

Article

Regional differences in unpaid household service work, leisure and unpaid childcare: 2015

How time spent performing unpaid household service work (for example, childcare, adult care, cooking, housework, unpaid transportation services and for volunteering), paid work or study and leisure time differs across UK regions or nations.

Contact:
Chris S Payne
HNSA@ons.gov.uk
+44 (0)1633 651660

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Table of contents

1. [Main points](#)
2. [Introduction](#)
3. [Regional differences in unpaid work, paid work or study and leisure](#)
4. [Focus on regional differences in unpaid childcare](#)
5. [Definitions](#)

1 . Main points

- Average time spent performing unpaid work was highest in the East of England in 2015, at 3 hours 19 minutes per day; unpaid work includes activities such as unpaid childcare, adult care, meal production, housework, transport and formal volunteering
- The average time spent on unpaid work was lowest in London at 2 hours 43 minutes per day.
- After controlling for demographic differences, those in Wales performed 27 minutes more unpaid work per day compared with those living in London.
- Scottish parents spent least time with children in 2015; however, they also provided more active childcare than other areas of the UK.
- People in Northern Ireland spent most time with children, at an average of 13 hours per day; they also spent the lowest proportion of time using devices while with children accounting for just 6% of that time.

2 . Introduction

The [UK Household Satellite Account](#) is used to value all productive unpaid activity performed by UK households. This type of activity is sometimes referred to as an informal service and includes services such as unpaid childcare, adult care, meal production, housework, transport and formal volunteering.

The UK Household Satellite Account enables a more complete understanding of the size of the UK economy and UK economic growth, as unpaid household service work is not counted in mainstream measures of the UK economy such as gross domestic product (GDP). In 2016, the value of the UK's unpaid household service work was estimated at £1.24 trillion – larger in size than the UK's non-financial corporations sector; overall unpaid household service work was equivalent to 63.1% of GDP.

The aim of this article is to address user feedback, which suggested some important areas of interest relating to childcare, while also giving a general analysis of how the distribution of unpaid work, paid work and leisure time differs across UK regions.

This article expands on the UK Household Satellite Account by providing insight into how unpaid work time is distributed across the regions and UK nations and is structured in the following order:

Section 3: Regional unpaid and paid work time, and leisure time, across UK regions, including controlling for demographic or socioeconomic differences across the regions to understand if any difference between regions is deemed as cultural or demographic in nature.

Section 4: Focus on unpaid childcare, which is often considered as one of the core ¹ unpaid household services valued in the UK Household Satellite Account. This analysis will explore both the quantitative and qualitative aspects of unpaid childcare provision across the UK regions.

Some of the statistics used in this report have been used to help monitor progress towards the Sustainable Development Goals (SDGs). Explore the UK data on our [SDGs reporting platform](#).

Notes for: Introduction

1. Unpaid household service work is often provided based on altruistic motives, something which is particularly true for unpaid childcare, where young children are often completely reliant on unpaid childcare service production for their own welfare. Unpaid childcare has also traditionally formed the most sizeable component of the UK Household Satellite Account, worth some £352 billion in 2016.

