Department for Education

Teacher Pay and Progression:

Differences by Teacher Characteristics

December 2024

Contents

Table of figures 4

Introduction 9

Methodology 10

- Data Sources 10
- Pay Curves and Progression Rates 11
  - Pay curves 11
  - Progression rates 12
- Perceptions of Pay in WLTL survey Methodology 13

Gender 24

- Descriptive Statistics 24
- Pay Curves 24
- Progression Rates 30
- Perceptions of Pay and Conditions: Gender 32
  - Baseline Findings 32
  - Linear modelling 34

Ethnicity 37

- Descriptive Statistics 37
- Pay Curves 38
- Progression Rates 43
- Perceptions of Pay and Conditions: Ethnicity 45
  - Baseline Findings 45
  - Linear modelling 47

Religion 50

- Perception of Pay and Conditions: Religion 50
  - Baseline Findings 50
  - Linear modelling 52

Age 56

- Descriptive Statistics 56
- Pay Curves 57
- Progression Rates 62
- Perception of Pay and Conditions: Age Band 64

Baseline Findings 64
Linear Modelling 66
Disability 70
Descriptive Statistics 70
Pay Curves 72
Progression Rates 74
Perception of Pay and Conditions: Disability 74
Baseline Findings 74
Linear Modelling 77
Sexual Orientation 80
Perception of Pay and Conditions: Sexual Orientation 80
Baseline Findings 80
Linear Modelling 83
Working Pattern 86
Perception of Pay and Conditions: Working Pattern 86
Baseline Findings 86
Linear Modelling 88

List of Figures

Figure 1: Differences between responses across waves on national level pay questions 22

Figure 2: Differences between responses across waves on school level pay questions 22

Figure 3: Differences between responses across waves on reasons for considering leaving teaching pay questions 23

Figure 4: Classroom teacher pay curves in years 2013 – 2023 by experience, split by gender and working pattern 25

Figure 5: Classroom teacher pay curves in years 2013 – 2023 by experience, split by gender and working pattern, with added phase in proportional weighting 26

Figure 6: Primary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by gender and working pattern 27

Figure 7: Secondary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by gender and working pattern 27

Figure 8: Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by gender and working pattern 28

Figure 9: Primary phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by gender and working pattern 29

Figure 10: Secondary phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by gender and working pattern 29

Figure 11: Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by gender 30

Figure 12: Primary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 - 2023 31

Figure 13: Secondary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 - 2023 31

Figure 14: Headline results on pay question in WLTL surveys, split by gender 33

Figure 15: Estimates of differences between responses on national level pay questions, split by gender 34

Figure 16: Estimates of differences between responses on school level pay questions, split by gender 35

Figure 17: Estimates of differences between responses on reasons for considering leaving teaching pay questions, split by gender 36

Figure 18: Classroom teacher pay curves in years 2013 – 2023 by experience, split by ethnicity and working pattern 38

Figure 19: Primary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by ethnicity and working pattern 39

Figure 20: Secondary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by ethnicity and working pattern 40

Figure 21: Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by ethnicity and working pattern 40

Figure 22: Primary phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by ethnicity and working pattern 41

Figure 23: Secondary phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by ethnicity and working pattern 42

Figure 24: Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by ethnicity 43

Figure 25: Primary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by ethnicity 44

Figure 26: Secondary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by ethnicity 44

Figure 27: Baseline results on pay question in WLTL surveys, split by ethnicity 46

Figure 28: Estimates of differences between responses on national level pay questions, split by ethnicity 47

Figure 29: Estimates of differences between responses on school level pay questions, split by ethnicity 48

Figure 30: Estimates of differences between responses on reasons for considering leaving pay questions, split by ethnicity 49

Figure 31: Baseline results on pay question in WLTL surveys, split by religion 51

Figure 32: Estimates of differences between responses on national level pay questions, split by religion 52

Figure 33: Estimates of differences between responses on school level pay questions, split by religion 53

Figure 34: Estimates of differences between responses on reasons for considering leaving teaching pay questions, split by religion 54

Figure 35: Classroom teacher pay curves in years 2013 – 2023 by experience, split by age group and working pattern 57

Figure 36: Primary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by age group and working pattern 58

Figure 37: Secondary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by age group and working pattern 59

Figure 38: Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by age group and working pattern 59

Figure 39: Primary Phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by age group and working pattern 60

Figure 40: Secondary Phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by age group and working pattern 61

Figure 41: Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by age band 62

Figure 42: Primary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by age band 63

Figure 43: Secondary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by age band 63

Figure 44: Baseline results on pay question in WLTL surveys, split by age band 65

Figure 45: Estimates of differences between responses on national level pay questions, split by age band 66

Figure 46: Estimates of differences between responses on school level pay questions, split by age band 67

Figure 47: Estimates of differences between responses on reasons for considering leaving teaching pay questions, split by age band 68

Figure 48: Classroom teacher pay curves in years 2013 – 2023 by experience, split by disability status and working pattern 72

Figure 49: Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by disability status and working pattern 73

Figure 50: Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by disability status 74

Figure 51: Baseline results on pay question in WLTL surveys, split by disability status 76

Figure 52: Estimates of differences between responses on national level pay questions, split by disability status 77

Figure 53: Estimates of differences between responses on school level pay questions, split by disability status 78

Figure 54: Estimates of differences between responses on reasons for considering leaving teaching pay questions, split by disability status 79

Figure 55: Baseline results on pay question in WLTL surveys, split by sexual orientation 82

Figure 56: Estimates of differences between responses on national level pay questions, split by sexual orientation 83

Figure 57: Estimates of differences between responses on school level pay questions, split by sexual orientation 84

Figure 58: Estimates of differences between responses on reasons for considering leaving teaching pay questions, split by sexual orientation 85

Figure 59: Baseline results on pay question in WLTL surveys, split by working pattern 87

Figure 60: Estimates of differences between responses on national level pay questions, split by working pattern 88

Figure 61: Estimates of differences between responses on school level pay questions, split by working pattern 89

Figure 62: Estimates of differences between responses on reasons for considering leaving teaching pay questions, split by working pattern 90

List of Tables

Table 1: Summary of questions relating to pay from Working Lives of Teachers and Leaders (WLTL) survey analysed in this document 15

Table 2: Table of the fixed effects included in modelling 19

Table 3: Descriptive Statistics by gender in SWFC, including classroom teachers and leadership, aggregated across years 2013-2023 24

Table 4: Descriptive Statistics by ethnicity in SWFC, including classroom teachers and leadership, aggregated across years 2013-2023 37

Table 5: Descriptive Statistics by age group in SWFC, including classroom teachers and leadership, aggregated across years 2013-2023 56

Table 6: Descriptive Statistics by disability status in SWFC, including classroom teachers and leadership, aggregated across years 2013-2023 70

Introduction

This publication supports the Department for Education's aims to produce detailed equality, diversity and inclusion data on a national level for teachers and leaders. This updates and builds on pay progression and pay curve analysis conducted in the 2022 Government Evidence to the STRB[1]. This is alongside new analysis of the Working Lives of Teachers and Leaders surveys. These areas are analysed with a breakdown by different protected characteristics.

This publication provides descriptive statistics and analysis that controls for observable characteristics relevant to pay and progression, such as teachers' experience levels. It does not attempt to assess the impact of any differences or to consider the role of various unobservable potential causes, such as different career path preferences and choices across groups; variation in performance or level of responsibility; or discriminatory effects.

[1] Government evidence to the School Teachers' Review Body 2022: https://assets.publishing.service.gov.uk/media/6230624b8fa8f56c1d3113f4/Government_evidence_to_the_STRB_2022.pdf

Methodology

Data Sources

Data for this publication comes from a range of data sources and timelines. The pay curves and pay progression analysis uses 11 years' worth of data, from 2013 to 2023. Previous analysis found that pay reforms in 2013 had significant impacts on the data after this point, with some progression rates appearing to fall, though the extent to which this was caused by changes in reporting remained uncertain. Using data from 2013 onwards ensures a consistent comparison[1].

- School Workforce Census (SWC)[2] - Census years 2013 to 2023 inclusive
    - SWC data is used to identify teachers and their characteristics. It is also used to identify teachers who receive additional allowances. Using a combination of TPS and SWC data, it is possible to estimate a teacher's base pay. This is done by taking gross pay in TPS data and using SWC data on allowances to convert this to an estimate for base pay.
- Teacher Pension Scheme records (TPS)[3] – 2013 to 2023 inclusive
    - TPS data is used to link to SWC to analyse teacher's total or gross pay.
- Working Lives of Teachers and Leaders survey data
    - Wave 1[4] fieldwork carried out February to May 2022
    - Wave 2[5] fieldwork was carried out February to May 2023

Wave 3 of Working Lives of Teachers and Leaders was published in November 2024[6] but data was not available at the time of analysis.

Note: Wave 2 fieldwork on Working Lives of Teachers and Leaders was carried out during a period of industrial action in Spring 2023.

[2] School Workforce Census: https://explore-education-statistics.service.gov.uk/find-statistics/school-workforce-in-england

[3] Teacher Pension scheme data: https://explore-education-statistics.service.gov.uk/find-statistics/median-teacher-pay-using-teacher-pension-scheme-data/2023-24

[4] Working Lives of Teachers and Leaders wave 1 reports: https://www.gov.uk/government/publications/working-lives-of-teachers-and-leaders-wave-1

[5] Working Lives of Teachers and Leaders wave 2 reports: https://www.gov.uk/government/publications/working-lives-of-teachers-and-leaders-wave-2

[6] Working Lives of Teachers and Leaders wave 3 reports: https://www.gov.uk/government/publications/working-lives-of-teachers-and-leaders-wave-3

Pay Curves and Progression Rates

To track teachers' pay and progression in detail over time, two datasets are used in combination: the Schools Workforce Census (SWC); and the Teacher Pension Scheme (TPS) record. TPS data is primarily used to measure pay, because in years where the pay award is finalised close to the School Workforce Census date, this can result in the school workforce official statistics not fully reflecting the latest pay award, unlike TPS data. Further rationale as to why TPS teacher pay data is more accurate in recent years can be found in the background information of the median teacher pay publication using TPS data[7].

Of the nine statutory protected characteristics, the administrative data in the SWC only records four: gender (as a proxy for sex); ethnicity (as a proxy for race); disability; and age. They do not contain sufficiently detailed information on other characteristics: gender reassignment; marriage or civil partnership; pregnancy and maternity; religion or belief; and sexual orientation.

Disability data is included, for the purposes of transparency, despite known challenges around this data in the School Workforce Census (SWC). The variable continues to have a large amount of missing data, and ongoing challenges with data quality[8]. Therefore, any conclusions on disability from School Workforce Census data should be used with appropriate caution.

Pay curves

Pay curve charts display average Full-Time Equivalent (FTE) base salary as measured by the hybrid TPS-SWC dataset, by protected characteristics. For part-time staff, this means that their pay is plotted on the basis of what they would be paid if they were full-time.

Teachers' pay increases with experience, and this is reflected in pay progression seen in the data: pay usually rises sharply in the first few years of a teacher's career. For this reason, pay is presented visually as a pay curve, with experience along the horizontal axis. This allows us to compare like-for-like, without differences in the average ages or experience of different groups leading to spurious differences in pay. One important limitation of this approach is that experience is measured as years since attaining

[7] Median teacher pay using teacher pension scheme data: https://explore-education-statistics.service.gov.uk/find-statistics/median-teacher-pay-using-teacher-pension-scheme-data

[8] Disability data collection in schools: https://www.gov.uk/government/publications/disability-data-collection-in-schools

Qualified Teacher Status (QTS), with no adjustment for periods of absence from teaching, such as career breaks or maternity leave.

Inverse Proportional Weighting

Pay results are influenced by several factors. In the pay curves, teachers' pay is averaged over several years. Taking a simple average across teacher pay over many years may not produce like-for-like comparisons, particularly if there are disproportionate numbers of teachers with specific characteristics in certain years or in areas with a higher pay scale (London). To account for this, inverse proportional weighting[9] is used, with the year the data is collected and regional pay scales[10] as covariates. Inverse proportional weighting produces a weight for each observation which is then used to calculate a weighted mean.

For example, for the ethnicity characteristic, a simple average would show black and Asian teachers typically have higher average pay than white teachers, for any given level of experience. Later in this publication, Table 4 shows that black and Asian teachers are both more likely to be on a London pay scale than white teachers, which could explain why this difference occurs. Weighting accounts for this and removes the effect of these distributional factors to give a clearer indicator of any underlying relationship between ethnicity and pay.

Progression rates

Progression rate charts show the proportion of teachers on one pay point, who progress to the next pay point each year, by protected characteristics. Whereas the pay curves are purely cross-sectional, progression rate analysis incorporates a longitudinal approach, linking a specific teacher's pay in one year with the pay of the same teacher in the next year.

Analysis of pay point progression from raw pay data raises two main challenges. Firstly, recorded pay does not always exactly match known pay points in the STPCD, so imputation requires fuzzy matching to pay points. Second, measuring year-on-year progression is sensitive to the timing of yearly pay increases. The SWC provides a snapshot of pay taken at the same time each year; however, annual pay reviews for a given teacher are not as regular, and the data displays evidence that pay increases may not always be recorded in time for the snapshot, leading to the appearance of uneven pay growth. Using TPS mitigates this problem, as it records reconciled pay data, such

[9] Inverse probability weighting or inverse propensity score weighting is an established method for adjusting estimates of a difference in means between two populations, when both the variable of interest, and group membership, are correlated with a third 'confounder' variable. See: Imbens, G., & Rubin, D. (2015), Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction, Cambridge University Press.

[10] Rest of England, London Fringe, Outer London, and Inner London.

that any pay rise a teacher received as part of a pay review that occurred after the SWC data was collected but that was backdated to the September, as is typical, is picked up. However, TPS data only records gross pay, so a hybrid estimate of base pay is required, using allowances data from the SWC for matched teachers. This introduces further risk of misestimation.

Analysis of progression rates assumes the existence of a structure of fixed pay points within the classroom teacher pay range. The status and salience of pay points has changed due to reforms to teacher pay and subsequent policy changes. Until 2013, the implementation of the national pay structure, including pay points, was compulsory for all state-funded, maintained schools. The pay reforms of 2014 removed compulsory pay points and replaced them with statutory minima and maxima for the classroom teachers' main pay range and upper pay range. Initially the Department did not provide any guidance on pay progression within those bounds. During this period, pay points continued to be salient for most schools, as union-backed reference values. Since September 2020, the department has published advisory pay points for qualified classroom teachers. Since academies have specific freedoms, including over teacher pay and other conditions of employment, and are not required to follow the STPCD, they can create their own pay and conditions policies, including pay bands. However, in practice, the data indicates that the majority of academies choose to follow the pay points in the STPCD.

Perceptions of Pay in WLTL survey Methodology

This section analyses several questions from the Working Lives of Teachers and Leaders survey (WLTL). The WLTL survey was sampled to be representative of teachers and leaders in state funded primary, secondary, special schools, pupil referral units (PRUs) or alternative provision (AP) in England. Analysis uses the full sample of teachers surveyed.

Reponses to questions in this survey are largely ordered categorical variables. For example, with the question J1_1 – "I am satisfied with the salary I receive for the work I do", answers could be "Strongly agree", "Tend to agree", "Neither agree or disagree", "Tend to disagree", "Strongly disagree", or "Don't know". Apart from "Don't know", which would be excluded in this analysis, the possible answers have an order relating to the level of agreement with the statement. Each of these answers is coded to a numerical value, starting with 1 being "Strongly agree" and 5 being "Strongly disagree". Therefore, higher numbers in the analysis of this question relate to more disagreement. There are differences between how questions are phrased and what the outcome values could be. In some cases, higher values relate to a higher importance of a factor (e.g. for questions asked to those considering leaving the state education sector). Care is taken when carrying out the analysis to ensure that variables are interpreted in the correct direction.

Table 1 displays the questions to be analysed in this document along with the number of observations for each wave, and for each question. This differs because for each

question, some teachers answered “Don’t know” – in these cases, they are excluded from any analysis of that question. Additionally, if a teacher has missing values in any of the demographic fields used in the analysis, they are also excluded. Hence, the number of observations used in the regressions will differ from the full sample size.

For each question a shorter name has been assigned for brevity in visualisations and tables.

Questions Analysed

Table 1 summarises the questions analysed in the perceptions of pay and conditions sections.

Table 1: Summary of questions relating to pay from Working Lives of Teachers and Leaders (WLTL) survey analysed in this document

Question	Description	Short Name	Sample Size Wave 1[11]	Sample Size Wave 2[12]	Regression Sample Size[13]
J1_1	"I am satisfied with the salary I receive for the work I do."	Satisfied with Salary	11,159	10,400	19,080
J1_2	"I am satisfied with overall national-level changes to teachers' pay in the last year" *Included an explanatory note alongside the question: "By 'national-level' changes, we mean changes to the national pay framework, rather than decisions made by your school."*	Satisfied with National Changes	10,880	10,343	18,796
J1_3	"At this stage of my career, teaching offers me a good salary compared to other careers I could follow if I leave"	Competitive Salary (Now)	10,914	10,230	18,699
J1_4	"I am satisfied with my longer-term salary prospects compared with other career paths I could follow if I leave."	Competitive Salary (Long-term)	10,908	10,224	18,697
J1_5	"The teacher pay structure allows for my pay to increase at a rate that fairly reflects my growing expertise, regardless	Fair Pay Structure	11,079	10,304	18,944

[11] Excludes responses of "Don't know" or "Prefer not to say"

[12] Excludes responses of "Don't know" or "Prefer not to say"

[13] Excludes respondents with missing demographic data as well as those who answered "Don't know" or "Prefer not to say"

Question	Description	Short Name	Sample Size Wave 1[11]	Sample Size Wave 2[12]	Regression Sample Size[13]
	of whether I take on additional duties and responsibilities"				
J6_1	"My school followed their own pay policy in making decisions about my pay."	School followed it's policy	8,121	7,781	14,084
J6_2	"The decisions my school took about my pay were fair"	School was fair	9,242	8,585	15,806
J6_3	"I am satisfied with how my school communicated decisions about my pay."	Satisfied with communication	9,681	8,996	16,546
	"How important have the following factors been in making you consider leaving the state education sector?" (Only asked of those considering leaving).				
M5_1	"High workload."	Workload important to leaving	2,773	3,625	5,606
M5_5	"Dissatisfaction with pay."	Pay important to leaving	2,774	3,625	5,605

Baseline Findings

For each characteristic, baseline findings are presented. These are the weighted average response for each question, broken down by characteristic and wave. When interpreting these charts, it is important to note that no modelling has been done to remove the effects of any confounding factors.

The survey weights included with the Working Lives of Teachers and Leaders data are used to calculate a weighted average for each of these questions. This is to ensure that the results are a representative sample of the wider population of teachers.

Linear Modelling

Linear models have been used throughout this analysis. Linear models can offer a better assessment of the impact of certain factors on responses, after allowing for the impact of other factors which may also impact response. As a simple example, female teachers are more likely to teach in primary schools, and therefore a simple analysis of response by gender may be confounded by any difference in opinion between primary school teachers and secondary school teachers, rather than showing the true relationship with being female, specifically. Linear models allow us to separate this relationship from other confounding factors.

Specifically, linear mixed models are used in longitudinal analysis where there are repeated observations from the same unit (in this case, the same teacher across both waves). The model allows both fixed and random effects, and allows for correlation between observations from the same individual unit. For example, one specific teacher may, in general, have a more positive outlook about their pay and conditions than another and whilst this may be affected by their individual characteristics, school, pay and conditions, and so on, there is inherently a teacher-level effect here that would be correlated between two observations in time. A linear mixed model would fit a random effect to allow for the teacher specific effect in the modelling. This is an individual effect for every teacher and is called ‘random’ because it is assumed that the distribution of these effects follows a normal distribution.

The model also fits fixed effects that affect the outcome variable for all teachers in the analysis. This analysis investigates the differences between teachers with different protected characteristics, such as gender or ethnicity, and these are put into the model as fixed effects. However, there are also other aspects of teachers’ working lives that are not protected characteristics and are likely to affect their response, such as their post, experience level and school characteristics.

A fixed effect is used for the wave that the response was collected in, and this is to represent any effect of the time of the response. This is particularly important here, with the context of Wave 2 being collected during industrial action.

A list of fixed effects included in analysis are set out in Table 2 below. Details of the variables used can be found in WLTL technical reports.[14,15]

With categorical variables, any output of linear modelling is a comparison between each group and a reference group. In this analysis, the reference group is the largest group for each characteristic so that it is easier to visualise effects in minority groups, with the exception of gender, where Male was chosen to be the reference group in convention with gender pay gap reporting. The choice of reference group does not affect the outcomes of the analysis, but simply how it is interpreted and visualised.

[14] Working Lives of Teachers and Leaders technical report wave 1: https://assets.publishing.service.gov.uk/media/642b51b47de82b00123134fc/Working_lives_of_teachers_and_leaders_-_wave_1_-_technical_report.pdf

[15] Working Lives of Teachers and Leaders technical report wave 2: https://assets.publishing.service.gov.uk/media/66ed848a4dd30ab91a9a8ca6/working_lives_of_teachers_and_leaders_wave_2_tech_report.pdf

Table 2: Table of the fixed effects included in modelling

Effect	Type	Values	Reference Value used in visualisations
Age Band	Categorical	Under 35, 35 to 44, 45 to 54, 55 and over	Under 35
Disability	Binary	True, False	False
Ethnicity	Categorical	Asian, Black, Mixed, White, Other Ethnic Group, Prefer Not to Say	White
Experience	Numerical		
Experience Squared	Numerical		
Full Time / Part time Status	Categorical	Full Time, Part Time	Full Time
Gender[16]	Categorical	Female, Male	Male
Post	Categorical	Classroom Teachers, Leadership, Middle Leader, Unqualified Teacher, Other	
Phase	Categorical	Primary, Secondary, Special/AP	
Region	Categorical	East Midlands, East of England, London, North East, North West, South East, South West, West Midlands, Yorkshire and the Humber	
Religion	Categorical	Christian, Hindu, Jewish, Muslim, Sikh, No Religion, Other Religions[17], Prefer Not To Say	No Religion
School: Academy or LA Maintained	Categorical	Academy, Local authority maintained	

[16] We refer to gender throughout this document. However, there are differences in the question asked between the two data sources used. The School Workforce Census data collected is for gender, whereas the Working Lives of Teachers and Leaders (WLTL) question asks about sex: “O3 - What is your sex? This does not have to be the same as on your birth certificate.”

[17] Other religions is a group combining religions with smaller base sizes, notably those answering “Buddhist” and any response under “Any other religion” on the question “O7 - What is your religion?”

Effect	Type	Values	Reference Value used in visualisations
Sexual Orientation	Categorical	Heterosexual, LGBPO[18], Prefer Not To Say	Heterosexual
Subject Taught	Categorical	TRI Subjects[19], Others	
Wave	Categorical	Wave 1, Wave 2	

For each characteristic section, only the effects relating to that characteristic are picked out. These estimated effects are extracted from the full regression model, with observable confounding factors accounted for, but the full regression output is not presented. For example, the Gender section of this document will only present the estimated difference between male and female responses that remains *after* controlling for other relevant factors, such as phase and working pattern. This provides the best estimate of the true effect on responses of gender alone.

All estimates of effects associated with each protected characteristics are presented with a 95% confidence interval.

Effect of wave and interpretation of charts

In the dot and whisker charts to be presented, the dot represents the estimate for the effect of that characteristic. As an example, Figure 11 presents the effect of Wave in the full regression model. In this case, the reference group is Wave 1, so any differences reported are relative to Wave 1.

For the 'satisfied with salary' question, the dot being to the right of the 0 line on the x-axis represents the central estimate of the analysis, that teachers are, on average, more dissatisfied in their response in the second wave of questioning than they were in the first. The magnitude of this effect is around 0.25: this means that, on average, teachers were likely to state their dissatisfaction at 0.25 points higher on the 5-point scale than they were in Wave 1.[20] The line surrounding the dot represents the 95% confidence interval, within which the true average effect (which can only be estimated using linear

[18] LGBPO refers to those who answered: "Gay or lesbian", "Bisexual", "Pansexual" or "Other" in question O5 – "How would you best describe your sexual orientation?"

[19] TRI subjects refer to subjects that are eligible for Targeted Retention Incentive payments for early career teachers, these are specifically Chemistry, Computing, Mathematics and Physics

[20] As noted in the WLTL Wave 2 publication, wave 2 was carried out during a period of industrial action and wider cost of living pressures.

modelling) is 95% likely to fall. The fact that the confidence interval does not cross the 0 line means that the differences in response on that question between Wave 1 and Wave 2 were statistically significant at the 95% level. A wider line indicates more uncertainty around the estimate than a narrower line.

As a comparison, Figure 33 presents the differences in response on the questions in which teachers state the important factors that are leading them to consider teaching. For workload, the estimate is positive but very small for wave, with a confidence interval that crosses the 0 line. The interpretation of this result would be that teachers' opinions on workload and whether it is a factor pushing them to leave hasn't changed to a statistically significant extent between waves. It is important to interpret this in conjunction with the overall findings from the main WLTL report that workload is an important factor overall, but this finding shows that opinion hasn't demonstrably improved or declined between waves[21]. This could also be an effect of workload being marked as important by the majority of teachers answering this question across both waves, and therefore variability is low and unlikely to change much between waves.

Size of effects and statistical significance

Throughout the remainder of this report, there is no commentary regarding whether any effects might be considered 'large', 'small', or otherwise, given the subjectivity of that judgement. Instead, for each question and each characteristic, the central estimates of response differentials and the associated 95% confidence intervals are presented. This includes presenting results that are not statistically significant but could still provide a useful signal, despite the noise in the estimate.

[21] Working Lives of Teachers and Leaders wave 1 reports: https://www.gov.uk/government/publications/working-lives-of-teachers-and-leaders-wave-1

Figure 1: Differences between responses across waves on national level pay questions

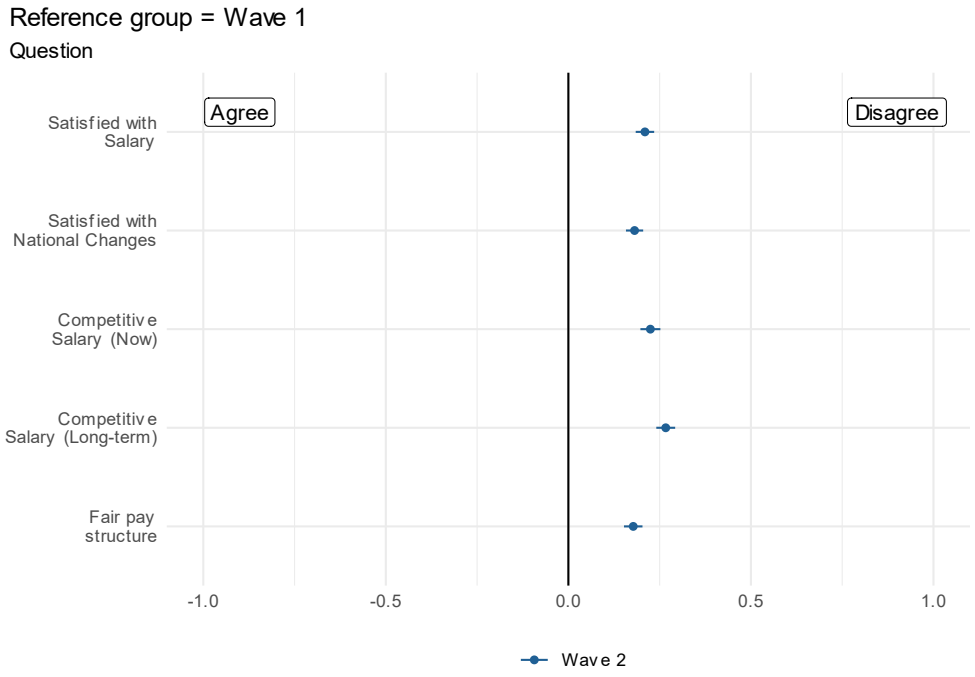


Figure 2: Differences between responses across waves on school level pay questions

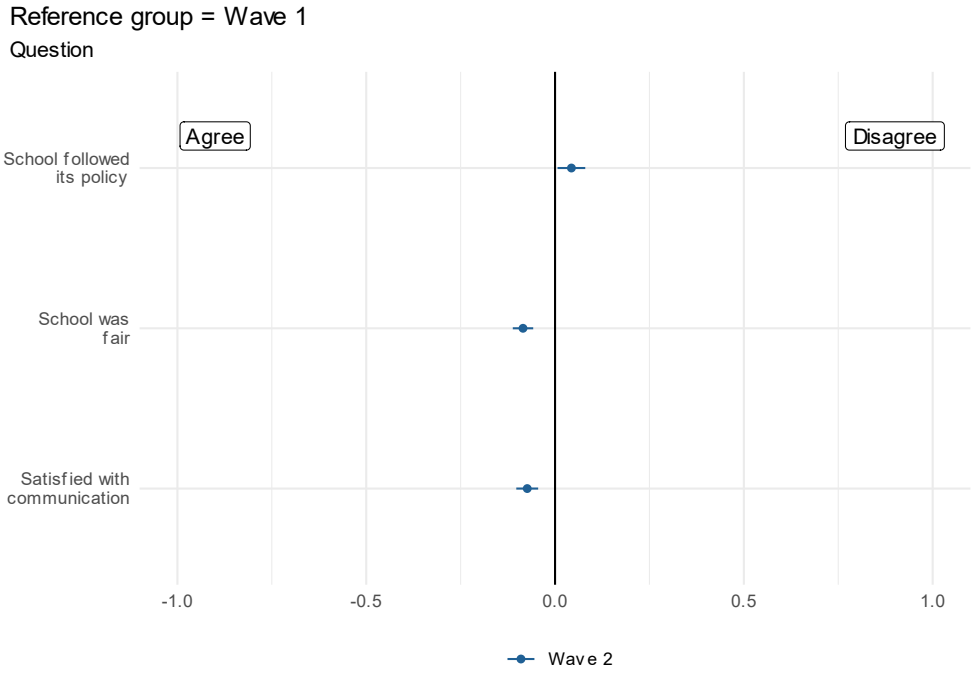
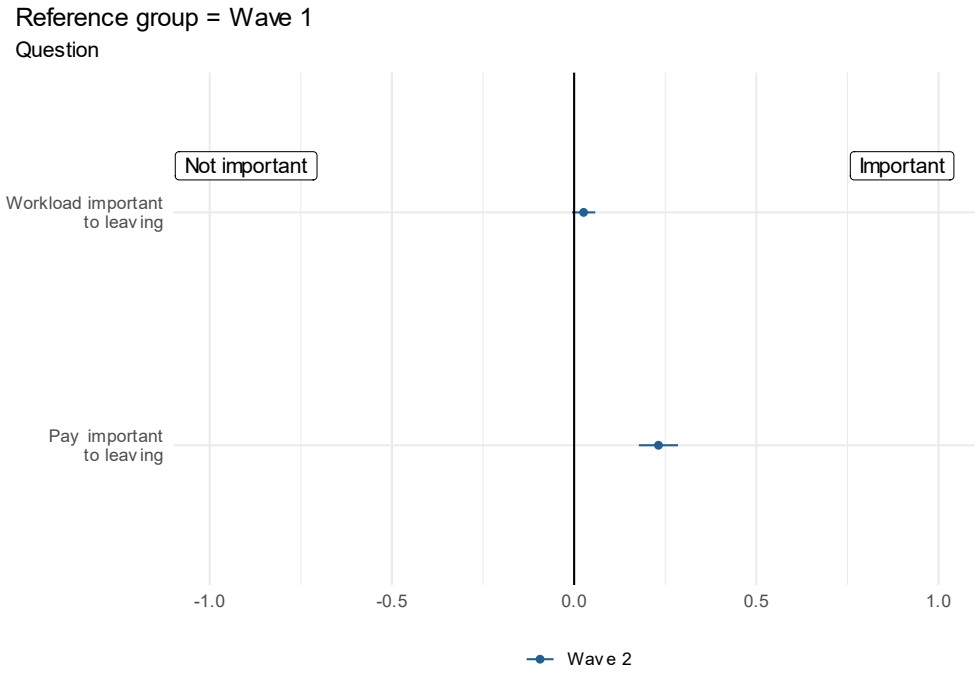


Figure 3: Differences between responses across waves on reasons for considering leaving teaching pay questions[22]



[22] Considering leaving the English state school sector in the next 12 months (excluding retirement). See Table 1 for full question details.

Gender

Descriptive Statistics

Table 3: Descriptive Statistics by gender in SWFC, including classroom teachers and leadership, aggregated across years 2013-2023

	Male	Female
Mean age	39.3	38.7
Mean experience[23]	13.2	13.4
% in leadership roles[24]	20	14
% part-time	8	28
% in secondary	67	39
% on London pay scales[25]	22	22

Table 3 shows that male teachers, on average, were slightly older with marginally fewer years of experience. They were more likely to be working in leadership roles, and less likely to be part-time. They were also much more likely to be working in a secondary school.

