

Assessment of the 2021 Census data on Haredi (Strictly Orthodox) Jewish children in England: Technical paper

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/ Introduction

The 2021 Census of England and Wales was carried out by the Office for National Statistics (ONS) in March 2021. It contained an optional question on religion, and it is the contention of this paper that the size of Britain's *haredi* (strictly Orthodox) Jewish population recorded by the Census was far smaller than other population estimates indicate.

This note presents an analysis of available data to assess this discrepancy by comparing 2021 Census data with two other sources: first, haredi birth announcements obtained from Jewish community records and second, [school census data](#) published by the Department for Education (DfE). Each of these sources is entirely unrelated to the other and in turn, both are independent of the national Census. While no data source is perfect, multiple independent sources can be used to increase confidence in the accuracy, or otherwise, of others. As the two non-census sources used here relate to babies and school children, this assessment is limited to these younger cohorts.

Our analysis of this issue can be found in this paper, and our conclusion based on this analysis is that the 2021 Census of England and Wales undercounted haredi children by as much as 35%.

/ Analysis

/ Haredi birth announcements

Data on haredi births are available since parents announce these events in Jewish community notices such as *Kol Mevasser*. Announcements of the birth of baby boys in the haredi community are made to publicise 'Shalom Zachar' celebrations (informal home gatherings to express congratulations).¹ Announcements of the birth of baby girls are made to publicise a 'Simchat Bat' ceremony when the child is formally named. Data relating to births in Stamford Hill in London have been collected by JPR. Data for Salford in Manchester have been collected by Martin Stern, a member of the haredi community, and provided to JPR. In this case, only Shalom Zachar data are available, so it has been necessary to impute the size of the female cohort on the basis of 95 girls for every 100 boys, the naturally occurring sex ratio at birth.

While the average size of the haredi birth cohort measured this way is 1,528 for the 9-year period 2012-2021, it is also apparent that the cohort size has been increasing over the period, with the average being notably larger in the latter half (1,641 births between 2017 and 2021) than the earlier half (1,416 births between 2012 and 2016) (Table 1). In other words, this is evidence that the population is growing in these younger cohorts.

¹ This is not the same as a circumcision ceremony which typically occurs at 8 days old.

Table 1. Haredi birth announcements by year and location, 2012-2021

Year	Hackney/ Haringey*	Salford [^]	Total
2012	874	408	1,282
2013	906	417	1,323
2014	943	454	1,397
2015	1,046*	425	1,471*
2016	1,149	458	1,607
2017	1,085	503	1,588
2018	1,092	509	1,601
2019	1,202	458	1,660
2020	1,195*	477*	1,672*
2021	1,188	495	1,683
Average size of birth cohort			
		2012-16	1,416
		2017-21	1,641
		2012-21	1,528

* These values have been imputed due to missing or depleted data based on the middle value of the immediately preceding and succeeding values. In 2020, counting was disrupted due to the COVID-19 pandemic.

[^] Female births in Salford have been imputed for all values (see text).

Caveats regarding birth announcement data

Haredi birth announcement data may undercount some births that occur on Fridays since the announcement is made for the Jewish Sabbath, and no adjustment has been attempted here. Further, raw data for Hackney / Haringey indicate that boys may have been undercounted given the expected sex ratio at birth of 100 boys to 95 girls. This would add about 3% to the total Hackney / Haringey data, but this has not been included here. Nevertheless, both of these issues indicate the birth announcement data may slightly understate the total numbers.

/ Department for Education data on school pupils

The Department for Education (DfE) publishes data on [school enrolments](#). JPR has [previously identified](#) Jewish schools in this list and further classified which of these are haredi schools. In the 2020/21 list, 132 Jewish schools were identified in England and Wales, many of which (66) were haredi schools located in Manchester (Salford and Sedgley in Bury), Hackney in London (Stamford Hill), and Gateshead (in Tyne and Wear).² (Despite a large haredi presence, there are no haredi schools in the Seven Sisters area of Haringey which is contiguous with Stamford Hill. It is assumed that 100% of children in this area attend haredi schools in Stamford Hill.)