3 . Regional differences in unpaid work, paid work or study and leisure

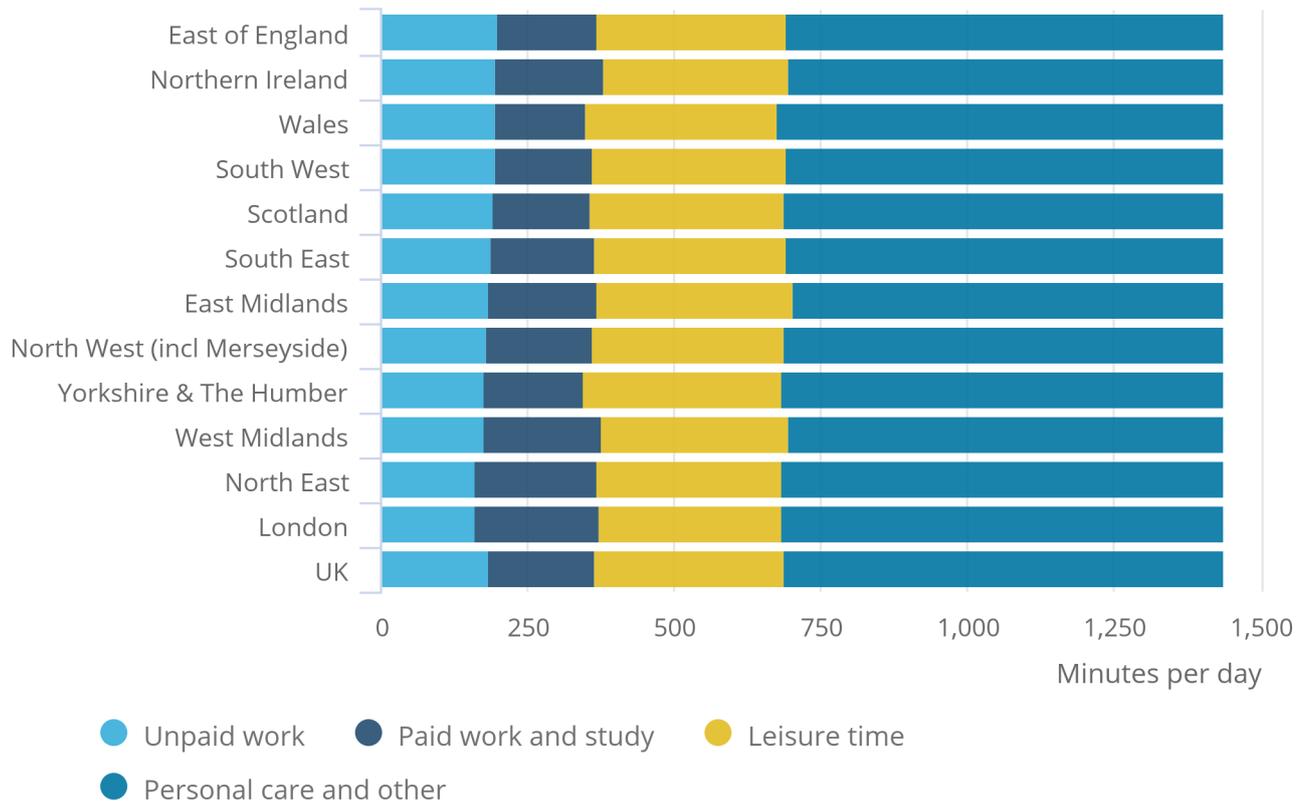
Regional differences in employment (type and rate), household composition and culture can all have an impact on how the average person uses their time. For example, a higher employment rate within a region would mean a higher amount of time per day is spent in some form of paid work. To understand the differences in the total amount of unpaid work, paid work or study, Figure 1 shows the differences in the average amount of unpaid and paid time per day across the entire population of that region aged eight years and over ¹ in 2015.

Figure 1: Unpaid work, paid work or study and leisure time spent throughout the day in 2015

UK

Figure 1: Unpaid work, paid work or study and leisure time spent throughout the day in 2015

UK



Source: UK Time Use Survey, 2015: Office for National Statistics

Notes:

1. Includes main activities only on weekdays and weekends across whole population whether employed or not.

Figure 1 shows in 2015 those in the East of England performed the highest amount of unpaid work per person whereas those in London performed the lowest, recording 3 hours 19 minutes and 2 hours 43 minutes respectively. Conversely, London saw the highest average time spent in paid work or study at 3 hours 21 minutes per day.

Those in the East of England transported themselves for longer than those in other regions and generally spent more time than the UK average performing other types of unpaid work such as childcare, adult care, DIY and gardening. Those in the East of England also spent the longest average time doing the laundry, compared with those from other UK regions or nations. Further details of types of unpaid work regionally can be found in [Regional differences in unpaid household service work: definitions and detailed regression results](#).

When considering total work time in 2015 (the combination of unpaid work and paid work or study), Northern Ireland recorded the highest average time at 6 hours 21 minutes per day, equivalent to 26.5% of all their time and Yorkshire and The Humber recorded the lowest at 5 hours 47 minutes per day.

The relative regional times spent on leisure are reversed and Yorkshire and The Humber recorded the highest amount of leisure time taken at 5 hours 36 minutes per day and Northern Ireland recorded the lowest at 5 hours 16 minutes per day, which is just over 13 minutes of every hour spent on leisure. In summary, the general pattern in the data is consistent with previous ONS findings, which showed that the [combination of paid work or study and unpaid work most often accounted for variance in leisure time](#), as opposed to variance in other time like sleeping, eating or personal care.

However, as mentioned previously in this article, some of these regional differences are likely to be attributed to demographic differences between the regions. Those with children are likely to perform higher amounts of unpaid work due to housework and childcare commitments, so regions that have a higher proportion of young families would be more likely to have a higher average time performing unpaid work. Similarly, if more people in a region are full-time employed², then it would increase the average amount of paid work in that region. Of course, if demographic differences are not responsible for the differences in unpaid work time, then it suggests that the regional differences are related to cultural differences.

Controlling for these demographic differences through a regression analysis shows that compared with living in London, living in other regions did have an effect over and above the age, sex, household type, income and work status of a region's residents. The results in Table 1 show the additional minutes of total unpaid work performed within regions of the UK compared with London, once demographic and household differences have been controlled for. Full regression results are available in the dataset.

