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The link between teacher buy-in and intentions to continue working in their current school

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Abstract

Previous research has found school working conditions—particularly school leadership—to be linked to teacher retention. At the same time, evidence from the management literature has suggested that obtaining 'buy-in' from staff is critical to employee performance and instigating change. This paper brings these two literatures together, being the first study to explore the relationship between buy-in and teachers' plans to continue working at their current school. The analysis illustrates how teachers who buy into the leadership team's strategy are much more likely to intend to continue working at the school, over and above their views on workload, pay and the quality of their relationships with their colleagues. We conclude by considering what school leaders might do to improve buy-in amongst their staff, while also highlighting areas where further research is needed.

KEYWORDS

buy-in, teacher engagement, teacher retention

INTRODUCTION

Teachers are the most important resource available to schools. Previous research has shown how being taught by a good rather than an average teacher can lead to an improvement in children's test scores by around 0.2 standard deviations per year (Hanushek, 2011). It is hence vital that schools recruit and retain the best people. Unfortunately, many fail to do so (Williams et al., 2022). Not only do leaders face competition from other schools for their top talent, but many teachers leave to pursue other careers. Indeed, in England, around one in three newly trained teachers are not working in state schools 5 years after completing

Key insights

What is the main issue that the paper addresses?

The paper explores the association between teacher 'buy-in' (the extent to which they believe in the strategy being pursued by their school) and their intentions to keep working in the school in the future.

What are the main insights that the paper provides?

Buy-in is found to be a strong predictor of teacher retention intentions. It has a stronger association with teachers' intentions to keep working at the school than other work environment factors, including workload, relationship with colleagues and views on pay.

training (House of Commons, 2022). This has led to great interest in how schools can retain their best staff.

A plethora of studies have consequently investigated the correlates of teacher attrition and retention (see Education Endowment Foundation, 2023 for a rapid evidence assessment). Although this has identified several important factors—including pay, workload and behaviour—school leadership has been found to be key. Indeed, leadership is more strongly associated with teacher retention than other aspects of teachers' working conditions, including school discipline and workload (Sims & Jerrim, 2020). Yet, despite this evidence, there have been relatively few quantitative studies linking key concepts from the management literature on effective leadership to the retention of teaching staff.

In this paper we consider one potentially important aspect of school leadership—the extent to which teachers buy into the strategic vision of the school. Specifically, we investigate whether teachers who have greater belief in their school's strategy are more likely to plan to keep working at the school—over and above their views on other aspects of their working conditions, such as pay, workload and relationships with colleagues. By including school fixed effects in our models, we highlight the importance of buy-in amongst teachers working in the same school, over and above the actual strategy their leadership team are pursuing.

The concept of buy-in

Merriam-Webster defines buy-in as the 'acceptance of and willingness to actively support and participate in something' (Merriam-Webster, 2023). Within business settings, this concept has been developed by researchers specialising in 'internal marketing'—the promotion of an organisation and its plans to its own employees. In a landmark study, Thomson et al. (1999) conceptualised staff within a firm as 'internal customers' who have 'buying decisions to make' (p. 824). This includes 'whether to buy-in to a business objective or initiative, whether to take ownership of a company vision, whether to aspire to achieve organisational goals'. Or, as put by Hsia (2017), 'an employee that has strong organizational buy-in believes in the potential success of the organization's strategy'.

A feature of Thomson et al.'s work was the division of buy-in into two distinct components: intellectual buy-in (staff understanding the organisation's strategy and how they can help achieve it) and emotional buy-in (staff commitment to achieving the organisation's strategic

goals). Employees must thus both (a) understand what their organisation's strategy is and (b) believe in its likely efficacy, for them to be truly bought in. Thomson et al. (1999, p. 83) go on to show that 'greater levels of buy-in [are] associated with better business performance'.

Since the work of Thomson et al. (1999), the concept of buy-in has been studied in several workplace settings. Altaf et al. (2022) investigated buy-in within finance, finding that both intellectual and emotional buy-in amongst staff is needed to make them organisational 'champions'. In healthcare, French-Bravo and Crow (2015) argue that 'without buy-in, employees are more likely to *go through the motions* and not commit to a level of change which results in active engagement'. Hubbart (2023, p. 5) describes buy-in as 'a commitment from organization members to support the vision of leadership', going on to describe how 'truth and buy-in are critical and unavoidable steps in the organizational change process' (Hubbart, 2023, p. 4). Zeiss and Chapman (2021) investigate buy-in amongst sales staff into (a) the product they are selling and (b) the marketing strategy underpinning their efforts. They describe buy-in as capturing 'the manner in which a salesperson gets behind the product or product strategy' (Zeiss & Chapman, 2021, p. 978), arguing that higher levels of buy-in will lead to staff striving to achieve long-term customer satisfaction. The only study to examine the relationship between employee buy-in and their intentions to continue working for their firm is Hsia (2017). They find that 'intent to stay is higher in employees with higher organizational buy-in' and that 'building buy-in throughout the organization can have a positive effect on retention, reducing the costs related to replacing employees, and reducing the inefficiencies in operations due to employee withdrawal' (Hsia, 2017, p. 34).

Buy-in within education settings

Our conceptual model of buy-in within education settings is based upon the framework of Grebing et al. (2023) and illustrated in Figure 1. While the aforementioned authors focused on buy-in amongst teachers in reference to a specific school reform programme, our focus is buy-in in relation to schools' strategy more generally.

The framework presented in Figure 1 conceptualises buy-in as being formed of four subconstructs. The first is 'belief'—that the school's strategy is the right one to pursue and will lead to school improvement. Following the management literature discussed above, one

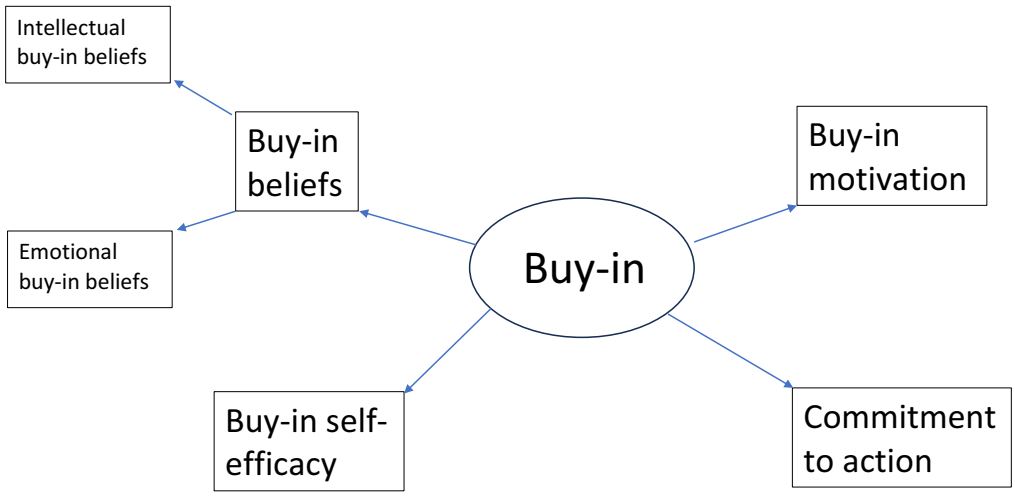

FIGURE 1 A conceptual model of buy-in within education settings.