Haredi children commonly move out of these schools to other institutions (i.e. yeshivas and seminaries not listed in the school census) depending on age, gender, and location. Therefore, the DfE data become less reliable indicators of cohort size for older children, but are

² A further 23 haredi schools were identified, the majority of which are in the London Borough of Barnet.

considered to be comprehensive for haredi children aged 5 to at least age 10.³ The data show that average cohort size in the 2020/2021 DfE data for children attending haredi schools aged 5 to 10 years old is exactly 1,600 (Table 2).

Table 2. Pupils aged 5 to 11 years old in haredi Jewish schools[^] by location, DfE enrolment data, 2021

	Hackney**			Salford		Gateshead		Sedgley (in Bury)		Total
	Girls	Boys		Girls	Boys	Girls	Boys	Girls	Boys	
Age 5	454	461		251	249	55	78	55	52	1,655
Age 6	428	460		215	251	64	71	65	60	1,614
Age 7	456	474		239	241	44	65	50	57	1,626
Age 8	449	431		205	249	50	64	70	50	1,568
Age 9	461	440		241	252	81	58	67	35	1,635
Age 10	452	424		184	239	44	55	58	48	1,504
Age 11	426	244*		236	133*	60	54	5*	48	1,206
Average for ages 5-10	450	448		223	247	56	65	61	50	1,600

[^] School type has been assigned by JPR not the DfE.

* Abrupt changes in the data trend for each cohort are assumed to be a result of haredi children moving out of the school system rather than a demographic change. This does not occur consistently by age, sex or location.

** In the DfE data it is assumed that 'Hackney' includes haredi children living in Haringey.

Source: Department for Education, School Census, 'Schools, pupils and their characteristics: Academic year 2020/21'.

/ Comparing haredi birth announcements with DfE school data

As discussed on pages 2 and 3 above, haredi birth announcements relate to Hackney, Haringey and Salford. Comparing the extracted DfE enrolment data for haredi schools in these locations indicates that, like-for-like, the two sources of data on haredi Jews, DfE school data and haredi birth announcement data, which are completely independent of each other, closely agree for the 5-9 age cohorts, the ages the data are most reliable. Average cohort size is **1,495** (DfE) and **1,416** (community announcements) (Table 3).

Table 3. Ages 5-9, DfE v haredi announcements

	~Year born	DfE school data (excluding Gateshead)	Haredi birth announcements	Difference between DfE and haredi data
Age 5	2016	1,522	1,607	85
Age 6	2015	1,479	1,471	-8
Age 7	2014	1,517	1,397	-120
Age 8	2013	1,454	1,323	-131
Age 9	2012	1,496	1,282	-214
Average/year		1,494	1,416	-77

³ A similar analysis of the DfE data for the 2014/15 academic year can be seen in: Staetsky, L. D. and Boyd, J. (2016), *The rise and rise of Jewish schools in the United Kingdom: Numbers, trends and policy issues*. London: Institute for Jewish Policy Research and Board of Deputies of British Jews. See especially pages 25-28. This work also pointed out that some haredi children are home schooled.

/ Comparing haredi birth announcements with 2021 Census data

Haredi birth announcements relate to Hackney, Haringey and Salford. These are compared with ONS 2021 Census data by age on Jews by religion in Table 4, and while these sources are not strictly like-for-like,⁴ they are acceptably comparable.

These two sources of data on haredi Jews—haredi birth announcement data and 2021 Census data—indicate quite different cohort sizes. On average, the census data count two-thirds as many children (67%) as the haredi birth announcement data. To put this another way, for the 2012-2021 period, the haredi data count ~50% more children aged 0-9 than the 2021 Census data. Average cohort size is **1,016** (Census) versus **1,528** (haredi announcements).

Caveats regarding Census data about Jews:

It must also be noted that the Census may undercount Jewish people for other reasons. The religion question in the Census is voluntary by law, and is therefore associated with an undercount which has not been adjusted for here. It is also the case that some Jewish people identify as being Jewish as an ethnic, rather than religious identity trait, and again this is not accounted for here. Further, while Jews in Hackney, Haringey, and Salford are mainly haredi, this is not 100% the case and the Census data inevitably include a small number of non-haredi Jews, especially at the local authority area level.