Unpaid work by region after controlling for demographic differences

Table 1: Additional minutes spent on unpaid work compared with those living in London, after controlling for demographic differences, UK, 2015

Region	Additional minutes spent on unpaid work per day compared to London, after controlling for demographic differences
Wales	27
East of England	27
Northern Ireland	23
Scotland	23
East Midlands	22
South West	18
South East	18
North West (incl Merseyside)	16
West Midlands	12
Yorkshire & The Humber, North East	No significant difference

Source: Office for National Statistics

Notes

1. Figures rounded to nearest minute. [Back to table](#)

Once demographic differences are accounted for, those living in Wales showed the highest levels of unpaid work time with an additional 27 minutes per day compared with those living in London. Levels of unpaid work were also high in the other nations, Scotland and Northern Ireland, both reporting an additional 23 minutes per day compared with the average of those living in London.

All three nations, Wales, Northern Ireland and Scotland, reported unpaid work time premiums above nearly all the English regions. Only in the East of England did people report higher average unpaid work times, with just under 27 additional minutes over London. This is after demographic differences had been controlled for and therefore likely to be related to a difference in culture, as opposed to a difference in population characteristics, although it is recognised that hourly wage, average hours worked or availability of market services may also have had an impact.

Leisure by region after controlling for demographic differences

Table 2: Additional minutes spent on leisure activities compared with those living in London, after controlling for demographic differences, UK, 2015

Regions which took a significantly higher amount of leisure time than London (after controlling for demographic differences)	Additional minutes spent taking leisure activity, after controlling for demographic differences
East Midlands	17
South West	14
South East	12
Yorkshire & The Humber, East of England, North West (incl Merseyside), Wales, North East, Scotland, West Midlands, Northern Ireland	No significant difference

Source: Office for National Statistics

Notes

1. Figures rounded to nearest minute. [Back to table](#)

Table 2 shows those regions where residents took significantly more leisure time (compared with our baseline in the model – those living in London). Fewer regions are significantly different, however, when demographic factors were controlled for. Those living in the East Midlands, the South West or the South East all took significantly more leisure time than those living in London, taking 17, 14 and 12 minutes more per day respectively, while all other regions did not show significant differences in individuals' leisure time. Hence the majority of the difference in leisure time between regions is down to demographic and household differences.

Although region of residence did have an impact on levels of unpaid work and leisure time, in both regression models, factors such as economic activity, age and household type had a higher impact on time spent on those two activities (leisure or unpaid work).

Notes for: Regional differences in unpaid work, paid work or study and leisure

1. Time Use Survey collected time use data from those aged eight years and over in the UK.
2. In a recent article: Families and the Labour Market (ONS, 2018), results showed that, between April and June 2018, more than 9 in 10 fathers (93.2%) and half (50.5%) of mothers in England worked 30 or more hours a week in their main job, which emphasises the extent to which parenthood and family dynamics interact with paid working time.