Pay Curves

The cash values on the y-axes of each chart do not correspond to any single set of pay points. This is because values are averaged across pay regions and use data from 2013 – 2023, inclusive. This is to increase sample size and reduce uncertainty. While this pooling of data is especially important for analysis of smaller groups, for gender it is possible to run single year data for 2023/24 that gives robust results. An equivalent

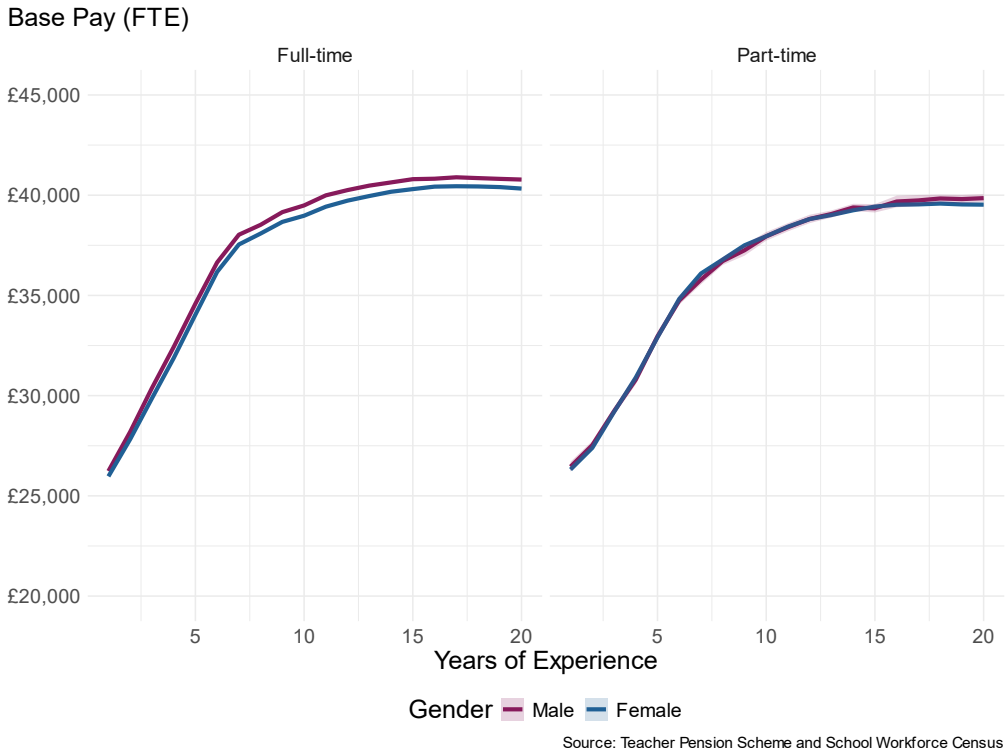
[23] Experience is measured as years since attaining Qualified Teacher Status (QTS), with no adjustment for periods of absence from teaching, such as career breaks or maternity leave.

[24] Leadership roles defined as senior leaders and headteachers

[25] London pay scales are defined as regional pay scales with higher pay scales than the national pay scales: London Fringe, Outer London, Inner London

version of Figure 1 shows the same pattern as below but with average pay in the first year at around £32,000 and after 20 years at around £47,000.

Figure 4: Classroom teacher pay curves in years 2013 – 2023 by experience, split by gender and working pattern



The cash values on the y-axes of each chart do not correspond to any single set of pay points. This is because values are averaged across pay regions and use data from 2013 – 2023, inclusive. This is to increase sample size and reduce uncertainty. While this pooling of data is especially important for analysis of smaller groups, for gender it is possible to run single year data for 2023/24 that gives robust results. An equivalent version of Figure 1 shows the same pattern as below but with average pay in the first year at around £32,000 and after 20 years at around £47,000.

Figure 4 plots teachers' base pay against their years of experience. This chart focuses on classroom teachers only. It shows a gap in favour of male teachers' pay for full-time classroom teachers but no significant differences in pay for part-time classroom teachers. This gap extends across all years of experience but widens from around 7 years of experience.

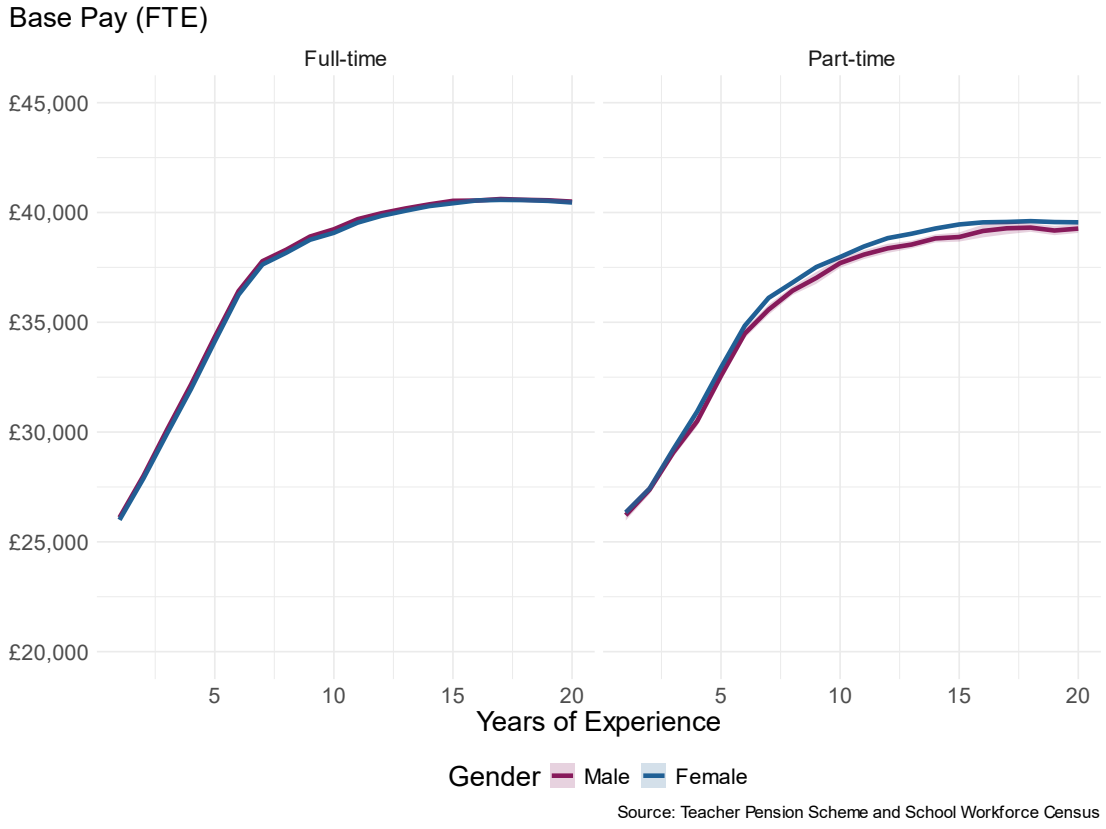
Figure 5 shows the same data but controls for school phase.[26] The pay gap for full-time teachers disappears, with no discernible differences at any experience level. However, a

[26] This is done by adding phase as a factor to the inverse proportional weighting.

gap does appear for part-time teachers, in favour of female teachers. This finding for full-time teachers is consistent with the effect in Figure 4 being driven by secondary teacher pay being higher than primary teacher pay, and male teachers being more likely to work in secondary.

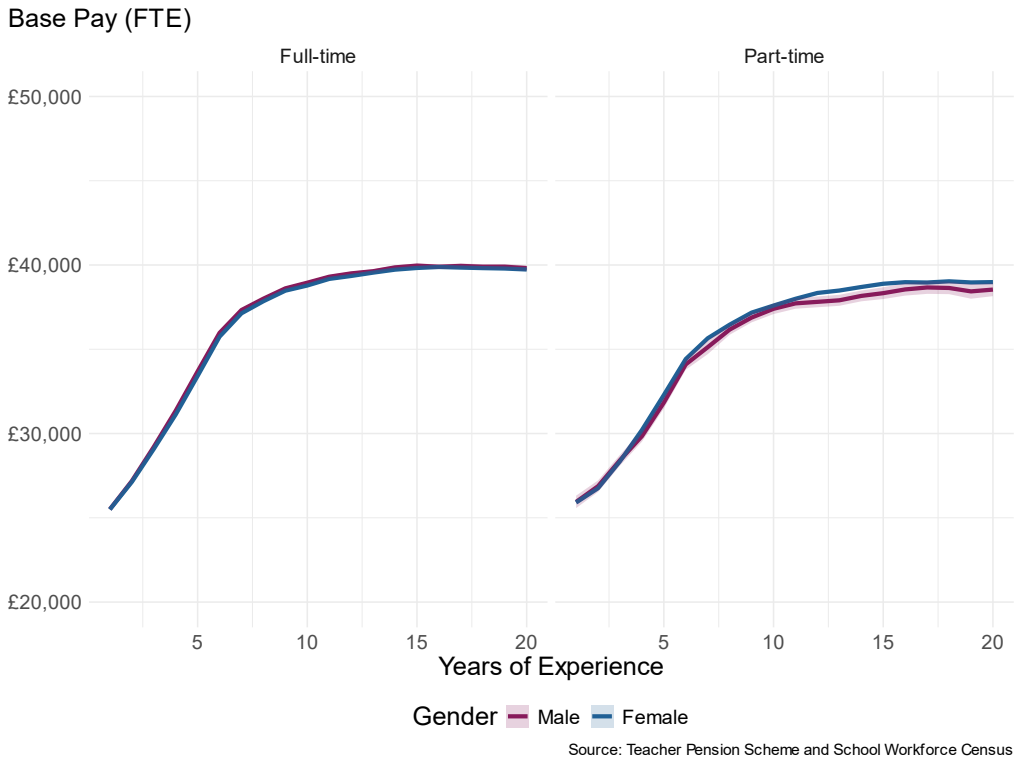
Figure 6 and Figure 7 show the gender pay curves at primary and secondary schools individually and, in both charts, no evidence of a gender pay gap exists for full time teachers. For part time teachers there is evidence of a small gap in favour of female teachers at both primary and secondary schools. Figure 6 and Figure 7, also show that that average secondary teacher pay is higher than average primary teacher pay at all experience levels, for both full- and part-time teachers, which again helps to explain the effect in Figure 4.

Figure 5: Classroom teacher pay curves in years 2013 – 2023 by experience, split by gender and working pattern, with added phase in proportional weighting



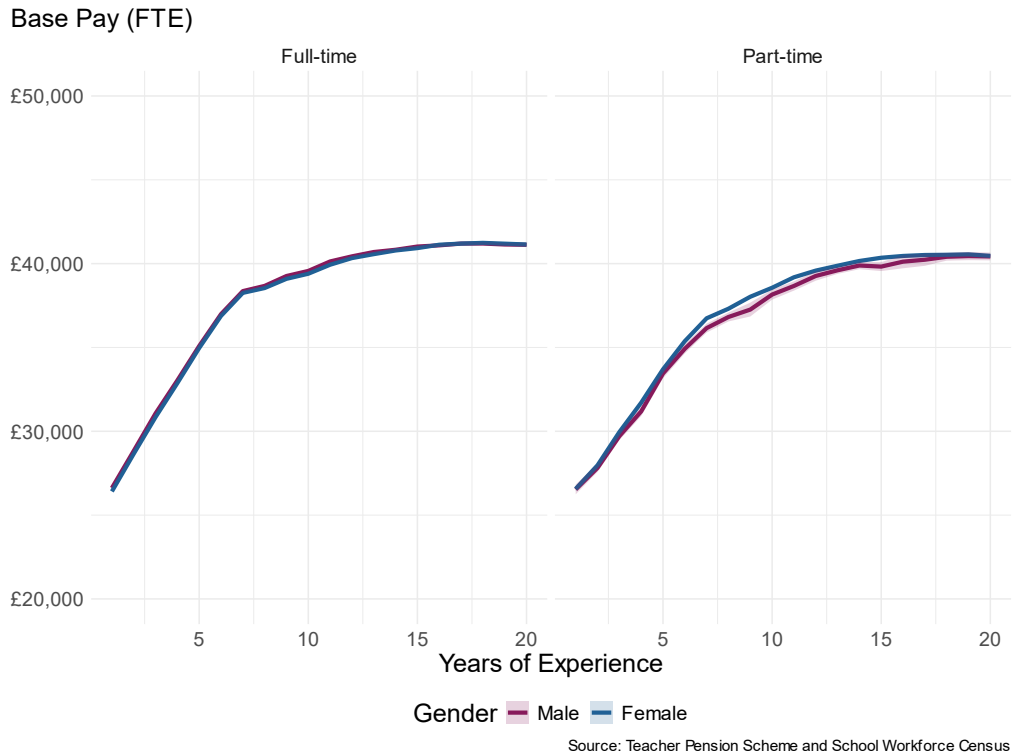
Source: Teacher Pension Scheme and School Workforce Census

Figure 6: Primary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by gender and working pattern



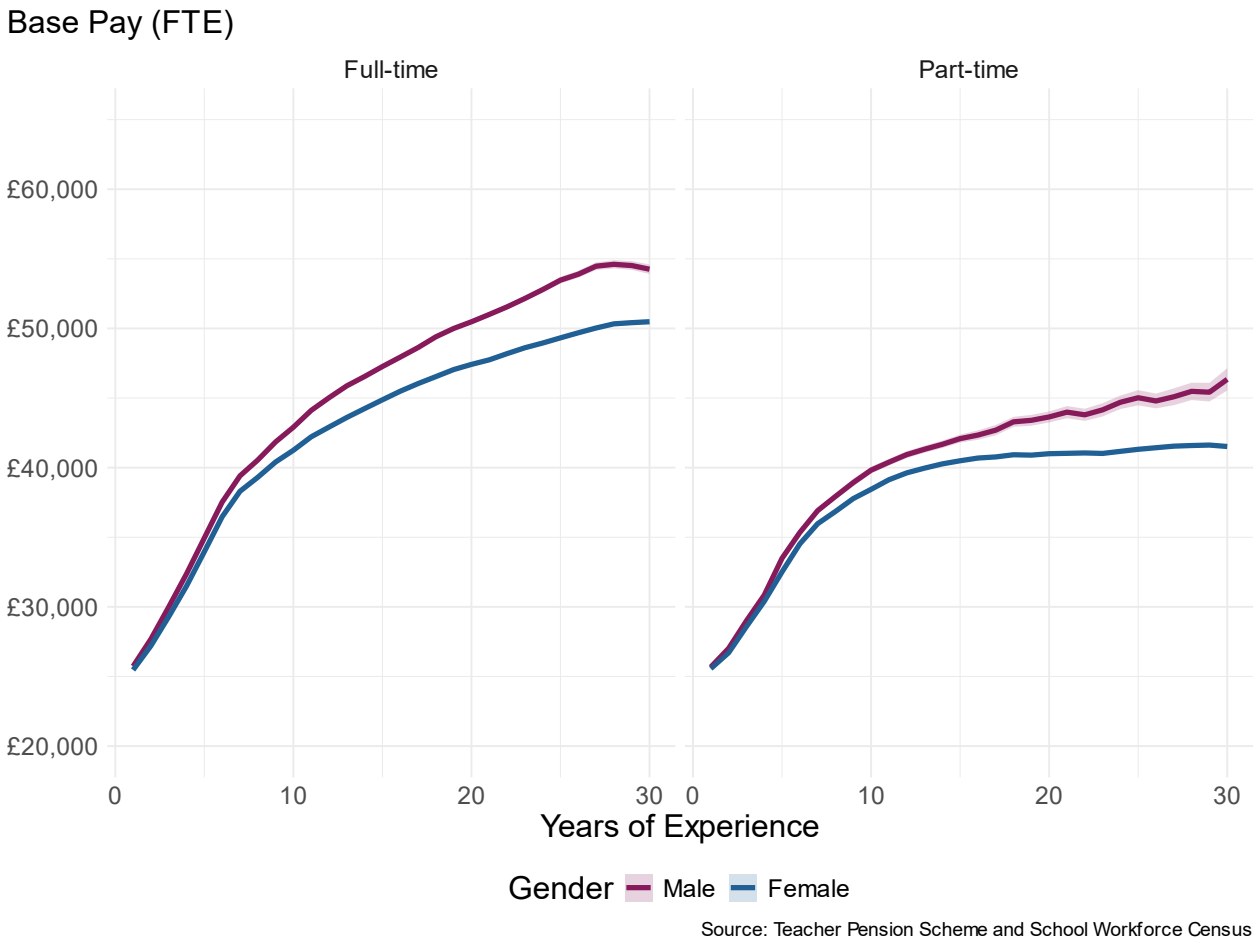
Source: Teacher Pension Scheme and School Workforce Census

Figure 7: Secondary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by gender and working pattern



Source: Teacher Pension Scheme and School Workforce Census

Figure 8: Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by gender and working pattern



Source: Teacher Pension Scheme and School Workforce Census

Once leadership roles are included in the pay curve in Figure 8, a sizeable gap opens up where male pay is higher, and the gap grows with experience. This gap exists regardless of part time status.

Considering each phase individually, with leadership included, the pay gap exists in both primary and secondary schools but is bigger in primary with the average salary of a full-time male primary school teacher being around 14% higher than the female equivalent by the latter part of teachers' careers at 30 years. The equivalent gap in secondary schools is around 6%. The relative gap is larger for part-time teachers with it being roughly 8% higher for secondary and 18% higher in primary.

Figure 9: Primary phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by gender and working pattern

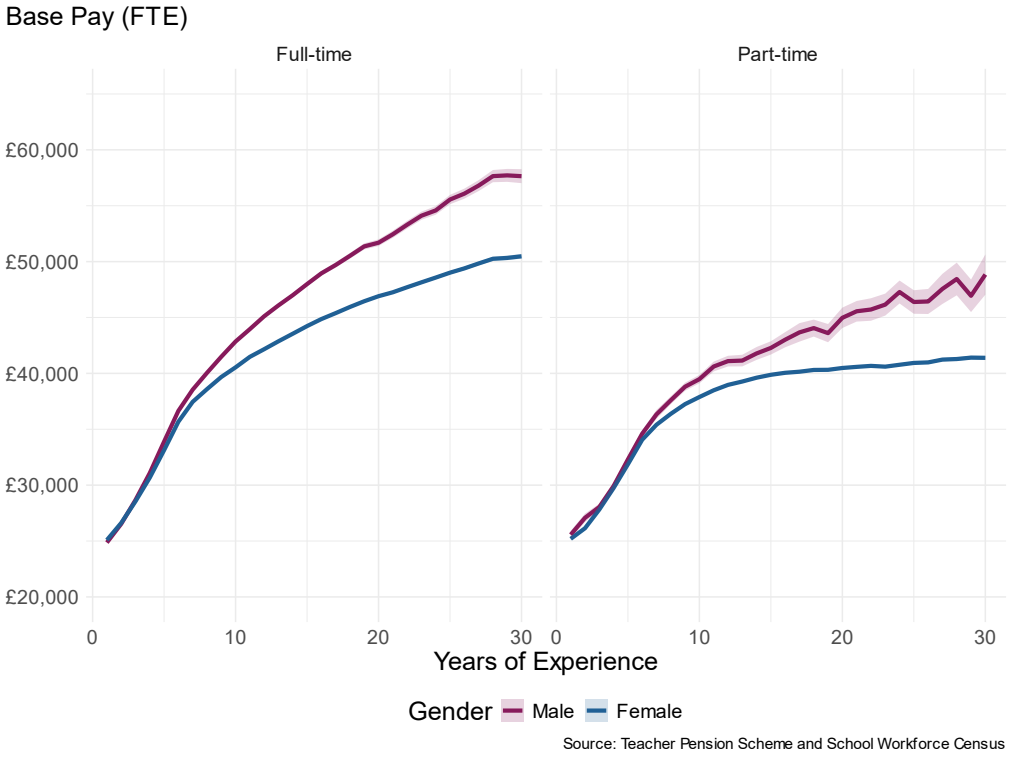
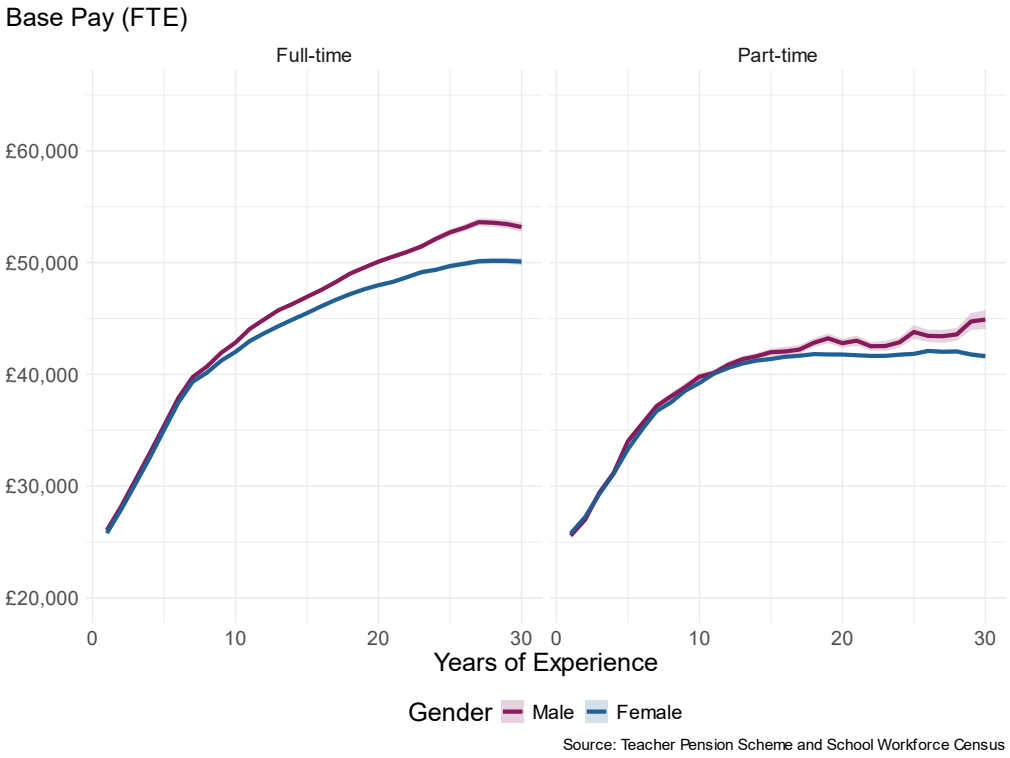
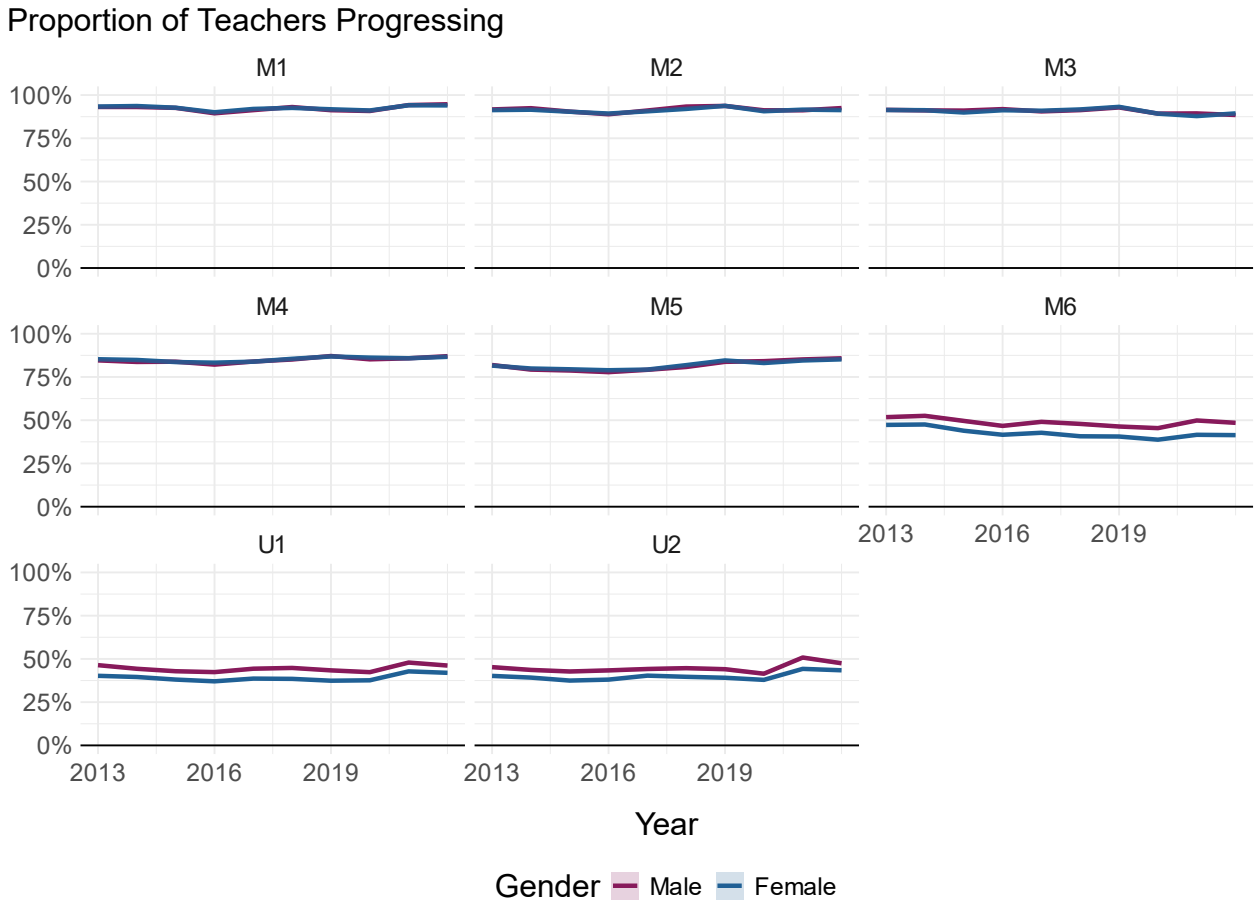


Figure 10: Secondary phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by gender and working pattern



Progression Rates

Figure 11: Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by gender



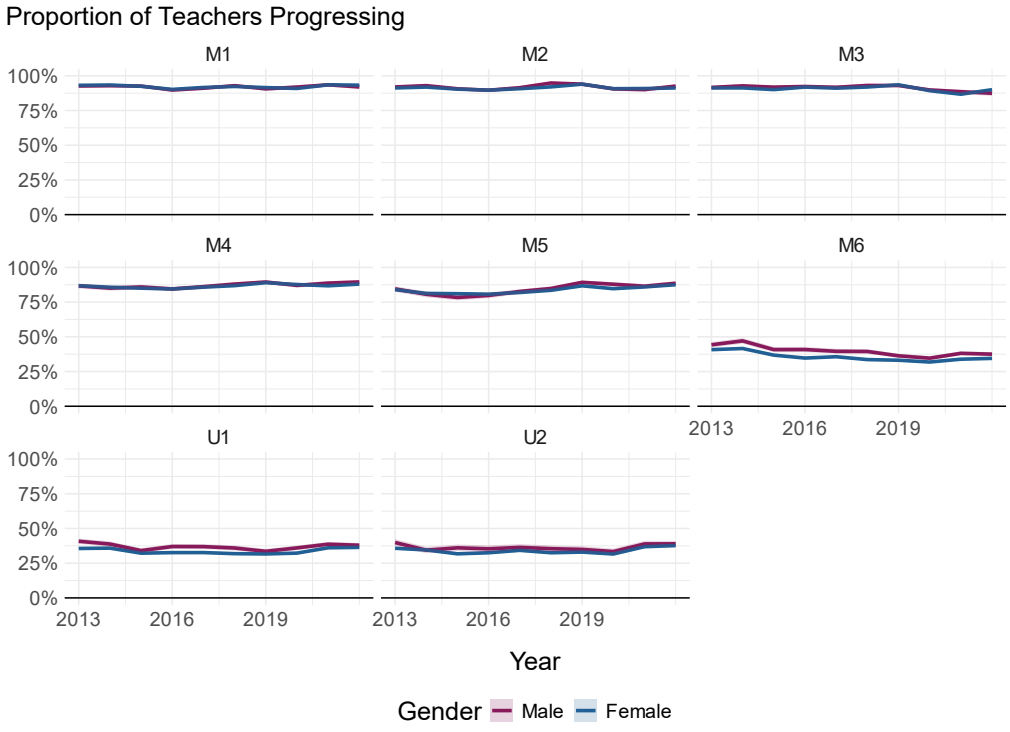
Source: Teacher Pension Scheme and School Workforce Census

Figure 11 shows no gender gap in terms of progression until the pay point M6, from which point male teachers progress both onto and then through the pay points on the upper pay range at a higher rate. This is most pronounced at pay point M6, reflecting a difference in rates of accessing the upper pay range.

Figure 12 and Figure 13 demonstrate that these differences are largely driven by compositional effects across phase. Secondary teachers progress onto the upper pay range and through the upper pay range points more quickly, on average, than primary teachers. The female workforce being more concentrated in primary schools than secondary means female teachers are less likely to experience these faster rates of progression than male teachers. Controlling for phase explains most of the difference by gender seen above, though some smaller differences remain within-phase in primary.

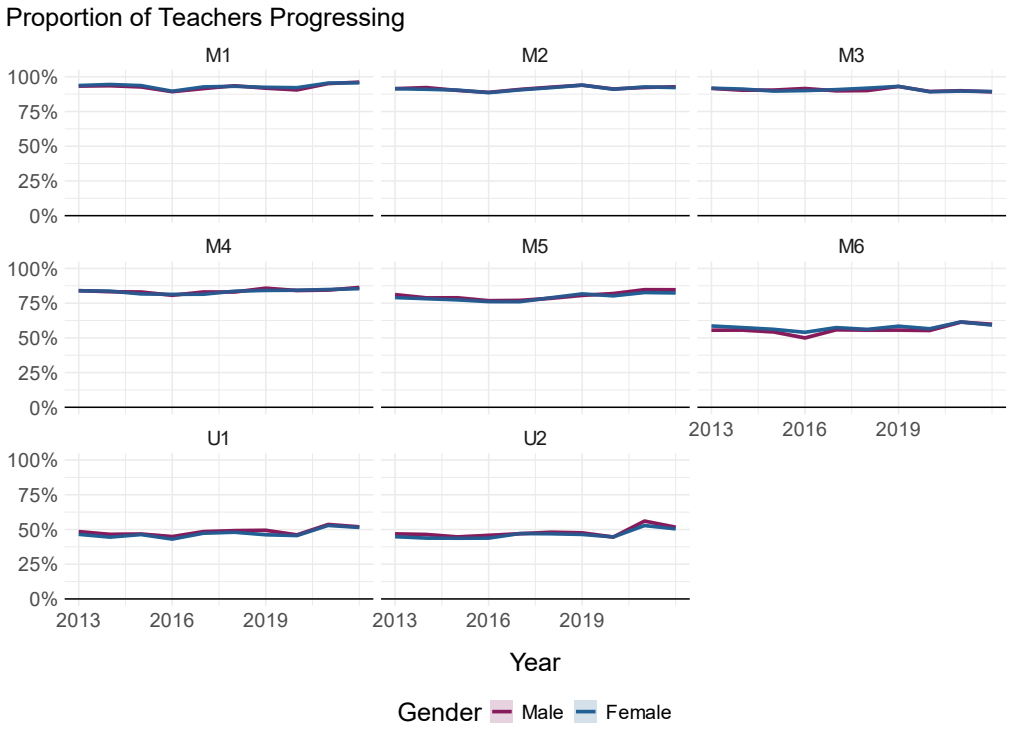
Specifically, there is some evidence of a persistent but narrowing gender gap in the rate that primary teachers access the upper pay range from the top of the main pay range, M6. There is no evidence of a gender difference in progression rates at secondary schools.

Figure 12: Primary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 - 2023



Source: Teacher Pension Scheme and School Workforce Census

Figure 13: Secondary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 - 2023



Source: Teacher Pension Scheme and School Workforce Census

Perceptions of Pay and Conditions: Gender

Baseline Findings

An overview of headline results can be found in the main Working Lives of Teachers and Leaders reports[27],[28]. Figure 14 displays the baseline findings for each pay question broken down by gender and wave. These responses are not further broken down by other variables that may be important for understanding views about pay, such as phase or working pattern (the pay curves and progression data presented above both show substantial differences between primary / secondary and part-time / full-time teachers). It cannot be concluded that any differences between genders in these charts are not partially caused by these other factors, rather than gender itself. However, the baseline findings are presented to provide context on the overall scale of agreement and disagreement for each question. The linear modelling will then identify the differences by gender that remain, once observable confounding factors are considered.