Table 4. Haredi birth announcements compared with 2021 Census data

1	2	3	4	5	6
Age in 2021	Year of birth	Haredi birth announcements	ONS 2021 Census count (Hackney, Haringey, Salford)	Difference	2021 Census as % of haredi birth data (clm4/clm3)
9	2012	1,282	997	-285	78%
8	2013	1,323	873	-450	66%
7	2014	1,397	994	-403	71%
6	2015	1,471*	937	-534	64%
5	2016	1,607	1,026	-581	64%
4	2017	1,588	984	-604	62%
3	2018	1,601	1,056	-545	66%
2	2019	1,660	1,044	-616	63%
1	2020	1,672*	1,098	-574	66%
0	2021	1,683	1,153	-530	68%
Average aged 0-9	2012-21	1,528	1,016	-512	67%
Average aged 0-4	2017-21	1,641	1,067	-574	65%
Average aged 5-9	2012-16	1,416	965	-451	68%

* Missing data are imputed based on middle value of immediately preceding and succeeding values.

⁴ Even in a perfect world, the number of babies born in a particular year will not necessarily match exactly with the number of children reported in the DfE school data five years later when those babies turn 5. This is due to various reasons such as migration, mortality, identity fluidity and the time points at which data are collected.

/ Comparing DfE school enrolment with ONS 2021 Census – narrow approach

A comparison of 2020/21 DfE data for haredi schools⁵ with 2021 Census data for Hackney, Haringey, Salford, and Gateshead is shown in Table 5.

This indicates that, like-for-like, the 2021 Census captured between 67% and 72% of 5-9 years olds counted in the DfE data. In other words, on average, DfE school data counted ~30% more haredi children aged 5-9 than were enumerated in the 2021 Census, a measure of undercount. Average cohort size is **1,068** (Census) versus **1,507** (DfE).

Table 5. DfE (school) data compared with 2021 Census, ages 5-9

1	2	3	4	5	6
	~Year born	DfE School data Hackney (Haringey*), Salford, Gateshead	2021 Census Hackney, Haringey, Salford, Gateshead	Difference between DfE and 2021 Census	2021 Census as a % of DfE (clm4/clm3)
Age 5	2016	1,548	1,120	-428	72%
Age 6	2015	1,489	1,047	-442	70%
Age 7	2014	1,519	1,098	-421	72%
Age 8	2013	1,448	977	-471	67%
Age 9	2012	1,533	1,096	-437	71%
Average/year		1,507	1,068	-440	71%

* In the DfE data it is assumed that 'Hackney' includes haredi children living in Haringey.

Source: Department for Education, School Census, 'Schools, pupils and their characteristics: Academic year 2020/21'; ONS 2021 Census.

/ Comparing DfE school enrolment with ONS 2021 Census – expanded approach

It was noted that haredi children leave the school system to attend yeshivas and seminaries depending on age, sex, and location.⁶ Therefore, DfE data are only comprehensive indicators of cohort size in specific circumstances. This is highlighted in Figure 1 showing the DfE data for haredi schools by single year age group and sex for Salford, Gateshead and Stamford Hill in 2021. It highlights the fact that the point at which haredi children leave the system to attend religious academies varies by sex and location. Girls predominantly leave the system after age 15 in all three locations, whereas boys leave after age 10 in Salford and Stamford Hill and after 14 in Gateshead.