4 . Focus on regional differences in unpaid childcare

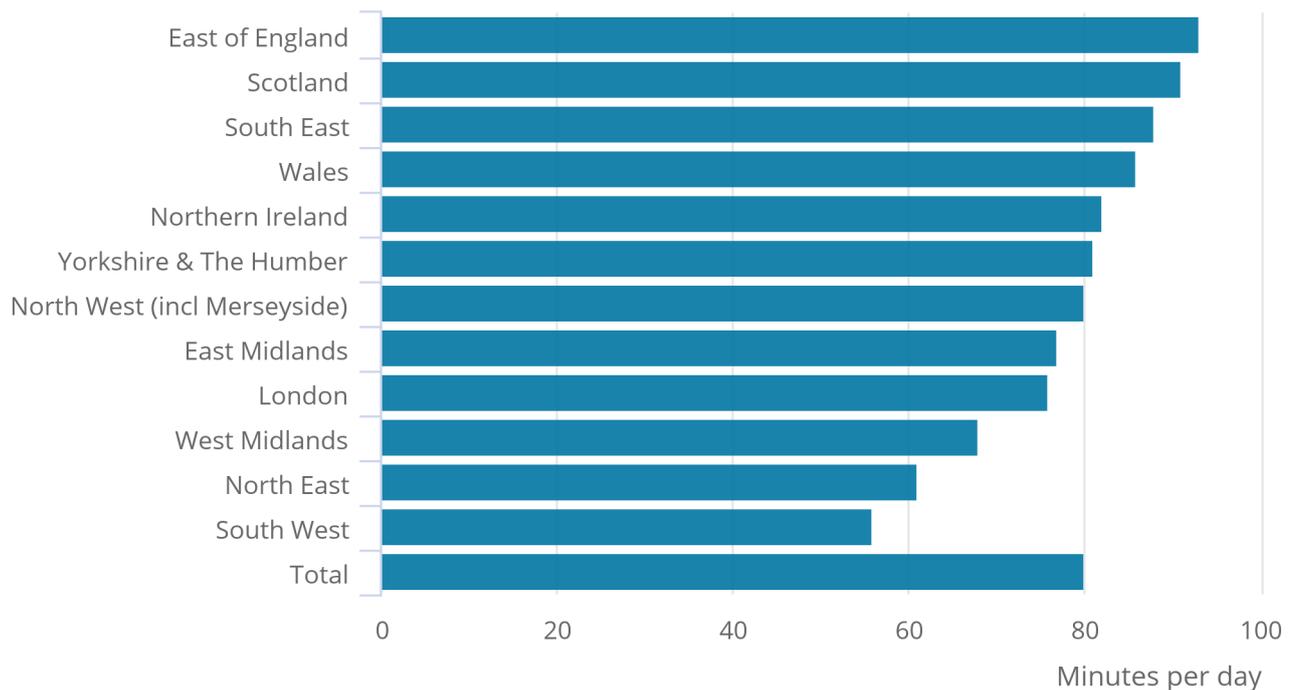
Parental active childcare¹ time

Figure 2: Time spent in active childcare by parents, by region

UK, 2015

Figure 2: Time spent in active childcare by parents, by region

UK, 2015



Source: UK Time Use Survey, 2015: Office for National Statistics

Notes:

1. Includes main and secondary activities, although secondary activity only counts if main activity is not defined as childcare at that point of time.
2. Active childcare includes activities such as feeding, washing or reading to children. A full definition is contained in the attached tables for the release.
3. Time is limited to time where a child aged 0 to 7 years is co-present.
4. Only includes parents whose youngest child is aged 10 years or under.

Figure 2 shows the regional difference in the amount of unpaid intensive childcare provided by parents whose youngest child lives with them and is aged 10 years or under.

Figure 2 shows that parents in the East of England spent the most time performing unpaid active childcare, on average recording 1 hour 33 minutes per day. Scottish parents also performed a higher average time performing active childcare, spending 1 hour 31 minutes per day.

Non-resident adults' active childcare time

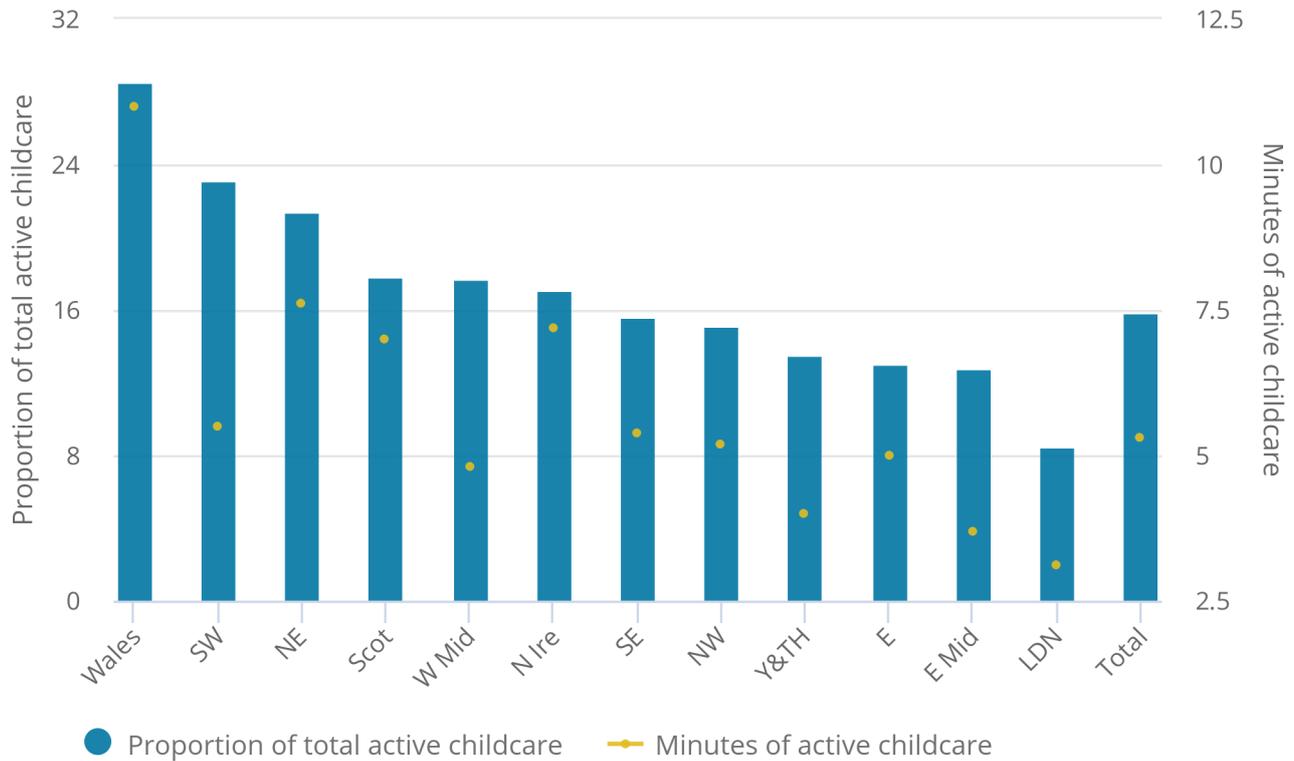
Looking at active childcare provision outside of the resident parents, including people such as wider family, grandparents, siblings, friends or neighbours, Figure 3 shows regional differences in the amount of childcare time provision by all those who were not resident parents.