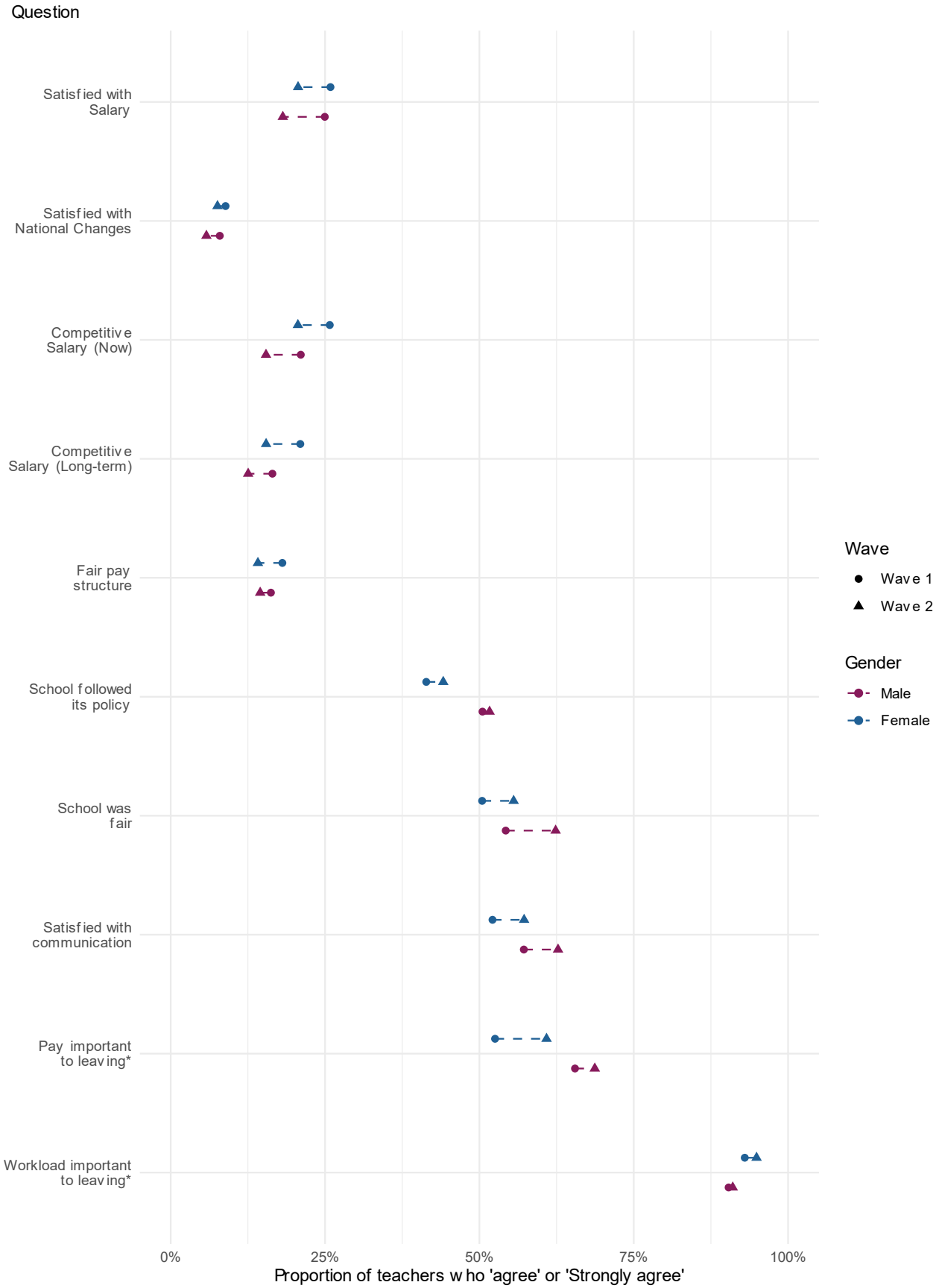
The important factors to read from this are:

- Satisfaction with salary is low amongst both male and female teachers, with at most 1 in 4 answering ‘Agree’ or ‘Strongly Agree’ to this question.
- Satisfaction with national changes is also very low amongst both male and female teachers. This may mean that variation between gender on this is hard to see in linear modelling.
- The direction of movement between waves is the same for both male and female teachers on all pay questions.
- The question with the biggest difference between male and female teachers is on whether the school followed its policy on pay, with female teachers less likely to agree. Whether this is a function of gender or other confounding factors will be explored in the linear modelling below.

[27] Working Lives of Teachers and Leaders wave 1 reports: https://www.gov.uk/government/publications/working-lives-of-teachers-and-leaders-wave-1

[28] Working Lives of Teachers and Leaders wave 2 reports: https://www.gov.uk/government/publications/working-lives-of-teachers-and-leaders-wave-2

Figure 14: Headline results on pay question in WLTL surveys, split by gender



*For pay and workload being important factors for leaving, proportion is how many answered 'Important' or 'Very important'

Linear modelling

Linear modelling is carried out to ascertain whether these differences are directly associated with gender rather than any observable, potentially confounding factors such as school phase, post held, or other factors. Strongly correlated confounding factors may reduce the visibility of impacts harder to see as it becomes difficult to disentangle effects from each other and this can lead to increased confidence intervals. For gender, being female is correlated with working part-time, and therefore there can be larger confidence intervals on gender and working pattern as a result.

In the perceptions of pay questions, the reference group for the gender characteristics are male teachers.

Figure 15: Estimates of differences between responses on national level pay questions, split by gender

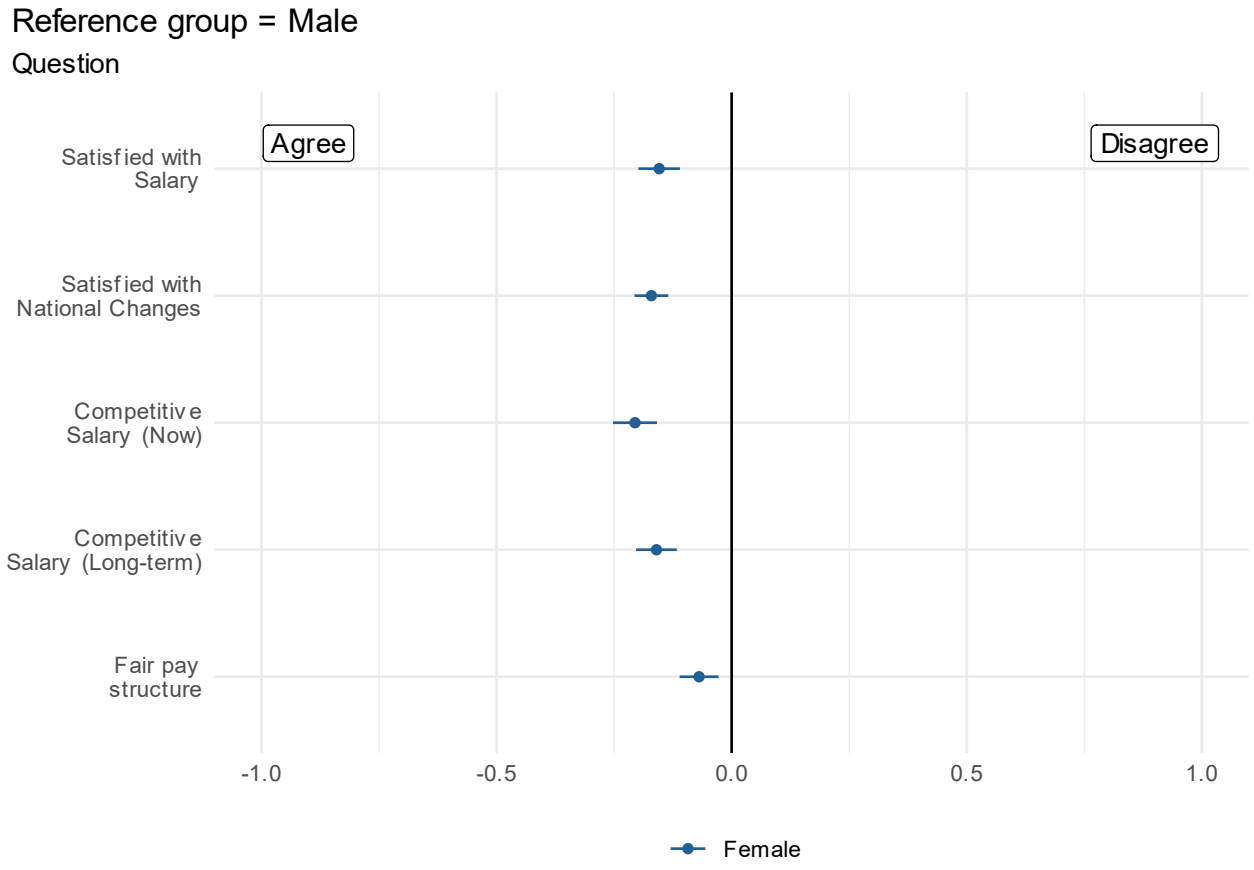


Figure 15 shows the difference in responses that remain between female teachers and male teachers, after considering a range of confounding factors, for the set of questions regarding national level pay.

Female teachers' responses showed higher levels of agreement on all the national level pay questions than those from male teachers. However, Figure 14 showed that both female and male responses to these questions demonstrated high levels of disagreement

overall, so the results in Figure 15 may be better expressed as female teachers' responses showing lower levels of disagreement than those of male teachers.

The differential responses by gender are statistically significant for each question.

Figure 16: Estimates of differences between responses on school level pay questions, split by gender

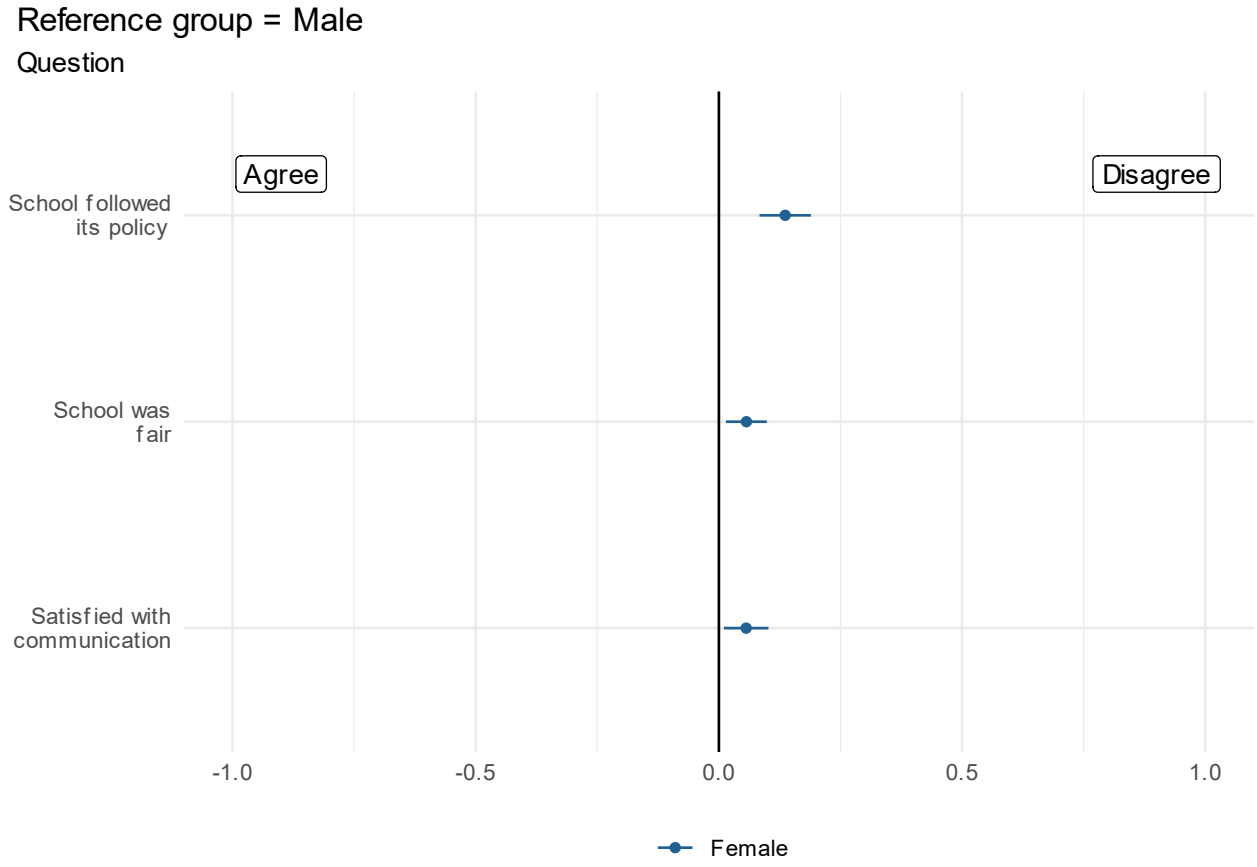


Figure 16 shows the difference in responses that remain between female teachers and male teachers, after considering a range of confounding factors, for the set of questions relating specifically to decisions on their pay taken by their school.

Female teachers' responses showed higher levels of disagreement on all the school level pay questions than those from male teachers. When considering decisions their school had taken on their own pay, female teachers were more likely to disagree that the school had followed its own policy; more likely to disagree that the decision was fair; and more likely to disagree that the communication around the decision was satisfactory.

The differential responses by gender are statistically significant for each question.

Figure 17: Estimates of differences between responses on reasons for considering leaving teaching pay questions[29], split by gender

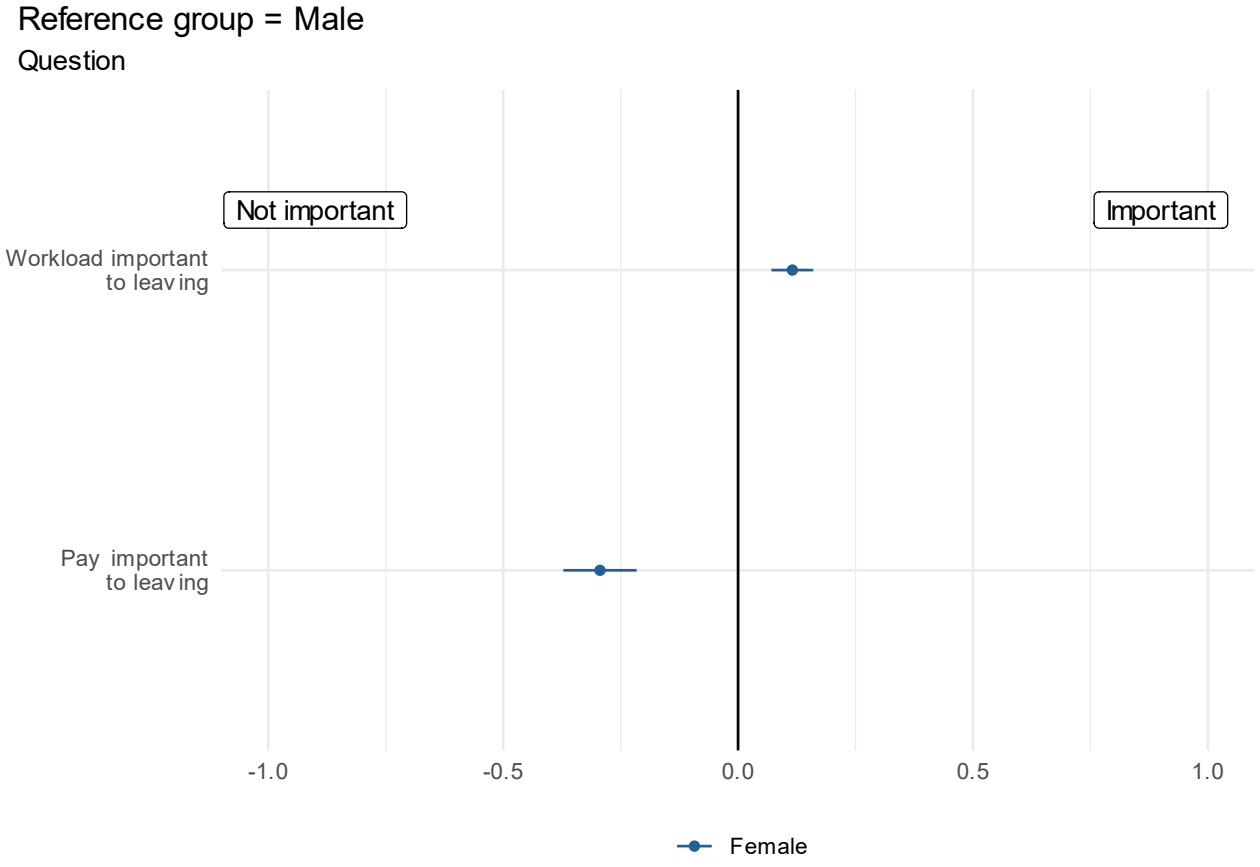


Figure 17 shows, for teachers who said they were considering leaving the state-funded school sector in the next 12 months (for reasons other than retirement), the differences that remain between female and male teachers, after considering a range of confounding factors, in the importance assigned to pay and workload as reasons.

Female teachers were less likely than male teachers to assign a high degree of importance to pay as a reason to consider leaving, and more likely to assign importance to workload. Note, however, that Figure 14 showed that both male and female teachers were more likely to assign importance to workload than to pay, in absolute terms.

[29] Considering leaving the English state school sector in the next 12 months (excluding retirement). See Table 1 for full question details.

Ethnicity

Descriptive Statistics

Table 4: Descriptive Statistics by ethnicity in SWFC, including classroom teachers and leadership, aggregated across years 2013-2023[30]

	White	Black[31]	Asian[32]	Mixed or Multiple Ethnic Groups	Other Ethnic Group	Prefer not to say
Mean age	39.1	40.9	36.6	36.3	39.1	39.5
Mean experience[33]	13.7	11.2	10.4	10.0	10.7	13.2
% in leadership roles[34]	16	11	9	12	10	12
% part-time	24	10	18	17	18	23
% in secondary	44	61	56	50	57	60
% on London pay scales[35]	20	70	48	47	56	25

Table 4 provides descriptive characteristics for teachers of different ethnicities in the aggregated sample, covering 2013 - 2023. There are several differences between these groups that could be important factors influencing a teacher's pay.

For example, white teachers, on average, have more years of teaching experience, are more likely to hold a leadership role, are more likely to be part-time, and are less likely to

[30] Excludes those who preferred not to say or unknown ethnicity

[31] In this section, 'black' is used for the group of teachers who state their ethnicity as 'Black', 'Black African', 'Black British', 'Black Caribbean' or 'Any other black background' in School Workforce Census

[32] In this section, ''Asian' is used for the group of teachers who state their ethnicity as 'Asian', 'Asian British', 'Bangladeshi', 'Chinese', 'Indian', 'Pakistani' or 'Any other Asian background' in School Workforce Census

[33] Experience is measured as years since attaining Qualified Teacher Status (QTS), with no adjustment for periods of absence from teaching, such as career breaks or maternity leave.

[34] Leadership roles defined as senior leaders and headteachers

[35] London pay scales are defined as regional pay scales with higher pay scales than the national pay scales: London Fringe, Outer London, Inner London

work in secondary schools or in London than any other ethnic group. Black teachers are less likely to work part-time, more likely to work in London, and more likely to work in secondary schools than any other ethnic group.

Pay Curves

The pay curves and progression plots in this section are presented for white, black and Asian teachers only, as the largest three groups. For some of the ethnicity groups with smaller sample sizes, high variance means the data does not provide a consistent picture – the challenge of interpreting a small sample size is already visible in the data for black teachers in some figures below.

Figure 18: Classroom teacher pay curves in years 2013 – 2023 by experience, split by ethnicity and working pattern

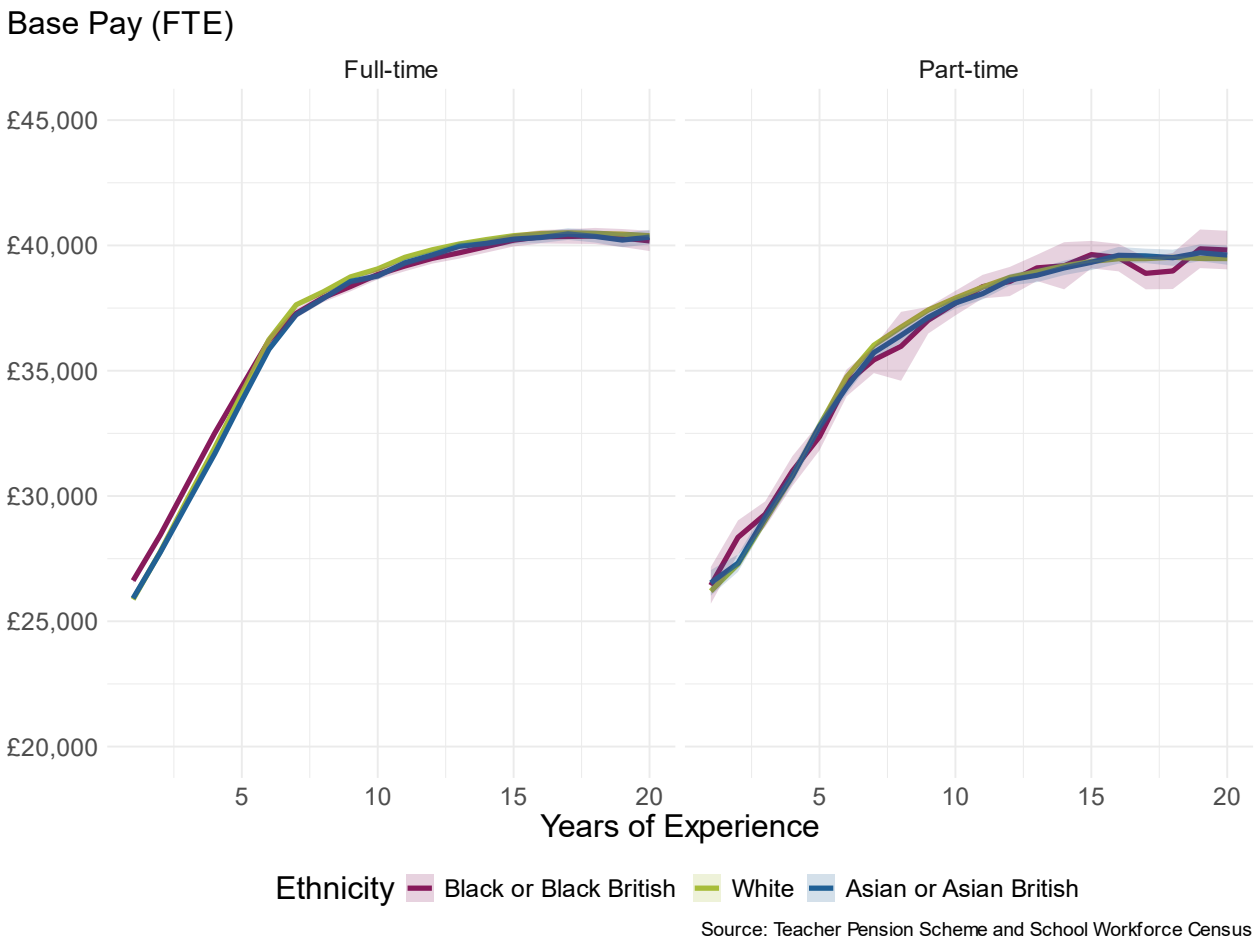


Figure 18 plots teachers' base pay, against their years of experience, by ethnicity. It focuses on classroom teachers only. There are limited differences between full-time teachers' pay by ethnicity. Black teachers' pay appears slightly higher in early career, but the gap is small. The data for part-time teachers is noisy due to low sample sizes but shows no significant differences by ethnicity.

Given black and Asian teachers are relatively more likely than white teachers to work in secondary schools, where average pay is higher than in primary, it is important to also present pay curves for each phase individually. Figure 19 and Figure 20 show the ethnicity pay curves for classroom teachers for primary and secondary schools, respectively.

For full-time teachers, both primary and secondary see a gap open up around the 6-year mark, with white teachers being paid more than black or Asian teachers. This gap appears to persist into later career for secondary teachers. For primary teachers, any gap that exists falls within the confidence interval of the data beyond the 10-year mark. For part-time teachers, small sample sizes mean that the confidence intervals of the pay curves overlap.

Figure 19: Primary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by ethnicity and working pattern

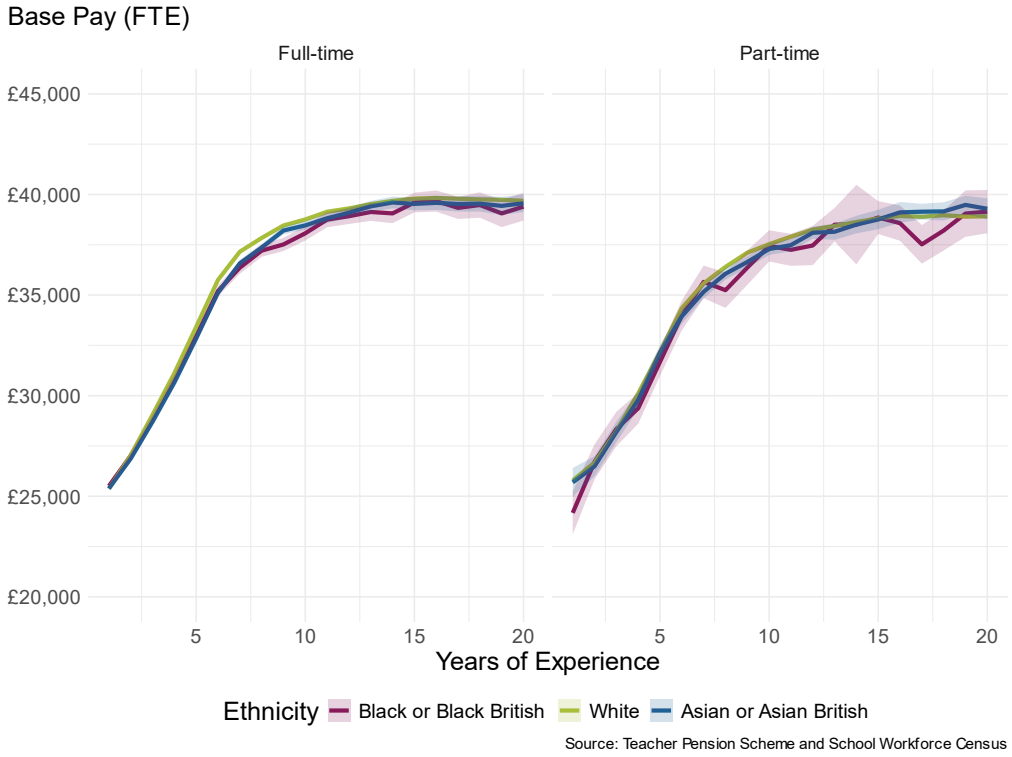
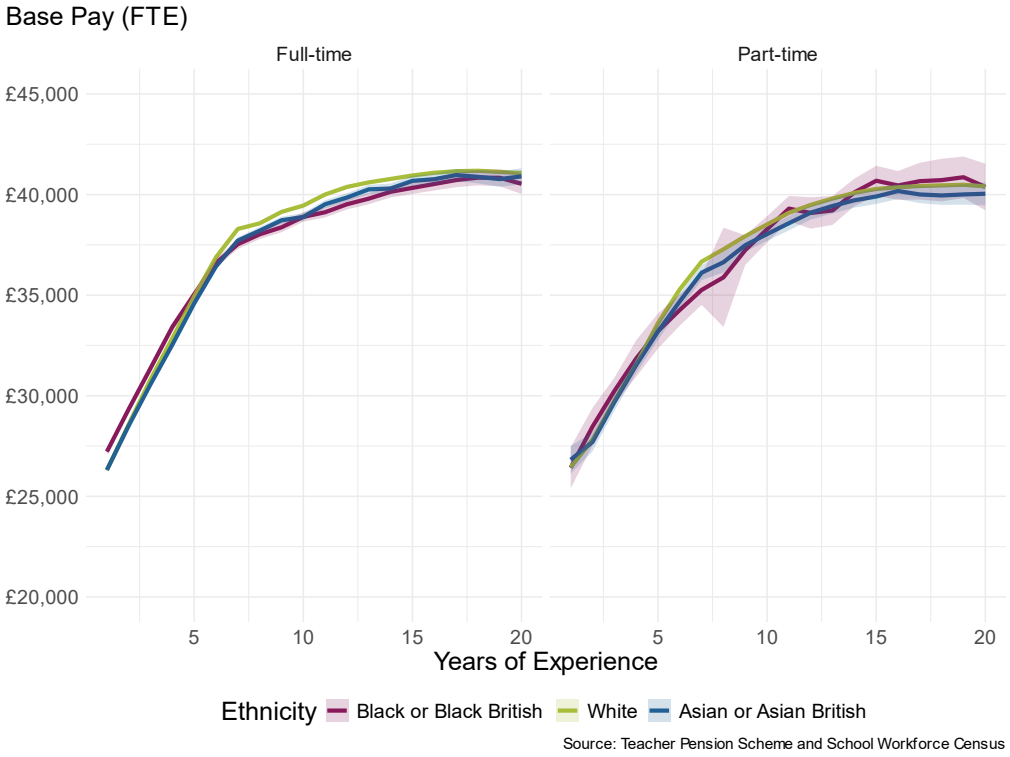
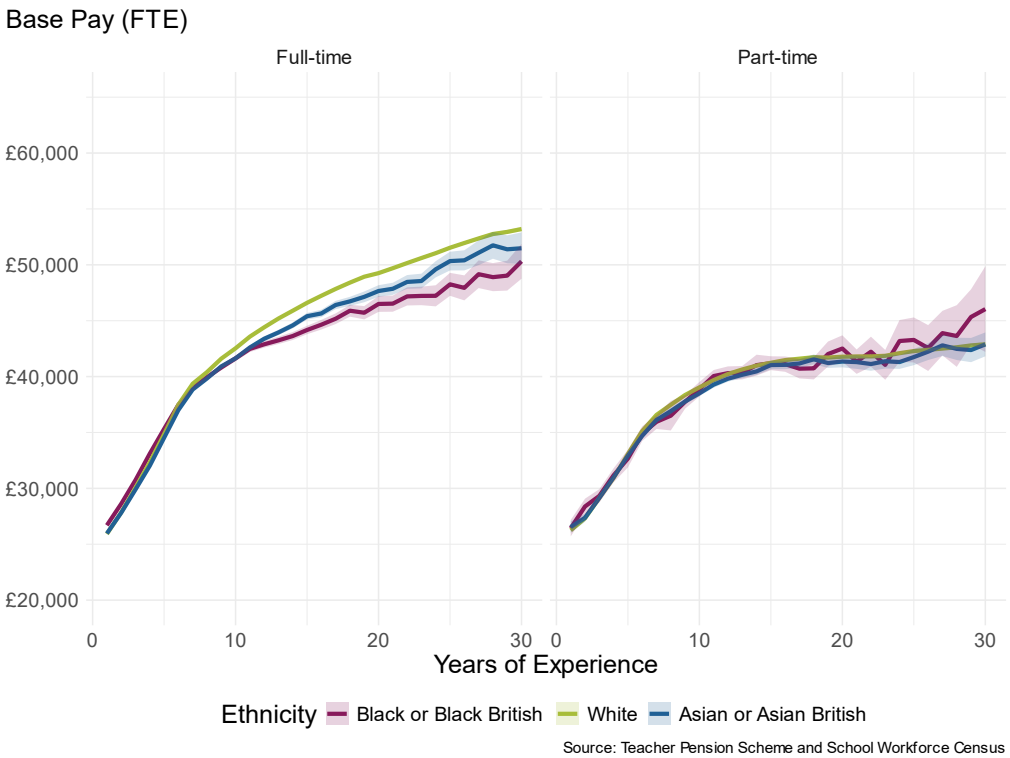


Figure 20: Secondary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by ethnicity and working pattern



Source: Teacher Pension Scheme and School Workforce Census

Figure 21: Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by ethnicity and working pattern



Source: Teacher Pension Scheme and School Workforce Census

Figure 21 presents pay curves for all teachers, including those in leadership roles, by ethnicity. For full-time teachers, there is a gap in pay between white teachers and black and Asian teachers, which opens up before the 10-year mark. Average pay for full-time Asian teachers also appears to be consistently higher than for full-time black teachers from around the 12-year mark, with the difference in several years being larger than the combined confidence intervals associated with the data. There are no discernible gaps for part-time teachers.

Figure 22 and Figure 2323 show the equivalent curves for primary and secondary schools, respectively, and still including leadership. The picture for full-time secondary teachers is similar to that set out in the paragraph above. For full-time primary teachers, from around the 7-year mark, white teachers appear to be paid more, on average, than black and Asian teachers. But the gap is smaller and sometimes less than the confidence intervals associated with the data. There is also no gap between full-time black and Asian teachers in primary schools, until around the 25-year mark, at which point a gap appears to open up, but the data carries wide confidence intervals.

