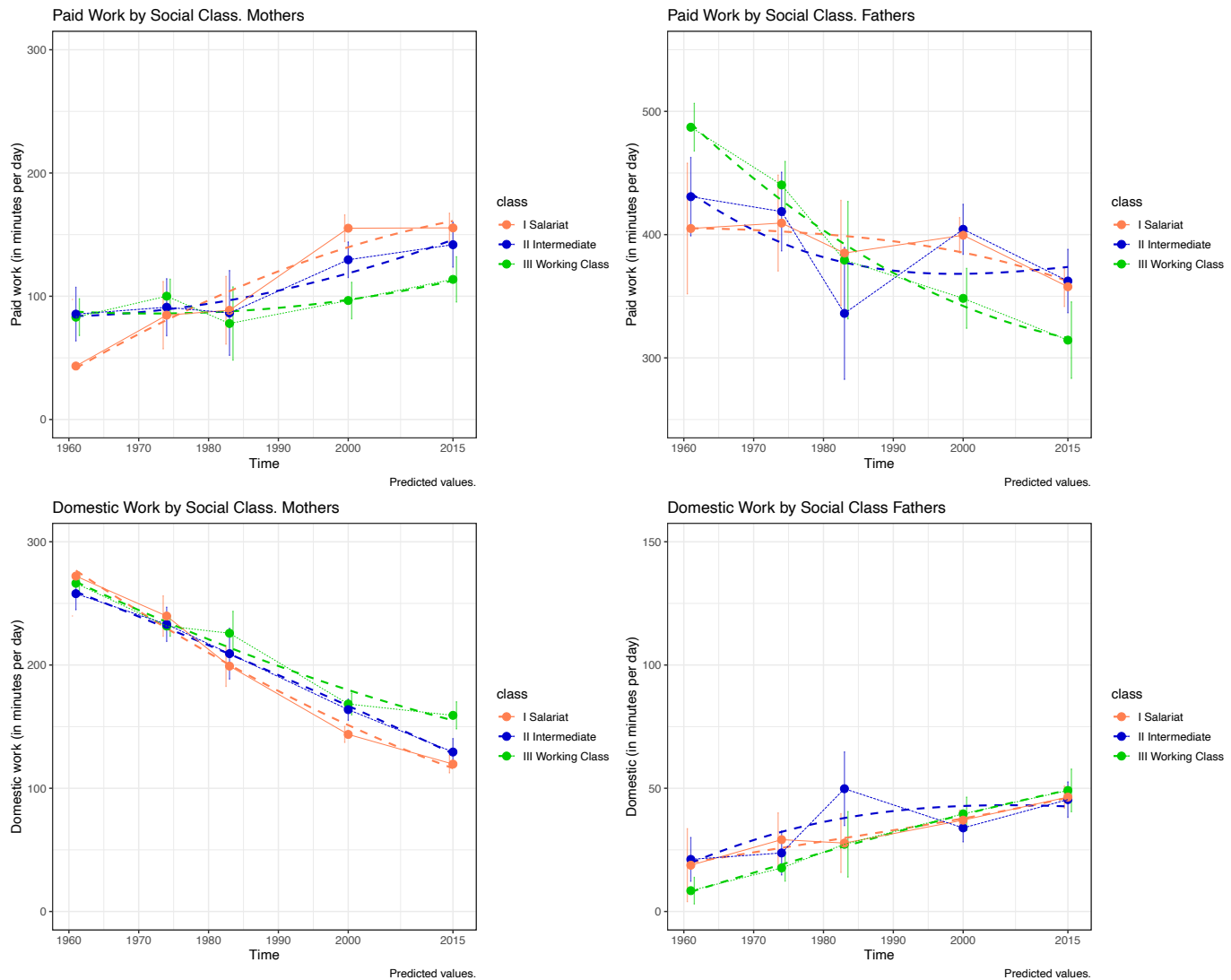


Figure 5. Predicted Values from OLS regressions of Paid and Domestic Work (excluding childcare) for Mothers and Fathers by Class, 1961-2015. The predicted values are adjusted for the day of the week (reference weekdays) number of children, and the age of the youngest child (reference under five years old).

Regarding domestic work (bottom panel of Figure 5), we see that all mothers decreased their time in housework (excluding childcare), while fathers increased theirs. The reader should bear in mind that the range of the y-axis is different for mothers and fathers. However, a class gradient can be seen developing between 1961 and 2015 in mothers' domestic work. Mothers in Class I and II (middle class) are doing much less domestic work compared to working-class

mothers in 2015. A class convergence in domestic work amongst fathers can be seen (bottom right panel).

