

Article

Religion, education and work in England and Wales: February 2020

Statistics and analysis of education and employment outcomes of people of different religious identities in England and Wales.

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Next release: To be announced

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1. Other pages in this release

- Exploring religion in England and Wales
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- Religion and participation in England and Wales
- Religion and health in England and Wales

Aim of this work

The Office for National Statistics (ONS) has worked with representatives from across government to identify the data that currently exist to understand the circumstances of people of different religious identities. Our aim is to assess the quality of the existing evidence base and develop plans to build on its strengths and address its limitations.

Definition of religion

Estimates presented in this release capture the concept of religious affiliation. The Government Statistical Service (GSS) <u>harmonised principle on religion</u> recommends that, where a single question is used in data collection, the concept that should be measured is religious affiliation. This captures how respondents connect or identify with a religion, regardless of whether they actively practise it (see The 2021 Census: Assessment of initial user requirements on content for England and Wales: Religion topic report (PDF, 780KB) for more information about concepts in relation to religion.)

Definition of education and work

The Equality and Human Rights Commission Measurement Framework (PDF, 15.66MB) identifies six domains or areas of life that are important to people and enable them to flourish.

The education domain is about having "the capability to be knowledgeable, to understand and reason, and have the skills and opportunity to participate in parenting, the labour market and in society".

The work domain is about having the capability to "work in just and favourable conditions, to have the value of your work recognised, even if unpaid, to not be prevented from working and be free from slavery, forced labour and other forms of exploitation".

Scope of this article

This part of the release presents statistics broken down by religious affiliation within the education and work domains. It includes the results of analysis that has been used to explore the relative importance of religious affiliation compared with other factors that relate to employment outcomes.

Our aim is to improve the evidence base particularly for groups that are often invisible in routine reporting of statistics, for example, because they are present in insufficient numbers for reliable estimates to be provided for them. In line with this aim, this release focuses on statistics that capture the full range of religious groups contained within the harmonised principle and does not include estimates that are available only for broad religious groupings. For England and Wales, the religious groups are:

- No religion
- Christian
- Buddhist
- Hindu
- Jewish
- Muslim
- Sikh
- Any other religion

Throughout this release, comparisons are only made between estimates for different religious groupings where these are <u>statistically significant</u> (see Uncertainty and quality in <u>Section 12</u> for details of how statistical significance is assessed). Caution should therefore be exercised when making other comparisons between religious groupings, as observed differences may not be statistically significant.

2. Main points

- Between 2012 and 2018 in England and Wales, those who identified as Christian were consistently less likely to report having a degree or equivalent qualification than all other religious groups, likely reflecting the older age profile of this group.
- Over the same period, although the percentage has been declining over time, those who identified as Muslim were more likely to report having no qualifications than most other religious groups.
- Economic inactivity was highest among women who identified as Muslim, over half of whom were economically inactive.
- After controlling for age, sex, ethnic group, marital status, region of residence and highest qualification held, adults who identified as Muslim were significantly less likely to be economically active than those who identified as Christian, particularly for women.
- Reflecting the higher rates of economic inactivity among this group, those who identified as Muslim had the lowest employment rate of all religious groups across England and Wales throughout the period between 2012 and 2018.
- In 2018, median hourly pay was highest among those who identified as Jewish, partly reflecting a greater likelihood among this group to be employed in high-skilled occupations and as managers, though controlling for differences in their personal and employment characteristics substantially reduced the difference in their average (median) pay relative to those who identified as Christian.
- Differences in qualification levels were stronger predictors of employment outcomes than religious affiliation, though occupation was the strongest predictor of median pay.

Statistician's comments

"This is part of a programme of work we are doing to explore inequalities in our society. The reasons for inequalities are complex, as today's findings show, with a range of factors to be taken into account. These findings are not intended to provide definitive answers but to add to the growing evidence base on equalities."

3. Educational attainment

Few data sources capture the religious identity of children while they are still in education but estimates of highest educational attainment are available from the <u>Annual Population Survey</u>.

It is important to recognise that a complex set of factors, including cultural norms, migration history, language proficiency, and so on, may combine in different ways among different religious groupings to contribute to the disparities observed in their educational outcomes. This has not been explored in this release but is an area for potential future research (see Exploring religion in England and Wales: February 2020 for details of ongoing work to improve the data in relation to educational outcomes).