might further separate this into two subcomponents—'intellectual' buy-in beliefs (whether the teacher knows what the school strategy is) and 'emotional' buy-in beliefs (whether they believe this is the right strategy to pursue). The second subconstruct is buy-in motivation—whether the staff member is motivated to help the school reach its strategic goals. Third comes buy-in self-efficacy; whether the staff member believes they can contribute towards the school meeting its objectives. Finally, there is commitment to action, operationalised as staff being willing to make changes when problems arise. Teachers who demonstrate each of the above can be considered as truly 'bought in'. Grebing et al. (2023) additionally distinguish between individual and collective buy-in, with the latter bringing additional benefits to schools from staff all pulling in the same direction. While these four subconstructs are distinct components of buy-in, Grebing et al. (2023) report the first of these—buy-in beliefs—to be strongly associated with buy-in motivation (Pearson correlation = 0.75), and moderately associated with buy-in self-efficacy (0.54) and commitment to action (0.53). As we shall discuss in the Data section below, the measure of buy-in used in this paper focuses on this 'belief' component.

Prior research into buy-in within education

Empirical studies investigating the role of teacher buy-in have been somewhat limited, with few distinguishing the subcomponents illustrated in Figure 1. Nevertheless, the general consensus is that having high levels of teacher buy-in is important. For instance, in the United States, Yoon et al. (2016, p. 517) found that 'students attending schools with high teacher buy-in are more likely to have a higher reading achievement' and that teachers tend to have higher levels of buy-in when headteachers use data to support their decisions. On the other hand, Lee and Min (2017) found a negative association between teacher buy-in and student achievement. They note, however, that in schools at more advanced stages of reform, buy-in had a significant positive relationship with pupils' academic achievement growth. Kramer et al. (2015) investigated how teacher buy-in related to the effectiveness of implementing new curricula in the middle schools. Those schools with the highest levels of buy-in were found to make greater levels of progress in mathematics. Feuerborn and Chinn (2012) discuss how gaining buy-in from teachers is vital to implementing school-wide changes in how behaviour is managed within schools. This sentiment is supported by Silin and Schwartz (2003), who note how curriculum reform is unlikely to be successful unless there is substantial buy-in from teachers. They go on to suggest that buy-in to a particular programme or intervention is best achieved when it is adapted to the local problems and needs of teachers in classrooms. When attempting to introduce a reform programme, Turnbull (2002) suggests that teachers are more bought in when they have had adequate training and resources, there is significant school-wide support for the change and they have control over how it is implemented.

Teacher retention

Our theoretical approach to teacher retention is based on the conceptual model presented by Guarino et al. (2006), building upon the work of Haggstrom et al. (1988) and Boardman et al. (1982). This is derived from a standard economic model of how labour markets function, applied to a school setting. As Guarino et al. (2006) explains, teachers will be more likely to remain in the profession—and continue to work in the same school—if this 'remains the most attractive activity to pursue among all activities available to them' (Guarino et al., 2006, p. 175). They then proceed to define the 'attractiveness' of employment in terms of four broad factors—pay, benefits, working conditions

and personal satisfaction. Teachers will then seek another job—whether this is in another school or outside teaching altogether—when they believe there is a more attractive alternative available.

Each of these four broad factors are comprised of subcomponents. Our particular interest is working conditions, which Sims and Jerrim (2020) divide into five dimensions: leadership/management, workload, collaboration, preparation and discipline. We conceptualise school strategy—and the extent to which leaders can get staff to understand and buy into it—as a key aspect of the leadership and management component.

Previous research has found school leadership to be amongst the most important aspects of the working environment, motivating our interest in studying the link between buy-in and teacher retention. For instance, Sims and Jerrim (2020) found that a one standard deviation increase in an early-career teacher's perception of leadership quality lowered the probability of them leaving the school the following academic year by 4.5 percentage points (from 12.5% to 8%). This built upon earlier work by Sims (2020), who drew upon TALIS 2013 data to investigate how a series of working conditions were linked to teacher retention. He found that 'leadership and management shows the strongest association with desire to move school'. Outside of England, Kraft et al. (2016) explored teacher retention in a sample of New York middle schools. They concluded that headteachers' leadership skills are 'particularly salient for whether teachers decide to remain in their schools' (Kraft et al., 2016, p. 1439). In North Carolina, Ladd (2011) found working conditions to be strongly related to teachers' intentions to leave their current school, with school leadership the most salient factor. Studying teachers in Massachusetts, Johnson et al. (2012) report that 'social work conditions'—including school leadership—are key factors in predicting teachers' job satisfaction and future career plans. Together, this demonstrates how understanding school leadership is vital to gaining further insight into the mechanisms underpinning teacher retention.

The present study

We follow the management literature into buy-in and conceptualise teachers as internal customers within their schools. They thus have a 'buying decision' to make—whether to sign up to the school strategy or not. If they fail to do so, this is likely to mean they do not believe that the performance of the school—and/or their working conditions—are likely to improve. They will, ceteris paribus, then start to evaluate outside employment offers more favourably, and start seeking employment elsewhere.