Figure 22: Primary phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by ethnicity and working pattern

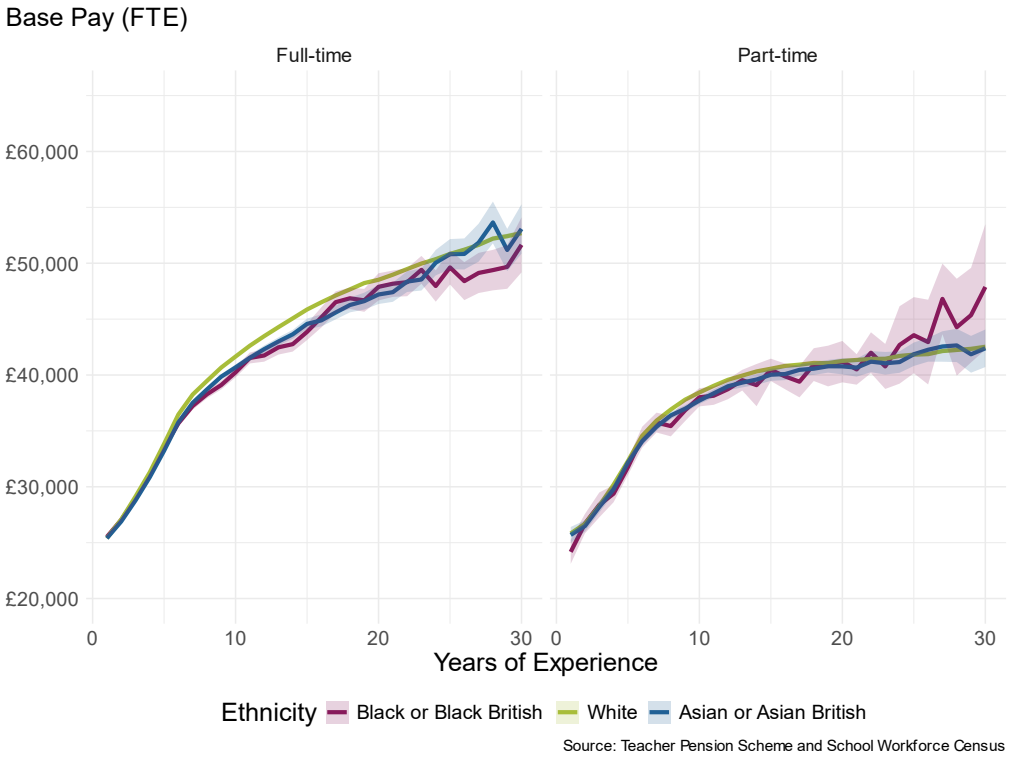
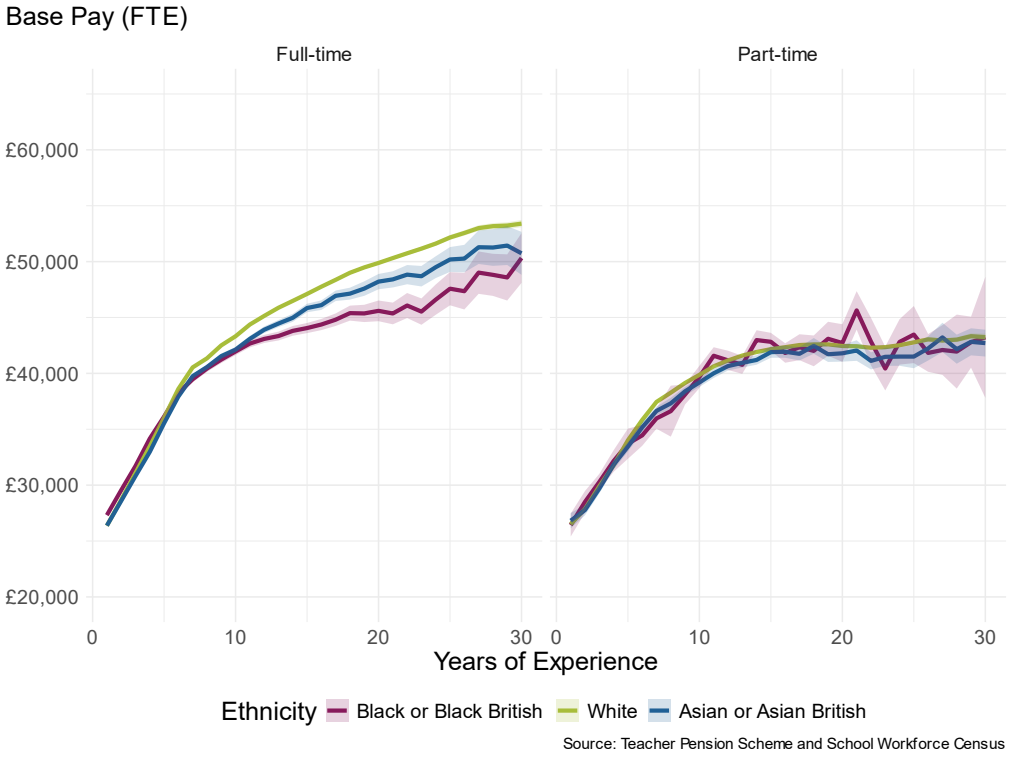
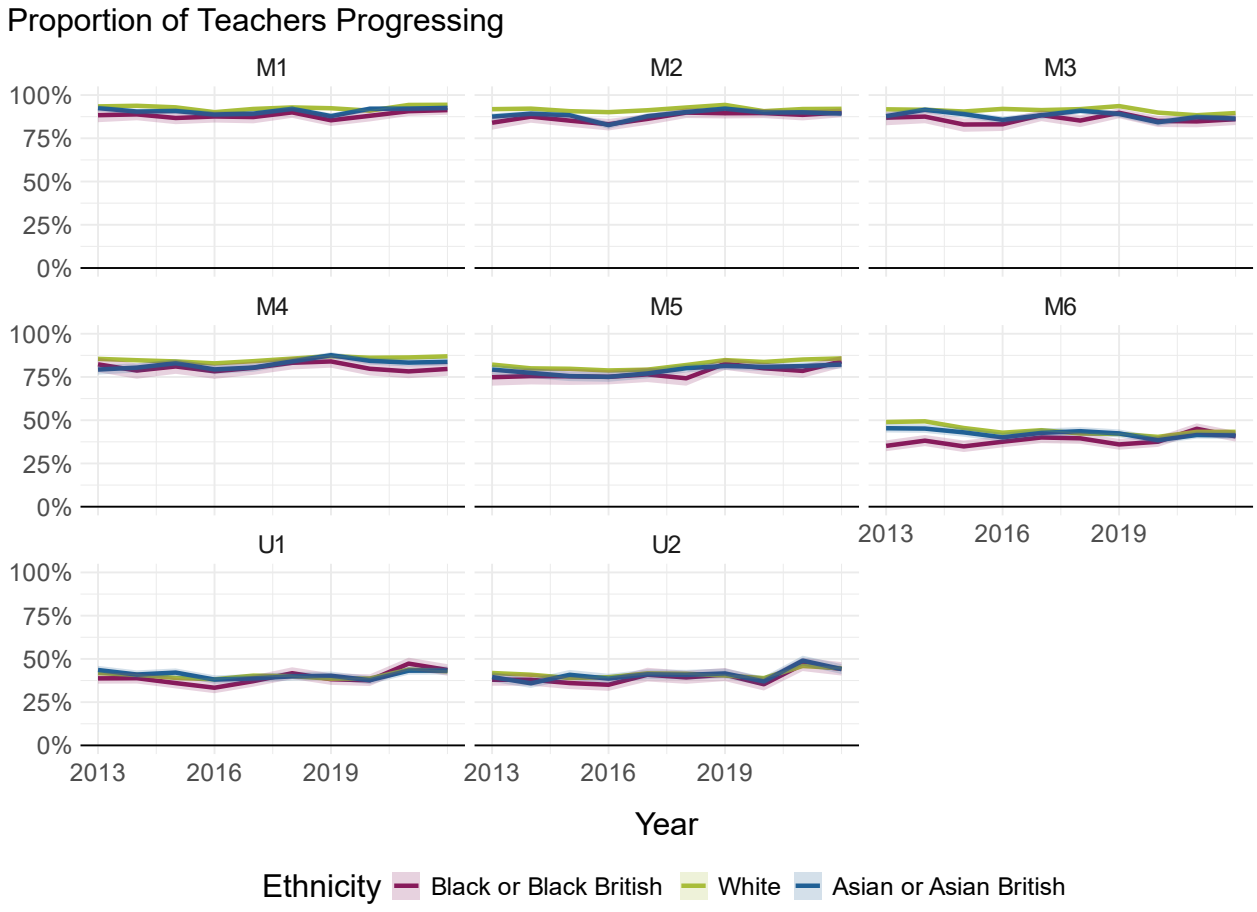


Figure 23: Secondary phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by ethnicity and working pattern



Progression Rates

Figure 24: Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by ethnicity

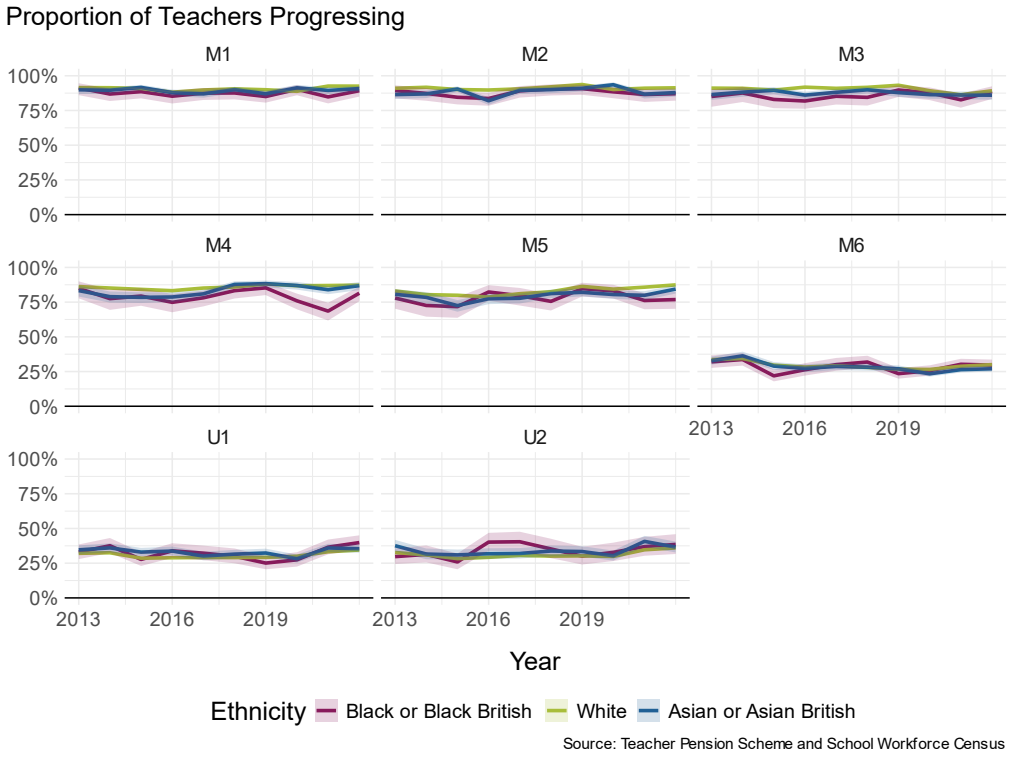


Source: Teacher Pension Scheme and School Workforce Census

Figure 24 shows the progression rates of teachers between advisory points on the main and upper pay ranges. In the latest year of data, progression rates from each pay point are similar for each ethnicity. The data does show a gap previously existed at M6, with black teachers progressing to the upper pay range at a slower rate, but the latest data appears to show that Black, Asian, and white teachers now progress from M6 at the same rate.

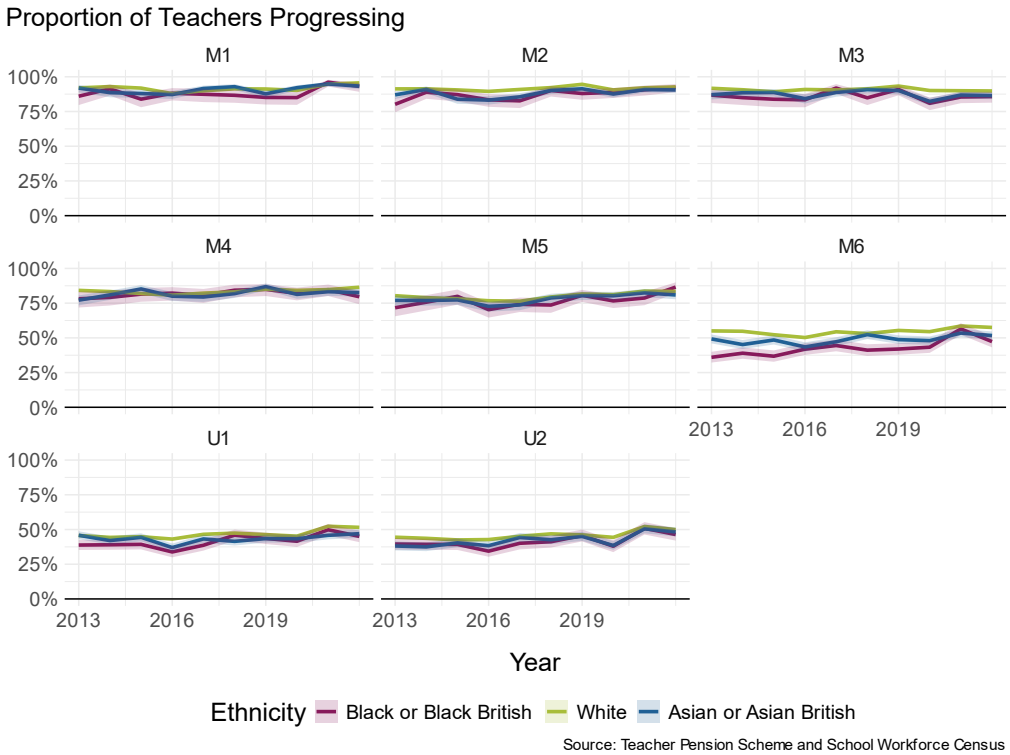
Figure 25 and Figure 26 show the same chart, split by phase. In primary, there appear to be some differences at M4 and M5, with black teachers progressing at a slightly lower rate. In secondary schools, there are differences in progression at M6, with both black and Asian teachers progressing at lower rates than white teachers in most years, though the gap has reduced over time. While the overall result in Figure 24 shows the progression gap at M6 has already closed, this is partly due to compositional factors. Secondary teachers progress onto the upper pay range and through the upper pay range points more quickly, on average, than primary teachers. The higher proportion of Black and Asian teachers than white teachers working in secondary schools, and so typically progressing faster from M6, offsets the within-secondary differences in recent years.

Figure 25: Primary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by ethnicity



Source: Teacher Pension Scheme and School Workforce Census

Figure 26: Secondary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by ethnicity



Source: Teacher Pension Scheme and School Workforce Census

Perceptions of Pay and Conditions: Ethnicity

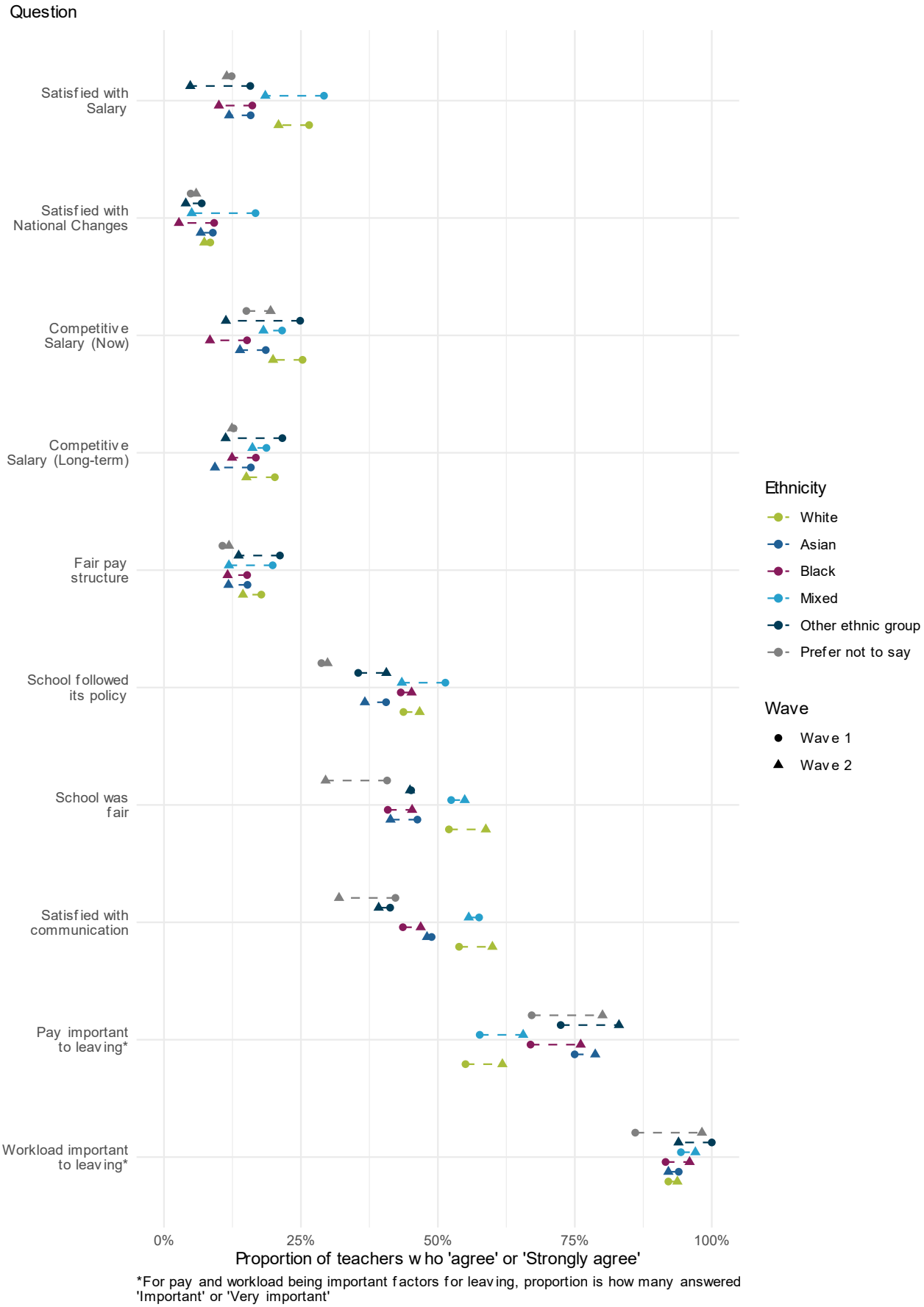
Baseline Findings

An overview of headline results can be found in the main Working Lives of Teachers and Leaders reports. Figure 27 displays the baseline results for each pay question broken down by ethnicity and wave. These responses are not further broken down by other variables that may be important for understanding views about pay, such as phase or working pattern (the pay curves and progression data presented above both show substantial differences between primary / secondary and part-time / full-time teachers). It cannot be concluded that any differences between ethnicities in these charts are not partially caused by these other factors, rather than ethnicity itself. However, the baseline findings are presented to provide context on the overall scale of agreement and disagreement for each question. The linear modelling will then identify the differences by ethnicity that remain, once observable confounding factors are considered.

The important factors to read from this are:

- Satisfaction with salary is low amongst all ethnicity groups, with at most 1 in 4 answering ‘Agree’ or ‘Strongly Agree’ to this question.
- Satisfaction with national changes is also very low amongst all ethnicity groups. The fact that this indicator is so unilaterally low may mean that variation between ethnicity on this is hard to see in linear modelling.
- In general, teachers of most ethnicity groups’ responses moved towards ‘disagree’ between wave 1 and wave 2. However, when it came to the school specific questions there are a few differences between ethnicity groups and waves. For example, on “School followed it’s policy”, Asian and teachers of mixed ethnicity were more likely to move towards disagree while black and white teachers and teachers of other ethnicities were more likely to move towards agree.

Figure 27: Baseline results on pay question in WLTL surveys, split by ethnicity



*For pay and workload being important factors for leaving, proportion is how many answered 'Important' or 'Very important'

Linear modelling

Linear modelling is carried out to ascertain whether these differences are directly associated with ethnicity rather than any observable, potentially confounding factors such as school phase, post held, or other factors. Strongly correlated confounding factors may reduce the visibility of impacts as it becomes difficult to disentangle effects from each other and can lead to increased confidence intervals. For ethnicity, this is particularly relevant, as some religions and ethnicities are strongly correlated, and therefore there can be larger confidence intervals on these two characteristics.

In the perceptions of pay questions, the reference group for the ethnicity characteristics are white teachers.

Figure 28: Estimates of differences between responses on national level pay questions, split by ethnicity

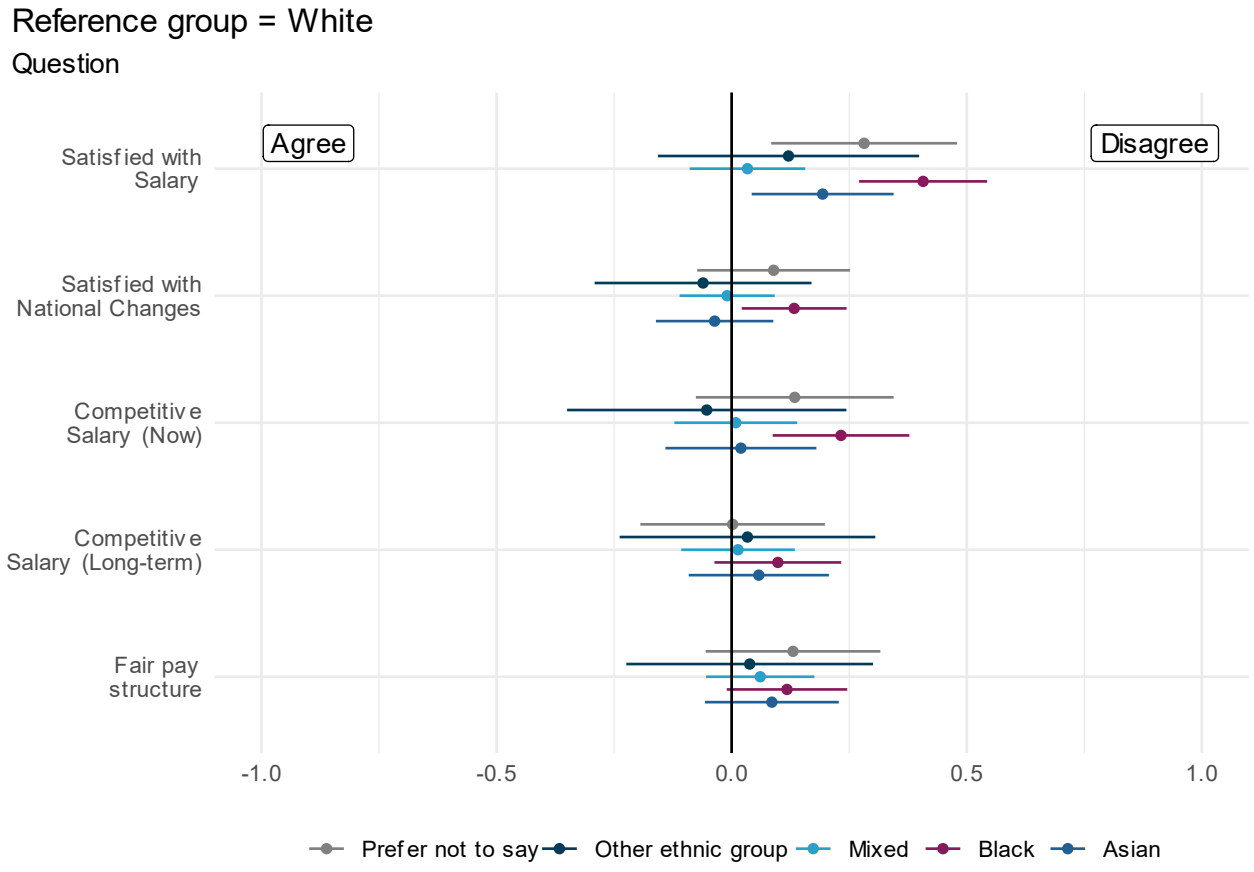


Figure 28 shows the difference in responses that remain between teachers of different ethnicities, after considering a range of confounding factors, for the set of questions regarding national level pay.

In most cases, the confidence intervals around the estimate overlap with zero. But there are some statistically significant differences. Black teachers' responses showed higher levels of disagreement than those of white teachers for satisfaction with salary; satisfaction with national level changes to the pay structure; and whether pay is

competitive in the immediate term. Asian teachers' responses showed higher levels of disagreement than those of white teachers for satisfaction with salary. Teachers who preferred not to state their ethnicity showed higher levels of disagreement than those of white teachers for satisfaction with salary.

Figure 29: Estimates of differences between responses on school level pay questions, split by ethnicity

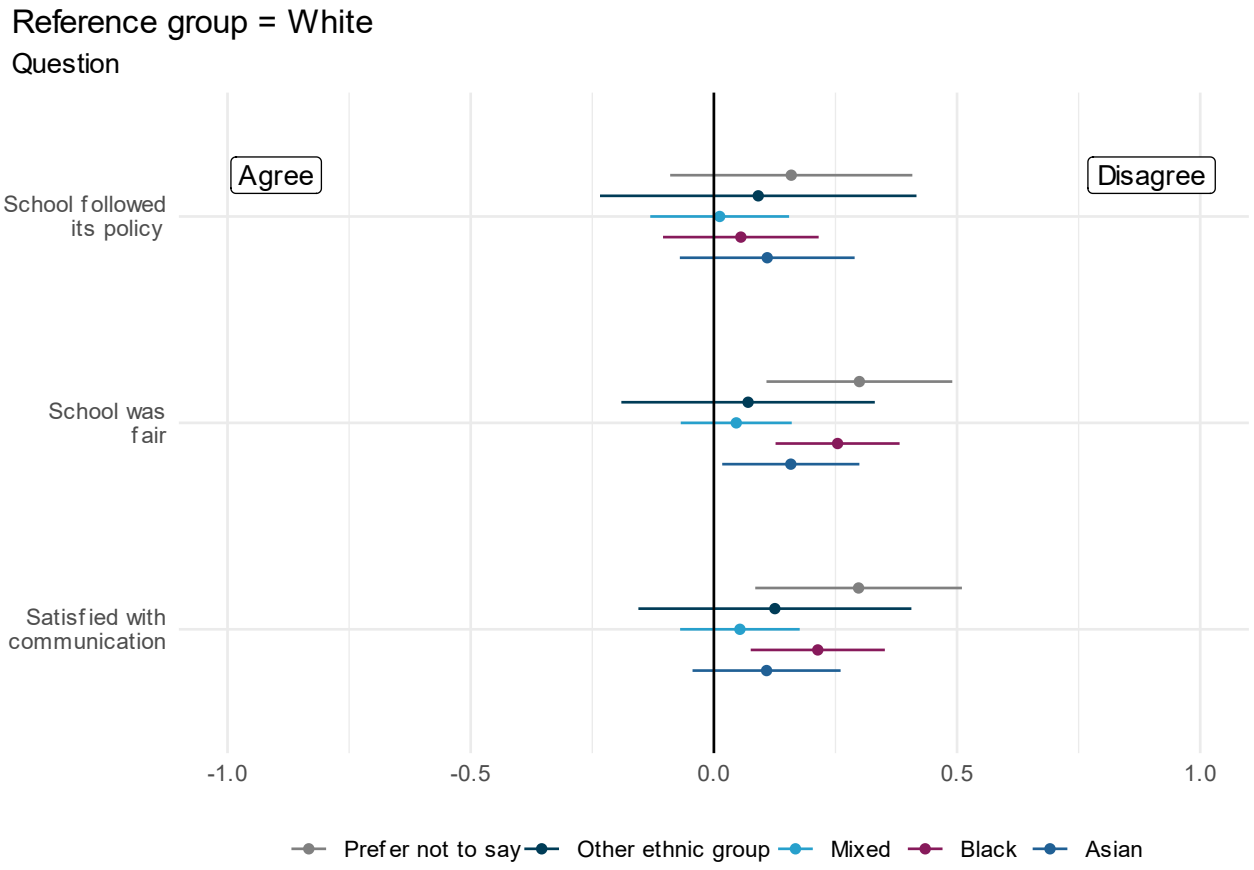


Figure 29 shows the difference in responses that remain between teachers of different ethnicities, after considering a range of confounding factors, for the set of questions relating specifically to decisions on their pay taken by their school.

In most cases, the confidence intervals around the estimate overlap with zero. But there are some statistically significant differences. Black teachers' responses showed higher levels of disagreement than those of white teachers that the decisions their school had taken around their pay had been fair; and higher levels of disagreement that they were satisfied with how decisions had been communicated. Asian teachers' responses showed higher levels of disagreement than those of white teachers that the decisions their school had taken around their pay had been fair. Teachers who preferred not to state their ethnicity also showed higher levels of disagreement than those of white teachers that the decisions their school had taken around their pay had been fair; and higher levels of disagreement that they were satisfied with how decisions had been communicated.

Figure 30: Estimates of differences between responses on reasons for considering leaving pay questions[36], split by ethnicity

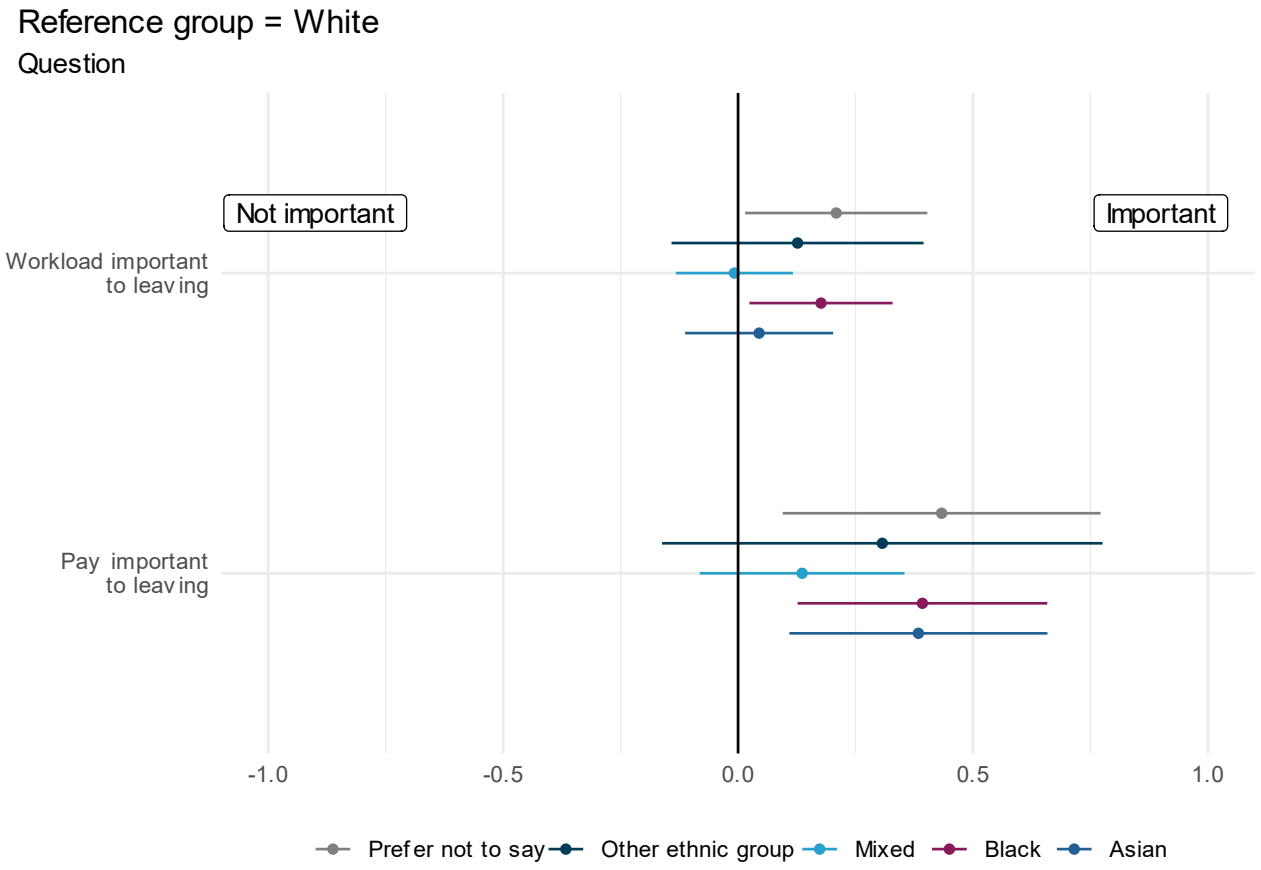


Figure 30 shows, for teachers who said they were considering leaving the state-funded school sector in the next 12 months (for reasons other than retirement), the differences that remain between teachers of different ethnicities, after considering a range of confounding factors, in the importance assigned to pay and workload as reasons.