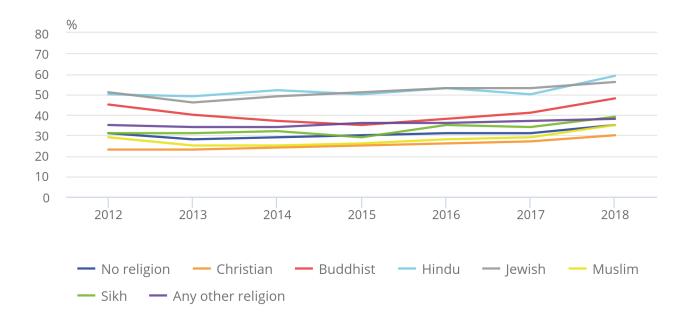
Across most religious groups, the percentage of adults reporting a degree or equivalent qualification increased between 2012 and 2018 (Figure 1). Although it has also increased significantly for those who identified as Christian, this group has been consistently less likely than all other religious groups to report having this level of qualification, likely reflecting the older age profile of this group among other factors.

Figure 1: Those who identified as Christian have the lowest percentage with a degree or equivalent qualification

Percentage of adults (aged 16 years and over) reporting highest level of educational attainment as degree or equivalent by religious affiliation, England and Wales, 2012 to 2018

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Percentage of adults (aged 16 years and over) reporting highest level of educational attainment as degree or equivalent by religious affiliation, England and Wales, 2012 to 2018



Source: Office for National Statistics – Annual Population Survey

Notes:

- 1. "Any other religion" encompasses those religions that are not otherwise listed separately.
- Because of the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons across other religious groupings as apparent differences may not be statistically significant.
- 3. Confidence intervals have not been displayed to improve readability but are included in the dataset.

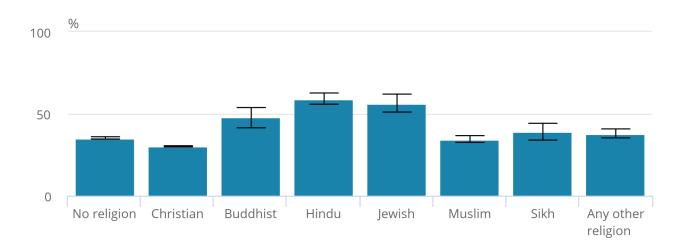
In England and Wales in 2018, 3 in 10 adults who identified as Christian (30%) reported having a degree or equivalent qualification, lower than for all other religious groupings (Figure 2). Those who identified as Buddhist (48%), Hindu (59%) and Jewish (56%) had higher percentages reporting this than most other religious groups in England and Wales.

Figure 2: The percentage having a degree or equivalent qualification was higher among those who identified as Hindu, Jewish or Buddhist than most other religious groupings

Percentage of adults (aged 16 years and over) reporting highest level of educational attainment as degree or equivalent by religious affiliation, England and Wales, 2018

Figure 2: The percentage having a degree or equivalent qualification was higher among those who identified as Hindu, Jewish or Buddhist than most other religious groupings

Percentage of adults (aged 16 years and over) reporting highest level of educational attainment as degree or equivalent by religious affiliation, England and Wales, 2018



Source: Office for National Statistics - Annual Population Survey

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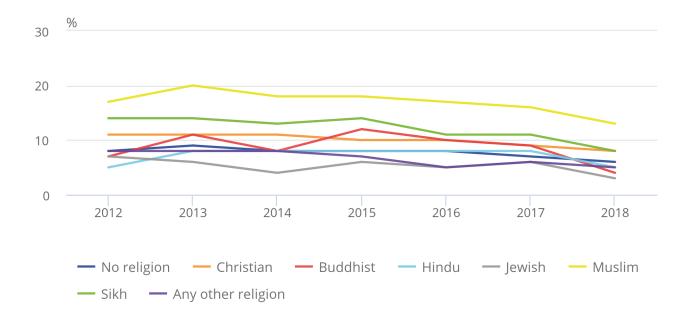
Across most religious groupings, the number of people reporting that they have no qualifications decreased significantly between 2012 and 2018 (Figure 3). The exception is for those who identified as Buddhist or with "any other religion" where the apparent difference is not statistically significant. Those who identified as Muslim were more likely to report having no qualifications throughout this period than most other religious groups.

Figure 3: The percentage having no qualifications was consistently higher among those who identified as Muslim than most other religious groupings

Percentage of adults (aged 16 years and over) reporting highest level of educational attainment as degree or equivalent by religious affiliation, England and Wales, 2012 to 2018

Figure 3: The percentage having no qualifications was consistently higher among those who identified as Muslim than most other religious groupings

Percentage of adults (aged 16 years and over) reporting highest level of educational attainment as degree or equivalent by religious affiliation, England and Wales, 2012 to 2018



Source: Office for National Statistics - Annual Population Survey

Notes:

- 1. "Any other religion" encompasses those religions that are not otherwise listed separately.
- 2. Estimates for Jewish and Buddhist in 2018 are based on reasonably low sample sizes (<26). These estimates may not be as robust and should therefore be treated with caution.
- 3. Confidence intervals have not been displayed to improve readability but are included in the reference tables.
- 4. Because of the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons across other religious groupings as apparent differences may not be statistically significant.