The main contribution of this paper is to provide the first large-scale quantitative investigation into this relationship between buy-in and teacher retention intentions. In doing so, we apply the concept of buy-in to a workplace setting where it has received limited attention before. It is also one of the first studies in any industry to explore the association between staff buy-in and future employment plans. Our first research question is hence:

RQ1: *How much more likely are teachers to intend to stay working in a school when they buy into the school strategy?*

Previous research into buy-in has highlighted the key role of communication between employees and senior leaders (French-Bravo & Crow, 2015). When staff do not buy into their organisation's vision, leaders should encourage an open dialogue to try and bring these employees onside (Thomson & Hecker, 2000). It may hence be particularly concerning if staff with low levels of buy-in feel unable to voice their concerns. Of course, some groups may be more willing to speak out when they don't buy in to their leader's strategy than others (e.g., more senior or experienced teachers), though this may then lead to concerns that the views of some groups are particularly unlikely to be heard. Our second research question explores the interplay between these issues:

RQ2: *To what extent do teachers who don't buy into the school strategy feel they are able to voice contrary views?*

We then consider how these two factors—teachers' buy-in to the school strategy and whether they feel able to voice contrary views—are jointly related to future employment plans. In particular, it is one thing for a teacher to not fully believe in the strategic direction leaders are taking, it is another for them to feel unable to have open and frank discussions about such matters. Thus, the *combination* of low buy-in and feeling unable to freely state one's views may be particularly damaging for the prospects of keeping a teacher working at a school. The final research question thus explores whether these two factors have an additive or multiplicative relationship with future employment plans.

RQ3: *Are teachers more likely to want to leave the school when they don't buy into the school strategy AND feel unable to voice contrary views?*

DATA

The data we use are drawn from the Teacher Engagement Platform (TEP), a school staff survey conducted in a selection of England's schools. We use information gathered during June 2023, when 2852 teachers from 82 schools took part. Although the sample of schools is not random, the response rate of teachers within schools is high (~80%). Table 1 provides descriptive information about participants, illustrating how the sample comprises a variety of school types with different pupil characteristics. Responding teachers were also from different demographic backgrounds and levels of seniority.

Measurement of buy-in

The ideal measure of staff buy-in would include separate questions capturing each subcomponent depicted in our conceptual model (Figure 1). However, due to the limited survey time available, teacher buy-in was captured via a single question: *Do we have a strategy that is taking this school in the right direction?*

Teachers responded to this (and all other survey questions) using an 11-point (0 to 10) scale. Returning to our conceptual model, this question is largely capturing teachers' buy-in beliefs (the first subcomponent in Figure 1), and the extent to which a teacher believes in the school strategy. Indeed, the question closely follows Hubbart's (2023) description of buy-in as 'a commitment from organization members to support the vision of leadership' and the notion put forward by Hsia (2017) that 'an employee that has strong organizational buy-in believes in the potential success of the organization's strategy'. The question does not, however, capture differences between intellectual and emotional buy-in as defined by Thomson et al. (1999). In other words, when staff disagree with this statement, we are unable to distinguish whether this is due to them not understanding the strategy of the school (a lack of intellectual buy-in), whether they do not believe the strategy is the right one to pursue (a lack of emotional buy-in) or some combination of the two. It also does not directly capture the other three subcomponents of buy-in within our conceptual model (buy-in motivation, self-efficacy and commitment to action). The strong correlation reported by Grebing et al. (2023) between buy-in beliefs and the other three subcomponents may nevertheless mean our measure is quite a good proxy for levels of staff buy-in more generally. However, it is perhaps most prudent to interpret our results as capturing the link between teachers' retention intentions and their buy-in beliefs (i.e., whether they believe in the likely success of what they perceive to be the school strategy).

TABLE 1 The background characteristics of the TEP sample (June 2023).

Variable	Group	Percent	Average buy-in score
Job role	Class Teacher	61%	6.5
	Middle Leader	25%	6.7
	Senior Leader	14%	8.5
Contract	Full time	85%	6.9
	Part time	15%	6.7
	Other	5%	7.5
Phase/subject	Primary—Foundation or Key Stage 1	7%	8.1
	Primary—Key Stage 2	10%	8.3
	Secondary—Arts, Music, Physical Education	15%	6.6
	Secondary—English, Humanities, Languages	31%	6.6
	Secondary—Maths, Science, Technology, Computing	31%	6.2
Gender	Female	66%	6.9
	Male	31%	6.8
	Prefer not to say	3%	5.2
Age	20–29	24%	6.6
	30–39	30%	6.9
	40–49	27%	7.2
	50+	15%	7.0
	Missing age	4%	5.3
Most recent Ofsted rating	1. Outstanding	31%	6.9
	2. Good	61%	6.9
	3. Requires improvement	5%	5.6
	4. Inadequate	2%	5.6
School-level demographics	% EAL pupils	14%	–
	% pupils Ever FSM eligible	31%	–
	% pupils persistently absent	31%	–

Note: School-level information reported where available. Average buy-in score refers to the average response of teachers to the question *Do we have a strategy that is taking this school in the right direction?* along the 0–10 scale.

The distribution of responses across the 0–10 scale can be found in Appendix A. This illustrates how responses are negatively skewed; around half of staff responded with a score of 8, 9 or 10, with around a quarter reporting a score of 5 or lower. Table 1 provides some descriptive information illustrating how average responses to this question varied across schools and teachers with different background characteristics. Primary school teachers buy in to their school's strategy more than secondary school teachers, with older and more senior staff more bought in than junior staff. There are also differences according to the school's most recent inspection rating. Interestingly, the proportion of the variation in responses that occurs *within* schools (77%) is greater than that occurring *between* schools (23%). This illustrates how there are substantial differences in how bought in teachers are to the strategy amongst colleagues working in the same school. Finally, as Figure 2 illustrates, senior leaders tend to provide more positive responses (on average) than their staff. In other

