

# How do views of working conditions vary across school staff?

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## Abstract

There has been much recent interest in working conditions in schools. Yet most existing studies are based upon samples of teachers, without capturing the views of other members of staff. This is despite individuals in non-teaching roles (teaching assistants, office staff, pastoral care) accounting for around half of England's school employees and who make a considerable contribution to the work environment shared amongst staff. The present paper therefore presents new evidence on how working conditions compare across different staff groups. We find that, while workload is the fundamental issue facing teachers, pay is a relatively more important amongst teaching assistants, pastoral workers and office staff. The strong association between the views of those in teaching and non-teaching roles within the same school nevertheless means that samples comprised of only teachers are likely to be a reasonable proxy for the school working environment as a whole. Senior leaders are also found to be consistently more positive about working conditions than the staff they employ.

**Key Words:** School working conditions, teachers, teaching assistant.

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## **1. Introduction**

Staff – including, but not limited to, teachers – are the most important resource available to any school. It is through their hard work and dedication that young people develop the cognitive and socio-emotional skills they need to succeed in later life. Yet, for school staff to succeed in this role, they need to have the right working conditions, including a positive, collegiate working environment. Indeed, previous research has suggested that the work environment – including having a strong and supportive leadership team – is vital for staff retention (Sims, 2020). This has consequently led to renewed interest across the education sector in understanding working conditions within schools (Ladd, 2011; Kraft et al., 2021; Ravalier & Walsh, 2018) and the steps that can be taken to help improve collective staff morale (Benti & Tarekegne, 2022; Pressley et al., 2023).

A notable limitation with existing evidence on school working conditions – and general workplace environment - is that most studies exclusively focus upon the views of teachers alone. Yet schools employ a wide variety of staff; in England, around half of all school staff are employed in non-teaching roles (Department for Education, 2023). This encompasses teaching assistants, administrators and those providing pastoral support, each of whom plays a vital role in the efficient operation of schools. Their working conditions – and retention – matter too. They also contribute to the overall work environment at a school, including the general atmosphere collectively shared amongst staff. To draw an analogy, it would be almost unthinkable to measure the shared work environment within hospitals through a survey of doctors alone, ignoring the views of (for instance) nurses and physios. Analogously, if one ignores the views of non-teaching staff – e.g. by only surveying teachers – then key aspects of the shared working environment may be missed.

This paper considers this issue in detail. Our analysis explores how views of working conditions - and the overall workplace environment - varies across different members of school staff, including teachers, teaching assistants, administrators and senior leaders. We also consider whether samples comprised of only teachers provides a reasonable proxy for the work environment that is shared across the entire body of school staff. In doing so, the paper provides important new evidence on issues surrounding working conditions within England's schools that have otherwise gone largely ignored.

### The importance of the work environment for employees and organisational outcomes

A wide array of research outside of education – both theoretical and empirical – has highlighted the importance of working conditions (and organisational climate more generally) for staff. A prime example is Herzberg’s two-factor theory of motivation-hygiene (Herzberg, 2017). This postulates two broad sets of factors that impact the job satisfaction of staff. The first are “motivational” factors, encompassing the challenges of the work, opportunities for progression, recognition for achievements and the associated pay and benefits. The second – which are of particular relevance to this paper – are “hygiene” factors, including relationships between colleagues, leadership quality and working conditions more broadly defined. Such factors – in Herzberg’s model – cannot lead an employee to be satisfied in their job. However, the absence of these hygiene factors can lead to dissatisfaction amongst staff. One particularly important hygiene factor is the collective workplace environment shared across employees (Ostroff et al., 2013). There are, for instance, likely to be peer effects in the workplace (Falk & Ichino, 2006; Banerjee & Srivastava, 2019), where disgruntled coworkers can make their colleagues unhappy as well.

This has led to much interest within the organisational management literature into how workplace climate and culture – i.e. aspects of the working environment shared across staff – impact employee performance and outcomes (e.g. staff retention). For instance, Tumen & Zeydanli (2016) use two data sources from the United Kingdom to show how the average level of job satisfaction amongst employees at a firm is associated with higher levels of job satisfaction amongst individual workers. In other words, they find that organisations with a more positive workplace climate have more satisfied employees. In a meta-analysis of 160 studies, Chiaburu & Harrison (2008) find that coworkers perceptions of the work environment matter for a broad spectrum of employee outcomes, including job satisfaction and organisational commitment. Carr et al. (2003) find that organisation-level aspects of workplace culture impacts employee job performance, organisational commitment, and wellbeing. Based upon data from 129 supermarkets, Mayer et al. (2009) report that organisational climate is related to higher levels of consumer satisfaction. Obeng et al. (2021) note how organisational climate is associated with the passion workers show for their job, with this partially mediating the relationship with job satisfaction.