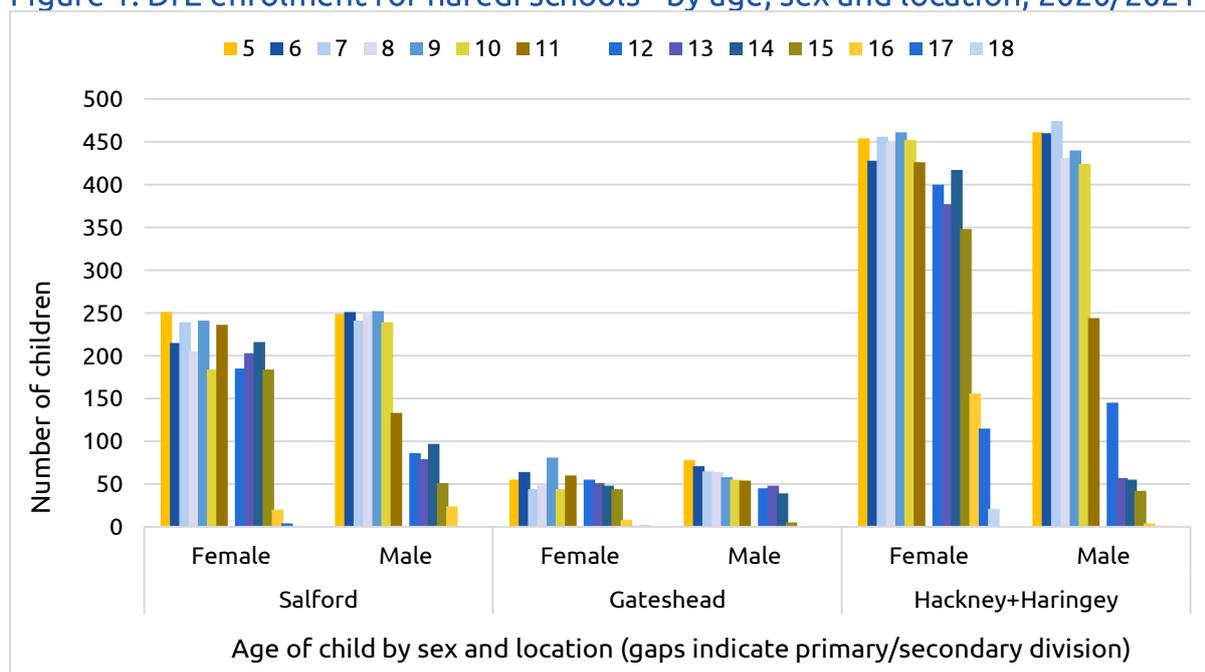
The maximum amount of DfE data by age, sex and location that can be relied upon and compared with the equivalent 2021 Census data is shown in Table 6. The data are cut off to correspond with abrupt trend changes (as per Figure 1).

The results vary considerably depending on the particular cohort and location. In terms of age, it ranges from 65% of the DfE figure for 5-15 year old girls in Salford to 87% of 5-14 year old boys in Gateshead. In terms of geography, Salford exhibits the greatest undercount with about 66% of children enumerated in the 2021 Census and Gateshead the smallest undercount with about 85% enumerated. In Hackney about 73% have been enumerated.

⁵ See also Staetsky and Boyd 2016, op cit.

⁶ See also Staetsky and Boyd 2016, op cit.

Figure 1. DfE enrolment for haredi schools^ by age, sex and location, 2020/2021



^ School type has been assigned by JPR not the DfE.

Source: Department for Education, School Census, 'Schools, pupils and their characteristics: Academic year 2020/21'.

Overall, for these specific cohorts, the 2021 Census enumerated 72% of the total population enumerated in the DfE data, indicating that the numbers missing were equivalent to 39% of the number actually enumerated (3,471/8,900) (Table 6).

Table 6. DfE data compared with 2021 Census data, various age cohorts from 5+^

	Sex	DfE age range considered reliable	DfE 2021 school data	ONS 2021 Census	Difference between DfE and ONS 2021 Census	% of DfE captured by Census
Salford	F	5-15	2,359	1,541	-818	65%
	M	5-10	1,481	985	-496	67%
Gateshead	F	5-15	596	487	-109	82%
	M	5-14^	577	501	-76	87%
Hackney + Haringey (Stamford Hill)	F	5-15	4,668	3,397	-1,271	73%
	M	5-10	2,690	1,989	-701	74%
Total	F	5-15	7,623	5,425	-2,198	71%
	M	5-10	4,562	3,310	-1,252	73%
Total		Various ages	12,371	8,900	-3,471	72%

^ Adjusted for Gateshead (5-14).

Source: Department for Education, School Census, 'Schools, pupils and their characteristics: Academic year 2020/21'; ONS 2021 Census.

/ Summary and concluding remarks

This analysis provides an empirical examination of the 2021 Census data on young Haredi Jews in England to assess their level of accuracy. It has focused on two independent data sources: haredi community records of birth announcements and data from the Department for Education (DfE) on pupil enrolments in schools identified by JPR as haredi. The analysis reaches four conclusions:

First, it was demonstrated that these two independent data sources closely align with each other but differ substantially from the 2021 Census data, strongly suggesting that *the 2021 Census has significantly undercounted haredi children*. The extent of this undercount varies depending on location, children's age and sex. The lowest level of undercount was among haredi boys aged 5-10, where the 2021 Census captured 73% of the expected total based on DfE data, and the highest level of undercount was for children aged 0-5, where the Census captured 65% of the total expected based on haredi community announcement data (Table 7).