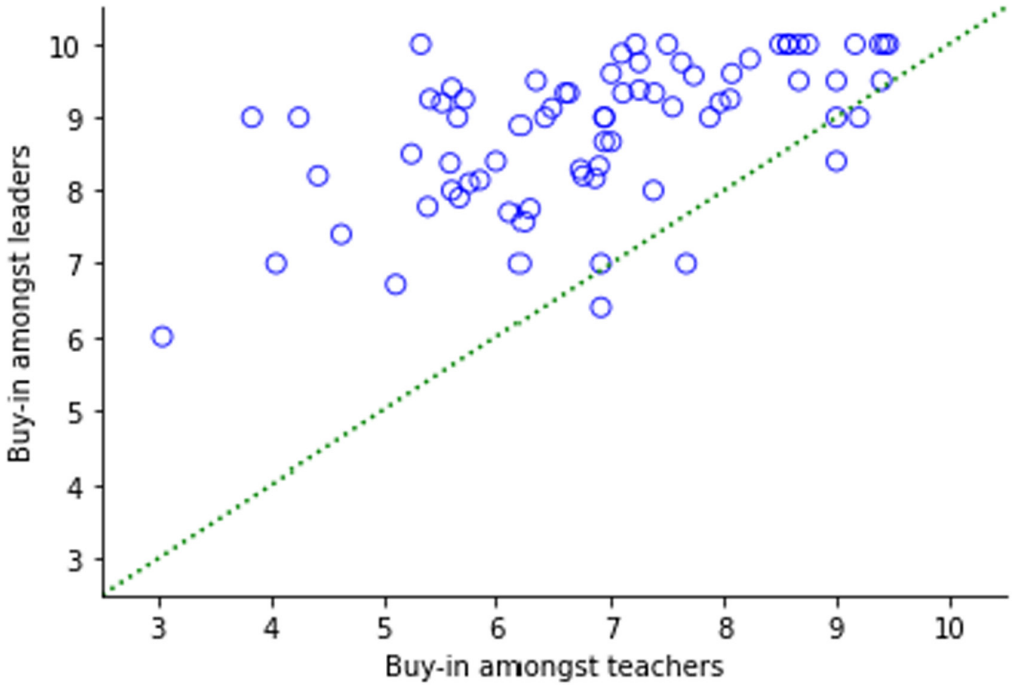

FIGURE 2 Views on school strategy across participating schools. Differences between school leaders and teaching staff. Each point in the plot represents one school. Figures along the horizontal axis capture the average response of class teachers in the school to the question *Do we have a strategy that is taking this school in the right direction?* along the 0–10 response scale. Analogous figures for senior leaders are reported along the vertical axis. Dashed 45-degree line is where responses are, on average, the same from teachers and school leaders. The correlation in responses is 0.56.

words, it is not uncommon for senior members of staff to be much more bought into the school strategy than more junior colleagues.

Measurement of teachers' intentions to continue working at their current school

Our primary outcome is how teachers responded to the question *If you were offered the same job at another school, how likely is it that you would stay at this school?*, reported using the same 0–10 scale. This is a measure of a teacher's intentions to continue working for their current school. It is thus a measure of future employment *intentions* (i.e., what teachers say they would do) rather than capturing actual decisions/actions. Responses to such questions are a frequently used outcome measure in the teacher retention literature (e.g., Ladd, 2011; Van den Borre et al., 2021), though an imperfect proxy of actual future behaviour. Nevertheless, in Appendix B we illustrate the robustness of our findings to an alternative measure (teachers' responses to the question *Do you see yourself working at this school in 2 years' time?*).

Measurement of other variables

To address our second and third research questions, we also make use of the following question (using the same 0–10 scale): *Can you voice a contrary opinion at this school without fear of negative consequences?*

We also draw on several other questions capturing teachers' views on other working conditions at their school, which are combined into a scale using confirmatory factor analysis. This includes:

- Seven questions about their relationships with their colleagues (e.g., *Do you value the relationships you have with colleagues in this school?*); Cronbach $\alpha = 0.91$.
- Three questions about teachers' views on their workload (e.g., *Do you feel happy about your work–life balance?*); Cronbach $\alpha = 0.92$.
- Five questions capturing teachers' self-efficacy (e.g., *Can you teach effectively in this school?*); Cronbach $\alpha = 0.84$.
- Six questions capturing teachers' general attitude towards teaching (e.g., *Are you excited about teaching?*); Cronbach $\alpha = 0.87$.
- A single question asking teachers about their view of their pay (*Do you believe that your total compensation (e.g., including both pay and other benefits) is fair, relative to similar roles at other schools?*).
- A single question capturing the quality of the relationship that the teacher has with their manager (*Do you feel that your manager cares about you as a person?*).

The correlation between each scale can be found in Appendix C. We report the results based on continuous measures in standardised form (mean zero and standard deviation one), meaning that estimates can be interpreted as effect sizes.

METHODOLOGY

Research question 1

A series of ordinary least squares regression models are estimated in the form

$$R_{jk} = \alpha + \beta . S_{jk} + \emptyset . D_{jk} + \delta . TSE_{jk} + \tau . At_{jk} + \theta . Rel_{jk} + \varphi . P_{jk} + \pi . W_{jk} + u_k + \varepsilon_j \quad (1)$$

where R_{jk} is a continuous measure of whether the teacher intends to continue working in the school, S_{jk} is a continuous measure of whether the teacher buys into the school strategy, D_{jk} is a vector of teacher demographic characteristics, including age, gender, subject and job role, TSE_{jk} is teacher self-efficacy scale, At_{jk} is teachers' attitudes towards teaching scale, Rel_{jk} is teachers' relationship with colleagues scale, P_{jk} is teachers' views on pay, W_{jk} is teachers' views on workload, u_k is school fixed effects, ε_j is a random error term, with standard errors clustered at the school level, j = teacher, k = school.

The intuition behind choosing this selection of controls is that they are each likely to be independently associated with our outcome—teachers' intention to continue working in their existing school. For instance, in the Introduction we noted how standard models of teacher retention focus on four factors (pay, benefits, personal satisfaction and working conditions), with the last of these formed of five dimensions (leadership/management, workload, collaboration, preparation and discipline). The controls included in our model thus recognise the importance of these other factors in determining teachers' future employment plans. Our primary interest is in whether buy-in continues to be associated with teachers' plans to remain in their current school, over and above these other factors (i.e., how teachers feel about their pay, workload, relationships with colleagues, teaching in general). We are also interested in whether the relationship between buy-in and teachers' future employment plans is stronger than for these other aspects of their working conditions.

The parameter of interest from this model is β. This captures the strength of the association between how bought in teachers are to the school strategy (S_{jk}) and whether they would choose to stay working at the school if they were offered the same job elsewhere (R_{jk}). To facilitate interpretation of our results, our covariates and outcome of interest have been standardised to mean zero and standard deviation one. Estimates can hence be interpreted as the standard deviation change in whether the teacher would choose to continue working at the school for each standard deviation increase in how bought in they are to the school strategy.

Five specifications of this model are estimated, illustrating how the strength of the association between buy-in and teachers' future employment plans changes with the addition of controls. In the baseline specification (M0), only our scale of interest (the extent to which each teacher buys into the school strategy, S_{jk}) is included. This provides a baseline understanding of the unconditional association between buy-in and teachers' intentions to continue working at their current school.

Teacher background characteristics (D_{jk}) and school fixed effects are added in model M1, thus illustrating the extent to which such factors confound our baseline results. Note that by controlling for school fixed effects, we effectively account for all between-school variation, including differences in actual strategy. (This is the primary reason why we have chosen to include school fixed effects at an early stage of our modelling process.) The β parameters will capture the association between teachers' retention expectations and their *views* on school strategy, net of any *actual* differences in the direction that leaders are taking the school.