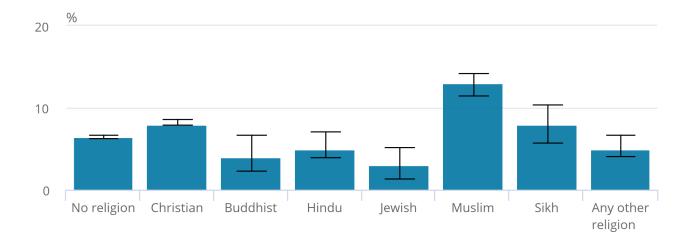
In 2018, 13% of adults who identified as Muslim in England and Wales reported having no qualifications, significantly higher than all other religious groupings (Figure 4). The percentage of those who identified as Christian who reported no qualifications was 8%, again likely reflecting the older age profile of this group.

Figure 4: Those who identified as Muslim and Christian were more likely to have no qualifications than most other religious groupings

Percentage of adults (aged 16 years and over) reporting highest level of educational attainment as no qualification by religious affiliation, England and Wales, 2018

Figure 4: Those who identified as Muslim and Christian were more likely to have no qualifications than most other religious groupings

Percentage of adults (aged 16 years and over) reporting highest level of educational attainment as no qualification by religious affiliation, England and Wales, 2018



Source: Office for National Statistics – Annual Population Survey

Notes:

- 1. "Any other religion" encompasses those religions that are not otherwise listed separately.
- 2. Estimates for Jewish and Buddhist in 2018 are based on reasonably low sample sizes (<26). These estimates may not be as robust and should therefore be treated with caution.
- 3. Because of the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons across other religious groupings as apparent differences may not be statistically significant.

4. Economic activity

The employment statistics in this section focus on those aged 16 to 64 years, as this is the age range used in headline employment statistics. Although there have been changes in State Pension Age in recent years, these do not apply below the age of 64 years and are unlikely to be an influence on the findings reported here.

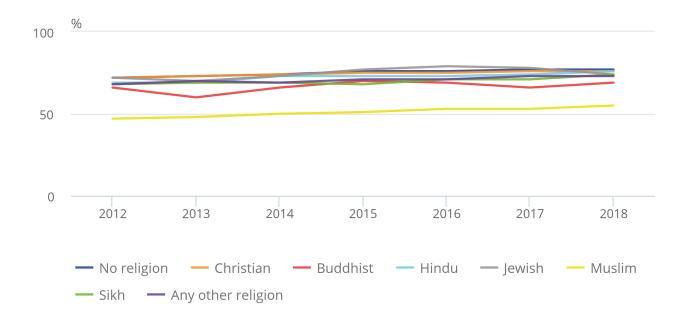
For most religious groupings, employment rates in England and Wales have been increasing since 2012 (Figure 5), a trend observed more widely in <u>official labour market statistics</u> over the same period. Throughout this period, a significantly lower percentage of those who identified as Muslim were in employment than all other religious groups, ranging from 47% in 2012 to 55% in 2018. This largely reflects the higher rates of economic inactivity for this group, particularly among Muslim women (see Figures 6 and 7).

Figure 5: While employment rates generally increased, a significantly lower percentage of those who identified as Muslim were in employment throughout this period

Percentage of adults aged 16 to 64 years in employment by religious affiliation, England and Wales, 2012 to 2018

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Percentage of adults aged 16 to 64 years in employment by religious affiliation, England and Wales, 2012 to 2018



Source: Office for National Statistics - Annual Population Survey

Notes:

- 1. Employment measures the number of people aged 16 to 64 in paid work. It includes people in self-employment and employed as employees. There are also two minor categories which represent less than 1% of all people in employment. These are: unpaid family workers and people on government-supported training programmes.
- 2. "Any other religion" encompasses those religions that are not otherwise listed separately.
- 3. Confidence intervals have not been displayed to improve readability but are included in the reference tables.
- 4. Because of the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons across other religious groupings as apparent differences may not be statistically significant.