Figure 3: Time spent in active childcare by non-resident adults, by region and UK total

UK, 2015

Figure 3: Time spent in active childcare by non-resident adults, by region and UK total

UK, 2015



Source: UK Time Use Survey, 2015: Office for National Statistics

Notes:

1. SW – South West, NE – North East, Scot – Scotland, W Mid – West Midlands, N Ire – Northern Ireland, SE – South East, NW – North West, Y&TH – Yorkshire and The Humber, E – East of England, LDN – London
2. Includes main and secondary activities, although secondary activity only counts if main activity is not defined as childcare at that point of time.
3. Active childcare includes activities such as feeding, washing or reading to children. A full definition is contained in the attached tables for the release.
4. Results in Figure 3 cannot be limited to time where children 0 to 7 years old are co-present

The results presented in Figure 3 show that non-resident adults in Wales performed significantly more childcare than in other regions of the UK, particularly when compared with non-resident adults in London. Non-resident adults provided childcare time accounting for 29% of the total childcare time provision in Wales, but just 9% in London.

The Welsh findings are statistically significant and do support previous evidence reported by Welsh Government that [Welsh parents have not been utilising free childcare](#), but rather they have a culture of relying on wider family to help with the childcare. However, the figure is particularly high compared with other UK regions and nations and should be treated with some caution as further analysis is required to fully explain the scale of this difference.

Children's supervised travel time in relation to education

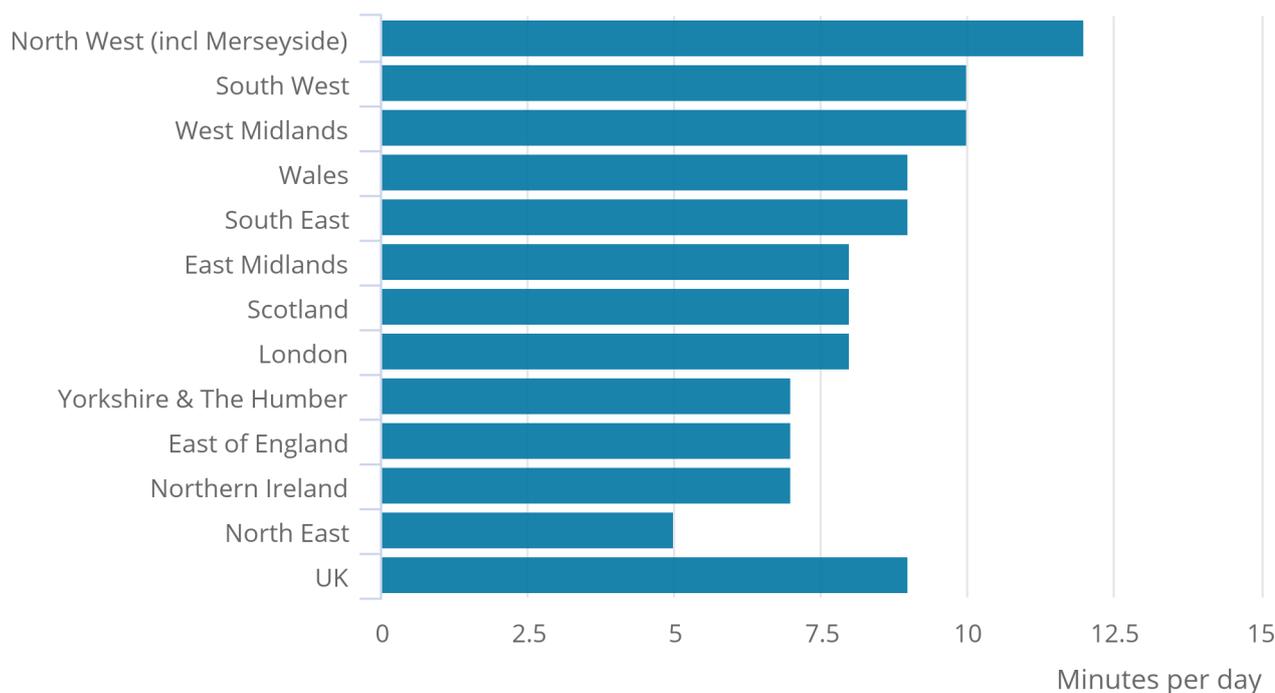
Extending the definition of childcare to consider other necessary activities child caregivers undertake, Figure 4 shows the amount of time children spend travelling in relation to education while supervised by another household member over eight years of age. Taking this approach is driven partly by data limitations but still functions on the assumption that when a child indicates that another person from their household is co-present while they travel in relation to education, that the other person is providing a supervisory service.