Table 7. Summary of main findings

Base comparative	Age (sex) cohort	Estimated % of base captured by the 2021 Census	Report reference
Haredi birth announcements	0-4	65%	Table 4
Haredi birth announcements	5-9	68%	Table 4
DfE school data	5-9	71%	Table 5
DfE school data	5-15 (females)	71%	Table 6
DfE school data	5-10 (males)	73%	Table 6

Second, it is apparent that, for haredi children, the magnitude of the undercount decreases as age increases. In other words, the undercount is greatest among the youngest children, which supports a common contention that Census form length⁷ was a key cause of this undercount, assuming children are generally entered onto the form from oldest to youngest. The corollary is that the undercount is more limited in older age groups. That said, given the [very high birth rates](#) among haredi Jews, haredi children make up a disproportionately large percentage of the total population and so any undercount in these cohorts is magnified.

Third, the data indicate that the undercount of haredi children was not geographically consistent. It was greatest in Salford (~66%) and Hackney (~73%) and lowest in Gateshead (~85%).

Fourth, it suggests that 3,471 haredi children are missing from the final Census count for Jews in England and Wales. If, as we suspect, they are missing because they were not included on household Census forms, it means they are not just missing from the Jewish count but are absent from the Census entirely. This is a doubly concerning outcome given that this is an especially vulnerable group.⁸

⁷ The Census' paper form for households contains the following caveat: "If there are more than 5 people [in the household], contact us [ONS] to request a Continuation Questionnaire." This is likely to have been a greater barrier to haredi enumeration than others given their larger average household size and greater reliance on paper forms (online forms having no household size limit but haredim having lower levels of Internet access).

⁸ See: Abramson, S., Graham D., and Boyd, J. (2011). [Key trends in the British Jewish community: A review of data on poverty, the elderly and children](#). London: Institute for Jewish Policy Research; Boyd, J. (2011). [Child poverty and deprivation in the British Jewish community](#). London: Institute for Jewish Policy Research.

In conclusion, these results, showing that the 2021 Census has significantly undercounted the number of haredi children living in England, raise further questions:

1. What, if any, undercount occurred among other haredi Jews, i.e. those above age 15? While this analysis provides strong empirical evidence to indicate that haredi children were significantly undercounted in the ONS 2021 Census, it cannot be assumed that the magnitude of this undercount is matched in older haredi cohorts, nor can this possibility be entirely dismissed.
2. What was the cause(s) of this undercount of haredi children and haredim in general (if this was the case)? It is likely that form length may have been a key contributory factor, but several other reasons may be relevant. For example, the religion question is voluntary and haredi families may have chosen not to respond. Alternatively, haredi families may have failed to lodge a Census form at all, and therefore would have been missed out entirely. Additionally, the Census took place in March 2021 during the COVID-19 pandemic, and this may also have impacted haredi responses.
3. There is a growing haredi population in the London Borough of Barnet. Was there an undercount in this population too? It is a more technically challenging task to isolate this haredi population in the Census data from the large non-haredi Jewish population living in Barnet.
4. Was there an undercount among the mainstream (non-haredi) Jewish population? Whilst this population is socially, economically and demographically different from the haredi population, it may also have been undercounted due to the religion question being voluntary and the increasing likelihood of Jewish people identifying as Jewish by ethnic group but not as Jewish by religion.

/ About the Institute for Jewish Policy Research (JPR)

The Institute for Jewish Policy Research (JPR) is a London-based research organisation, consultancy and think-tank. It aims to advance the prospects of Jewish communities in the United Kingdom and across Europe by conducting research and informing policy development in dialogue with those best placed to influence Jewish life positively. Web: www.jpr.org.uk.

/ About the author

Dr David Graham is a Senior Research Fellow at JPR, Honorary Associate at the Department of Hebrew, Biblical and Jewish Studies, University of Sydney, Honorary Research Associate at the University of Cape Town, and the author of this paper. A geographer by training and expert in the study of Jews in the UK, Australia and South Africa, his skills encompass statistical analysis, survey design, census analysis and geographic information system mapping. He has published widely for academic and general interest audiences and holds a DPhil from the University of Oxford.