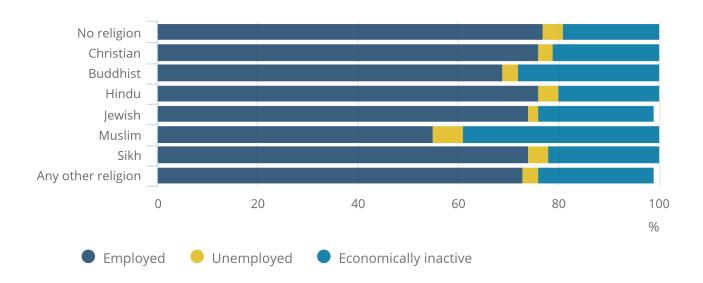
This lower rate of employment amongst those who identified as Muslim can largely be explained by higher rates of economic inactivity, almost 4 in 10 (39%) of whom were economically inactive in 2018 (Figure 6).

Figure 6: A higher percentage of those who identified as Muslim were economically inactive

Percentage of adults aged 16 to 64 years by employment status by religious affiliation, England and Wales, 2018

Figure 6: A higher percentage of those who identified as Muslim were economically inactive

Percentage of adults aged 16 to 64 years by employment status by religious affiliation, England and Wales, 2018



Source: Office for National Statistics - Annual Population Survey

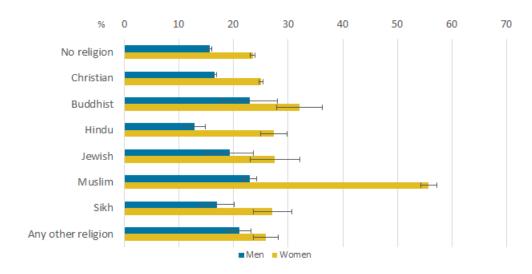
Notes:

- 1. Employment measures the number of people aged 16 to 64 years in paid work. It includes people in selfemployment and employed as employees. There are also two minor categories which represent less than 1% of all people in employment. These are: unpaid family workers and people on government-supported training programmes.
- 2. Economically inactive refers to an individual that is not in employment and has not been seeking work within the last four weeks and/or is unable to start work in the next two weeks.
- 3. Estimates for those who identified as Buddhist or Jewish and were unemployed are based on reasonably low sample sizes (<26). These estimates may not be as robust and should therefore be used with caution.
- 4. "Any other religion" encompasses those religions that are not otherwise listed separately.
- 5. Because of the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons across other religious groupings as apparent differences may not be statistically significant.

The high rates of economic inactivity seen among those who identified as Muslim were largely driven by the rate of economic inactivity among Muslim women, over half of whom (56%) were economically inactive in 2018 (Figure 7).

Figure 7: Economic inactivity rates were highest among women who identified as Muslim

Percentage of adults aged 16 to 64 years were economically inactive by religious affiliation by sex England and Wales, 2018



Source: Office for National Statistics - Annual Population Survey

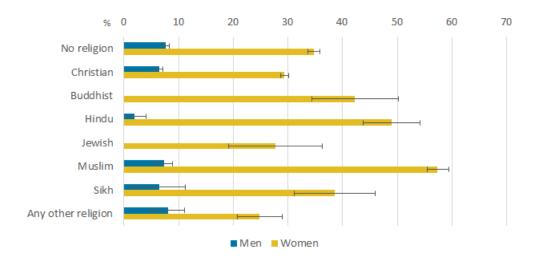
Notes:

- 1. Economically inactive refers to an individual that is not in employment and has not been seeking work within the last four weeks and/or is unable to start work in the next two weeks.
- 2. "Any other religion" encompasses those religions that are not otherwise listed separately.
- 3. Because of the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons across other religious groupings as apparent differences may not be statistically significant.

The economic inactivity rate of Muslim women can be attributed in part to the greater proportion of this group looking after their family and/or home (Figure 8), 57% of whom stated this as their reason. This is significantly higher than for other religious groups.

Figure 8: Almost 6 in 10 Muslim women said that looking after the family or home was their reason for economic inactivity

Percentage of adults aged 16 to 64 years who were economically inactive and stated family/home as the reason by religious affiliation by sex, England and Wales, 2018



Source: Office for National Statistics - Annual Population Survey

Notes:

- 1. "Any other religion" encompasses those religions that are not otherwise listed separately.
- 2. Estimates could not be presented for men who identified as Buddhist or Jewish because sample sizes were so small as to be potentially disclosive. In addition, estimates for men who identified as Hindu, Sikh or "Any other religion" and women who identified as Jewish are based on reasonably low sample sizes (<26). These estimates may not be as robust and should therefore be used with caution.
- 3. Economically inactive refers to an individual that is not in employment and has not been seeking work within the last four weeks and/or is unable to start work in the next two weeks.
- 4. Because of the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons across other religious groupings as apparent differences may not be statistically significant.

Though the unemployment rate has fallen across the UK since 2012, we cannot comment on differences in unemployment between and within religious groups over time because of small sample sizes for these groups.