Black and Asian teachers, as well as those who preferred not to provide their ethnicity, were more likely than white teachers to assign a high degree of importance to pay as a reason to consider leaving. Black teachers, as well as those who preferred not to provide their ethnicity were more likely than white teachers to assign a high degree of importance on workload as a reason to consider leaving. The confidence intervals for all other estimates overlap with zero.

[36] Considering leaving the English state school sector in the next 12 months (excluding retirement). See Table 1 for full question details.

Religion

This section uses only the survey data from the Working Lives of Teachers and Leaders.

No data is collected on religion within the School Workforce Census or Teacher Pension Scheme datasets. It is therefore not possible to produce the associated pay curves or progression rates.

Perception of Pay and Conditions: Religion

Baseline Findings

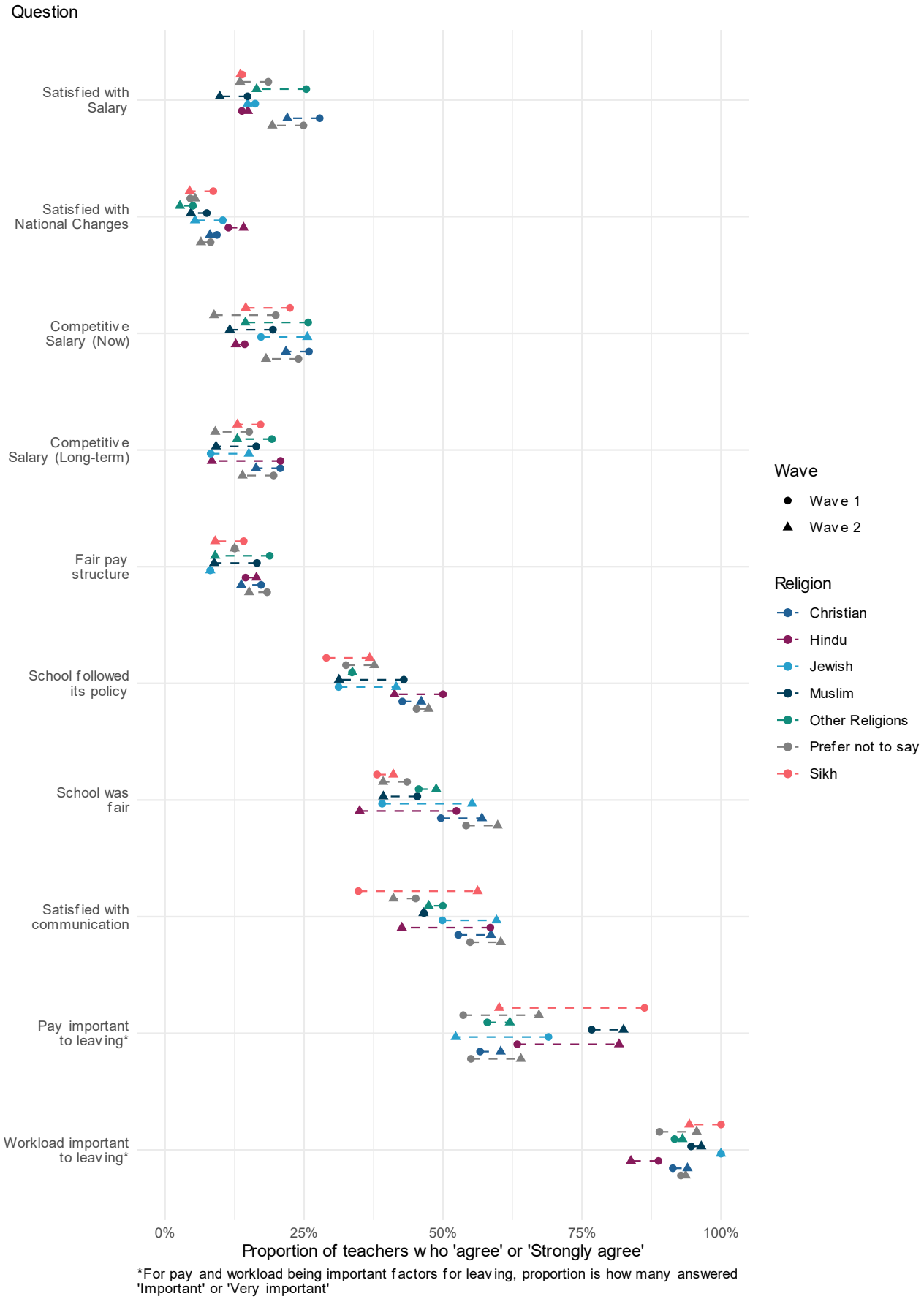
An overview of headline results can be found in the main Working Lives of Teachers and Leaders reports. Figure 31 displays the baseline results for each pay question broken down by religion and wave. Smaller religions are combined into the category "Other Religions"[37]. These responses are not further broken down by other variables that may be important for understanding views about pay, such as phase or working pattern. It cannot be concluded that any differences by religion in these charts are not partially caused by these other factors, rather than being related to religion itself. However, the baseline findings are presented to provide context on the overall scale of agreement and disagreement for each question. The linear modelling will then identify the differences by religion that remain, once observable confounding factors are considered.

The important factors to read from this are:

- Satisfaction with salary is low amongst all religions.
- Satisfaction with national changes is also very low amongst all religions. The fact that this indicator is uniformly low may reduce the variation available for the linear modelling to identify.
- Variation between waves is high for some religions, particularly Sikh and Hindu teachers, and this is largely due to smaller numbers for these religions.
- The question "Pay important to leaving" has large confidence intervals but seemed to show the most variation between teachers of different faiths.

[37] Other religions is a group combining religions with smaller base sizes, notably "Buddhist" and any response under "Any other religion".

Figure 31: Baseline results on pay question in WLTL surveys, split by religion



*For pay and workload being important factors for leaving, proportion is how many answered 'Important' or 'Very important'

Linear modelling

Linear modelling is carried out to ascertain whether these differences are directly associated with religion rather than any observable, potentially confounding factors such as school phase, post held, or other factors. Strongly correlated confounding factors may reduce the visibility of impacts as it becomes difficult to untangle effects from each other and can lead to increased confidence intervals. For religion, this is particularly relevant, as some religions and ethnicities are very strongly correlated in the data, and therefore there can be larger confidence intervals on these two characteristics.

In the following charts, the reference group is teachers of no religion.

Figure 32: Estimates of differences between responses on national level pay questions, split by religion

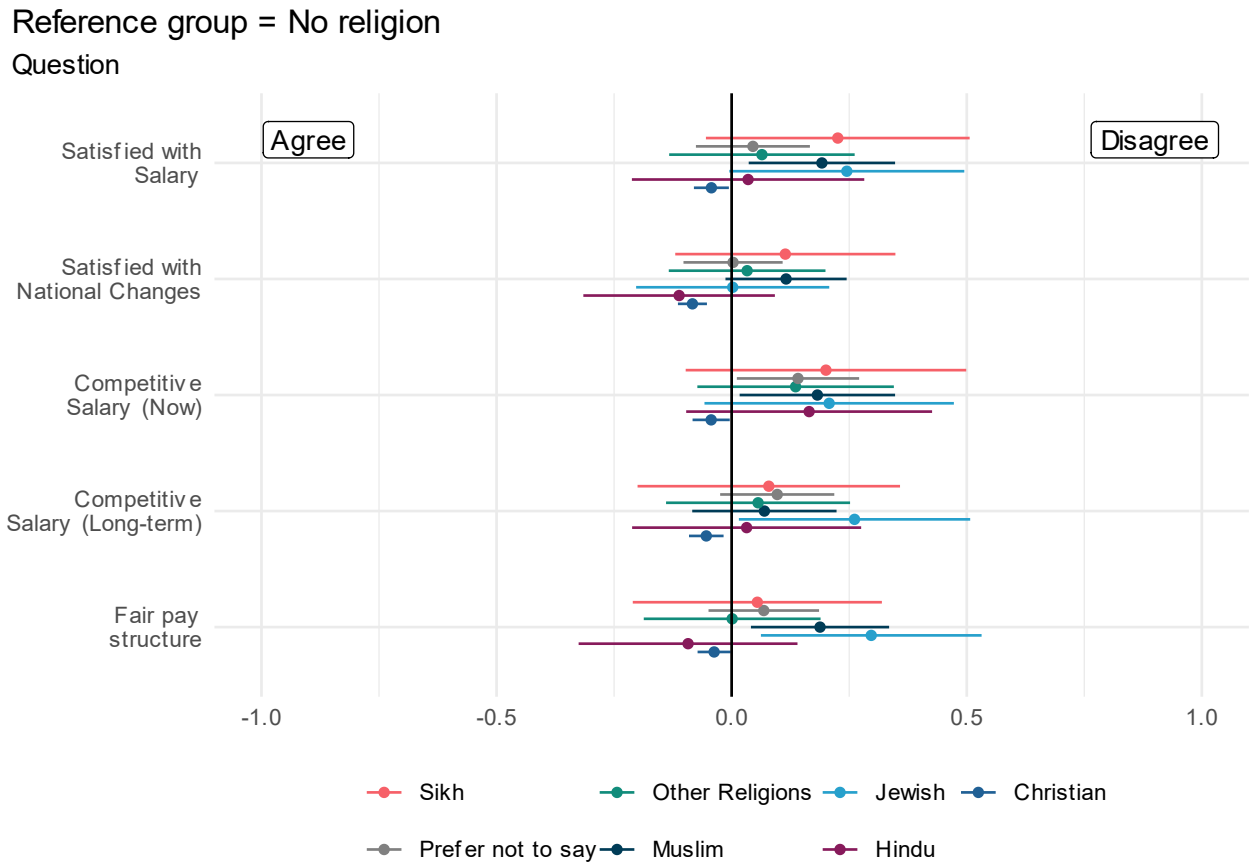


Figure 32 shows the difference in responses that remain between teachers of different religions, after considering a range of confounding factors, for the set of questions regarding national level pay.

In most cases, the confidence intervals around the estimate overlap with zero. But there are some statistically significant differences.

Christian teachers' responses showed higher levels of agreement on all the national level pay questions than those from the reference group, teachers of no religion. However,

Figure 31 showed that responses to these questions demonstrated high levels of disagreement overall, for teachers of any religion, so the results in Figure 32 may be better expressed as Christian teachers' responses showing lower levels of disagreement than those of teachers of no religion.

Muslim teachers' responses showed higher levels of disagreement that they were satisfied with their salary; that their pay was competitive in the immediate term; and that the pay structure allowed their pay to progress at a rate that fairly reflected growing expertise.

Jewish teachers' responses showed higher levels of disagreement that they were satisfied with their salary; that their pay would be competitive in the longer term; and that the pay structure allowed their pay to progress at a rate that fairly reflected growing expertise.

Teachers who preferred not to provide their religion showed higher levels of disagreement that their salary was competitive in the immediate term.

Figure 33: Estimates of differences between responses on school level pay questions, split by religion

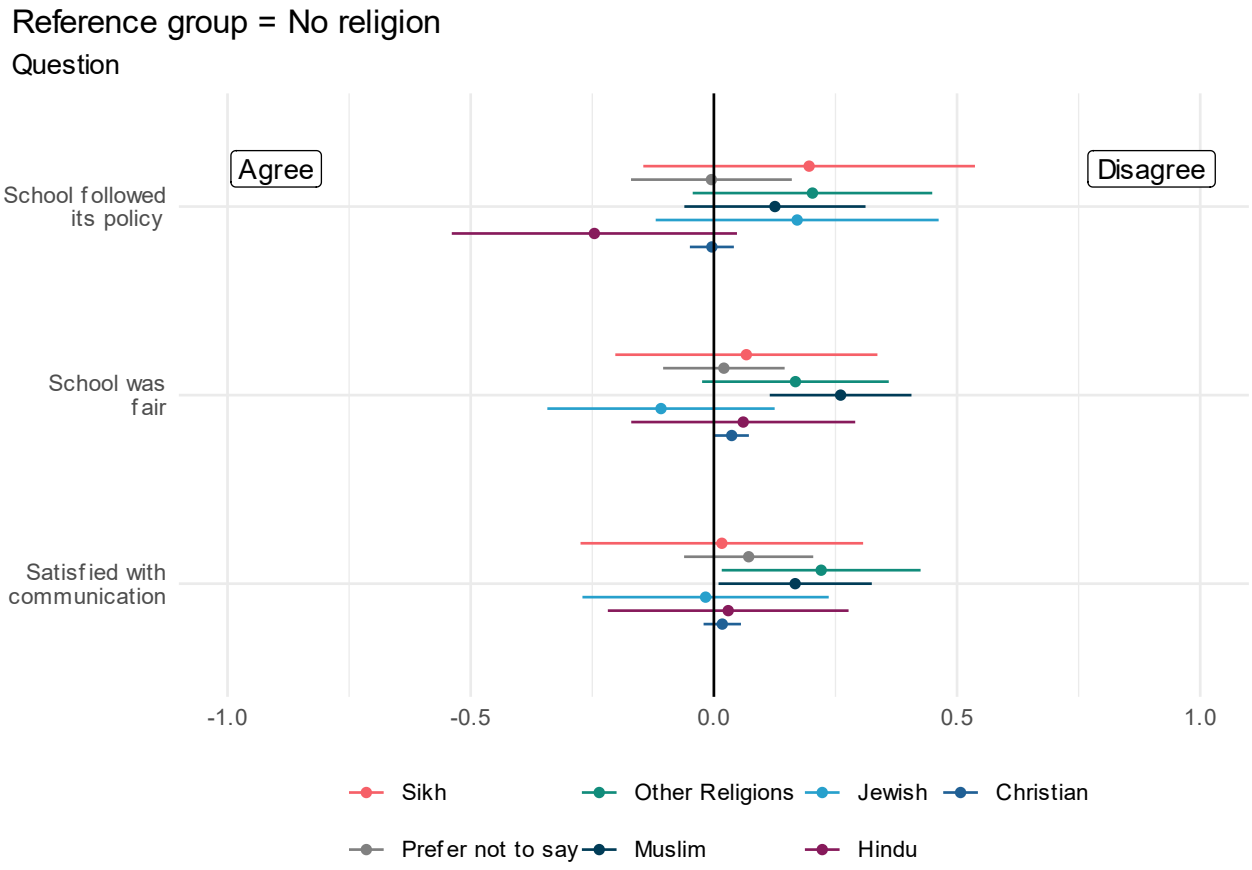


Figure 33 shows the difference in responses that remain between teachers of different religions, after considering a range of confounding factors, for the set of questions relating specifically to decisions on their pay taken by their school.

In most cases, the confidence intervals around the estimate overlap with zero. But there are some statistically significant differences. Muslim teachers' responses showed higher levels of disagreement than those of no religion, with the statement of their school making fair decisions on pay and being satisfied with their school's communication of the decisions. Teachers in the category "Other Religions" also showed higher levels of disagreement than those of no religion on being satisfied with their school's communication.

Figure 34: Estimates of differences between responses on reasons for considering leaving teaching pay questions[38], split by religion

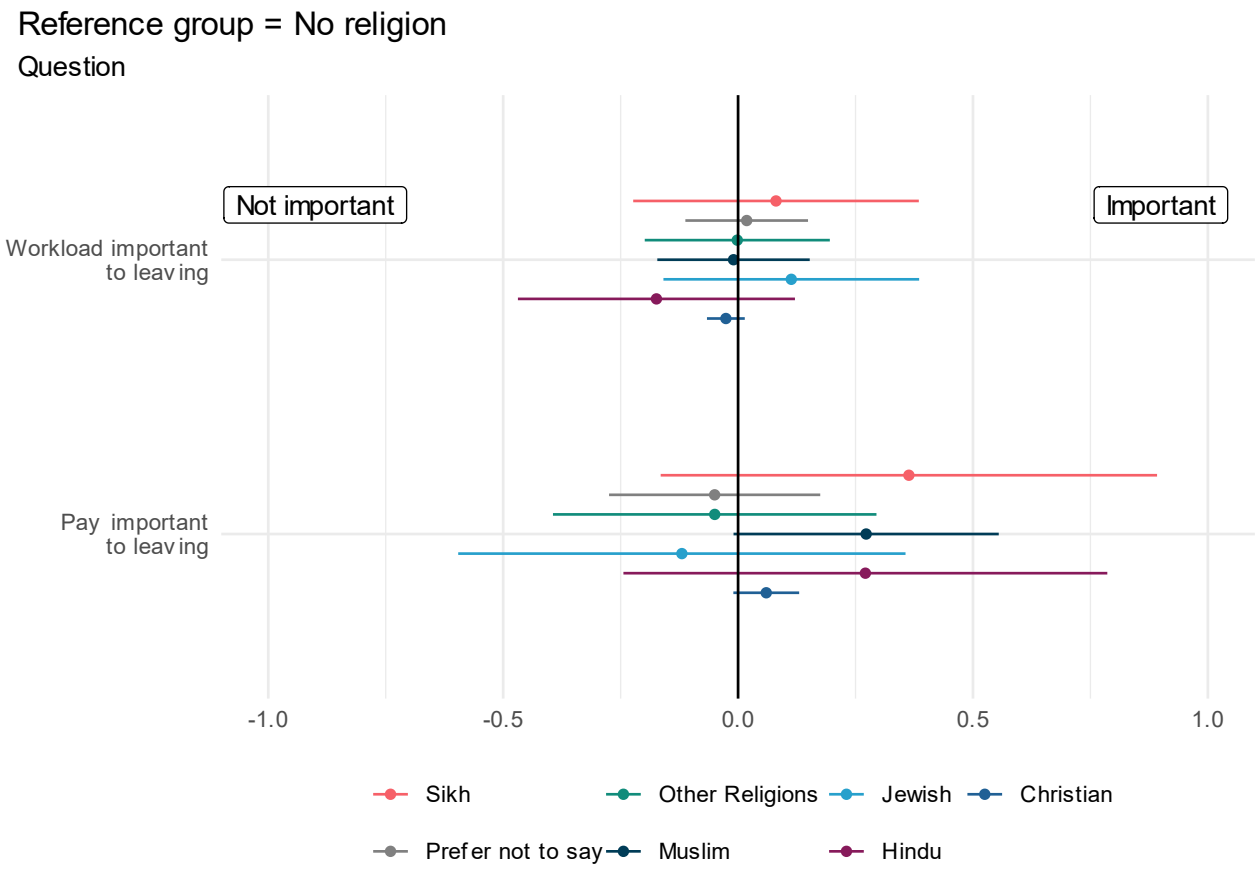


Figure 34 shows, for teachers who said they were considering leaving the state-funded school sector in the next 12 months (for reasons other than retirement), the differences that remain between teachers of different religions, after considering a range of confounding factors, in the importance assigned to pay and workload as reasons.

[38] Considering leaving the English state school sector in the next 12 months (excluding retirement). See Table 1 for full question details.

The confidence intervals for all of the estimates overlap with zero, meaning there were no statistically significant differences between teachers of different religions on these questions.

Age

Descriptive Statistics

Table 5: Descriptive Statistics by age group in SWFC, including classroom teachers and leadership, aggregated across years 2013-2023[39]

	Under 35	35 to 44	45 to 54	Over 55
Mean age	28.9	39.4	49.4	58.9
Mean experience[40]	5.9	14.0	20.9	28.8
% in leadership roles[41]	6	20	24	21
% part-time	13	30	26	39
% in secondary	45	48	45	46
% on London pay scales[42]	24	20	20	27

Table 5 provides descriptive characteristics for teachers of different age groups in the aggregated sample, covering 2013 – 2023. There are several differences between these groups that could be important factors influencing a teacher's pay.

For example, teachers aged under 35 are less likely to hold a leadership role, and less likely to work part-time. Teachers aged 55 and over are the most likely to work part-time. The oldest and youngest age groups are more likely to work in London.

[39] Excludes those of unknown age

[40] Experience is measured as years since attaining Qualified Teacher Status (QTS), with no adjustment for periods of absence from teaching, such as career breaks or maternity leave.

[41] Leadership roles defined as senior leaders and headteachers

[42] London pay scales are defined as regional pay scales with higher pay scales than the national pay scales: London Fringe, Outer London, Inner London

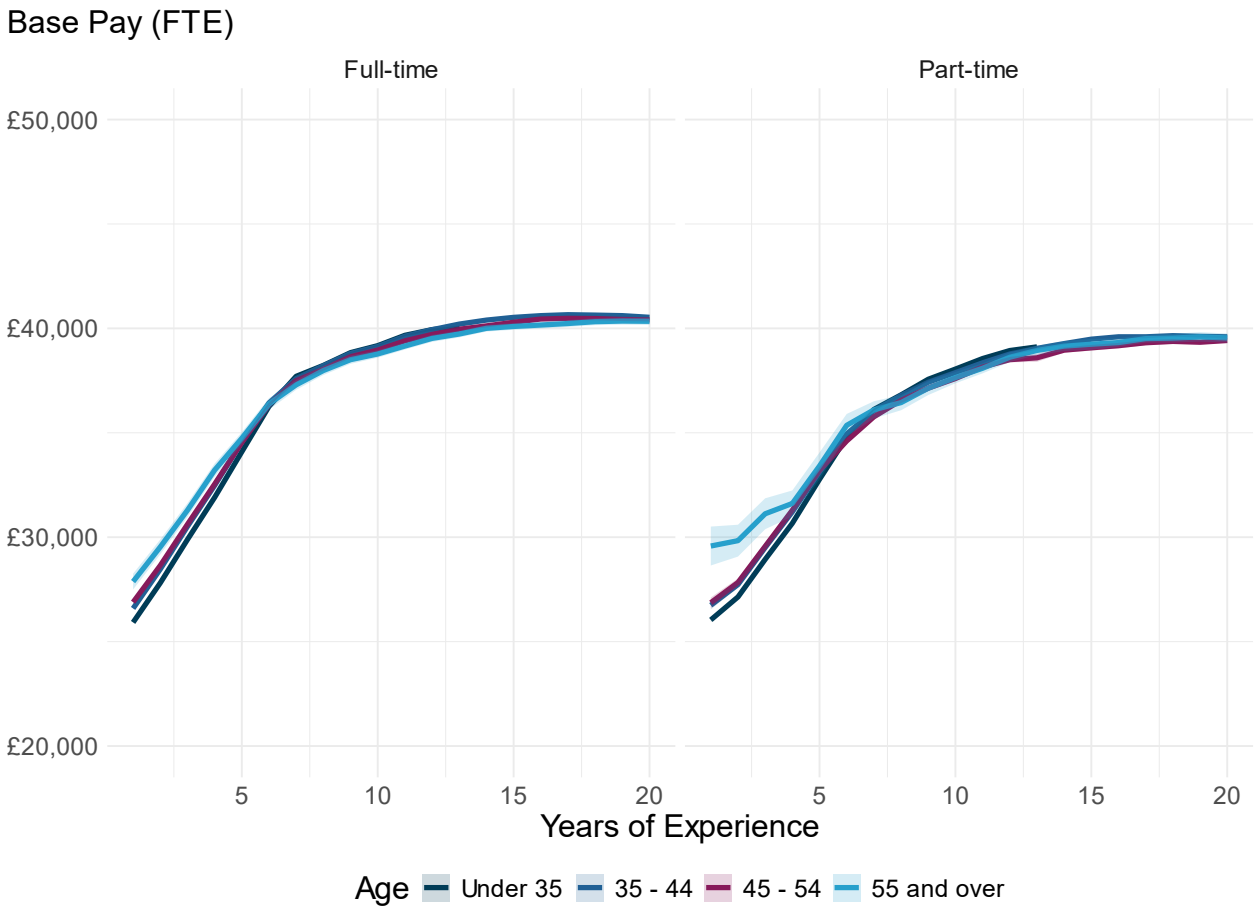
Experience

As elsewhere in this report, experience is defined as the number of years since a teacher achieved Qualified Teacher Status (QTS). Some of the limitations of this definition are covered in the Methodology section. These may be particularly important for analysis by age. It is possible that years since QTS may be a less useful proxy for key elements of experience when applied to some older teachers than to the workforce as a whole.

Pay Curves

The pay curves and progression plots in this section have additional filters to remove data for teachers aged under 35 with more than 13 years' experience, as this data is likely to be spurious. On leadership charts which show up to 30 years of experience, the experience level is capped at 23 years for those in age band 35 – 44, for similar reasons.

Figure 35: Classroom teacher pay curves in years 2013 – 2023 by experience, split by age group and working pattern



Source: Teacher Pension Scheme and School Workforce Census

Figure 35 plots teachers' base pay, against their years of experience, by age group. It focuses on classroom teachers only. There are limited differences between full-time and part time teachers' pay. The pay of newly qualified teachers aged over 55 appears higher than that of their younger colleagues, but this gap closes quickly and disappears by 5 years of experience.

Figure 36 and Figure 37 show the age group pay curves for classroom teachers for primary and secondary schools respectively. Again, these show limited differences, but newly qualified teachers aged over 55 appear to have higher pay in secondary schools until around 5 years of experience, both full and part-time, whilst this difference is only observed for part-time teachers in primary. The confidence intervals around part-time primary teachers aged over 55 are large.

Figure 36: Primary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by age group and working pattern

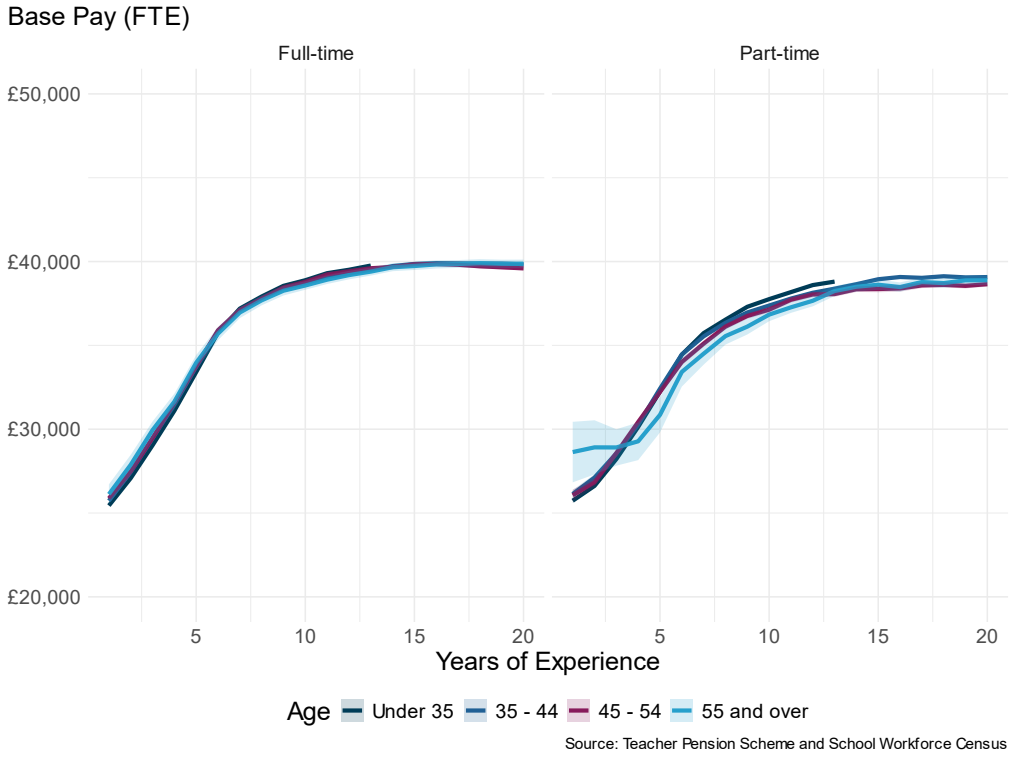


Figure 37: Secondary Phase only - Classroom teacher pay curves in years 2013 – 2023 by experience, split by age group and working pattern

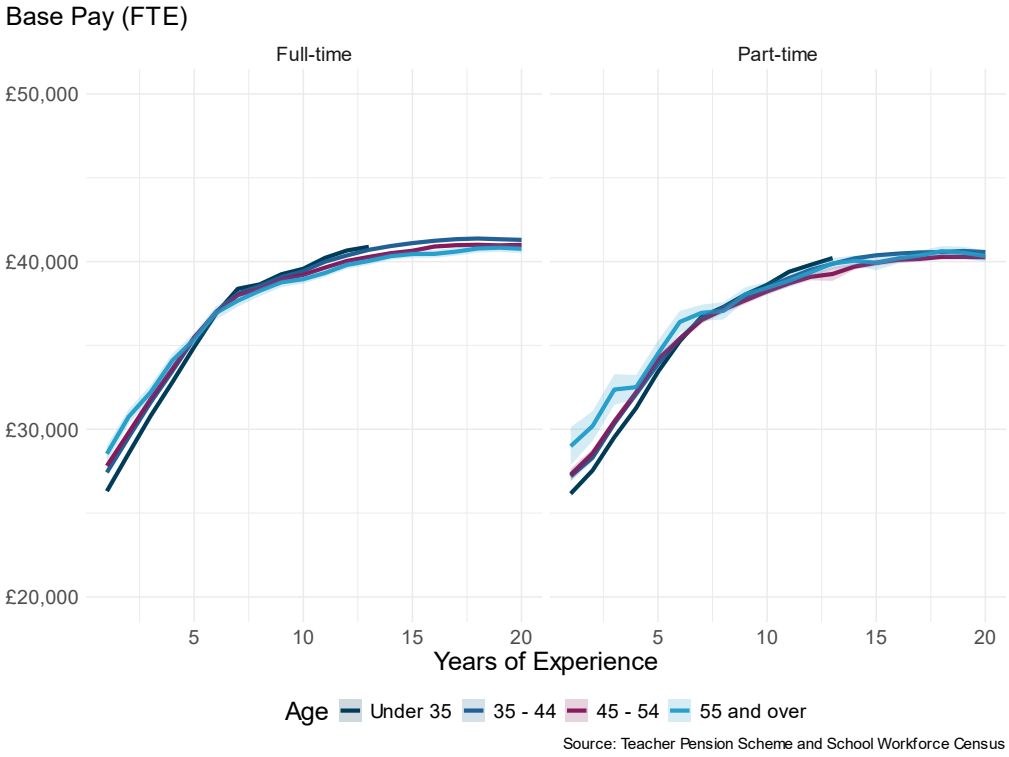


Figure 38: Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by age group and working pattern

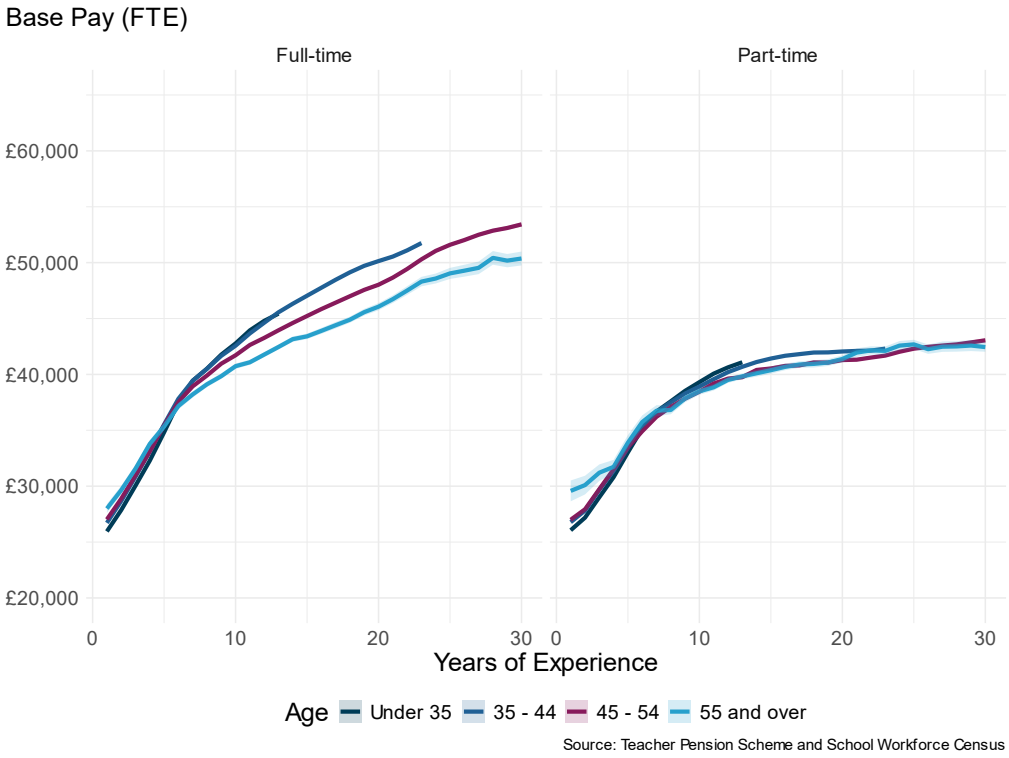


Figure 38 presents pay curves for all teachers, including those in leadership roles, by age group.