The attitudes of teachers towards teaching and views about pay are added in specification M2. This includes responses to questions such as *Do you pay a lot of attention to how you teach?* and *Do you find teaching a reward in itself?* These are added at this point to control for differences in teachers' general (dis)satisfaction with their job amongst a set of factors that are (arguably) unlikely to have been strongly impacted by their views of the school strategy. They may also help control for the potential confounding influence of teachers' general enthusiasm for their job or survey response style (e.g., individual differences in the tendency to generally use higher or lower parts of the 0–10 response scale).

Similarly, specification M3 adds to the model measures of teacher self-efficacy and the quality of their relationship with their colleagues. The latter, in particular, is likely to be related to whether teachers intend to continue working in their current school. We recognise that these variables may be impacted by teacher buy-in—and thus be part of the mechanism linking buy-in to retention intentions—rather than confounds. This is why we have chosen to add these variables in a later stage of our modelling process, with our main interest being whether buy-in continues to be linked with our outcomes, even over and above these potentially endogenous factors.

Finally, model M4 also adds a control for teachers' perceptions of their workload. We have added this as the final control in our modelling process to recognise its potential endogeneity (e.g., teachers' views of their workload will to some extent be driven by whether they buy into the school strategy). However, our main interest after including this control is whether buy-in continues to be associated with teachers' intentions to continue working at their current school over and above their views on workload.

Hence, by the end of this modelling process, our estimates will capture whether teachers who buy into the school strategy are more likely to want to plan to continue working at their current school than a colleague who does not, even when they work for the same school and have similar views on other aspects of their working conditions, such as pay, relationships with colleagues and workload.

Research question 2

We begin by presenting a cross-tabulation between whether teachers buy into their school's strategy and whether they feel able to voice contrary opinions to their leadership team. Having first restricted the sample to those teachers with low levels of buy-in (scores between 0 and 5), we then estimate the following regression model to explore whether teachers with certain characteristics feel more able to express their views:

$$C_{jk} = \alpha + \beta . S_{jk} + \emptyset . D_{jk} + \varepsilon_j \quad (2a)$$

where C_{jk} is teachers' responses to the question regarding whether they believe they can voice contrary opinions.

Our focus from this model is the relationship between teachers' background characteristics (e.g., gender, age, job role) and whether they feel able to raise contrary views (amongst those who do not buy into the school's strategy). We do not control for any other factor in these models as our interest is in differences across demographic groups in their willingness to voice concerns.

We then extend this model to also include teachers' views on working conditions and various aspects of their job. These variables are added to the model now so that we can explore whether they are independently associated with whether teachers feel able to voice concerns:

$$C_{jk} = \alpha + \beta . S_{jk} + \emptyset . D_{jk} + \delta . TSE_{jk} + \tau . At_{jk} + \theta . Rel_{jk} + \varphi . P_{jk} + \pi . W_{jk} + \varepsilon_j \quad (2b)$$

with all variables defined as for Equations (1) and (2a) above. Our interest is in the δ, τ, θ, φ and π parameters. For instance, amongst teachers who do not buy into the school strategy, do they feel more able to voice such contrary views when they have a better relationship with their colleagues (θ)?

Research question 3

Returning to the model presented in Equation (1), we estimate the following additional specification:

$$R_{jk} = \alpha + \beta . S_{jk} + \vartheta . \text{Voice}_{jk} + \delta . \text{Interaction}_{jk} + \emptyset . D_{jk} + \varepsilon_j \quad (3)$$

where Voice_{jk} is teachers' responses to the question asking about whether they feel able to voice contrary views and all other variables are as outlined above.

Several specifications of this model are estimated. First, we re-estimate the bivariate relationship between teacher buy-in (S_{jk}) and teachers' retention intentions (R_{jk}). The scale capturing whether teachers feel able to voice contrary views (Voice_{jk}) is then added to the model. This is to initially establish whether these two covariates have an additive association with teachers' plans to continue working at the school. We then test for an interaction between buy-in (S_{jk}) and teachers' feelings of whether they can voice concerns (Voice_{jk}) in the third specification, to investigate whether these variables have a multiplicative association with teachers' future employment plans. In other words, is the relationship between buy-in and teachers' intentions to continue working for their current school stronger when they feel unable to voice a contrary view? Finally, a further set of controls are added to the model (school fixed effects and teachers' views on other aspects of their working conditions) to investigate the robustness of the results.

RESULTS

Research question 1

Estimates from the model outlined in Equation (1) are presented in Table 2. Model M0 provides the bivariate relationship between teacher buy-in and intentions to keep working at their current school. There is a clear, strong relationship; each standard deviation increase in teacher buy-in is associated with a 0.50 standard deviation increase in the likelihood they would reject the offer of the same job elsewhere.

School fixed effects and teacher background characteristics are added in specification M1. Interestingly, this leads to almost no change in the results; the strength of the relationship remains virtually unchanged at 0.50. This illustrates how the link between buy-in and retention intentions is not being driven by differences between schools, such as between-school differences in leadership style or the actual strategy that leaders are pursuing. Rather, the relationship is due to variation in views amongst staff working in the *same* school. This may include, for instance, differences across colleagues in their understanding of the school strategy and the extent they personally feel it is the right direction to go.

In model M2, teachers' general attitudes towards teaching and their pay are added as controls. The intuition behind including these measures now is that they will to some extent control for individual differences in teachers' general (dis)satisfaction with their job amongst a set of factors that are (arguably) unlikely to have been strongly impacted by their views on the school strategy.[i] Again, the inclusion of these controls leads to little change in the substantive results. Although the estimated effect size now falls slightly (from 0.50 to 0.42 standard deviations), teacher buy-in remains strongly associated with future employment plans.

There is greater movement in the estimates in model M3 once we have accounted for the relationship that teachers report having with their colleagues and line manager. We note that, rather than being confounders, these factors could be a mechanism via which buy-in influences retention (i.e., a teacher who buys into the strategy may make sure they have a good relationship with their colleagues in order to reach the school's objectives). Nevertheless, even after accounting for this factor, the relationship between teacher buy-in and future employment plans remains substantial (0.27 standard deviations). Moreover, the same continues to hold true in model M4, where teachers' satisfaction with their workload is also added to the model. Together this suggests that teachers who are bought into the school strategy are much more likely to reject outside employment offers compared to colleagues who don't buy into the strategy, even amongst those working in a similar job in the same school, having the same demographic characteristics and who are equally (dis)satisfied with their pay, workload, teaching in general and relationships with their colleagues.