5. Earnings

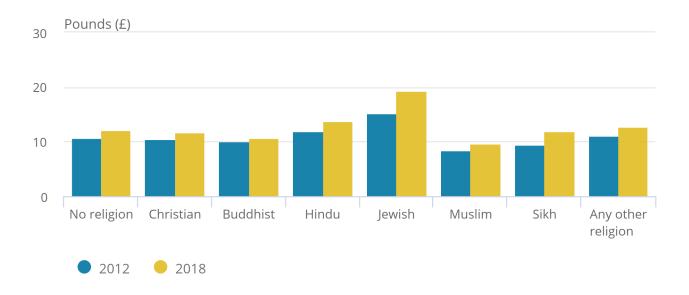
For this analysis, a new earnings weight on the <u>Annual Population Survey</u> was used to estimate the median gross hourly pay excluding overtime for all employees in England and Wales. (For details of the derivation of hourly pay, see the <u>Labour Force Survey User Guide</u>.)

Figure 9: Median hourly pay was highest for those who identified as Jewish

Median hourly pay of employees by religious affiliation, England and Wales, 2012 and 2018

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Median hourly pay of employees by religious affiliation, England and Wales, 2012 and 2018



Source: Office for National Statistics - Annual Population Survey

Notes:

- 1. "Any other religion" encompasses those religions that are not otherwise listed separately.
- 2. Confidence intervals are not available for these estimates.

Employees who identified as Jewish had the highest median hourly earnings of all religious groups in England and Wales in both 2012 and 2018 (£15.17 and £19.22 respectively) (Figure 9). Employees who identified as Hindu have consistently had the second-highest median hourly earnings; in 2018, this was £13.80. In comparison, Muslim employees had the lowest median hourly earnings at £9.63 in 2018. This was approximately half of the median hourly earnings of Jewish employees.

Sections 6 and 7 explore differences in occupational skill levels and managerial responsibility between religious groups. Variations in these and other characteristics should help in understanding differences in average earnings and are explored in Section 8 of this article.

6. Occupation skill level

Occupations were grouped into skill level categories according to their three-digit <u>Standard Occupation</u> <u>Classification (SOC) code</u>, a common classification of occupational information for the UK. Skill level is divided into four categories: high, upper middle, lower middle and low. (For definitions of these skills levels, see the <u>Glossary</u>.)

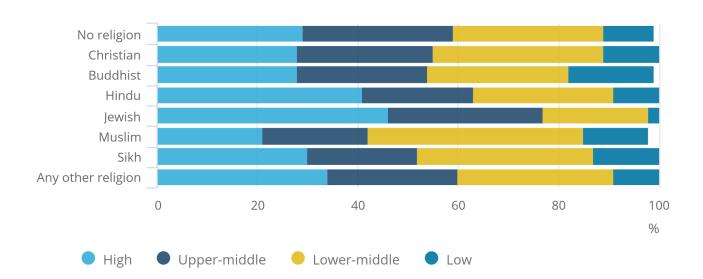
In 2018, among Jewish people in employment, 46% were employed in high-skill occupations in England and Wales (Figure 10). This was closely followed by those identifying as Hindu, 41% of whom were working in high-skill occupations.

Figure 10: Almost half of those who identified as Jewish and 4 in 10 of those who identified as Hindu were occupied in high-skill occupations

Occupation skill level of adults aged 16 to 64 years in employment by religion, England and Wales, 2018

Figure 10: Almost half of those who identified as Jewish and 4 in 10 of those who identified as Hindu were occupied in high-skill occupations

Occupation skill level of adults aged 16 to 64 years in employment by religion, England and Wales, 2018



Source: Office for National Statistics - Annual Population Survey

Notes:

- 1. "Any other religion' category" those religions that are not otherwise listed separately.
- 2. Adults aged 16 to 64 years in employment includes people in self-employment, employees, unpaid family workers and those employed on government schemes.
- 3. Estimates for those who identified as Jewish employed in low skill occupation are based on reasonably low sample sizes (<26). These estimates may not be as robust and should therefore be used with caution.
- 4. Caution should be exercised when making comparisons across religious groupings as apparent differences may not be statistically significant due to large confidence intervals.
- 5. Confidence intervals have not been displayed to improve readability but are included in the reference tables.
- 6. Because of the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons across other religious groupings as apparent differences may not be statistically significant.

7. Managerial status

In 2018, 40% of employees who identified as Jewish reported being employed as a manager (Figure 11). This was the highest such share reported across all religious groups.