For full-time teachers there is a gap in pay between teachers aged under 44 and those who are in the age groups 45 to 54 and 55 and over, which opens up before the 10-year mark. Pay for teachers aged 45 to 54 also appears to be higher than those aged over 55. For part-time teachers, there is a small gap between those aged under 45 and those ages older in mid-careers between around 10 and 20 years of experience.

Figure 39 and Figure 40 show the equivelant curves for primary and secondary schools respectively.

Full-time primary teachers show a differing pay curve for those aged over 55 than other age groups, with pay appearing to be lower between around 7 and 22 years of experience after which point their pay appears to be higher than those aged 45 to 54. Part-time teachers do not show significant differences at primary level.

Full-time secondary teachers show a similar picture to that overall in Figure 38. Younger teachers appear to have higher pay than older teachers once they have more than around 7 years of experience. Part-time teachers at secondary schools show a similar but smaller effect, with no difference between those aged over 45.

Figure 39: Primary Phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by age group and working pattern

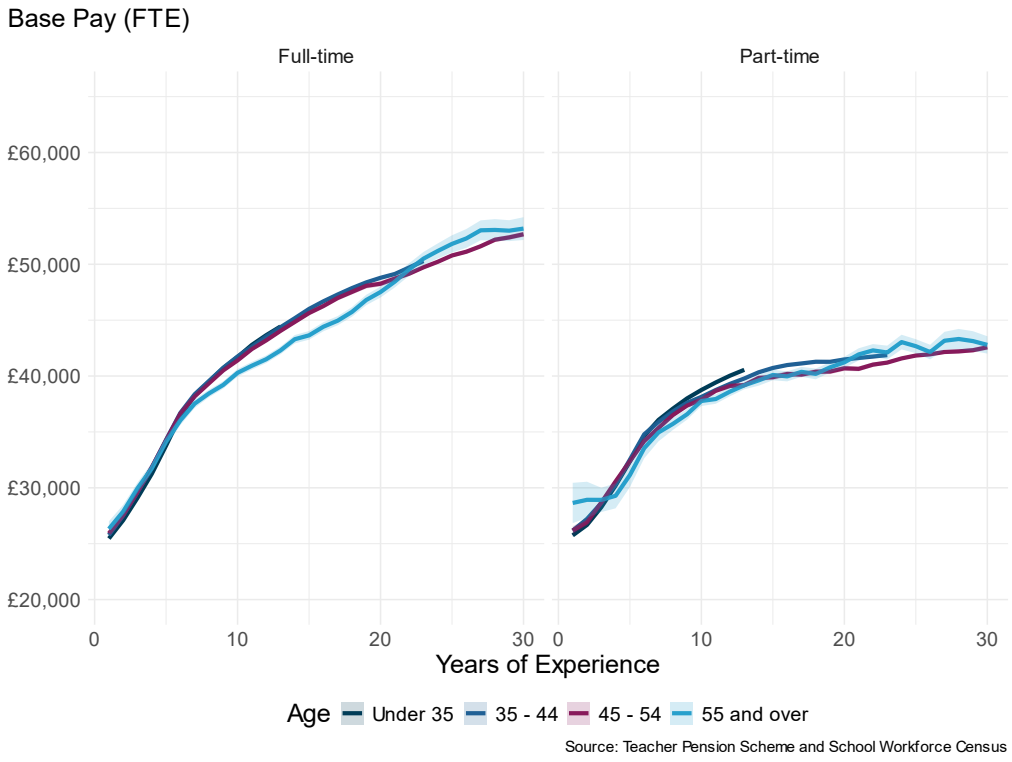
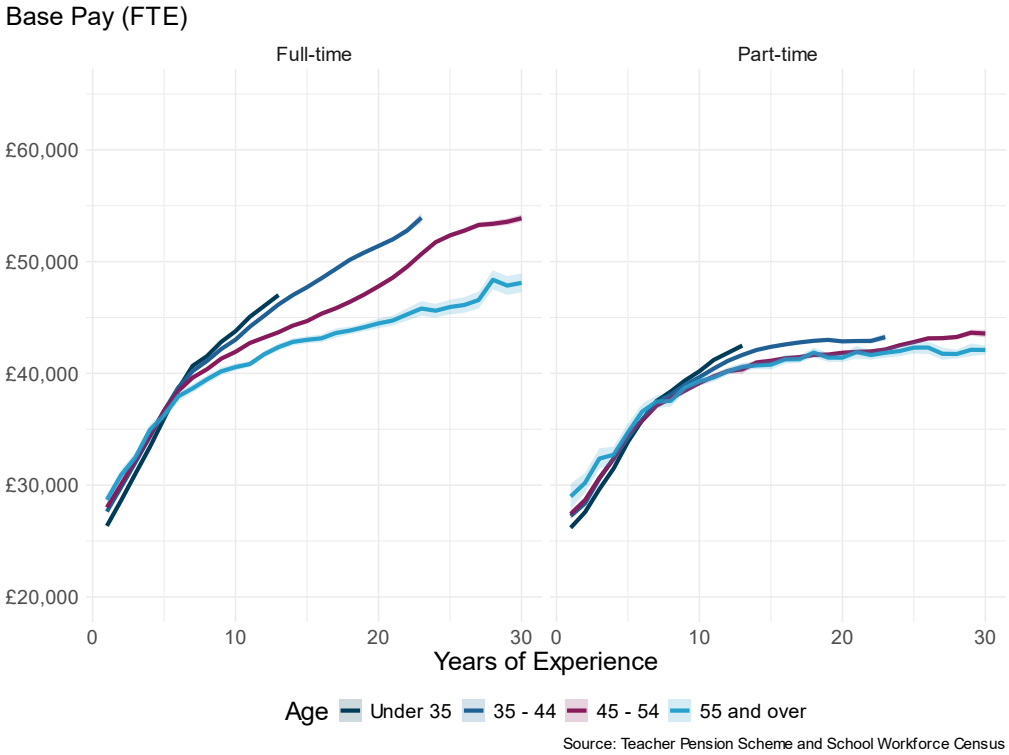
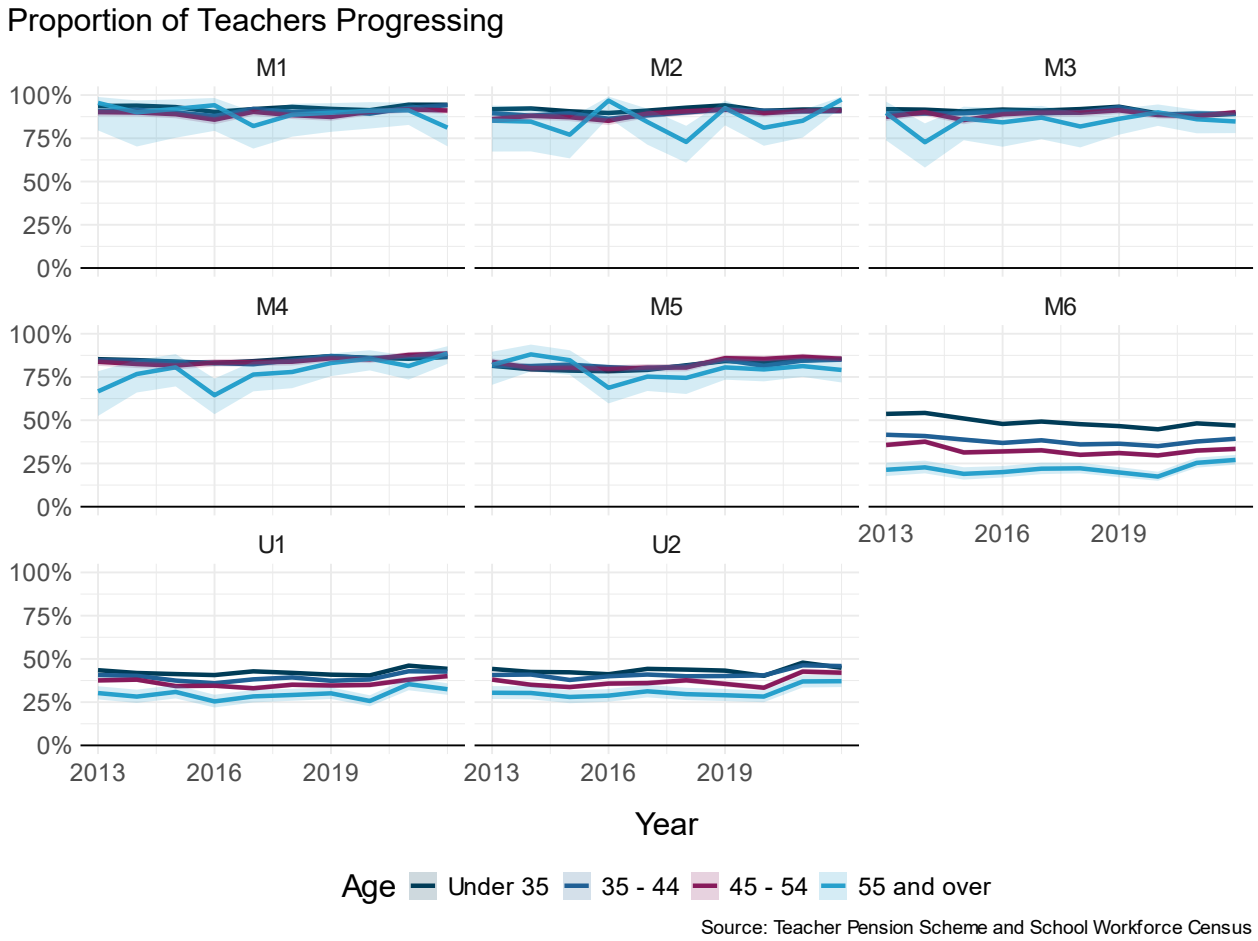


Figure 40: Secondary Phase only - Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by age group and working pattern



Progression Rates

Figure 41: Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by age band



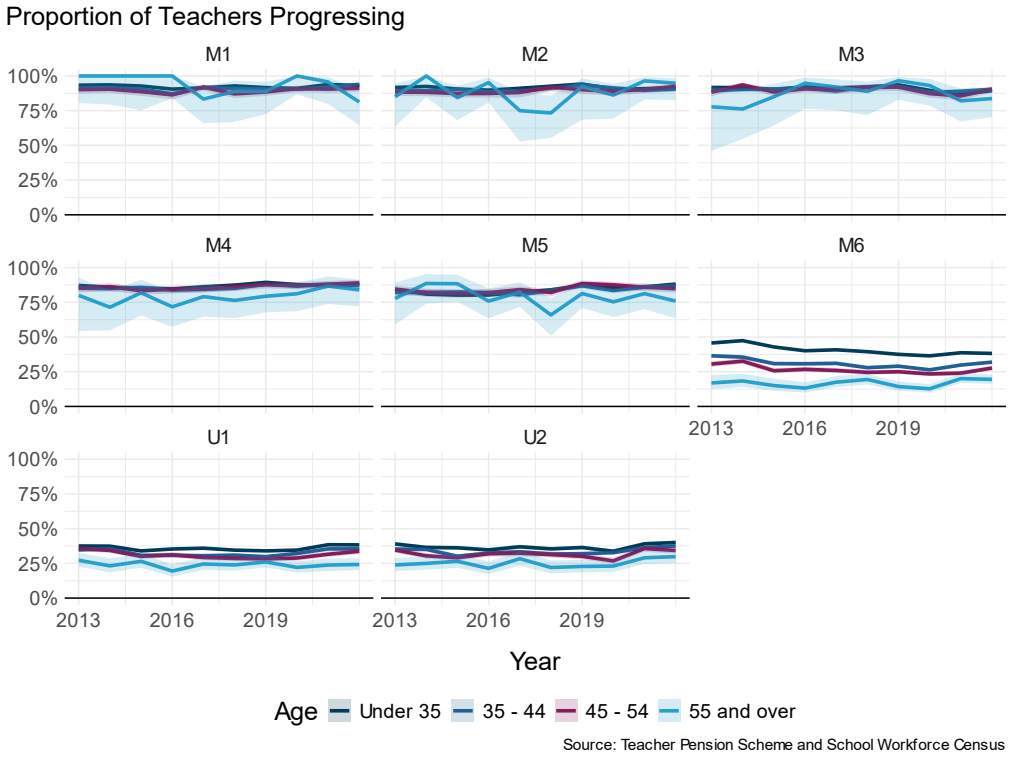
Source: Teacher Pension Scheme and School Workforce Census

Figure 41 shows the progression rates of teachers between spine advisory points on the main and upper pay ranges, by age group. They show limited differences in rates of progression until the pay point M6, from which point younger teachers progress both onto and through the upper pay range points more quickly, on average.[43] This is most pronounced at pay point M6, reflecting a difference in rates of accessing the upper pay range. These differences do appear to have narrowed in recent years.

Figure 42 and Figure 43 show the equivalent charts, split by phase. They show that these gaps persist across phase, although they are more pronounced in secondary than they are in primary.

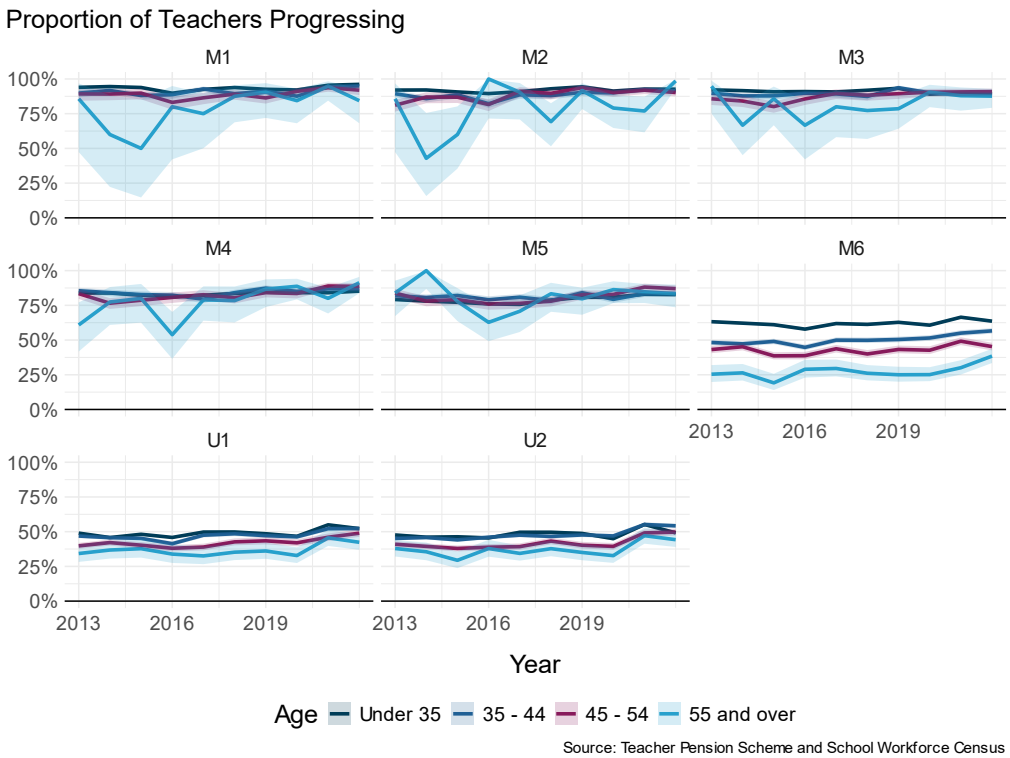
[43] Note that this does not necessarily mean that teachers newly arrived on M6 progress more slowly, on average, if they are older. The analysis measures one-year progression for all teachers on the pay point in any given year, including teachers who have already been on M6 for many years.

Figure 42: Primary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by age band



Source: Teacher Pension Scheme and School Workforce Census

Figure 43: Secondary Phase only - Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by age band



Source: Teacher Pension Scheme and School Workforce Census

Perception of Pay and Conditions: Age Band

It should be noted that in recent years, several pay awards have been weighted towards starting salaries/the bottom of the main pay scale. This may have an impact on data by age group (particularly teachers' agreement with statements from WLTL), as younger teachers are more likely to be at the lower end of the pay range, and therefore more likely to have experienced bigger pay rises.

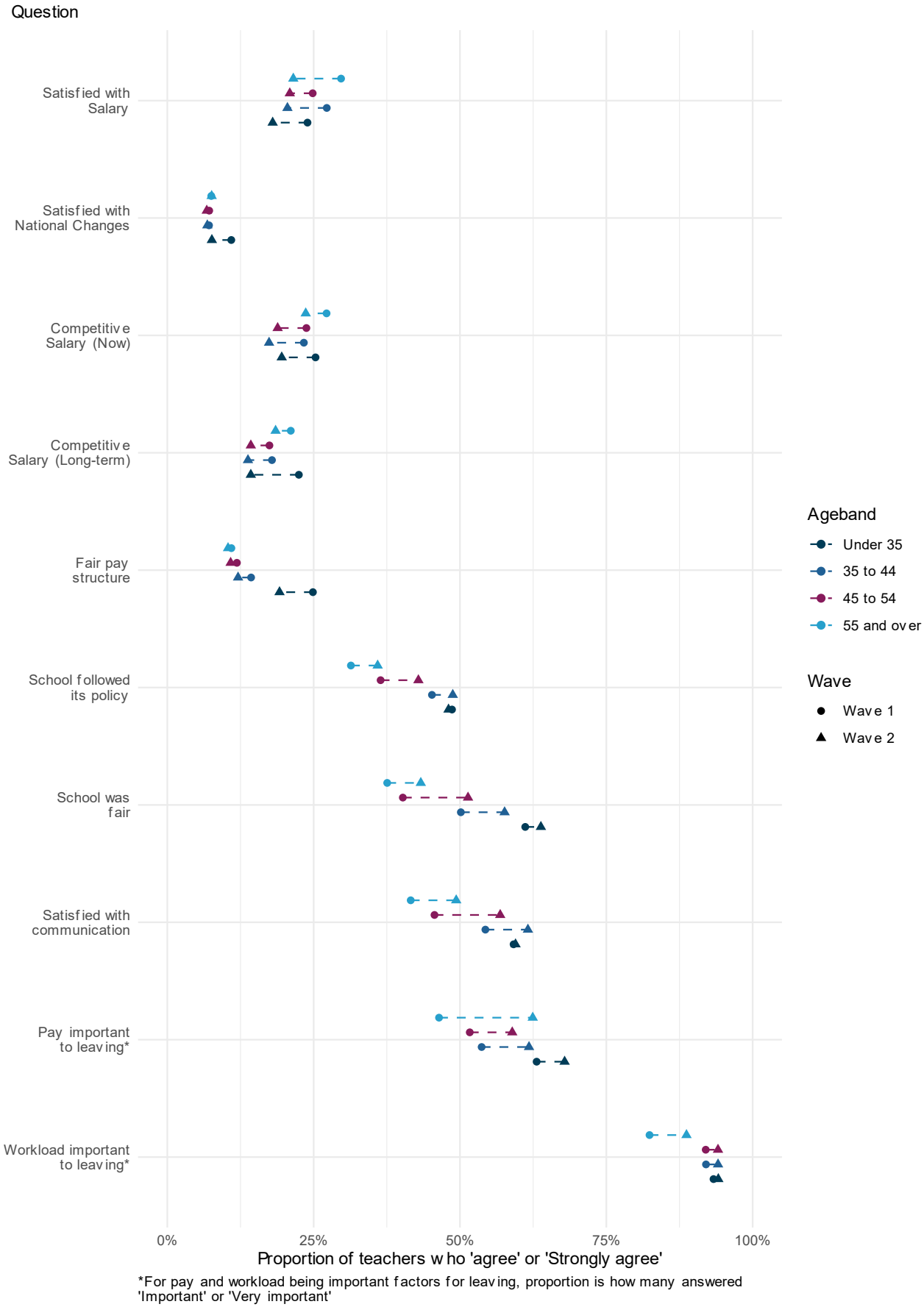
Baseline Findings

An overview of headline results can be found in the main Working Lives of Teachers and Leaders reports. Figure 44 displays the baseline findings for each pay question broken down by age band and wave. These responses are not further broken down by other variables that may be important for understanding views about pay, such as phase or working pattern (the pay curves and progression data presented above both show differences between primary / secondary and part-time / full-time teachers). It cannot be concluded that any differences between age groups in these charts are not partially caused by these other factors, rather than age itself. However, the baseline findings are presented to provide context on the overall scale of agreement and disagreement for each question. The linear modelling will then identify the differences by age group that remain, once observable confounding factors are considered.

The important factors to read from this are:

- Satisfaction with salary is low amongst all age groups, with less than 1 in 4 answering 'Agree' or 'Strongly Agree' to this question in Wave 2.
- Satisfaction with national changes is also very low amongst all age groups and response to this question barely changed between waves. Under 35s were the only group to show any differences. The fact that this indicator is uniformly low may mean that variation between age groups on this is hard to see in linear modelling.
- In general, the direction of movement between waves is the same regardless of age group. The only question in which this differs is on the question "School followed its policy" where under 35s were less likely to state agree by a small amount, in comparison to all other groups where the proportion increased.
- For the school specific questions, "School followed its policy", "School was fair" and "Satisfied with communication", older age groups are less likely to state "Agree" or "Strongly Agree". Again, whether this is a true effect of age, or a result of another confounding factor will be addressed with the linear modelling.

Figure 44: Baseline results on pay question in WLTL surveys, split by age band



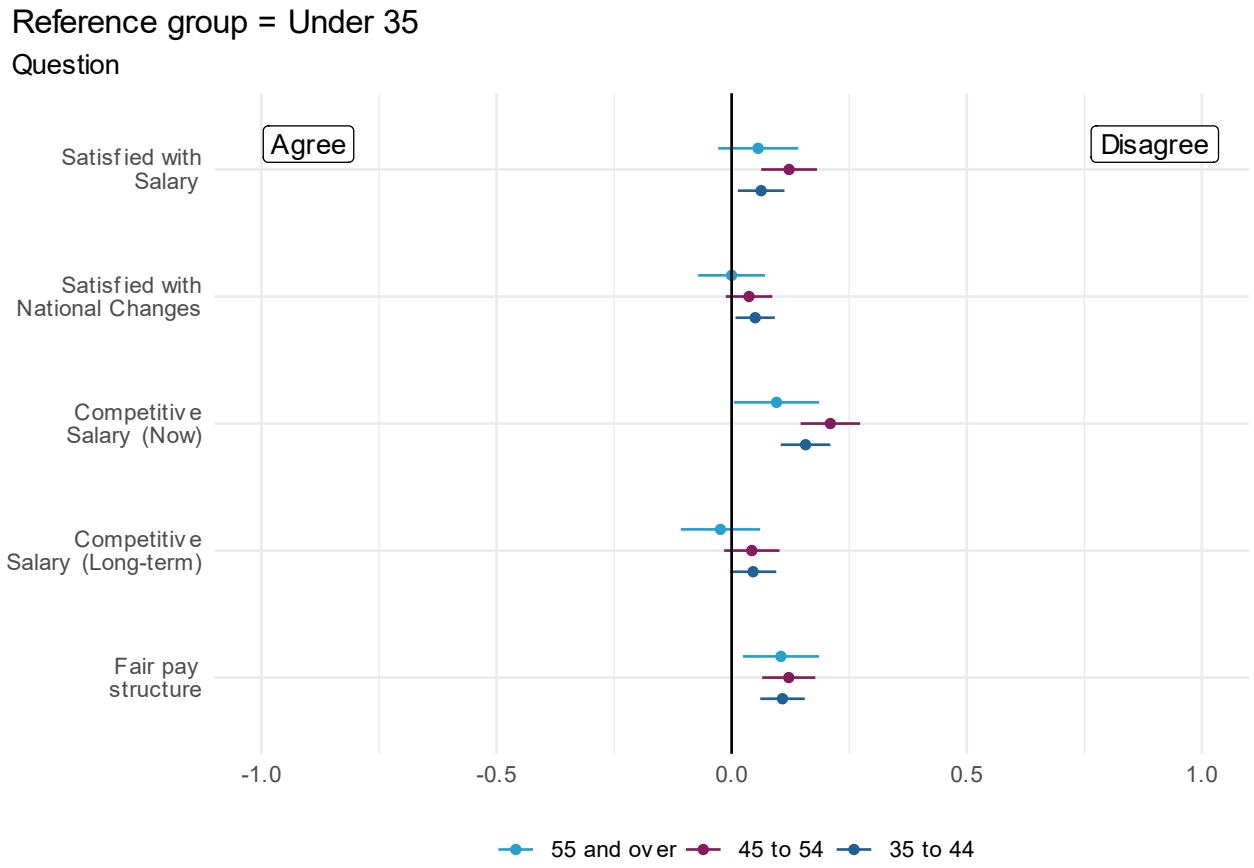
*For pay and workload being important factors for leaving, proportion is how many answered 'Important' or 'Very important'

Linear Modelling

Linear modelling is carried out to ascertain whether these differences are directly associated with age group rather than any observable, potentially confounding factors such as school phase, post held, or other factors. Strongly correlated confounding factors may reduce the visibility of impacts as it becomes difficult to untangle effects from each other and can lead to increased confidence intervals. For age group, this is particularly relevant, as age is very strongly correlated with experience[44], which is included as a fixed effect, and therefore there can be larger confidence intervals on age group as an effect.

For age questions the reference group were teachers under 35.

Figure 45: Estimates of differences between responses on national level pay questions, split by age band



[44] Experience is measured as years since attaining Qualified Teacher Status (QTS), with no adjustment for periods of absence from teaching, such as career breaks or maternity leave.

Figure 45 shows the difference in responses that remain between teachers of different ages, after considering a range of confounding factors, for the set of questions regarding national level pay.

Responses from teachers in both the 35 to 44 and 45 to 54 age groups showed statistically significantly higher levels of disagreement on all national level pay questions than those aged under 35, apart from competitiveness of their salary long term, and satisfaction with national changes for those aged 45 to 54 where the confidence intervals overlap with zero. Teachers aged over 55 showed higher levels of disagreement than those under 35 that teaching offered them a competitive salary in the immediate term and that the pay structure allowed for their pay to progress at a rate that fairly reflected growing expertise.

However, Figure 44 showed that all age groups' responses to these questions demonstrated high levels of disagreement overall, so the results in Figure 45 may be better expressed as teachers aged under 35 responses showing lower levels of disagreement than those aged older.

Figure 46: Estimates of differences between responses on school level pay questions, split by age band

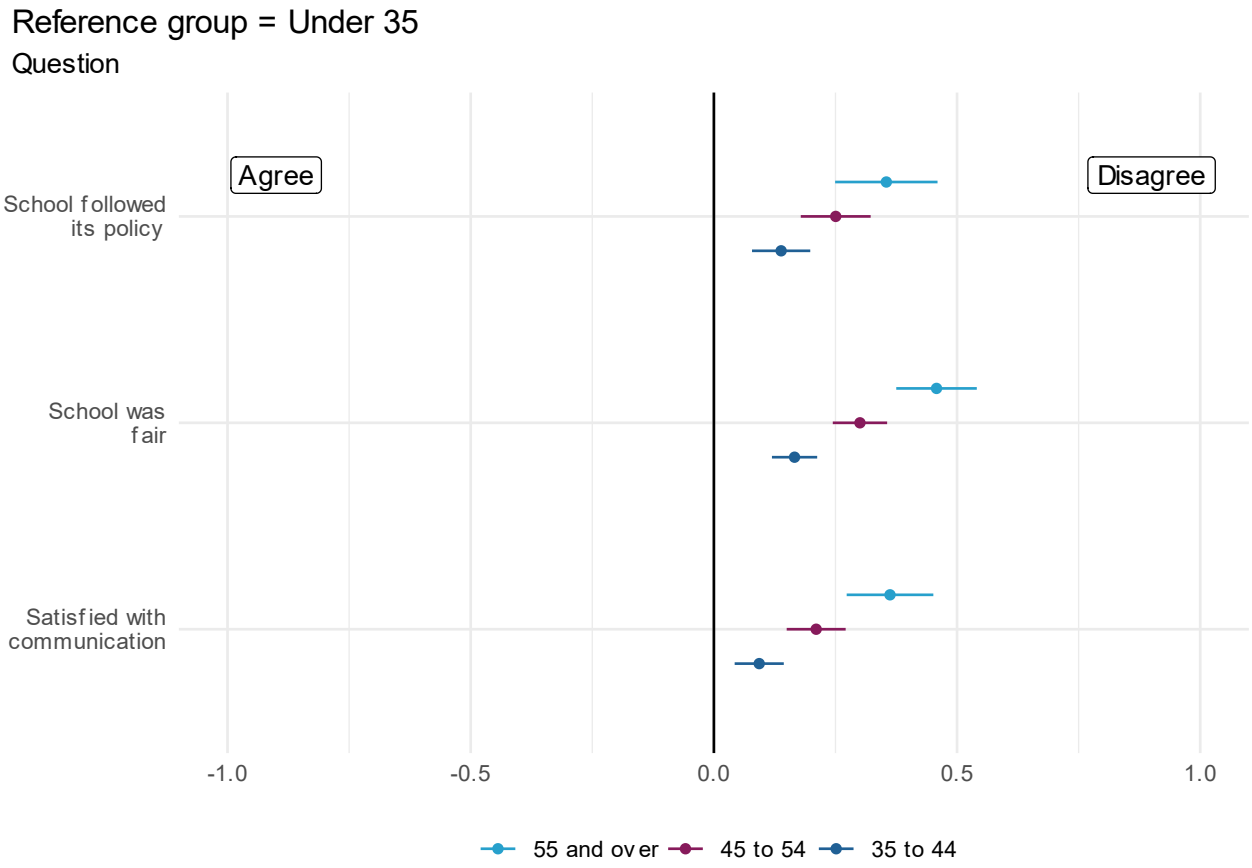


Figure 46 shows the difference in responses that remain between teachers of different ages, after considering a range of confounding factors, for the set of questions relating specifically to decisions on their pay taken by their school.

Responses from teachers in all age groups above 35 showed higher levels of disagreement on all school level pay questions than those aged under 35.

The differential responses for each age group are statistically significant for each question.

Figure 47: Estimates of differences between responses on reasons for considering leaving teaching pay questions[45], split by age band

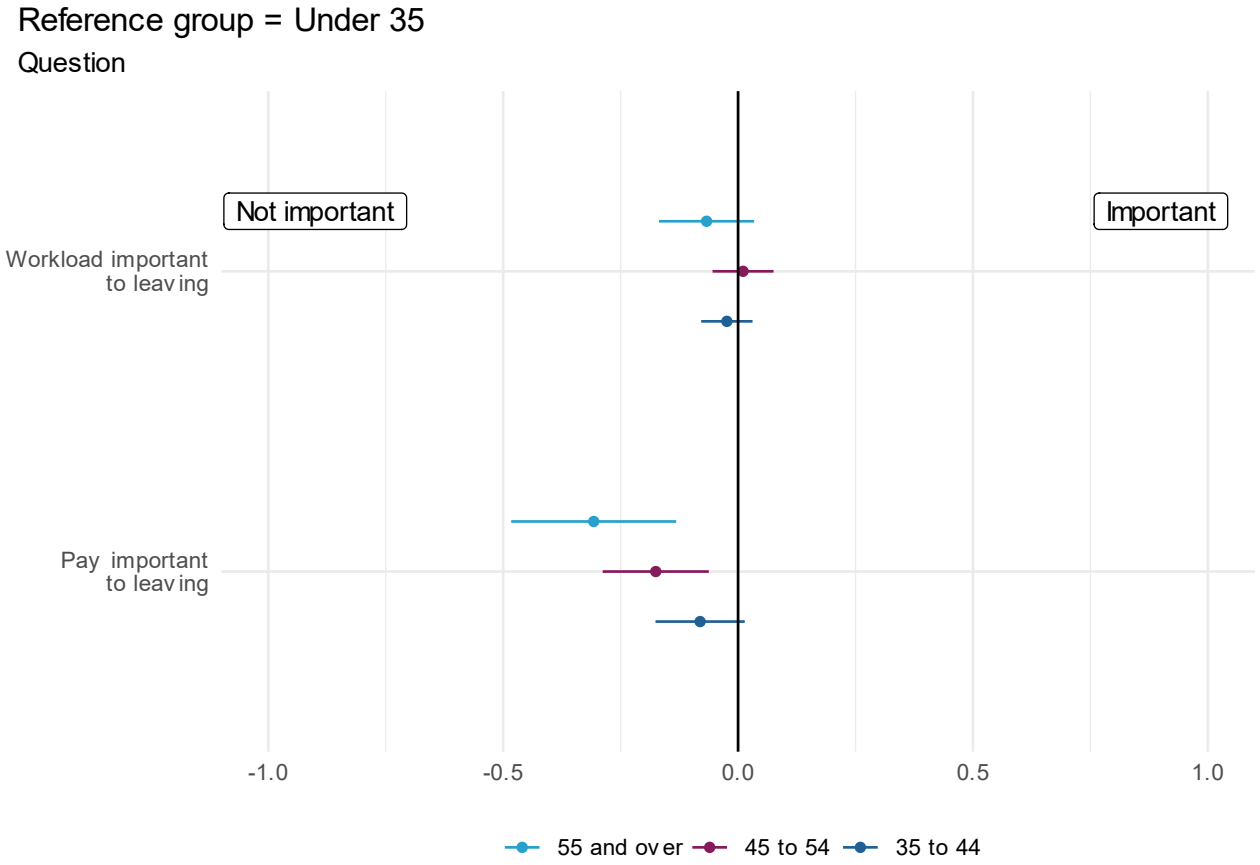


Figure 47 shows, for teachers who said they were considering leaving the state-funded school sector in the next 12 months (for reasons other than retirement), the differences that remain between teachers in different age groups, after considering a range of confounding factors, in the importance assigned to pay and workload as reasons.