Figure 4: Time spent by children aged 8 to 15 years travelling in relation to education while in the presence of another household member over 8 years, by region

UK, 2015

Figure 4: Time spent by children aged 8 to 15 years travelling in relation to education while in the presence of another household member over 8 years, by region

UK, 2015



Source: UK Time Use Survey, 2015: Office for National Statistics

Notes:

1. Includes main activities only.

This analysis suggests children in the North East spent less time escorted by another household member while travelling in relation to education, compared with children in the North West (five minutes and 12 minutes per day respectively). The only other area to have a significantly higher average supervised time than the North East was the South West (10 minutes per day) (Figure 4). These findings provide some evidence for an East: West divide in the north of England, in terms of the amount of time children spent travelling for education while with another member of their household aged over eight years.

Total time with children

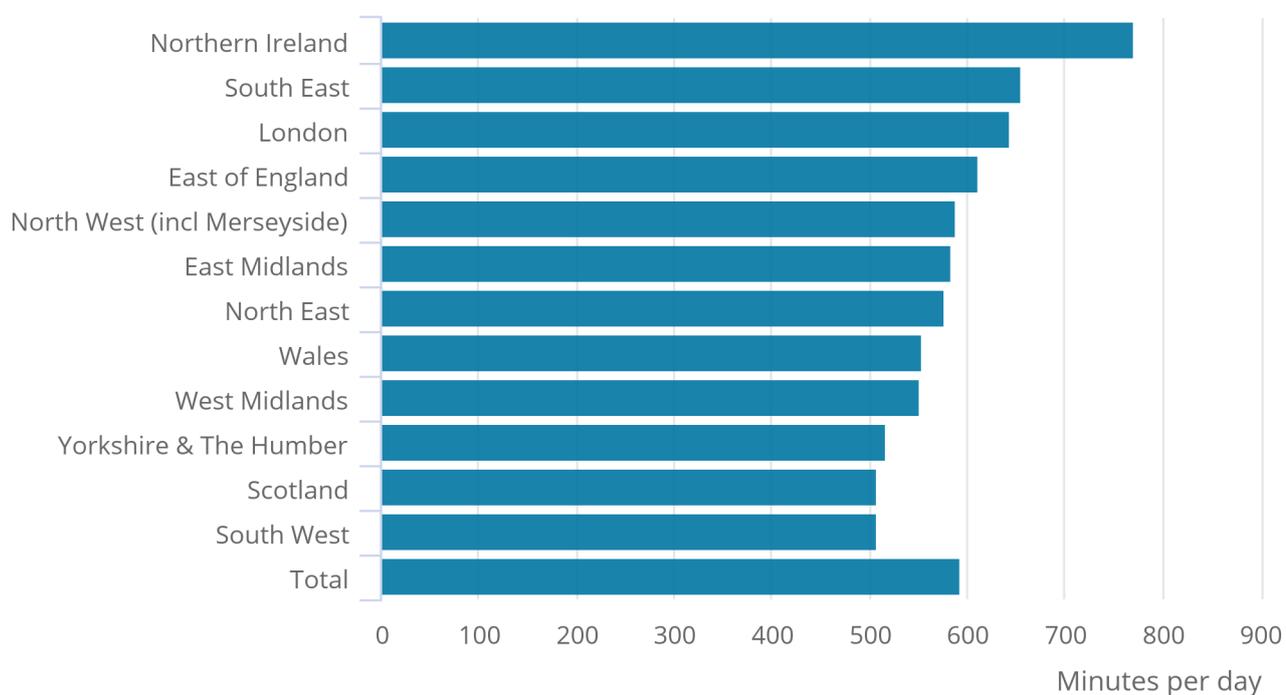
The following section considers all time spent with children and how that differs in both quantitative and qualitative terms, considering the total amount of time spent with children and the type of leisure activity performed when with children.

Figure 5: Total time spent by parents with young children, by region

UK, 2015

Figure 5: Total time spent by parents with young children, by region

UK, 2015



Source: UK Time Use Survey, 2015: Office for National Statistics

Notes:

1. Time is limited to time where a child aged 0 to 7 years is co-present.

When regional differences in total time spent with children are analysed in Figure 5, it suggests that of those parents with their youngest living with them and under five years old, Scottish parents spent among the lowest amounts of parental time with young children². In contrast, parents in Northern Ireland spent significantly more parental time with young children than parents in Scotland, recording an average of 53% and 35% of their time respectively.

This difference could be connected to [the larger family sizes in Northern Ireland](#) but also supports findings in the recently released Office for National Statistics [UK Household Satellite Account](#), that suggest that a typical Scottish child spent more hours in a formal care setting than children from the other nations of the UK.