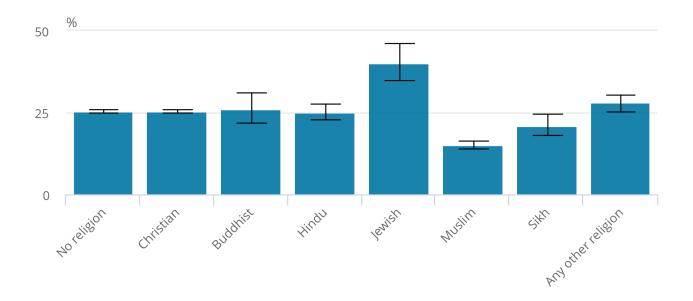
Employees who identified as Muslim were the least likely to be employed as a manager (15% in 2018). This was lower than for all other religious groups.

Figure 11: A higher percentage of those who identified as Jewish were employed as a manager than across other religious groupings

Proportion of employees employed as a manager, England and Wales, 2018

Figure 11: A higher percentage of those who identified as Jewish were employed as a manager than across other religious groupings

Proportion of employees employed as a manager, England and Wales, 2018



Source: Office for National Statistics – Annual Population Survey

Notes:

- 1. "Any other religion" encompasses those religions that are not otherwise listed separately.
- Because of the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons across other religious groupings as apparent differences may not be statistically significant.

8. Controlling for personal and employment characteristics

Various factors are known to be related to employment outcomes, including both personal characteristics, such as age, sex, ethnic group, marital status, region of residence and highest qualification held, as well as employment characteristics, including whether an individual works full-time or part-time, job tenure, industry and occupation.

Because the characteristics of those who identified with the different religious groupings vary, this can affect the employment outcomes of the group as a whole, making it difficult to distinguish differences that are related to religious affiliation from those that are caused by underlying differences in their characteristics.

To better understand the effect of these differences on employment outcomes for people of different religious affiliations, the Office for National Statistics (ONS) commissioned research ¹ using the Annual Population Survey (APS) to explore the relative importance of religious affiliation compared with other factors in relation to rates of economic activity, employment rates and employees' median hourly earnings.

Factors affecting the likelihood of being economically active

Logistic regression was used to model the probability of being economically active taking into account religious affiliation, age, sex, ethnicity, marital status, region of residence and highest qualification held.

Numbers presented in this section and the next are the estimated odds ratios which, in this case, represent the relative odds of being economically active rather than economically inactive compared with a reference group.

In the case of religious affiliation, we use those who identified as Christian as the reference group, though it should be noted that this is simply because this is the largest religious grouping and it does not imply any particular importance of this group relative to any other religious grouping. (For other reference groups used, see the dataset accompanying this article.) An odds ratio of greater than 1 indicates that those who identified with this religious affiliation are more likely to be economically active than those who identified as Christian while an odds ratio of less than 1 indicates they are less likely to be economically active than those who identified as Christian.

Figure 12 shows the effect of controlling for age, sex, ethnicity, marital status, region of residence and highest qualification held on the likelihood of being economically active by religious affiliation.

For adults aged 16 to 64 years as a whole, controlling for these personal characteristics has the effect of narrowing the gap between those who identified as Muslim who are economically active and those who identified as Christian, though the Muslim adults are still significantly less likely to be economically active than Christian adults, particularly for women. Those who identified as Buddhist, Jewish and with "any other religion" are also all still significantly less likely to be economically active than those who identified as Christian even after accounting for the personal characteristics included in the model.

When considering the pattern for men aged 16 to 64 years, controlling for these characteristics has a similar overall effect to that seen for adults as a whole. However, for men, the large difference in the likelihood of being economically active for those who identified as Hindu with those who identified as Christian is reduced substantially after controlling for personal characteristics.

Before accounting for differences in the personal characteristics of the different groups, women who identified as Sikh and Hindu were less likely to be economically active than women who identified as Christian. However, after controlling for personal characteristics, they are significantly more likely to be economically active than women identifying as Christian.

Figure 12: After controlling for personal characteristics women who identified as Muslim are significantly less likely to be economically active than women who identified as Christian

Odds ratios of being economically active compared with economically inactive without controls and controlling for personal characteristics by religious affiliation. Adults, men and women aged 16 to 64 years, England and Wales, 2018

Figure 13 shows the relative importance of religious affiliation on the likelihood of being economically active alongside the other factors included in the model. After taking into account the effect of the other characteristics, differences in qualification levels are a greater contributor to differences in economic activity rates than religious affiliation.