[45] Considering leaving the English state school sector in the next 12 months (excluding retirement). See Table 1 for full question details.

Teachers aged 45 and over were less likely than those aged under 35 to assign a high degree of importance to pay as a reason to consider leaving. The confidence interval overlaps with zero for teachers in the 35 to 44 age group.

Disability

Descriptive Statistics

Disability in School Workforce Census

Schools are asked to provide information on the number of teachers that record themselves as disabled. However, information on disability was not obtained by schools for 56 per cent of teachers in the November 2023 census. The disability data is routinely collected as administrative data, which is not always entered by the teacher themselves into the system. The data may then under-count teachers with "hidden" disabilities.

This data has been used in the pay curves and pay progression analysis. Analysis should be used with appropriate caution given these data quality issues. Trends in the obtained data may not reflect trends in the overall population. In comparison, the perceptions of pay uses WLTL which is both more complete and self-reported, and one would expect it to therefore benefit from greater accuracy.

Pay curve and progression rate analysis is provided, in support of the Department's aim for transparency, although further breakdowns by phase are not provided due to poor data coverage.

Table 6: Descriptive Statistics by disability status in SWFC, including classroom teachers and leadership, aggregated across years 2013-2023[46][47]

	No disability	Disability
Mean age	39.3	39.7
Mean experience[48]	13.9	13.4
% in leadership roles[49]	16	11

[46] Excludes those of unknown disability status or those who refused to state

[47] Missing data proportion of 56% in 2023 from School Workforce Census methodology: https://explore-education-statistics.service.gov.uk/methodology/

[48] Experience is measured as years since attaining Qualified Teacher Status (QTS), with no adjustment for periods of absence from teaching, such as career breaks or maternity leave.

[49] Leadership roles defined as senior leaders and headteachers

	No disability	Disability
% part-time	24	24
% in secondary	44	53
% on London pay scales[50]	23	24

Table 6 provides descriptive characteristics for teachers with and without a disability in the aggregated sample, covering 2013 – 2023. There are several differences between these groups that could be important factors influencing a teacher's pay.

Teachers with a reported disability were, on average, slightly older with marginally fewer years of experience. They are less likely to hold a role within leadership, and more likely to work with a secondary school.

[50] London pay scales are defined as regional pay scales with higher pay scales than the national pay scales: London Fringe, Outer London, Inner London

Pay Curves

Figure 48: Classroom teacher pay curves in years 2013 – 2023 by experience, split by disability status and working pattern

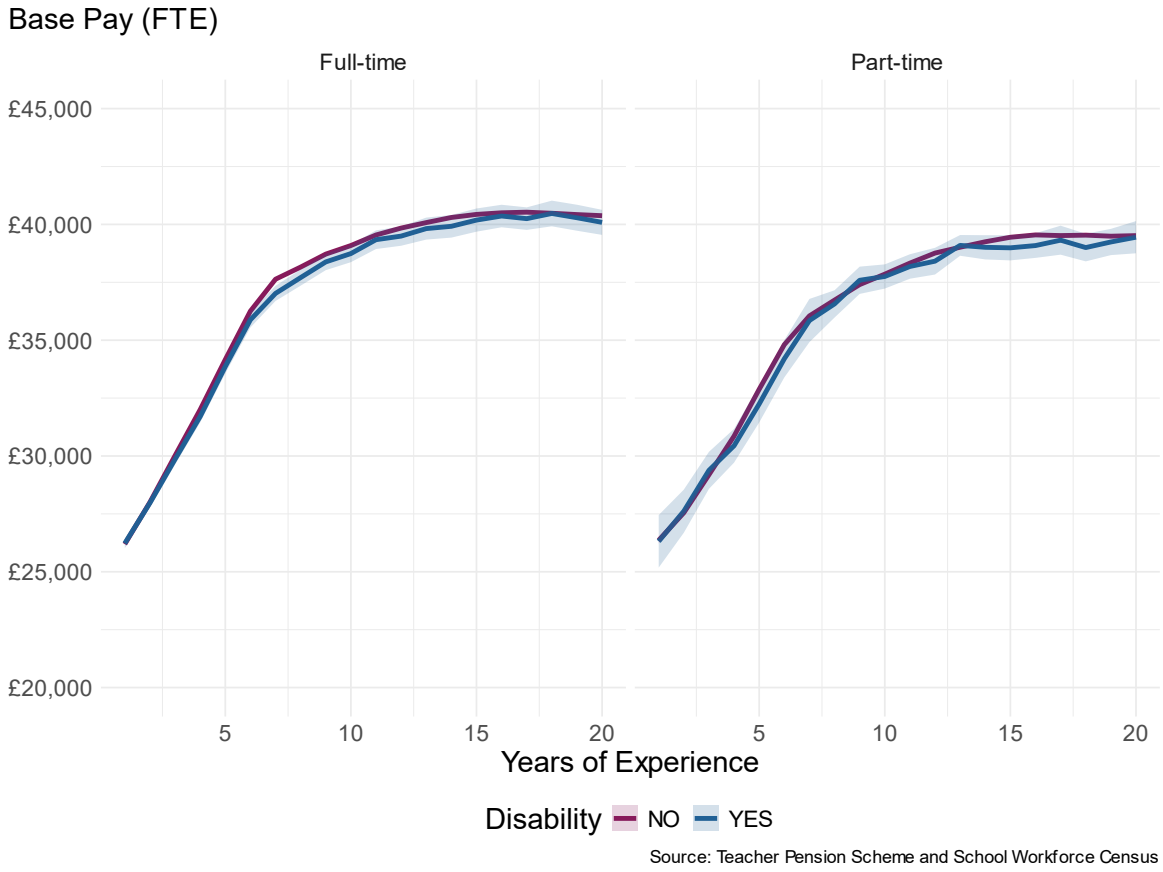


Figure 48 plots teachers' base pay, against their years of experience, split by whether or not teachers were reported as having a disability. For full-time teachers, there appears to be a small gap from around the 7-year mark, which falls within the confidence interval of the data most cases but is relatively consistent. For part-time teachers, the data carries wider confidence intervals, and it is therefore more difficult to draw any inference.

Figure 49: Teacher pay curves (inc. Leadership) in years 2013 – 2023 by experience, split by disability status and working pattern

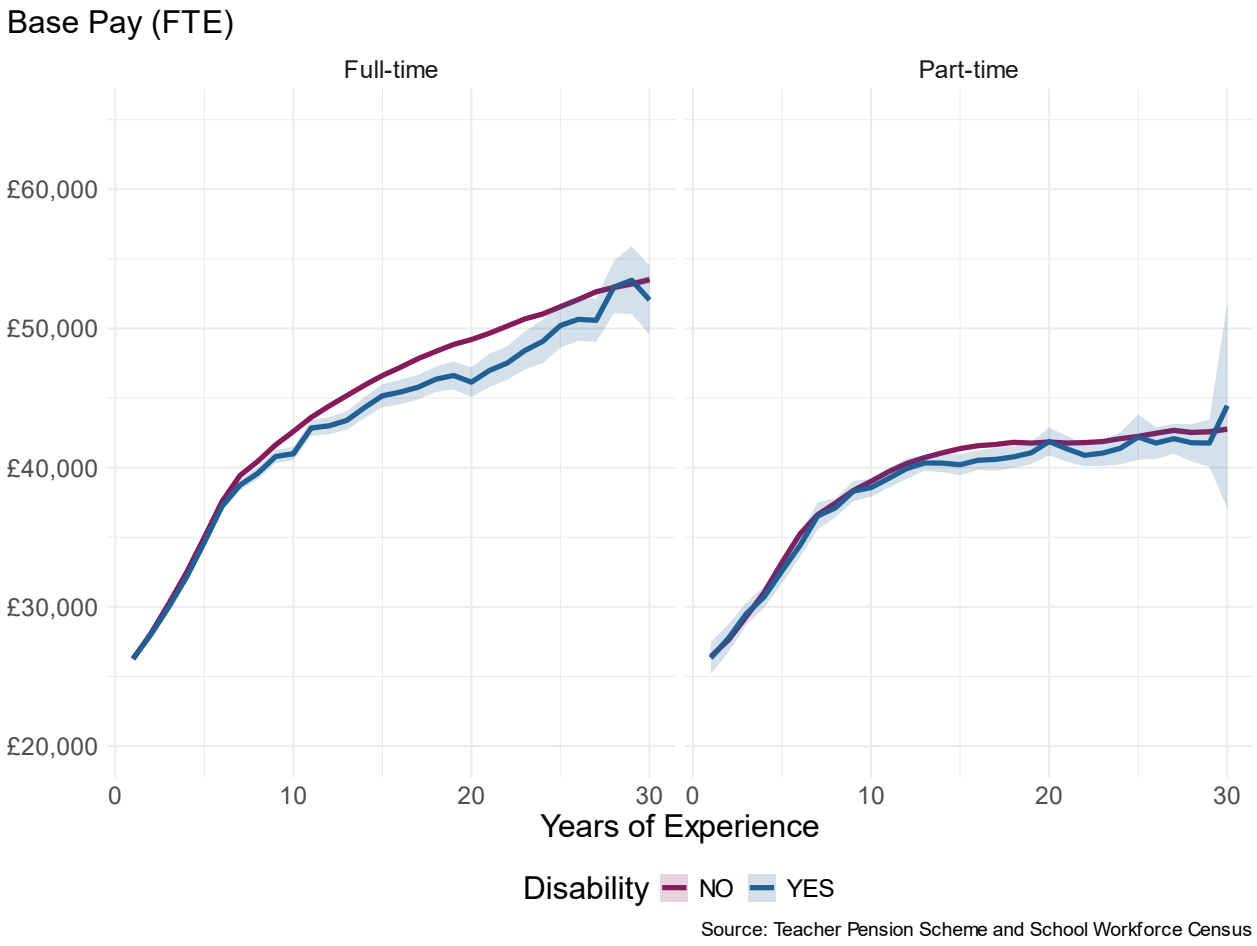
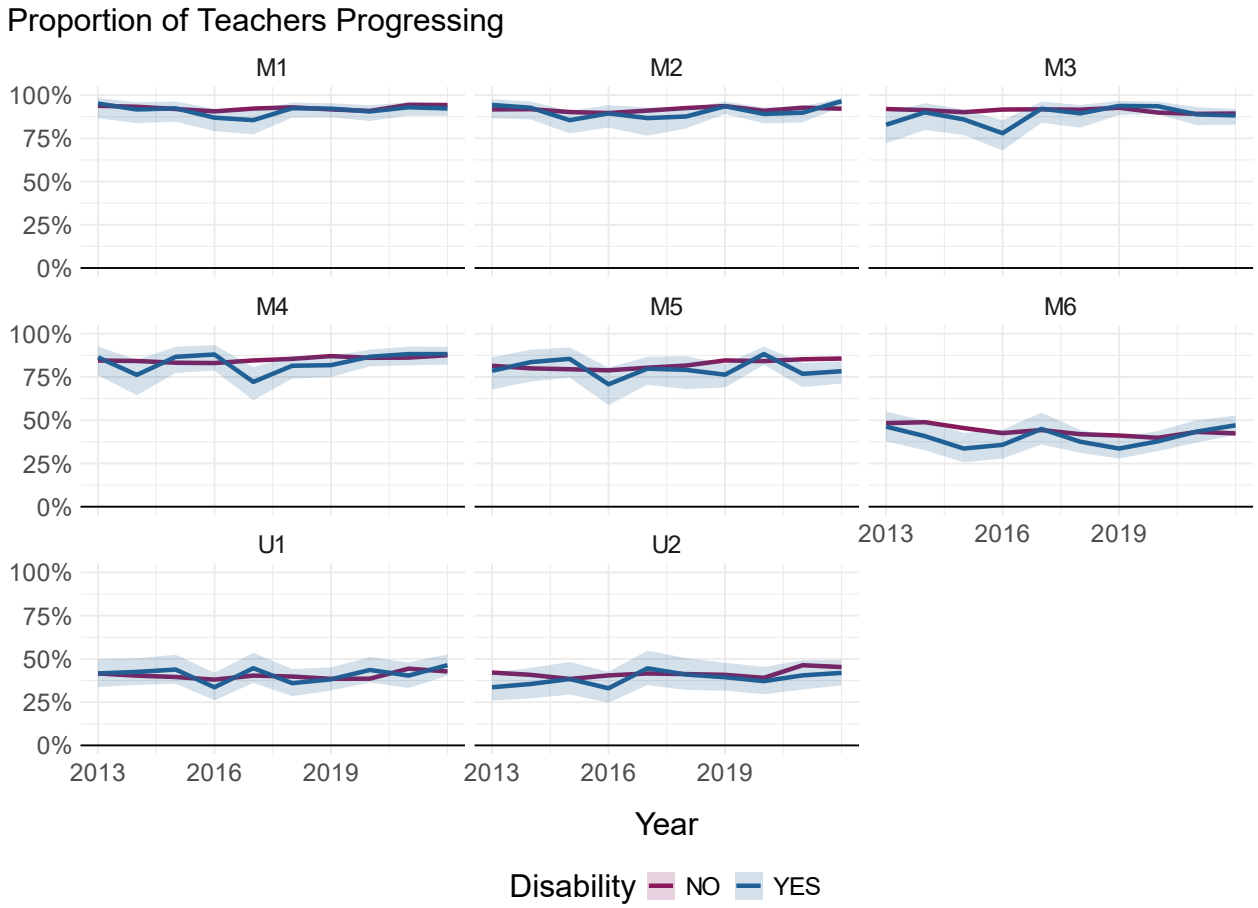


Figure 49 presents pay curves for all teachers, including those in leadership roles, split by whether teachers reported having a disability. For full-time teachers, a gap opens up before 10 years of experience and continues until late career, with average pay higher for those who did not report a disability. For part-time teachers, the data carries more uncertainty, and the confidence intervals overlap, but the data is suggestive of a smaller gap.

Progression Rates

Figure 50: Progression rates of full-time classroom teachers between pay scale spine points, years 2013 – 2023, split by disability status



Source: Teacher Pension Scheme and School Workforce Census

Figure 50 shows the progression rates of teachers between spine advisory points on the main and upper pay ranges, by disability status. It shows a lot of variability in progression rates for teachers with a disability. This is due to smaller numbers, firstly due to the incompleteness of disability data, and secondly, due to the granularity of breaking this down to individual spine points. There do not appear to be any consistent differences in progression rates between teachers with and without a disability. There may be some suggestion of a historical difference at M6, that appears to have closed in recent years, but confidence intervals are large and therefore no definitive conclusions can be reached.

Perception of Pay and Conditions: Disability

Baseline Findings

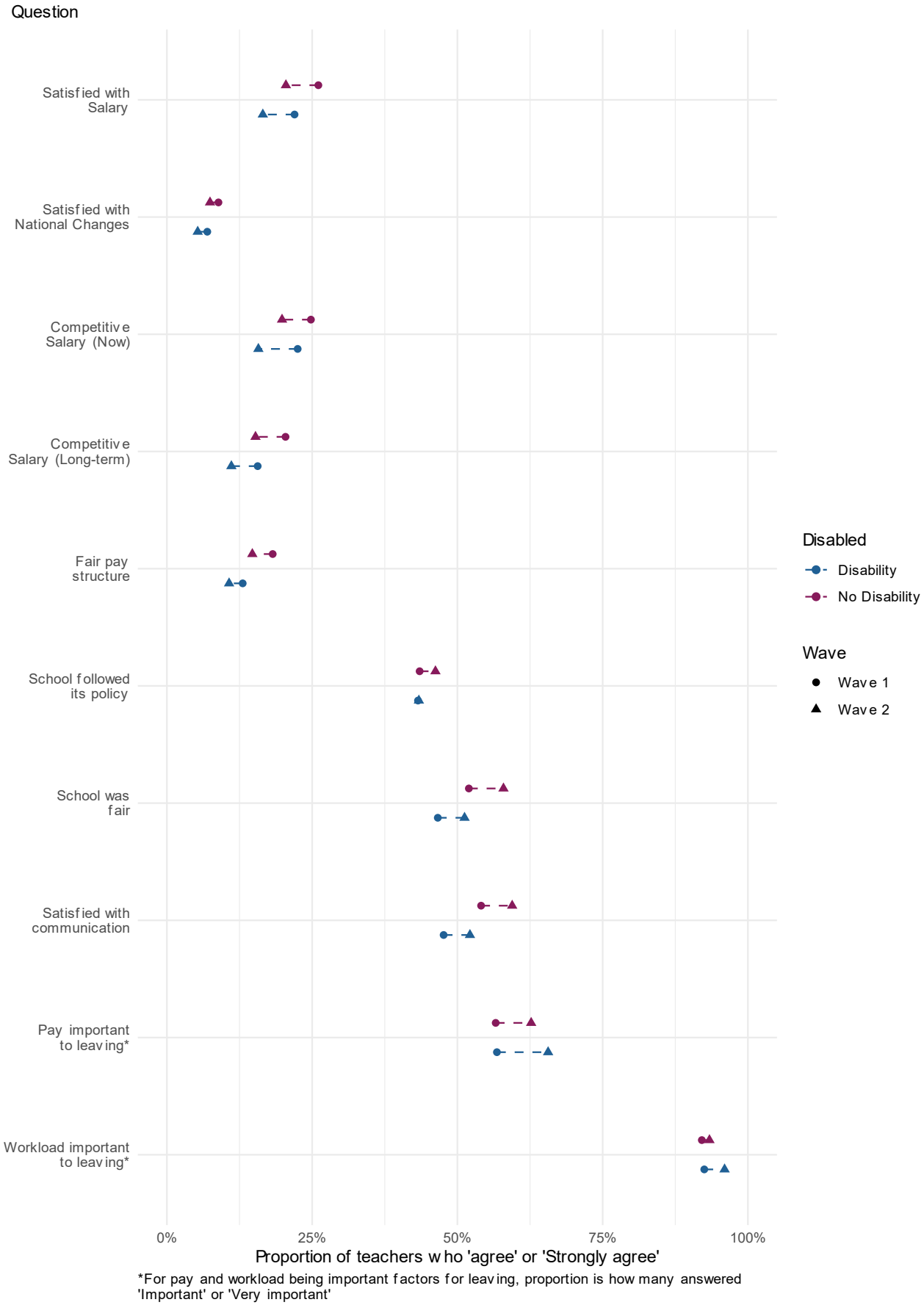
For this section, disability status is drawn from teachers' self-reported answers to the WLTL survey, which is a more complete data set and more likely to be accurate. An overview of headline results can be found in the main Working Lives of Teachers and

Leaders reports. Figure 51 displays the baseline results for each pay question broken down by disability status[51] and wave. These responses are not further broken down by other variables that may be important for understanding views about pay, such as phase or working pattern. It cannot be concluded that any differences between disability status in these charts are not partially caused by these other factors, rather than disability itself. However, the baseline findings are presented to provide context on the overall scale of agreement and disagreement for each question. The linear modelling will then identify the differences by disability status that remain, once observable confounding factors are considered. The important factors to read from this are:

- Satisfaction with salary is low amongst all teachers, with and without a disability, with the average of less than 1 in 4 teachers being satisfied with their salary.
- In general, the direction of movement between waves is the same regardless of disability status.
- The questions “School was fair” and “Satisfied with communication” showed the most variation between teachers with different disability status’, with less teachers with a disability stating “Agree” or “Strongly Agree”. Whether this is a true effect of disability, or a result of confounding factors will be addressed in the linear modelling.

[51] Teachers with a disability in Working Lives of Teachers and Leaders survey is defined as those who answered both yes to the question “O1 - Do you have any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?” and “Yes – a lot” or “Yes – a little” to the question “O2 - Do any of your conditions or illnesses reduce your ability to carry-out day-to-day activities?”. This definition is in line with the definition of disability under the Equality Act.

Figure 51: Baseline results on pay question in WLTL surveys, split by disability status



*For pay and workload being important factors for leaving, proportion is how many answered 'Important' or 'Very important'

Linear Modelling

Linear modelling is carried out to ascertain whether these differences are directly associated with disability status rather than any observable, potentially confounding factors such as school phase, post held, or other factors. Strongly correlated confounding factors may reduce the visibility of impacts as it becomes difficult to untangle effects from each other and can lead to increased confidence intervals.

In the disability questions, the reference group are teachers who did not report a disability.

Figure 52: Estimates of differences between responses on national level pay questions, split by disability status

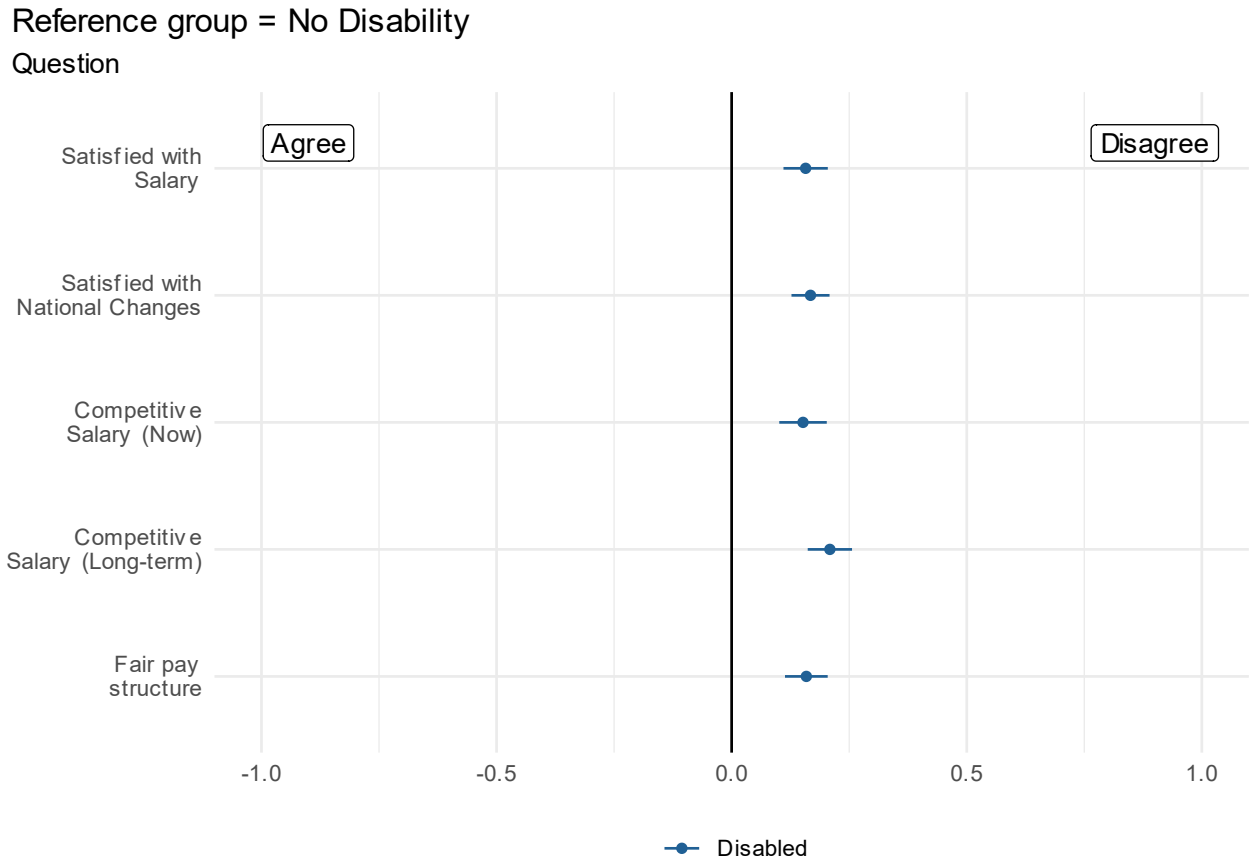


Figure 52 shows the difference in responses that remain between teachers with and without a disability, after considering a range of confounding factors, for the set of questions regarding national level pay.

Responses from teachers with a disability showed a higher level of disagreement on all the national level pay questions than those without a disability.

The differential responses by disability status are statistically significant for each question.

Figure 53: Estimates of differences between responses on school level pay questions, split by disability status

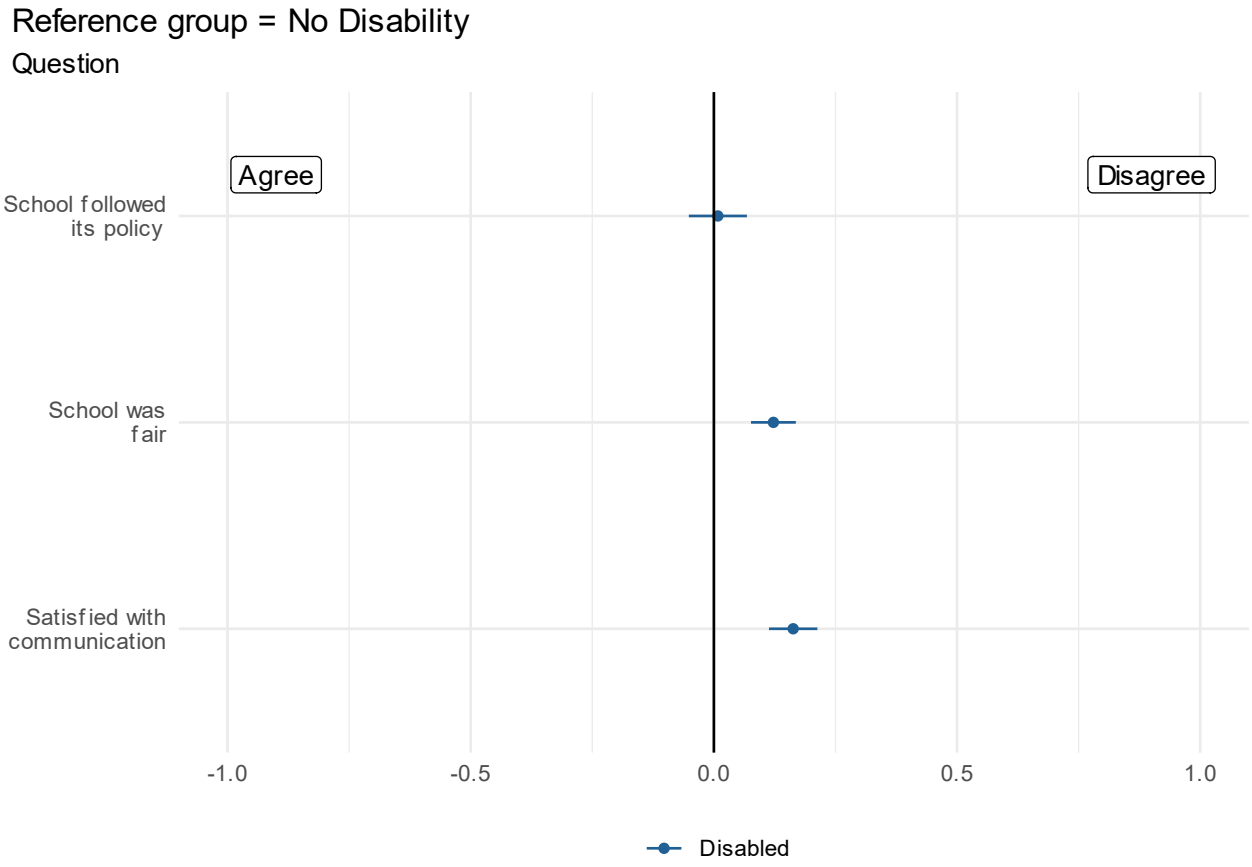


Figure 53 shows the difference in responses that remain between teachers with and without a disability, after considering a range of confounding factors, for the set of questions relating specifically to decisions on their pay taken by their school.

Responses from teacher with a disability showed higher levels of disagreement on the questions about whether their school was fair on decisions it took around pay and whether they were satisfied with their school's communications around pay.

There was no difference in response on whether the school followed its policy on pay.

Figure 54: Estimates of differences between responses on reasons for considering leaving teaching pay questions[52], split by disability status

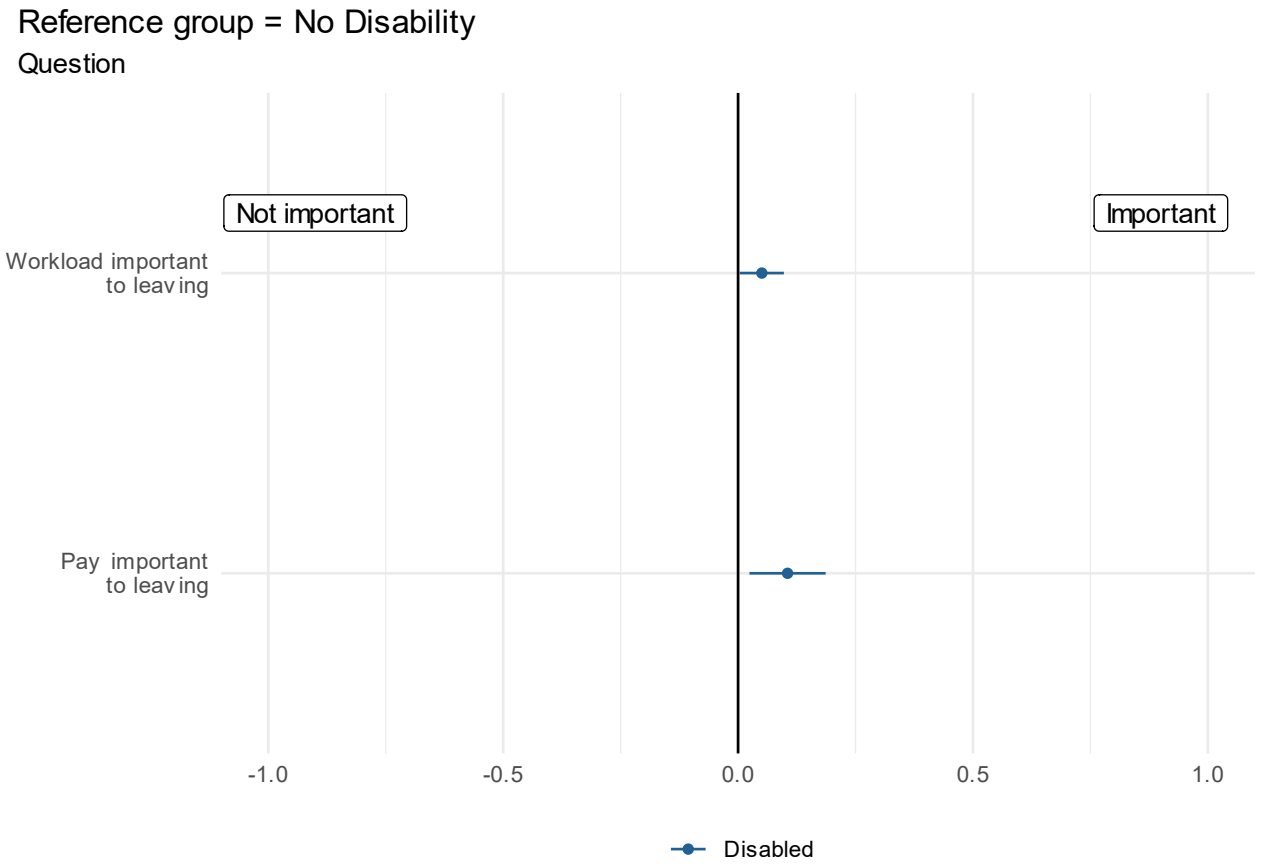


Figure 54 shows, for teachers who said they were considering leaving the state-funded school sector in the next 12 months (for reasons other than retirement), the differences that remain between teachers with and without a disability, after considering a range of confounding factors, in the importance assigned to pay and workload as reasons.

Teachers with a disability were more likely than those without to assign high importance on both pay and workload as reasons that they were considering leaving teaching.

[52] Considering leaving the English state school sector in the next 12 months (excluding retirement). See Table 1 for full question details.