Given this interest in the working environment stemming from the management literature, it is perhaps of little surprise that there has been extensive research applying these ideas within education settings as well. Indeed, a wide array of empirical research has found the working

environment within a school to be linked to an important array of staff and student outcomes. For instance, in an analysis of the 2011 Trends in Mathematics and Science Study (TIMSS), Reeves et al. (2017) found that, in Japan, teacher collaboration (in the form of sharing teaching experiences amongst colleagues) was positively associated with teacher confidence. Ismail et al. (2022, p. 261) argue that their empirical analysis shows how a “*positive and collaborative school culture enhances school effectiveness*”. Reviewing the evidence on collegiality amongst teachers – an important component of the work environment – Shah (2012) reports how it plays a vital role in developing teacher job satisfaction, organisation commitment and school quality. In an analysis of teachers in Germany, Dreer (2022) illustrates how there is a positive association between the workplace environment and teacher wellbeing. Christensen (2022) reports how professional learning communities – i.e. a school-level measure of collaboration amongst teaching staff – is associated with teacher job satisfaction in Sweden and Norway.

The aforementioned literature illustrates how a wide range of research – spanning across education and management– has found organisational (school) climate to have important implications for staff. In particular, organisations with a more positive climate tend to have more satisfied, committed employees, resulting in higher levels of employee performance.

### Research questions

Despite this important array of prior research, there remains an important, underexplored issue. Namely, almost all existing studies measure school working environments based solely upon samples of teachers, with the perspective of other staff members effectively ignored. In doing so, existing studies implicitly assume that measures of the work environment captured through teachers acts as a good proxy for the environment that is shared – and contributed to - by all staff. But is this a reasonable assumption to make? We are aware of little prior research to have scrutinised this issue in detail or, indeed, to more generally explore how views of working conditions vary across different groups of school employees.

This paper seeks to address this issue by answering four research questions. We begin by documenting how different school staff – e.g. teachers, teaching assistants, pastoral support – differ in their views of their working conditions. This encompasses several of the “hygiene” and “motivational” factors within Herzberg’s model, including workload, relationships with colleagues and opinions of the school’s leadership:

- Research question 1. How do views of working conditions and the school environment vary across teaching and non-teaching staff?

We then turn to comparisons of working conditions across schools. For instance, in schools where teachers feel less satisfied with an aspect of their working conditions (e.g. quality of school leadership) do non-teaching staff feel the same way? This is important as it will help reveal whether the same schools are identified as having “better” or “worse” working conditions (and general workplace environment) regardless of whose perspective (teaching versus non-teaching staff) is used. Our second research question tackles such matters by asking:

- Research question 2. To what extent do teaching staff and support staff working in the same school hold similar views about the school working environment?

Third, our analysis considers the extent that the views of teachers provide a reasonable proxy for the views of all staff employed by the school. This is important as it will provide insight into whether measures of the shared working environment captured in other school surveys (e.g. the Organisation for Economic Co-Operation and Development’s Teaching and Learning International Survey - TALIS) mismeasure organisation level attributes by only capturing the views of teachers. We not only consider whether this is the case on average, but also variation in responses as well. Thus, in summary:

- Research question 3. How well is the whole workplace (school) environment proxied by the views of teachers alone?

Finally, we turn to differences in views of the working environment between school leaders and more junior members of staff. This is important for at least two reasons. First, it will reveal the extent that school leaders share the same view as their staff. For instance, do senior leaders believe that strong behaviour management policies are in place - but their staff do not feel the same way? Second, one alternative way of measuring working environments in schools is to survey headteachers, as is done by the OECD as part of its Programme for International Student Assessment (PISA) study. But do responses provided by headteachers really capture important aspects of the work environment as experienced by their staff? Our final research question provides new evidence on such matters by asking:

- Research question 4. How do views of the working environment compare between school leaders and teachers?