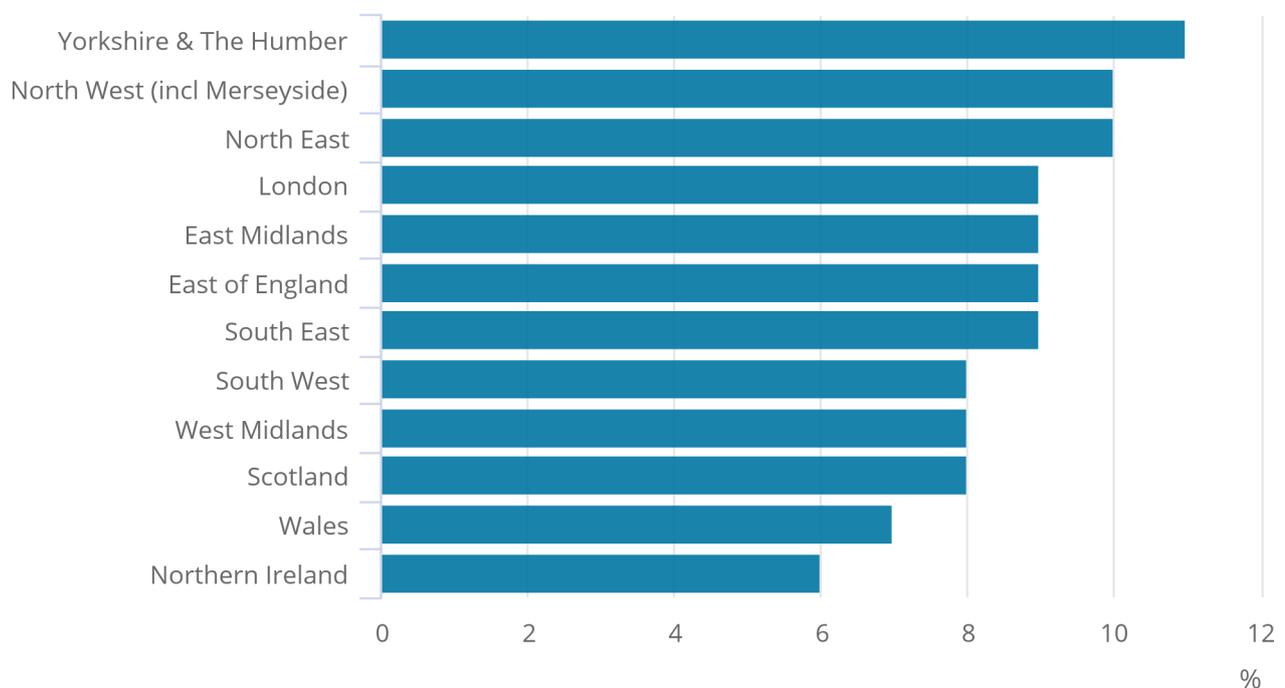
Device use during time with children

Figure 6: Device use during time with children, by region

UK, 2015

Figure 6: Device use during time with children, by region

UK, 2015



Source: UK Time Use Survey, 2015: Office for National Statistics

Notes:

1. Time is limited to time where a child aged 0 to 7 years is co-present.

Figure 6 shows the proportion of time spent with children, where devices such as smartphones, tablets or laptops were also used by the respondent. This was highest in Yorkshire and The Humber accounting for 11% of time with young children and lowest in Scotland, Wales and Northern Ireland, which accounted for 8%, 7% and 6% respectively.

Device use could represent time spent on a device alongside the child, such as a parent helping a child complete their homework on a laptop, or it could represent the parent and child doing different activities and the parent being on their device, such as a parent who is on their laptop while their child is doing their homework. The results give an indication of time where a device is being used and this information can then be used alongside other evidence to inform debate about the quality of time spent with children in the UK.