Figure 13: After controlling for other personal characteristics, having a degree or equivalent qualification has the strongest effect on the likelihood of being economically active

Odds ratios of being economically active compared with economically inactive by religious affiliation, age, sex, ethnicity, marital status, region of residence and highest qualification. Adults aged 16 to 64 years, England and Wales, 2018

Factors affecting the likelihood of being employed

Logistic regression was also used to model the probability of being employed for people who are economically active, again taking into account religious affiliation, age, sex, ethnicity, marital status, region of residence and highest qualification held. As in the previous section, numbers presented in this section are estimated odds ratios, which should be interpreted as previously described.

Figure 14 shows the effect of controlling for age, sex, ethnicity, marital status, region of residence and highest qualification held on the odds ratios of being employed, by religious affiliation. In this case, the estimated odds ratios represent the relative odds of being employed rather than unemployed relative to the comparison group, which again is the Christian religious affiliation.

Overall, for economically active adults, again although controlling for differences in the personal characteristics of the different religious groupings increases the likelihood that those who identified as Muslim are in employment, particularly for women, they are still significantly less likely to be employed than those who identified as Christian. In fact, those who identified with all the religious groupings except Buddhist are significantly less likely to be employed than those who identified as Christian.

Comparing the effects of controlling for differences in the personal characteristics on the likelihood of being employed for men and women reveals that the differences seen in the overall population of economically active adults are being driven mainly by differences in the likelihood of being in employment for women of different religious affiliations. Across almost all religious groupings, women are less likely to be employed than their male counterparts, even after controlling for differences in their personal characteristics.

Figure 14: After controlling for personal characteristics, adults who identified as Muslim are significantly less likely to be employed than those who identified as Christian

Odds ratios of being employed compared with unemployed without controls and controlling for personal characteristics by religious affiliation. Economically active adults, men and women aged 16 to 64 years, England and Wales, 2018

Figure 15 shows the relative importance of religious affiliation on the likelihood of being employed alongside the other factors included in the model. Again, after accounting for differences in the personal characteristics of the different groups, differences in qualification levels are a greater contributor to the likelihood of being employed than religious affiliation, though being married compared with being single, also significantly increases its likelihood.

Figure 15: After controlling for other personal characteristics, the effect of religious affiliation on the odds ratios of being employed is smaller than for some of the other characteristics

Odds ratios of being employed compared with unemployed by age, sex, ethnicity, marital status, region of residence and highest qualification. Economically active adults aged 16 to 64 years, England and Wales, 2018

Factors affecting hourly earnings

To investigate the relative importance of religious affiliation on median hourly earnings of employees aged 16 years and over, quantile regression models at the median of the earnings distribution, using the log of hourly earnings, were estimated. Alongside the personal characteristics used in the earlier models (religious affiliation, age, sex, ethnic group, marital status, region of residence and highest qualification held), because this analysis focused on employees, it was also possible to control for the following employment characteristics: whether an individual works full-time or part-time, job tenure, industry and occupation.

Figure 16 shows the percentage difference between the median pay of people identifying as Christian and those identifying with other religious affiliations, before and after controlling for the different factors.

For employees as a whole, across all religious groupings, controlling for personal and employment characteristics reduces the difference in median pay compared with people who identified as Christian. For employees who identified as Jewish, controlling for these other factors considerably reduces the difference in median pay, from 65% higher to 14% higher after controlling for them. The effect is even stronger when looking at male employees only, with controlling for these factors reducing the difference from 92% higher before to 18% higher after.

Controlling for personal and employment characteristics also has the effect of narrowing the difference in median pay for employees who identified as Muslim. Before controlling for these characteristics, their earnings were 17% less than those who identified as Christian but controlling for them narrows that difference so their earnings are 4% less than those who identified as Christian. Again, the effect of adjustment is strongest for male employees, increasing from 23% less to 6% less than those who identified as Christian.

Figure 16: The difference in median pay for employees who identified as Jewish, particularly male employees, considerably narrows after controlling for personal and employment characteristics

Median pay gap relative to those who identified as Christian, without controls and controlling for personal and employment characteristics by religious affiliation. All employees, male employees and female employees aged 16 and over, England and Wales, 2018

Figure 17 shows the relative effects of the different personal and employment characteristics on the difference in median pay. Overall, occupation is the strongest predictor of earnings after accounting for the other factors, with those employed as a manager, director or senior official having median pay 75% higher relative to employees in elementary occupations. Having a degree or equivalent qualifications were again also important in predicting median pay.