## 2. Data and methodology

The data source used in this paper stems from The Engagement Platform (TEP) - <https://www.tep.uk/>. This is an online tool used in a selection of England’s schools to measure staff engagement. These data were collected in November 2023, when a total of 91 schools participated. An important aspect of TEP is that it measures the attitudes and engagement of all school staff – not just teachers. Thus, in total, 2,249 teachers, 725 school leaders, 489 office staff, 1,268 teaching assistants, 134 facilities staff, 511 pastoral support workers and 330 with other roles completed the survey. As Table 1 illustrates, overall response rates varied across different groups of staff, ranging from 86% for middle leaders to just over half of pastoral and facilities staff. These response rates are high compared to most other studies of school staff in England, which often fall below 40% (Jerrim, 2023). Nevertheless, we have created a set of response weights to adjust estimates for non-response in terms of observable background characteristics<sup>2</sup>. Table 2 provides further information on the background characteristics of participating schools, illustrating how the participating sample compares to the broader population.

<< Table 1 >>

<< Table 2 >>

The TEP survey asked staff about various aspects of their job and – more broadly – the work environment. These were all answered on a 0 to 10 scale, with 10 referring to more positive responses. We focus on nine survey questions covering the following issues:

1. Quality of leadership (*“The leaders and managers in this school communicate effectively about what is happening”*)
2. Relationship with colleagues (*“I feel part of a team at this school”*)
3. Workload (*“I feel happy about my work-life balance”*)
4. Inclusion (*“People, regardless of race, gender, sexual orientation, religion, age, or social background, have equal opportunities and support to succeed at this school”*)
5. Remuneration (*“I believe my total compensation (e.g. including both pay and other benefits) is fair, relative to those with similar responsibilities and experience within this school”*)

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<sup>2</sup> These weights were created using a logistic regression model, with whether the individual responded or not as the outcome, and job role, age, gender and length of employment at the school as covariates. The response weights were then created as the reciprocal of the predicted probability of response.

6. Professional development (*“I am given opportunities to develop skills relevant to my role and interests”*)
7. Wellbeing (*“I feel physically and mentally well enough to succeed in my job”*)
8. Resources (*“I have the resources and equipment that I need to do my job effectively”*)
9. Overall satisfaction in their job (*“Overall, how satisfied are you working at this school?”*)

The distribution of responses to these questions across the full sample can be found in Appendix A. At times within our analysis, we standardise responses to these questions to mean zero and standard deviation one, to aid interpretation of results.

We draw upon the responses of school staff to these nine questions to address our four research questions. With respect to research question 1, we compare the average response (mean score) provided by different staff groups. This is complemented by estimation of OLS regression models which compare the responses of teachers (reference group) to other members of school staff, controlling for a selection of background characteristics (age, gender, length of tenure at the school) and school fixed effects. These results hence provide an initial descriptive overview of how different groups of school staff vary in their perceptions of their working conditions.

When addressing research question 2, school-level averages of the responses to the nine questions are compared across teaching and non-teaching staff. Our focus is upon the school-level correlation, with a selection of the results also displayed in a scatterplot. This together illustrates the level of agreement regarding various working conditions in each school across teaching and non-teaching staff. We are particularly interested in whether schools that appear to have a positive work climate from the perspective of one group (e.g. teachers) continue to do so from the perspective of other groups (e.g. non-teaching staff).

A similar approach is used to answer research question 3. Now, however, we compare measures of the school working environment based upon (a) just the views of teachers to (b) views of all staff within the school. If there is a strong correlation between (a) and (b), then the former can be said to be a good proxy for the latter. As noted in the introduction, establishing the strength of this correlation is important as it will reveal whether samples comprised only of teachers are reflective of the working environment shared amongst (and contributed to) all members of staff.

Finally, we turn to how views of working conditions compare between teachers and school leaders. When doing so, we focus on questions that specifically ask about school-wide matters

(e.g. whether school systems and policies are effective) rather than questions about individuals own situations (e.g. whether they view their own pay as fair). This includes (1) and (4) in the nine questions outlined above, accompanied by three other questions asked as part of TEP:

- *I think that there are effective systems for managing pupil behaviour in this school.*
- *At this school there are policies and ways of working that support the physical and mental wellbeing of its staff.*
- *This school actively seeks employee input.*

### **3. Results**

Research question 1. How do views of working conditions and the school environment vary across teaching and non-teaching staff?