Parental leisure time³ spent with young children

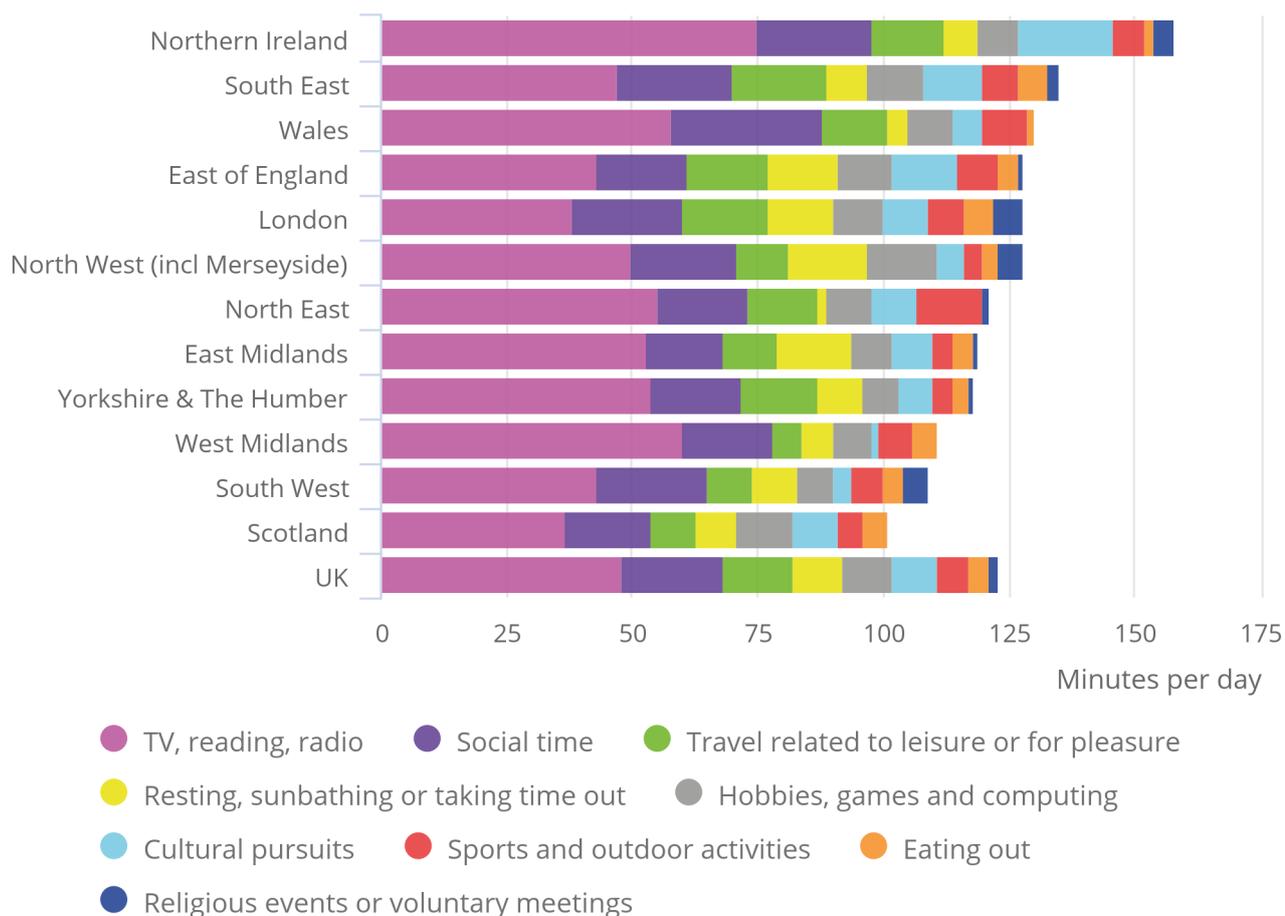
Figure 7 shows the average minutes of leisure time parents of under-fives spent with young children by region and type of leisure.

Figure 7: Parental leisure time spent with young children by type of leisure and region

UK, 2015

Figure 7: Parental leisure time spent with young children by type of leisure and region

UK, 2015



Source: UK Time Use Survey, 2015: Office for National Statistics

Notes:

1. Time is limited to time where a child aged 0 to 7 years is co-present.

Parents of under-fives in Northern Ireland spent most leisure time with children, at an average of 2 hours 37 minutes a day. Those in Northern Ireland also spent significantly more time enjoying cultural activities with children than those in other regions in the UK at an average of 19 minutes per day, while those in Wales spent the most social time with children. This may seem low but the sample includes many days where there are no cultural leisure events spent with young children, which lowers the average time compared with more frequent or common events. Those parents of under-fives in Scotland spent least leisure time with young children, accounting for an average time of 1 hour 43 minutes per day.

Notes for: Focus on regional differences in unpaid childcare

1. Includes time where childcare is coded as either main or secondary activity, but time where it is coded as both main and secondary activity is only counted once.
2. Under seven years is used due to the design of the co-presence component of the diary instrument used in the survey. In this instance, time recorded with under-five year olds would have been preferable but was not available in the dataset.
3. Includes main activities only

5 . Definitions

Mean average minutes per day

Where averages are produced across the typical day for a complete population, this includes both weekends and weekdays for everyone, regardless of their employment status. For this reason, working times are likely to be lower than might be expected when considering the average worker on a typical work day in a region.

Co-presence (time with children) and the zero to seven years child age category

Some of the analysis focused on time spent with children aged under seven years. This age group was referred to as young children in the article to aid the flow of the commentary. This group was chosen as a result of the co-presence coding in the survey diary instrument. Those in the survey provide information about how they are using their time, but also if they are with children aged zero to seven years at the time. Other co-presence categories include spouses, parents, other household members or members of other households.

A focus on parents of resident pre-school aged children (under-fives)

Within the article there was a focus on parents of resident children under five years. The reason for this was to exclude time of others, some of whom wouldn't usually perform any form of regular childcare. If they were included, the average childcare minutes per person would fall dramatically. By focusing on parents of under-fives whose child is also resident in the same household, we focus on a group of parents who have a duty of care for children on a day-to-day basis, achieving more relatable and meaningful time commitments for childcare per day.