Table 3 extends the insights from model specification M4 by comparing the strength of the relationship between buy-in and future employment plans to other aspects of teachers' working conditions. In particular, Table 3 presents how much more likely teachers are to reject an outside employment offer for each standard deviation increase in the relevant working condition scale (pay, workload and relationship with colleagues).

Out of all these factors, buy-in has the strongest link to teachers' employment plans. Each standard deviation increase in teacher buy-in is associated with a 0.26 standard deviation increase in the likelihood they would reject an outside offer of employment. This is almost twice as strong as the next most important factor (relationship with colleagues), with teachers who have a good relationship with other members of staff being 0.15 standard deviations more likely to plan to continue working at the school. Buy-in also appears to be a more important driver than either workload (0.07 standard deviations) or pay (0.03 standard deviations), with the latter barely having any relationship with intentions to continue working

TABLE 2 The association between a teacher buying into the school leadership's strategy and their intentions to continue working at the school.

(a) Models M0–M2

	M0		M1		M2	
	Effect size	**SE**	**Effect size**	**SE**	**Effect size**	**SE**
Believes in strategy (1 SD increase)	0.50*	0.02	0.50*	0.02	0.42*	0.02
N	2852		2852		2852	
Controls						
Demographics	–		Y		Y	
Attitudes towards teaching	–		–		Y	
Views on pay	–		–		Y	
School fixed effects	–		Y		Y	

(b) Models M3 and M4

	M3		M4	
	Effect size	**SE**	**Effect size**	**SE**
Believes in strategy (1 SD increase)	0.27*	0.02	0.26*	0.02
N	2852		2852	
Controls				
Demographics	Y		Y	
Attitudes towards teaching	Y		Y	
Views on pay	Y		Y	
Teacher self-efficacy	Y		Y	
Relationship with colleagues	Y		Y	
Relationship with manager	Y		Y	
Views on workload	–		Y	
School fixed effects	Y		Y	

Note: The outcome measure is teachers' responses to the question *If you were offered the same job at another school, how likely is it that you would stay at this school?* The covariate of interest is teachers' responses to the question *Do we have a strategy that is taking this school in the right direction?* Figures refer to the standard deviation change in teachers saying they would remain at the school for each standard deviation increase in their belief in the school strategy. Estimates can hence be interpreted in terms of an effect size. SE refers to the estimated standard error.

*Indicates statistical significance at the 5% level.

at the school at all (conditional upon the other factors included in the model). These results are consistent with previous research illustrating how leadership is the strongest workplace factor predicting teacher retention (e.g., Kraft et al., 2016; Sims, 2020).

Research question 2

We now turn to whether staff who are not bought into the school strategy feel able to raise contrary views. Table 4 presents the cross-tabulation between the two variables. Many staff who do not buy into the school strategy also have concerns about raising contrary views. Around a quarter of teachers with low levels of buy-in scored their ability to voice contrary views as between 0 and 2 along the 11-point response scale, with almost 70% returning a score between 0 and 5 (for reference, the mean score reported across all teachers was

TABLE 3 How does teachers' intentions to continue working at their school relate to views on pay, workload, relationships with colleagues and buy-in to their leaders' strategy.

	Effect size	SE
Buy-in to strategy	0.26*	0.02
Good relationship with colleagues	0.15*	0.03
Satisfaction with workload	0.07	0.02
Pay fair	0.03	0.02
Controls		
Demographics	Y	
Attitudes towards teaching	Y	
Teacher self-efficacy	Y	
Relationship with manager	Y	
School fixed effects	Y	

Note: The outcome measure is teachers' responses to the question *If you were offered the same job at another school, how likely is it that you would stay at this school?* Figures refer to the standard deviation change in teachers saying they would remain at the school for each standard deviation increase in the covariate in question. Estimates can hence be interpreted in terms of an effect size. SE refers to the estimated standard error.

*Indicates statistical significance at the 5% level.

TABLE 4 Do teachers who don't buy into the school strategy feel able to voice their concerns?

Feels able to voice concerns	Low buy-in	Moderate buy-in	High buy-in
0. Feels completely unable to voice concerns	9%	1%	0%
1	6%	1%	0%
2	10%	2%	0%
3	11%	5%	1%
4	10%	6%	1%
5	21%	15%	5%
6	8%	11%	4%
7	11%	19%	9%
8	8%	22%	20%
9	2%	9%	20%
10. Feels completely free to voice concerns	3%	8%	40%

Note: Figures are column percentages. Figures refer to teachers' responses to the question *Can you voice a contrary opinion at this school without fear of negative consequences?*, stratified by whether the teacher had low (score 0–5), moderate (score 6–8) or high (score 9–10) belief in the school strategy.

6.5). This points to a risk that when staff are not bought into the school strategy, they may be unwilling to talk to leaders about their concerns.

Table 5 takes this analysis a step further by considering the characteristics of teachers who are more likely to raise contrary views when they have low levels of buy-in (operationalised as those reporting a score between 0 and 5 on the buy-in scale). Panel (a) focuses on teacher background characteristics. There is no difference by age or job role. A modest difference can, however, be observed by gender. In particular, male teachers who do not buy into the school strategy are 0.15 standard deviations more likely to feel able to raise contrary views than their female colleagues, with this difference reaching statistical significance at the 5% level.

TABLE 5 Amongst teachers who don't buy into the school strategy, who is more likely to feel that they can voice concerns?

	Effect size	SE
(a) Demographic characteristics		
Job role (ref: Class Teacher)		
Middle Leader	0.04	0.07
Gender (ref: Female)		
Male	0.15*	0.06
Age (ref: 20–29)		
30–39	0.00	0.11
40–49	0.07	0.09
50+	0.13	0.11
N	806	
(b) Attitudes towards other aspects of job		
Relationship with colleagues	0.20*	0.03
Relationship with manager	0.12*	0.04
View of workload	0.09*	0.04
View of pay	0.04	0.04
Teacher self-efficacy	0.02	0.09
General attitude towards teaching	−0.05	0.04
N	806	

Note: Sample restricted to those teachers who have low levels of buy-in to the school strategy (scored 0–5 in response to the question *Do we have a strategy that is taking this school in the right direction?* Outcome measure is teachers' responses to the question *Can you voice a contrary opinion at this school without fear of negative consequences*?, standardised to mean zero and standard deviation one. Estimates in panel (a) do not include any further controls in the model, other than the residual difference within the group in their views on school strategy. Estimates in panel (b) additionally control for job role, age, gender and school fixed effects.