Table 3 illustrates how different groups of school staff feel about various aspects of their working conditions and the workplace environment. Standardised mean scores are presented in panel (a) with OLS regression estimates (with class teachers as the reference group) provided in panel (b). Green shading in these tables indicate more positive responses.

#### **<< Table 3 >>**

It becomes immediately clear that different members of school staff have rather different concerns. Out of the nine areas considered, the biggest difference across groups occurs with respect to workload. Class teachers and middle leaders hold particularly negative views, with the regression estimates in panel (b) putting their workload scores more than 0.6 standard deviations lower than teaching assistants, pastoral support workers and administrative staff. In contrast, the key issues faced by teaching assistants is pay; this group are much less likely to believe that their remuneration is fair, relative to other employees at the school. Indeed, the regression results in panel (b) indicate that teaching assistants' views of their pay are around half a standard deviation lower than teachers, and a quarter of a standard deviation lower than pastoral support and office staff. Teaching assistants generally positive views regarding their workload and wellbeing are hence somewhat offset by their dissatisfaction towards pay. It is also notable that they are also less satisfied with their professional development opportunities than most other groups.

A broadly similar pattern emerges for office and pastoral support staff. These employees are generally amongst the most positive about their working conditions. This is particularly true for how they view communication from leadership, their workload, wellbeing and having



access to adequate resources. However, much like teaching assistants, office and pastoral support staff are more likely to feel underpaid (compared to teachers). The remaining group – facilities staff – appear to be amongst the most negative about communication from school leadership, their professional development opportunities and the relationships they have with their colleagues. The small sample size for this group means, however, some caution is needed when interpreting this result, with only their scores on the professional development scale being significantly lower than for teachers (and, even then, only at the 10% level).

The final point of note from Table 3 are the significant differences in overall levels of job satisfaction, as illustrated by the column on the far right. Specifically, it is notable how class teachers are the least satisfied in their job out of any group. While the difference compared to middle leaders and teaching assistants is relatively small (around 0.1 standard deviations), the gap between class teachers and office/pastoral staff is more substantial (around 0.35 standard deviations). Together, Table 3 thus highlights how school staff in different roles hold rather different views – on average - of their working conditions, with certain issues (e.g. pay, workload) being of greater concern to some groups than others.

Research question 2. To what extent do teaching and non-teaching staff - working in the same school - hold similar views about the working environment?

Whereas Table 3 considered differences on average, we now turn to the consistency of the views expressed by teaching versus non-teaching staff working at the same school. For instance, in schools where teachers feel overworked – or that their leadership team doesn't communicate effectively – are non-teaching staff more likely to feel the same way? The school-level correlations between the views of teaching staff (encompassing class teachers and middle leaders) and non-teaching staff (encompassing teaching assistants, office staff, facilities staff and pastoral support) are reported in the middle column of Table 4. This is supplemented by Figure 1, which presents scatterplots for two of the outcomes – (a) workload and (b) relationships with colleagues.

<< **Table 4** >>

<< **Figure 1** >>

Most of the correlations reported in the middle column of Table 4 are relatively strong. This indicates that – in most cases – teaching and non-teaching staff hold reasonably similar views about their working conditions and the school environment. Take whether the leadership team

communicate effectively, for instance. With a correlation of 0.63, it generally seems to be the case that – in schools where teachers feel leaders communicate effectively – support staff are more likely to feel the same way. Likewise, a similar finding emerges regarding relationships between colleagues, as illustrated by Figure 1 panel (b). This demonstrates how, in schools where teachers feel part of a team, non-teaching staff tend to feel part of a team as well (correlation = 0.59).

There are, however, a small number of areas where the correlation between the views of teaching and non-teaching staff are markedly lower, such as workload (0.25) and pay (0.37). A scatterplot of the former is presented in Figure 1 panel (a), with two key aspects of this graph standing out. First, almost all the data points (each referring to a single school) sit above the dashed 45-degree line. This reiterates a finding from the previous sub-section; in almost every school in the sample, teaching staff are (on average) less satisfied with their workload than non-teaching staff. Second, unlike the results for relationships between staff in panel (b), there is no clear and obvious pattern to the cloud of data points. For instance, it is not usually the case that, in schools where teaching staff are dissatisfied with their workload, non-teaching staff are as well. Indeed, there are clear cases of schools where teachers feel rather unhappy about their work-life balance, but non-teaching staff do not (e.g. the data point in the top-left corner of Figure 1 panel a).