6 Discussion

The results presented in this study show that parents from all social classes and all educational backgrounds increased the time they spent caring for their children between 1961 and 2015. This is true for childcare in general and for developmental care. Childcare increased rapidly from 1960 to 2000, especially between the 1974 and 1983 surveys. The rate of growth slowed down between 2000 and 2015.

The results from my study do not show a *uniform* pattern for childcare among the different social classes and educational groups. I present the major conclusions in Table 5, summarising the results focusing on the comparison between mothers in Class I (professional households) and mothers in Class III (working-class households).

Table 5 Summary of Findings about the Gap in Childcare between Mothers from Class I and Mothers from Class III, and Mothers with and without Education

	Mothers		Fathers	
	All Childcare	Developmental	All Childcare	Developmental
Social Class	H2. Constant Gap	H2. Constant Gap	H3 Closing Gap	H4. No Gap
Education	H1. Growing Gap	H2. Constant Gap possibly H1	H3 → H1 (closed and re-opened)	H4, and H1 for 2015.

Note. H1: Growing Gap, H2: Constant Gap, H3: Closing Gap. H4: No Gap.

I initially hypothesised three main patterns: the Growing Gap hypothesis (H1), the Constant Gap hypothesis (H2), and the Closing Gap hypothesis (H3). However, I must add another pattern I had not initially considered from the literature viewpoint: the No Gap hypothesis (H4). I also hypothesised that the patterns would be the same for mothers and fathers. My analyses clearly show that this is not the case.

The results for mothers are the most straightforward to present. Mothers from Class I (professional/salariat) and those with higher levels of education devote significantly more time to childcare than other mothers. This gap in childcare time averages around 20-30 minutes per day.

I found that the gap in childcare opened between mothers with higher education and other mothers in the 1980s. I found a similar pattern for developmental childcare, with the exception that the gap between mothers with a higher education degree and those without opened in 2000 rather than in 1983. The developmental childcare gap approximately doubled from 1961 to 2015.

The evidence regarding social class and childcare suggests that the gap between mothers in working-class households and mothers in professional households remained constant over time. The gap in childcare in 2015 was the same as it was in 1961 (about 20 minutes), but because of the small sample size, the p-value does not adequately capture the significance of this difference. The same applies to developmental childcare.

When considering the patterns of father involvement, it is not easy to provide a concise summary due to the lack of an overarching pattern. Fathers' childcare time is much less stratified than mothers' childcare time. It is only in recent periods that fathers' time has been bifurcating, especially regarding fathers' education.

Going deeper into the findings, the regression analysis showed the following relationships between childcare, education and social class. The results suggest that social class was the main stratifying factor in the earlier periods (1961-1974). It is only in recent periods (2000-2015) that education became the marker of the stratification of childcare.

The fact that education is more influential nowadays is positive news because education has expanded dramatically during this period (more and more mothers have a tertiary education now). This shift in the composition of parents has benefited children because more highly educated parents spend more time on childcare than other parents.

What is the role of time availability on these trends? I demonstrated that, on average, the amount of time spent on paid work has decreased since 1961, which means that parents would have more free time outside of work. However, in 2015, it was the parents who had the least time outside work, i.e. highly educated professionals, who spent the most time doing childcare. Many studies found a similar paradox (Altintas, 2016; England & Srivastava, 2013). My analysis showed that controlling for working hours did not affect the estimates for education or social class. This suggests that parents will make up for time constraints by carving into their own free time. Childcare seems inelastic to time availability (Hsin & Felfe, 2014). Therefore, time availability is unlikely to have played a major role in driving this social change.

While some work equates social class and education (Lareau, 2003), class can conceptually be differentiated from education on several grounds. The class schema used in this paper is closely related to the work of Goldthorpe and is mainly intended to capture employment relations and, more generally, long-term economic resources rather than, for instance, cultural resources (Goldthorpe & McKnight, 2006).

This class schema differentiates between professionals who typically have higher wages, more stable incomes, greater job protection, and more avenues for career advancement and the working class, who generally experience a more unstable and unpredictable form of employment, such as an hourly contract, as well as lower wages. In that sense, social class is about economic resources as well as stability (Goldthorpe, 2007).

One possible explanation is that the unpredictable nature of working-class jobs can make it difficult for parents to organise time for childcare, especially when they have non-traditional work hours such as early mornings, late evenings, or weekends. This problem is more related to the timing of work rather than the total number of hours worked. Another hypothesis that cannot be examined with this dataset is that working-class occupations may be more mentally and physically taxing, which could result in parents having limited energy to engage with their children after work. More work is needed to test these mechanisms.