*Indicates statistical significance at the 5% level.

Somewhat more pronounced differences can be observed in panel (b), where we consider the correlation with other attitudinal factors. Perhaps the clearest evidence is with respect to the relationship teachers have with other members of staff. Specifically, amongst those who do not subscribe to the school strategy, teachers who have a better relationship with their colleagues are 0.20 standard deviations more likely to feel able to voice their concerns. There is then an additional benefit—equivalent to 0.12 standard deviations—if teachers also feel that their manager cares for them as a person. Together, these results are consistent with the broader managerial literature on how organisations can achieve buy-in, where communication between staff has been found to be key (French-Bravo & Crow, 2015; Thomson & Hecker, 2000).

Research question 3

To conclude, Table 6 explores whether teacher buy-in and willingness to voice contrary views have an additive or multiplicative relationship with their intentions to continue working at the school.

Specification M1 includes the main effects for both variables. These are both independently associated with whether teachers plan to continue working at the school, though

TABLE 6 The association between teachers' belief in the school strategy, whether they feel able to voice concerns and intentions to remain working at the school.

	Specification M0		Specification M1		Specification M2		Specification M3	
	Effect size	SE	Effect size	SE	Effect size	SE	Effect size	SE
Believes in strategy (1 SD increase)	0.50*	0.02	0.37*	0.02	0.37*	0.03	0.21*	0.03
Feels able to voice concern (1 SD increase)	–	–	0.21*	0.02	0.21*	0.02	0.08*	0.03
Interaction	–	–	–	–	0.00	0.02	−0.02	0.01
N	2852		2852		2852		2852	

Note: Model specifications M0, M1 and M2 control for job role, age, gender and school fixed effects. Model specification M3 additionally controls for general attitudes towards teaching, views on pay, teacher self-efficacy, relationship with colleagues, relationship with manager and views on teacher workload.

*Indicates statistical significance at the 5% level.

with buy-in being the stronger of the two (0.37 vs 0.21 standard deviations). An interaction between these variables is then added in specification M2. This is small in terms of magnitude and statistically insignificant at conventional levels. Similar results emerge in model M3, where a series of further controls (for teachers' attitudes towards other aspects of their job) are added to the model. Indeed, the interaction term has a negative sign, indicating that—if anything—the importance of teacher buy-in may be slightly *lower* when teachers feel unable to voice contrary views. Nevertheless, on the whole, the results presented in Table 6 point towards buy-in and teachers feeling able to voice contrary views as having an additive, rather than a multiplicative, relationship with teachers' intentions to continue working at their current school.

CONCLUSION

Teachers play a pivotal role in achieving the mission of schools. Unfortunately, in many countries, there continues to be a shortage of high-quality teaching staff. It is therefore vital that leaders retain their top talent, and do not lose key individuals to other schools, or organisations outside the teaching profession. Previous research has highlighted how working conditions are key to teacher retention, with school leadership particularly important (Kraft et al., 2016; Sims, 2020). At the same time, previous work on 'buy-in' from the management literature has shown how this plays a key role in keeping staff motivated, on-task and wanting to keep working for their firm.

This paper has taken the concept of 'buy-in' from the field of management and applied it to an education setting. Our analysis demonstrates how teachers who buy into the school strategy are around 0.3 standard deviations more likely to want to continue working at the school than a colleague who does not, even when they work for the same school and have similar views on other aspects of their working conditions, such as pay, relationships with colleagues and workload. We also illustrate how many staff who are not bought into the school strategy feel unable to voice contrary opinions, particularly when they do not have a strong relationship with their colleagues. Together, this suggests that some leaders may not be hearing the concerns some staff have with their plans.

These findings are consistent with previous research into teacher retention. For instance, Ladd (2011), Kraft et al. (2016), Sims (2020) and Sims and Jerrim (2020) all point

towards leadership being vital to schools retaining their best staff. Our work has added further insight by highlighting the importance of teachers believing in their leaders' strategic plans. Our findings are also in line with research into buy-in outside of education, although this has mostly focused on employee performance and organisational change. However, Hsia (2017) found buy-in to be related to the future employment plans of staff, with our analysis replicating this finding and showing, for the first time, that it holds amongst staff within education settings.

What might school leaders do to increase strategic buy-in amongst staff? Unfortunately, the empirical evidence is somewhat scant. There has only been limited previous research into the correlates of buy-in, with many of these conducted in other industries (e.g., French-Bravo & Crow, 2015; Hubbart, 2023). However, the general view from the existing literature is that communication is key (Errida & Lotfi, 2021). Increasing buy-in amongst staff into the leadership team's vision is likely to involve winning a battle of hearts and minds, particularly if this involves the introduction of bold initiatives or significant organisational change. Teachers should thus feel able to talk to senior leaders openly about their views, particularly when they have concerns, so that leaders can hopefully bring them 'on board'.

This does, of course, assume that staff have an accurate understanding of what the strategy of their school is in the first place. Yet, as Hsia (2017, p. 17) notes, 'it is often the case that employees are unaware of their organization's strategy', pointing towards evidence from Kaplan and Norton (2005) who found that 95% of employees in large corporations do not know—or do not understand—their organisation's strategy. Although we do not currently know the extent to which this holds true amongst teachers within schools—or indeed within groups of schools such as academy chains in England—it is nevertheless clear that the first step to getting education staff to buy into their leader's strategy is that they know and understand what this strategy is. Leaders should not take this for granted, and may thus wish to monitor both intellectual buy-in (understanding of the strategy) and emotional buy-in (belief that the strategy is the correct one) over time.