Thus, the answer one reaches for research question 2 to some extent depends on the specific aspect of the work environment being measured. For most areas, teaching and non-teaching staff hold reasonably similar views. There are some however – most notably pay and workload – where there is greater discrepancy.

### Research question 3. How well is the whole workplace environment proxied by the views of teachers alone?

Next, we turn to how well samples comprised only of teachers are able to proxy the views of all staff within the school. This is a function of (1) the level of agreement on working conditions across teaching and non-teaching staff (as reported in the sub-section above) and (2) the proportion of a school's workforce operating in non-teaching roles. Our main results for this research question are presented in the right-hand column of Table 4. This provides the school-level correlation for each working condition when it is based upon (a) only the views of teachers versus (b) all staff working in the school. These results are supplemented by Figure 2, illustrating the results for workload and relationships between colleagues.

<< **Table 4** >>

<< **Figure 2** >>

Overall, Figure 2 and Table 4 suggest that samples including only teachers are likely to act as a reasonable good proxy for the views of all staff working in a school. The correlation between the teacher-only and all-staff measures reported in Table 4 are consistently strong, reaching ~0.9 for views on leadership and overall levels of job satisfaction. Moreover, Figure 2 panel (b) presents a very clear positive association for relationships between colleagues, demonstrating how it is reasonable to conclude that staff in a school generally feel part of a team (or not) even if only teachers are included in the survey. The weakest correlation in the right-hand column of Table 4 is again for workload, where the results – as illustrated in Figure 2 panel (a) - are somewhat more nuanced. While the absolute value of the correlation remains relatively high (0.75) – and thus the rank ordering of schools across the teacher-only and all-staff measures remains broadly stable – there is a non-trivial difference in the level (i.e. most points sit above the 45-degree line). That is, a measure based upon teacher-only reports is likely to overstate (on average) concerns about workload across school staff as a whole. Nevertheless, in relative terms, estimate based upon samples only including teachers will act as a reasonable proxy for schools where workload is generally more or less of a concern.

Thus far, we have focused on the consistency of average scores. However, one may also be interested in the diversity (variation) in responses. In particular, when including non-teaching staff in the sample, does this increase the heterogeneity in the views expressed? These results are presented in Table 5 and Figure 3, the latter focusing on pay and workload. These investigate how the spread (standard deviation) of responses within schools compare across all-staff versus teacher-only samples.

<< **Table 5** >>

<< **Figure 3** >>

The findings for most working conditions again generally paint an optimistic picture. The correlation coefficients mostly sit between ~0.7 and ~0.8, demonstrating how the spread of responses provided by teachers within a school provides quite a good approximation to the spread across all members of staff. This is illustrated by the results for workload in Figure 3a (correlation = 0.68), where the variation in teacher responses generally provides a good approximation for the variation across all staff employed by the school (though with a handful

of notable outliers). The only clear exception are the results for pay – presented in Figure 3b – where the correlation is somewhat lower (0.47). In this instance, the spread is generally wider once non-teaching staff are added to the sample (i.e. most data points fall above the 45 degree line), with quite large swings in the spread of responses obtained from some schools. This likely reflects the fact that – in some schools – teaching and non-teaching staff hold markedly different views about the fairness of their pay, thereby increasing the diversity observed in their sample.

Nevertheless – outside the important exceptions discussed above – our overarching response to research question 3 is positive. That is, samples formed only of teachers tend to provide a good approximation to the views of the wider body of school staff, and thus the working environment more generally.

Research question 4. How do views of the working environment compare between school leaders and teachers?

To conclude, we focus upon discrepancies in views of the working environment expressed by teachers and leaders. Table 6 presents the school-level correlation between the survey responses of leaders and teachers (middle column) and between leaders and non-teaching staff (right hand column).

**<< Table 6 >>**

The estimated correlations are generally moderate to low, sitting around 0.5 with respect to the views of teachers and leaders and 0.3 for leaders and auxiliary staff. Take, for instance, the statement “*People, regardless of race, gender, sexual orientation, religion, age, or social background, have equal opportunities and support to succeed at this school*”. Schools where leaders are more likely to agree with this statement are not necessarily the ones where teaching (correlation = 0.43) and non-teaching (correlation = 0.27) staff concur. In other words, the picture that emerges differs substantially depending upon whom the information is drawn from.