Sociologists have argued that education, on the other hand, provides resources more closely related to knowledge and culture (Bukodi & Goldthorpe, 2013). A parent with a university degree, for instance, will have an understanding of the educational system and will be able to provide guidance on how to navigate it and how to be successful within it (Bukodi & Goldthorpe, 2013). Furthermore, education provides resources regarding human capital and its effective accumulation. Not only how to read and write academically but also how to study effectively and manage time properly. The educational system also exposes individuals to a specific culture, its references, and norms, providing invaluable cultural resources to navigate

the professional class. More work is needed to understand the different effects of social class and education on child-rearing.

Looking at the increase in childcare since the 1960s, what factors could have contributed to this growth? Ramey and Ramey argued that competition for top universities was one of the main drivers for the increase in childcare, at least in the US context (2010). The issue with this theory is that educational competition also happened in the 1990s in the UK (Blanden & Machin, 2004), which does not correspond to the timing of the increase in childcare (see Online Appendix, Figure H2). The growth in childcare occurred earlier in the UK (between the 1974 and 1983 surveys). What other social changes during the 1970s and early 1980s might be related to the rise in childcare?

An empirical study of the diffusion of intensive parenting shows that it was during this period that the ideology of intensive parenting spread in British society (Vagni, 2023). But it was also during this period, especially between 1970-1980, that absolute downward social mobility started to rise (see Online Appendix). The fear of downward mobility could have triggered parents to invest more in their children's human capital early in life. Then, a more general model of the Rug Rat Race focused on competition in the labour market could be a complementary explanation.

The 1970s was a difficult period economically in Britain and contrasted greatly with the economic growth of the 1960s. The first signs of economic difficulties began with the 1973 oil crisis. The 1970s ended with the “Winter of Discontent” and, of course, with Margaret Thatcher, who came into power with a discourse focused on competition. Neoliberal policies deregulated labour markets, housing and education, resulting in a climate of acute competition (Deakin & Reed, 2000). Therefore, concerns about social mobility and increasing competition in the labour market could have played an important part in driving parents to invest more and more time in their children's human and cultural capital.

The stratification of parental competition can be understood in the context of the theory of loss aversion often discussed in social mobility research (Breen & Goldthorpe, 1997; Bukodi & Goldthorpe, 2018; Kahneman, 2011). Losing something, such as social status, is perceived as more detrimental than failing to find something we never had (Kahneman, 2011). The fear of downward mobility is a greater motivation than the motivation of achieving upward mobility and thus constitutes an important incentive for middle-class families to maintain their social status (Bukodi & Goldthorpe, 2018:p.69).

However, why is fathers' childcare time not as strongly socially stratified as mothers' time is? One explanation is that fathers are generally less involved and take less responsibility for childcare and the organisation of care. Fathers provide a much more contingent type of care, focused on leisure with children, rather than structured activities such as teaching (Bittman & Wajcman, 2000; Vagni, 2019). Another explanation is that the ideology of intensive parenting and parenting books were, and still are, primarily targeted at mothers (Hays, 1996). More research is needed to understand the motivations behind fathers' involvement with children.

Several limitations of this study should be noted. The most important limitation pertains to the comparability of the childcare categories across surveys. I have reviewed in detail my harmonisation procedure in the Online Appendix. Despite my best efforts, the harmonisation can only be imperfect because the surveys have not been collected consistently over time. This is not just the case for the British surveys but for the American surveys too. Unfortunately, no other surveys could serve as a benchmark for childcare, unlike for paid work, where labour force surveys can serve as comparison points. It should also be noted that harmonising

education has limitations, particularly in earlier periods. For instance, in the 1961 and 1974 surveys, the educational information was gathered based on age rather than the highest degree achieved. This suggests that our measure of education is capturing more of a relative education level rather than an absolute one. The cases grouped under *advanced higher education* indicate that they were advanced relative to their peers and the period in which they lived. This is a limitation to keep in mind.

This paper contributes to the literature on social stratification and childcare by presenting estimates of childcare time by social class and education in Britain in the period 1961-2015. Despite the potential issues discussed above, I believe the trends are consistent and robust enough to take the estimates at face value. Contrary to other countries, such as the US, where the gap between mothers with high education and mothers with low education appears to be reducing in recent years (Prickett & Augustine, 2021), the trends in the UK show little sign of convergence. On the contrary, they show some signs of divergence. While highly educated parents, typically found in professional-class households, are devoting increasing amounts of childcare time, parents with lower levels of education, who are overrepresented in the working class, are struggling to catch up.

Further work should explore why this divergence is only occurring in the UK, or if it is also happening in other contexts such as France, Germany, etc. By comparing more closely the patterns of divergence and convergence in different countries, we might better understand the role that childcare plays in the general social stratification of society and what role childcare plays in the production and reproduction of inequalities.

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