We recognise that there are also limitations with our work. First, our empirical analysis has focused on measures of teachers' future employment intentions (what they *say* they would do) rather than actual decisions made. Although such measures have been widely used in the teacher retention literature (e.g., Ladd, 2011; Van den Borre et al., 2021), we recognise that the evidence could—and should—be made stronger in the future by directly linking buy-in to teacher retention. Second, it has been beyond the scope of this paper to investigate the drivers of buy-in, and how buy-in changes over time. Indeed, few studies have presented such a longitudinal analysis of buy-in in any organisational setting (not just education), making this area ripe for future work. Third, we have analysed cross-sectional rather than longitudinal data, thus making causation hard to establish. Our estimates are hence best interpreted as conditional associations, rather than establishing cause and effect.*

Finally, and perhaps most importantly, there are some limitations with how buy-in has been measured in this paper. Returning to the conceptual model of Grebing et al. (2023), our measure of buy-in relates to the 'belief' component of individual teachers, with this not fully capturing other dimensions of buy-in such as self-efficacy and commitment to action, or to collective buy-in amongst staff as a whole. Likewise, our use of a single question does not allow us to distinguish between Thomson et al.'s (1999) concepts of 'intellectual' versus 'emotional' buy-in. We have therefore been unable to investigate the extent to which our results may be due to some teachers not really knowing what the school strategy is, or properly understanding it. Further iterations of the survey should seek to address this issue, by measuring buy-in amongst teaching staff in greater depth and breadth.*

It is therefore clear that further research is needed to develop a better understanding of buy-in amongst teaching staff, and how leaders can then utilise this information to help

retain their best teachers. At the same time, we believe there is sufficiently promising evidence to suggest that school leaders may look to systematically track how bought in their staff are to their strategic plans. This will help management to better understand whether staff are becoming more or less in tune with the strategic direction of the school over time, how this differs across groups (e.g., junior vs more senior staff; those working in different departments) and how the level of buy-in responds to major events (e.g., a change in inspection judgements; arrival of a new headteacher). Such data may also help leaders understand what they can do to further improve buy-in of staff into their plans, and the efficacy of attempts they make to do so.*

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CONFLICT OF INTEREST STATEMENT
The author declares no conflict of interest.

DATA AVAILABILITY STATEMENT
The data that support the findings of this study are from The Engagement Platform (TEP). The paper is a secondary data analysis of the data TEP has collected. Restrictions apply to the availability of these data.

ETHICS STATEMENT
This research was conducted under BERA ethical guidelines.

ENDNOTE
[i] They will also to some extent control for inter-individual differences in response style (e.g., some teachers continually using either the upper or lower part of the scale).

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APPENDIX A

A.1 | Distribution of responses to the question *Do we have a strategy that is taking this school in the right direction?*

Response	Percent
0 (low)	1%
1	1%
2	3%
3	5%
4	6%
5	12%
6	11%
7	15%
8	20%
9	11%
10 (high)	15%

APPENDIX B

Alternative estimates using response to the question *Do you see yourself still working at this school in 2 years' time?*

Table B1 The association between a teacher buying into the school leadership's strategy and whether they intend to keep working in the school.

(a) Models M0–M2

	M0		M1		M2	
	Effect size	SE	Effect size	SE	Effect size	SE
Believes in strategy (1 SD increase)	0.49*	0.02	0.52*	0.03	0.44*	0.03
N	2852		2852		2852	
Controls						
Demographics	–		Y		Y	
Attitudes towards teaching	–		–		Y	
Views on pay	–		–		Y	
School fixed effects	–		Y		Y	

(b) Models M3 and M4

	M3		M4	
	Effect size	SE	Effect size	SE
Believes in strategy (1 SD increase)	0.29*	0.03	0.28*	0.03
N	2852		2852	
Controls				
Demographics	Y		Y	
Attitudes towards teaching	Y		Y	
Views on pay	Y		Y	

(b) Models M3 and M4				
	M3		M4	
	Effect size	SE	Effect size	SE
Teacher self-efficacy	Y		Y	
Relationship with colleagues	Y		Y	
Relationship with manager	Y		Y	
Views on workload	–		Y	
School fixed effects	Y		Y	

Note: The outcome measure is teachers' responses to the question *Do you see yourself still working at this school in 2 years' time?* The covariate of interest is teachers' responses to the question *Do we have a strategy that is taking this school in the right direction?* Figures refer to the standard deviation change in teachers saying they would remain at the school for each standard deviation increase in their belief in the school strategy. Estimates can hence be interpreted in terms of an effect size. SE refers to the estimated standard error.

* Indicates statistical significance at the 5% level.

Table B2. How teachers' intentions to keep working at their school relate to their views on pay, workload, relationships with colleagues and buy-in to their leaders' strategy.

	Effect size	SE
Buy-in to strategy	0.28*	0.03
Good relationship with colleagues	0.20*	0.03
Satisfaction with workload	0.07*	0.02
Pay fair	0.00	0.02
Controls		
Demographics	Y	
Attitudes towards teaching	Y	
Teacher self-efficacy	Y	
Relationship with manager	Y	
School fixed effects	Y	

Note: The outcome measure is teachers' responses to the question *Do you see yourself still working at this school in 2 years' time?* Figures refer to the standard deviation change in teachers saying they would remain at the school for each standard deviation increase in the covariate in question. Estimates can hence be interpreted in terms of an effect size. SE refers to the estimated standard error.

* Indicates statistical significance at the 5% level.

Table B3 The association between teachers' belief in the school strategy, whether they feel able to voice concerns and intentions to remain working at the school.

	Specification M0		Specification M1		Specification M2		Specification M3	
	Effect size	SE	Effect size	SE	Effect size	SE	Effect size	SE
Believes in strategy (1 SD increase)	0.52*	0.03	0.39*	0.03	0.38*	0.03	0.22*	0.03
Feels able to voice concern (1 SD increase)	–	–	0.22*	0.02	0.22*	0.02	0.09*	0.02
Interaction	–	–	–	–	−0.01	0.02	−0.03	0.02
N	2852		2852		2852		2852	

Note: Model specifications M0, M1 and M2 control for job role, age, gender and school fixed effects. Model specification M3 additionally controls for general attitudes towards teaching, views on pay, teacher self-efficacy, relationship with colleagues, relationship with manager and views on teacher workload.

* Indicates statistical significance at the 5% level.

APPENDIX C

C.1 | Pearson correlation between the continuous measures used in the analysis.

	Teacher buy-in	Intend to continue working at school	Attitudes towards teaching	Views on pay	Teacher self-efficacy	Relationship with colleagues	Relationship with manager	Workload
Teacher buy-in	–							
Intend to continue working at school	0.50	–						
Attitudes towards teaching	0.36	0.26	–					
Views on pay	0.42	0.32	0.23	–				
Teacher self-efficacy	0.54	0.41	0.56	0.24	–			
Relationship with colleagues	0.54	0.47	0.37	0.43	0.46	–		
Relationship with manager	0.42	0.39	0.21	0.38	0.27	0.60	–	
Workload	0.46	0.35	0.33	0.46	0.36	0.41	0.35	–

Note: Darker shading refers to stronger correlations.