Figure 17: After controlling for personal and employment characteristics, being a manager, director or senior official results in the largest difference in median pay relative to being in elementary occupations

Median pay gap after controlling for personal and employment characteristics. Employees ages 16 and over, England and Wales, 2018

9. Religion, education and work data

Religion, education and work in England and Wales

Dataset | Released 26 February 2020

Economic inactivity rate and reason, by sex and religion with breakdowns for the rate of employment, unemployment, inactivity and median gross hourly pay by religious affiliation in England and Wales. The data also contain estimates for the proportion of people employed as a manager, occupation skill level, industry and education attainment. Also included are odds ratios from logistic regressions of economic activity and employment with estimated coefficients from quantile regression of log hourly earnings.

10. Glossary

The number of people in employment in the UK is measured by the <u>Labour Force Survey (LFS)</u> and consists of people aged 16 to 64 years who did one hour or more of paid work per week and those who had a job that they were temporarily away from (for example, because they were on holiday or off sick). The largest two categories within employment are employees and self-employed people; in recent years these two categories have accounted for over 99% of all people in employment.

These categories are defined as:

- employees are those who are in employment and paid a wage by an employer for the work that they do;
 this category may be further sub-divided into permanent and temporary employees
- self-employed are those people who regard themselves as self-employed, that is, who in their main employment work on their own account, whether or not they have employees

There are also two minor categories which, in recent years, have accounted for less than 1% of all people in employment. Those categories are:

- unpaid family workers are those who work in a family business who do not receive a formal wage or salary but benefit from the profits of that business; this series does not include unpaid family carers they are not included in the employment statistics at all
- people on government-supported training programmes are classified as in employment only if they are engaging in any form of work, work experience or work-related training; if they are not engaging in such activities they are classified as unemployed or economically inactive

Economically inactive refers to an individual that is not in employment but does not meet the accepted definition of unemployment. Economically inactive people have not been seeking work within the last four weeks and/or are unable to start work in the next two weeks.

High-skill level jobs are generally acquired through a degree or an equivalent period of work experience and includes occupations such as scientists, engineers and teachers. The upper middle skill level requires competence acquired through post-compulsory education, but not quite degree level. It includes occupations such as nurses, electricians and catering managers.

Low-skill level equates to the competence acquired through compulsory education. It includes occupations such as cleaners, catering and postal workers. The lower middle skill level requires the same education as the low-skill level but requires longer work-related training. Occupations include driving, machine operation and retailing.

The self-employment rate is defined as the proportion of people that report themselves as self-employed, out of all people in employment. In the Annual Population Survey (APS), self-employment is self-reported, so it is up to the respondent to identified as self-employed.

The question in the APS to identified managers is only asked to employees and as such excludes people in self-employment. Additionally, the question is self-reported.

11. Measuring the data

Annual Population Survey

Estimates in this section are based on data collected from the <u>Annual Population Survey (APS)</u>. This is an annual survey based on data collected in wave 1 and wave 5 of the <u>Labour Force Survey (LFS)</u>, combined with an annual local area boost sample run in England, Wales and Scotland.

The survey does not cover communal establishments, except for NHS staff accommodation. Those living in student halls of residence or boarding school are included as part of their family household. The APS dataset contains approximately 300,000 individuals.

The APS datasets are produced for four different overlapping 12-month periods: January to December, April to March, July to June and October to September. Estimates in this article are based on January to December datasets for each year.

12. Strengths and limitations

Uncertainty and quality

The statistics presented are estimates and as with all estimates, there is a level of uncertainty associated with them. Where available, 95% confidence intervals have been shown. These show the range within which we would expect the true value to lie for 95 out of every 100 samples drawn at random from the population. Wide confidence intervals, often associated with small sample sizes, indicate a larger range of values within which we would expect the true value to lie.

In many cases, sample sizes for specific religious groups are small and confidence intervals are large and overlap with one another. This makes it difficult to make robust comparisons between groups. Only <u>statistically</u> <u>significant</u> differences, as defined in this section, are commented on in this article.

Throughout this release we have assessed statistical significance using non-overlapping confidence intervals. This method has the limitation that some estimates with overlapping confidence intervals may be significantly different but will not be identified as such (that is, the false-negative rate will be inflated). In addition, no adjustments have been made for multiple comparisons.

In line with the 2011 Census, questions in all surveys relating to religion are voluntary and respondents can opt not to reveal their religious affiliation. Throughout this release, we have assumed that there is no link between choosing not to self-identify and the outcome being examined. For example, an individual of a particular religious affiliation who withholds that identity is no more or less likely to be in employment than one who has indicated their religious affiliation. However, if this is not the case, this would affect the results presented here.

When interpreting the results of this analysis, it should be remembered that the estimated percentages may be indicative (or otherwise) of a statistical association between participation levels and religious affiliation, but do not necessarily imply a causal relationship between the two.

It has not been possible to present estimates for Wales separately from England because of small sample sizes for some religious groups.