Sexual Orientation

This section uses only the survey data from the Working Lives of Teachers and Leaders, where teachers self-reported their sexual orientation as heterosexual, gay or lesbian, bisexual, pansexual, or other. All teachers who answered other than 'heterosexual', or 'prefer not to say' are grouped together as LGBPO[53], as otherwise the samples would otherwise be too small to analyse robustly.

No data is collected on sexual orientation within the School Workforce Census or Teacher Pension Scheme datasets. It is therefore not possible to produce the associated pay curves or progression rates.

Perception of Pay and Conditions: Sexual Orientation

Baseline Findings

An overview of headline results can be found in the main Working Lives of Teachers and Leaders reports. Figure 55 displays the baseline results for each pay question broken down by sexual orientation and wave. These responses are not further broken down by other variables that may be important for understanding views about pay, such as phase or working pattern. It cannot be concluded that any differences by sexual orientation in these charts are not partially caused by these other factors, rather than being related to sexual orientation itself. However, the baseline findings are presented to provide context on the overall scale of agreement and disagreement for each question. The linear modelling will then identify the differences by sexual orientation that remain, once observable confounding factors are considered.

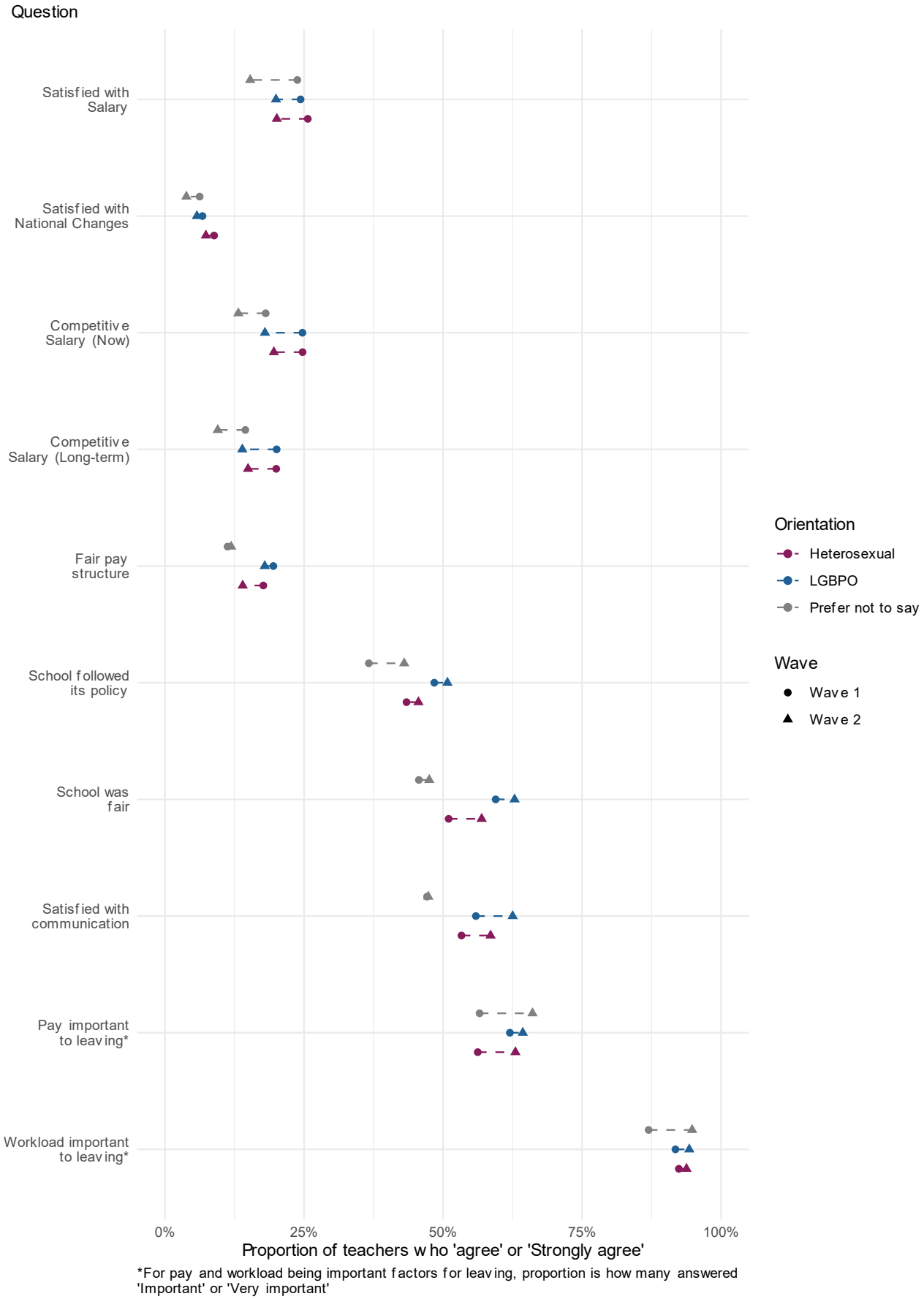
The important factors to read from this are:

- Satisfaction with salary is low amongst teachers of all sexual orientations, with less than 1 in 4 stating "Agree" or "Strongly Agree" to this statement in Wave 2.
- In general, the direction of movement between waves is the same regardless of sexual orientation. Overall there was lower agreement to the national pay questions in Wave 2 compared to 1 and higher agreement to school level questions in Wave 2.
- The questions "School was fair" and "Satisfied with communication" showed the most variation between teachers with different sexual orientations, with LGBPO teachers more likely to "Agree" or "Strongly Agree" and those who preferred not to

[53] LGBPO refers to those who answered: "Gay or lesbian", "Bisexual", "Pansexual" or "Other" in question O5 – "How would you best describe your sexual orientation?"

say less likely to “Agree” or “Strongly Agree”. Whether this is an effect directly associated with sexual orientation, or a result of confounding factors will be addressed in the linear modelling.

Figure 55: Baseline results on pay question in WLTL surveys, split by sexual orientation



*For pay and workload being important factors for leaving, proportion is how many answered 'Important' or 'Very important'

Linear Modelling

Linear modelling is carried out to ascertain whether these differences are directly associated with sexual orientation rather than any observable, potentially confounding factors such as school phase, post held, or other factors. Strongly correlated confounding factors may reduce the visibility of impacts as it becomes difficult to untangle effects from each other and can lead to increased confidence intervals.

In the following charts, the reference group is heterosexual teachers.

Figure 56: Estimates of differences between responses on national level pay questions, split by sexual orientation

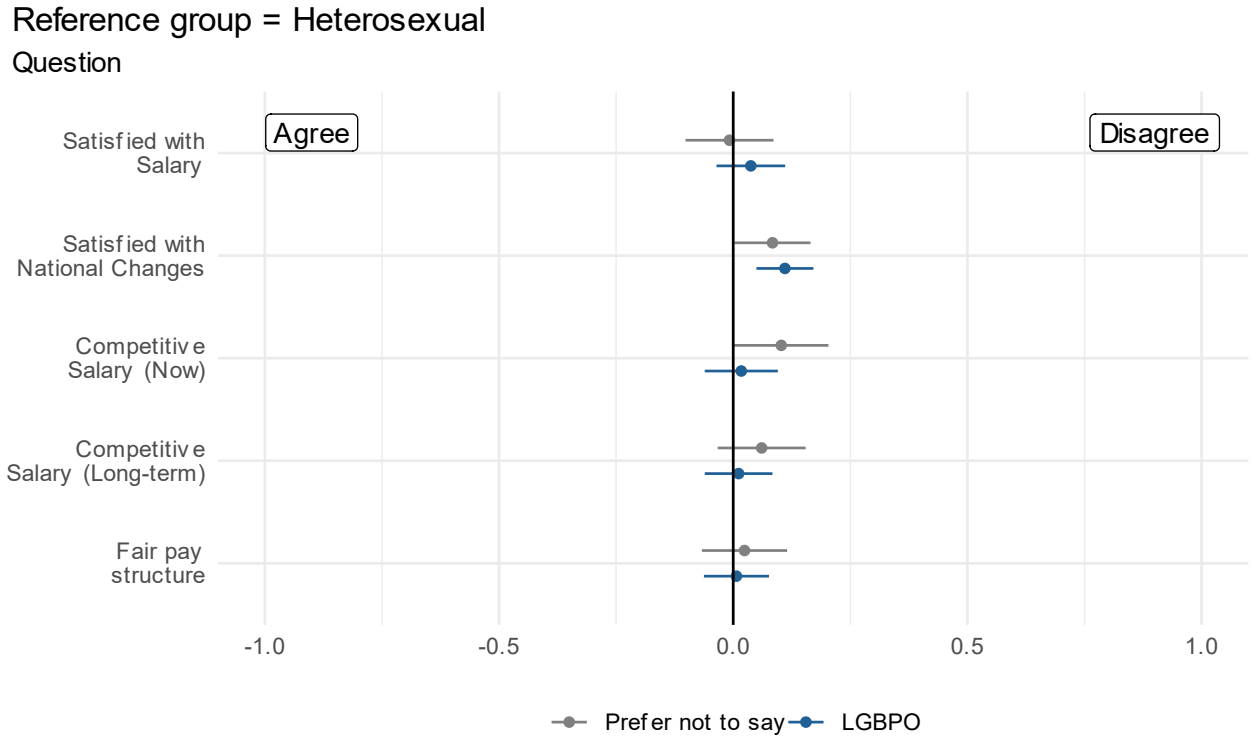


Figure 56 shows the difference in responses that remain after controlling for confounding factors on the set of questions covering national level pay.

For the majority of questions, the confidence intervals overlap zero, showing no statistical difference in responses to these question by sexual orientation including overall salary satisfaction.

LGBPO teachers' responses showed higher dissatisfaction with national changes to the pay and conditions than heterosexual teachers. Teachers who preferred not to state their sexual orientation also showed higher dissatisfaction with national changes and were more likely to disagree that their salary was competitive compared to heterosexual teachers.

Figure 57: Estimates of differences between responses on school level pay questions, split by sexual orientation

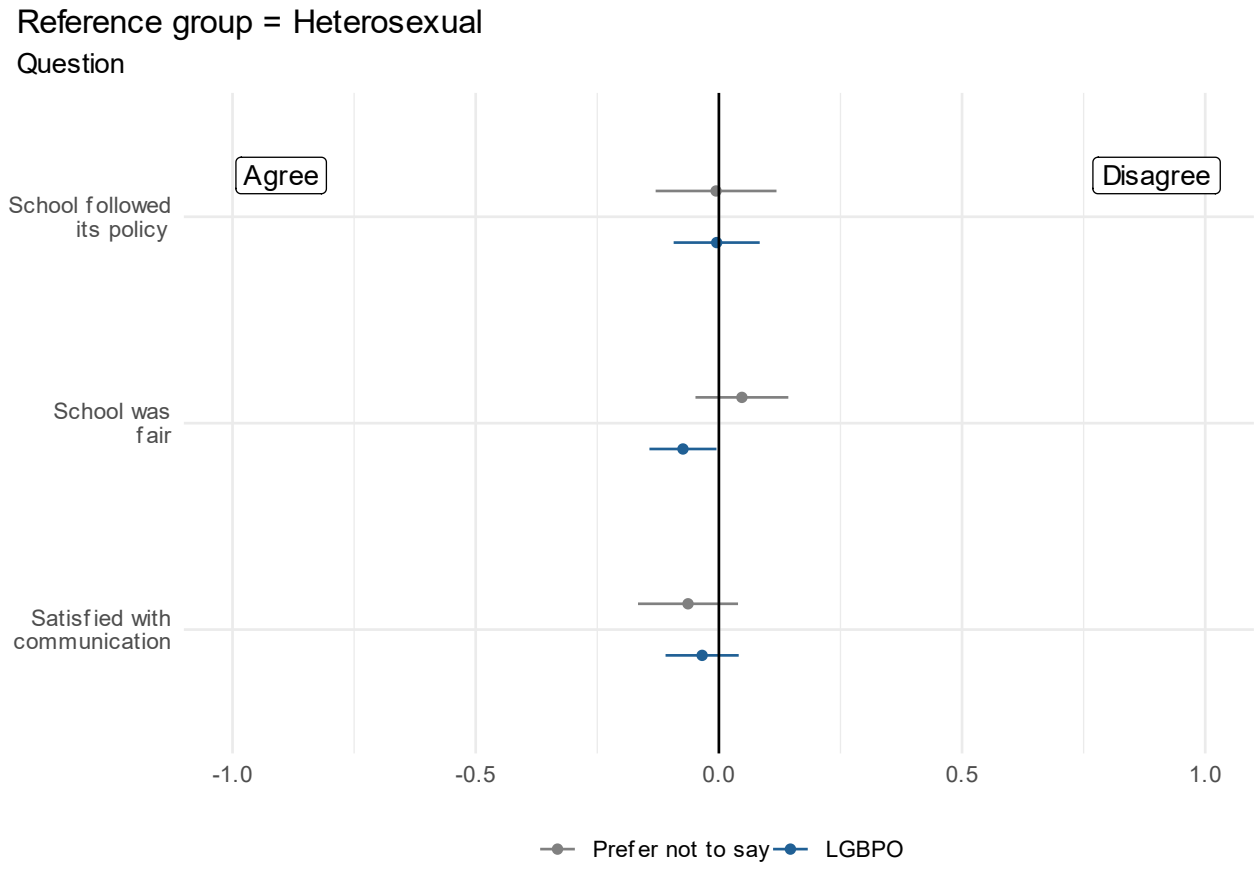


Figure 57 shows the difference in responses that remain between teachers of different sexual orientations, after considering a range of confounding factors, for the set of questions relating specifically to decisions on their pay taken by their school. LGBPO teachers showed higher levels of agreement that decisions their school took about their pay were fair than heterosexual teachers. There were no other statistically significant differences as all confidence intervals cross zero.

Figure 58: Estimates of differences between responses on reasons for considering leaving teaching pay questions[54], split by sexual orientation

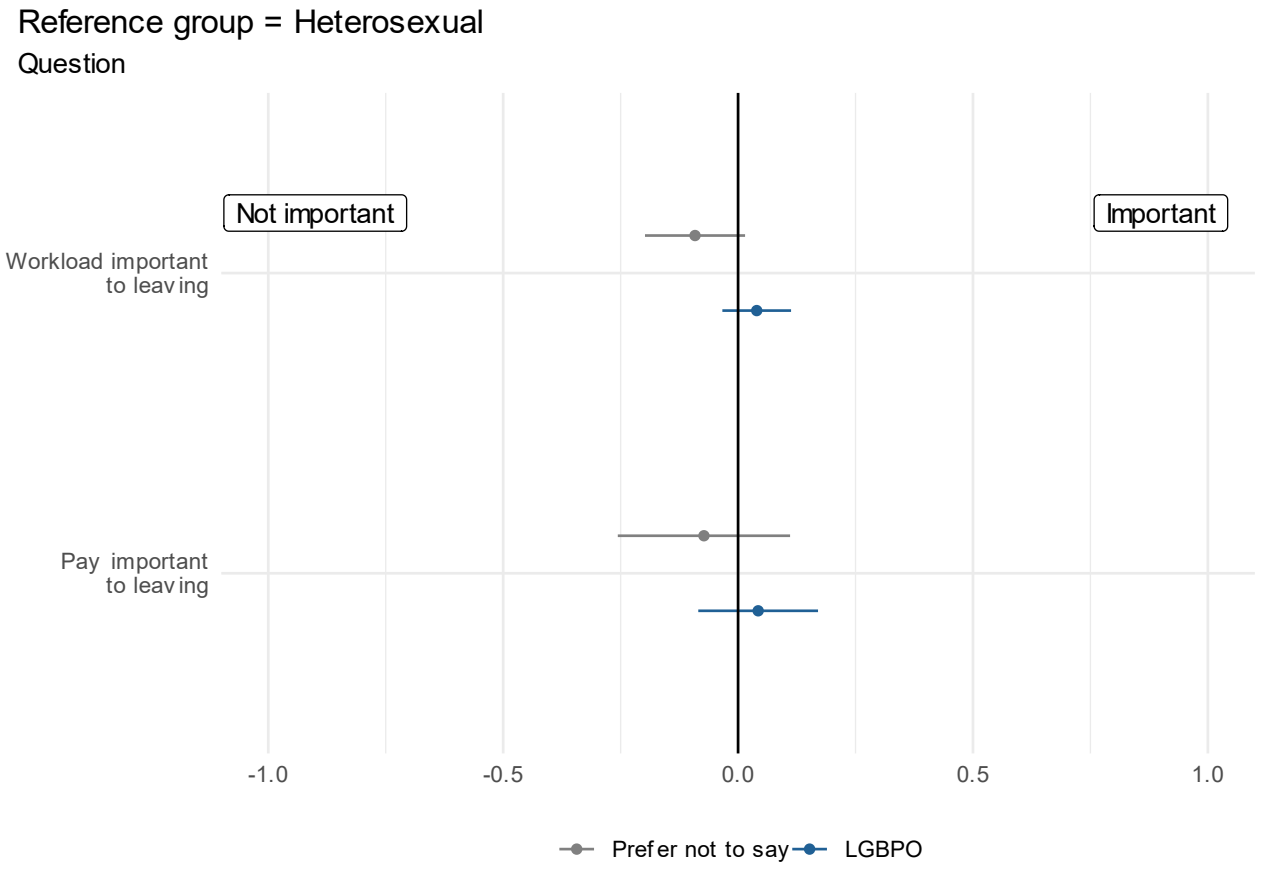


Figure 58 shows for teachers who said they were considering leaving the state-funded school sector, the differences that remain between teachers of different sexual orientations, after considering a range of confounding factors, in the importance assigned to pay and workload as reasons.

There were no significant differences between teachers of any sexual orientation on the questions round reasons for leaving teaching.

[54] Considering leaving the English state school sector in the next 12 months (excluding retirement). See Table 1 for full question details.

Working Pattern

Working pattern is not a protected characteristic. However, it is an important factor impacting pay and interacts with protected characteristics, most notably gender. Analysis for each protected characteristic has been presented for full-time and part-time teachers separately, throughout. For completeness, this section also covers how working pattern affects responses to questions around pay in the Working Lives of Teachers and Leaders survey.

This section uses only the survey data from the Working Lives of teachers and Leaders to analyse differences in perceptions of pay of part-time compared to full-time teachers. Part-time pay curves and progression rates are presented throughout the document within each section.

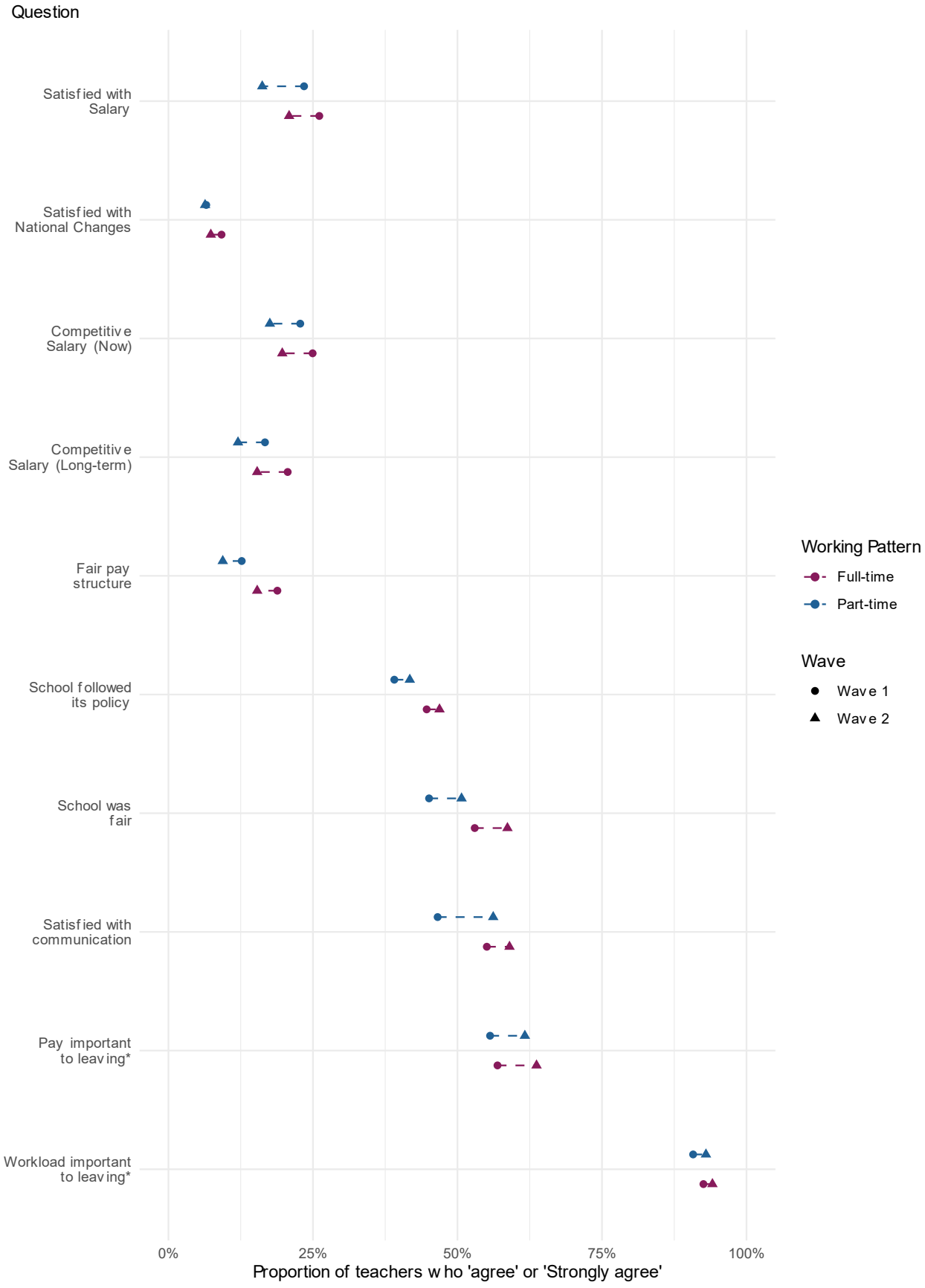
Perception of Pay and Conditions: Working Pattern

Baseline Findings

An overview of headline results can be found in the main Working Lives of Teachers and Leaders reports. Figure 59 displays the baseline results for each pay question broken down by working pattern and wave. These responses are not broken down further by other variables that may be important in understanding pay satisfaction such as gender and phase. Part-time working, as one example, is heavily correlated with being female, and therefore conclusions from baseline results may be confounded by this. However, the baseline findings are presented to provide context on the overall scale of agreement and disagreement for each question. The linear modelling will then identify the differences by religion that remain, once observable confounding factors are considered. The important factors to read from this are:

- Satisfaction with salary is low amongst teachers regardless of working pattern.
- In general, the direction of movement between waves is the same regardless of working pattern.
- The questions “School was fair” and “School followed its policy” showed the most variation between teachers with different working pattern, with part-time teachers less likely to “Agree” or “Strongly Agree” than full time teachers. Whether this is a true effect of working pattern, or a result of confounding factors, will be addressed in the linear modelling.

Figure 59: Baseline results on pay question in WLTL surveys, split by working pattern



*For pay and workload being important factors for leaving, proportion is how many answered 'Important' or 'Very important'

Linear Modelling

Linear modelling is carried out to ascertain whether these differences are directly associated with working pattern rather than any observable, potentially confounding factors such as school phase, post held, or other factors. Strongly correlated confounding factors may reduce the visibility of impacts as it becomes difficult to untangle effects from each other and can lead to increased confidence intervals. For working pattern, working part-time is strongly correlated with being female, and therefore there are larger confidence intervals on gender and working pattern as a result.

In the following charts, the reference group is full-time teachers.

Figure 60: Estimates of differences between responses on national level pay questions, split by working pattern

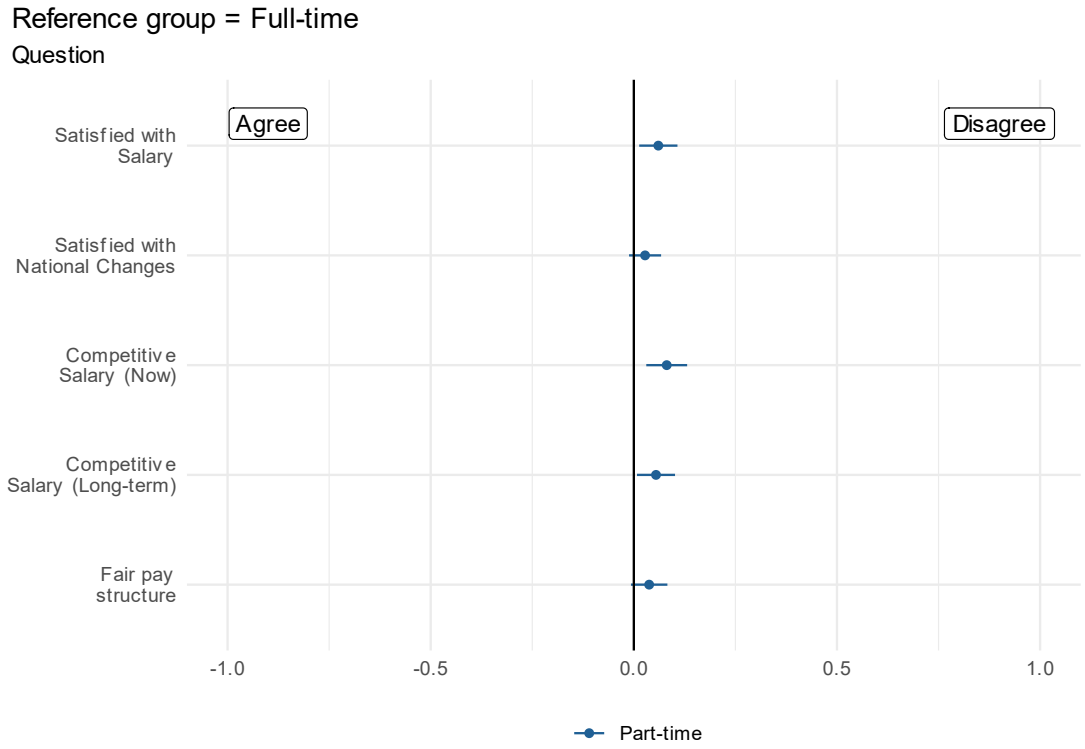


Figure 60 shows the difference in responses that remain between part-time and full-time teachers after considering a range of confounding factors. Part-time teachers were more likely to disagree that they were satisfied with their salary than those who work full-time. They were also more likely to disagree that their salary was competitive, both at the time of the survey and in the longer term.

Figure 61: Estimates of differences between responses on school level pay questions, split by working pattern

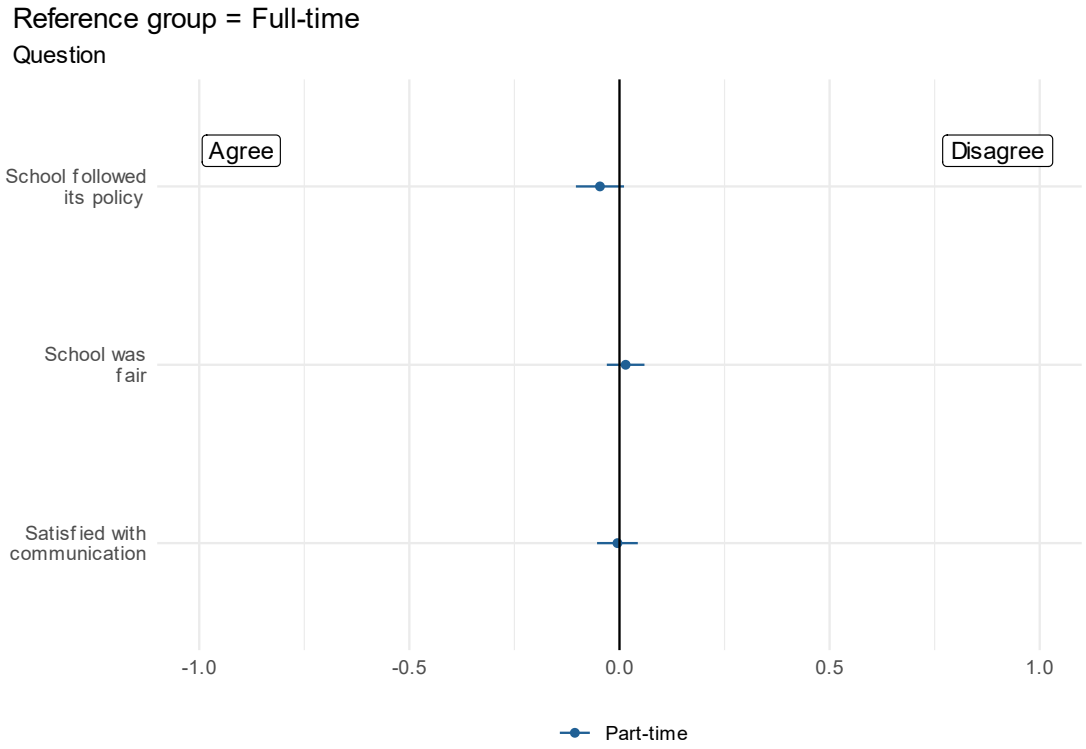


Figure 61 shows the difference in responses that remain between teachers working part-time or full-time, after considering a range of confounding factors, for the set of questions relating specifically to decisions on their pay taken by their school.

There were no statistically significant differences between part-time teachers and full-time teachers' responses to the school level questions, as all the confidence intervals cross zero.

Baseline results, from Figure 59, showed teachers working part-time had higher levels of disagreement on some of these questions compared to full time teachers. However, once confounding factors are accounted for, such as gender, this difference is no longer evident.

Figure 62: Estimates of differences between responses on reasons for considering leaving teaching pay questions[55], split by working pattern

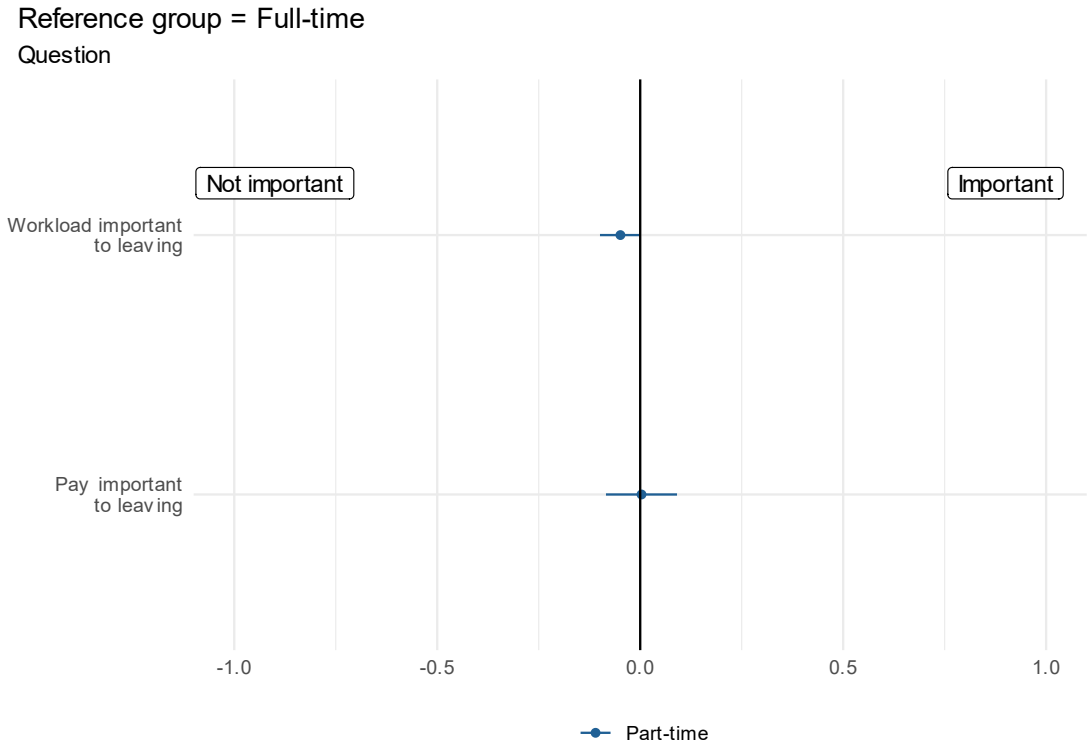


Figure 62 shows for teachers who said they were considering leaving the state-funded school sector in the next 12 months (for reasons other than retirement), the differences in importance assigned to pay and workload reasons, after accounting for confounding factors. Part-time teachers assigned lower importance to workload as a factor in them considering leaving. There was no difference between teachers of different working patterns on whether pay was an important factor in considering leaving.

[55] Considering leaving the English state school sector in the next 12 months (excluding retirement). See Table 1 for full question details.

Department for Education

About this publication:

enquiries https://www.gov.uk/contact-dfe
download www.gov.uk/government/publications

Follow us on Twitter: @educationgovuk
Connect with us on Facebook: facebook.com/educationgovuk