Figure 4 highlights a further discrepancy between teacher and school leader reports; almost all data points (schools) sit above the 45-degree line. In other words, leaders are much more likely to believe that they actively seek staff input (panel a) and that they communicate effectively (panel b) than the individuals they employ. The same holds true with respect to leaders and staff views regarding the efficacy of behaviour management systems, policies to support wellbeing and the extent the school promotes equality of opportunity (see Appendix B). Similar

results are obtained across most schools in the sample, suggesting that school leaders may generally be overconfident in the functioning of their school.

<< **Figure 4** >>

Our overarching answer to research question 4 is hence that leaders tend to be much more positive about the working environment than their staff, though with the magnitude of the difference in views varying substantially across schools. This leads one to question the validity of measuring the school environment using information reported by school leaders alone.

#### **4. Conclusions**

A wide array of research from the management literature has highlighted the importance of working conditions for staff, including measures of organisation-wide culture and climate (Ostroff et al., 2013). Related issues have also been explored in the education literature, with working conditions – and measures of the school working environment – found to predict a range of important outcomes, such as teacher retention (Ladd, 2011; Sims, 2021; Sims & Jerrim, 2020). Yet a notable feature of existing research is that measures of working conditions and the work environment within schools has almost entirely been based upon samples of teachers. While obviously an important group, this has meant that the perspectives of other staff members have often been ignored. This is despite the fact that around half of the staff schools in England employ are not working in a teaching role. Consequently, by focusing upon samples comprised only of teachers, previous studies – and most routine data collections – may not adequately capture important aspects of schools as a workplace.

The primary contribution of this paper has been to present results from one of the first large-scale quantitative investigations into how views of working conditions vary across staff in England's schools. In doing so, the research has established the level of consistency in the views of teachers, leaders and non-teaching staff, and how well samples formed only of teachers are likely to proxy the working environment across schools as a whole.

Our results have illustrated how school staff occupying different roles have – on average – rather different concerns. The greatest difference in views is with respect to workload, which is a much bigger issue for teachers than for other staff groups. In contrast, while teaching assistants are much happier about their work-life balance and wellbeing, they tend to feel underpaid. However, we do find that in schools where teachers report being more satisfied with their working conditions, non-teaching staff tend to do as well (with the notable exception of workload). This reasonably high degree of consistency means that samples comprised only of

teachers acts as a sufficiently good proxy for working conditions across school employees as a whole.

The results with respect to school leaders are a different matter. Those in-charge of schools tend to be much more positive about working conditions than the staff they employ. There are also only low levels of consistency across leader and staff views; those where staff express the greatest concern about the work environment are often not the one's where leaders feel the same. Such divergence between leader and staff perspectives of key aspects of the work environment is clearly an area where further research is needed.

In many ways, these findings are consistent with many aspects of the existing evidence base. For instance, it has long been known that workload is a major concern amongst England's teachers (Towers et al., 2022; Allen et al., 2021), though with our results illustrating how this is less of an issue for non-teaching staff. Likewise, previous research has documented the low pay of teaching assistants and how this might undermine the recruitment of high-quality candidates to these roles (Hall & Webster, 2023). While we are aware of little prior research explicitly comparing views of working conditions across teaching and non-teaching staff, our finding that school leaders may be over-optimistic in their assessment of the workplace has some support from the international literature. In particular, Veletic et al. (2023) noted how school leaders surveyed as part of the OECD TALIS study tended to provide more positive responses about the school climate than teachers within the same school. The overconfidence expressed by school leaders may therefore not be an issue that England is experiencing alone.

The following limitation should be noted, however, when interpreting our results. First, although overall response rates in the sample were high compared to most teacher surveys (Jerrim, 2023) levels of non-response were somewhat higher amongst some groups of non-teaching staff (recall Table 1). While we have adjusted our estimates using response weights, differential attrition may still be having some impact on our results. Second, some potentially interesting issues are not covered within the data available. For instance, Sims (2021) investigated the issue of "compliance", measured via questions such as "*I am expected to do things solely for the purpose of generating evidence*". It would be interesting for future research to explore how responses to such questions vary across staff occupying different roles, how this varies across schools, and the extent that it correlates with perceptions of workload. Finally, the data we have analysed are cross-sectional, focusing on staff views at a single point in time. It is possible that different results could occur at different points in the academic year (e.g. if

certain groups of staff become more despondent about working conditions as the academic year progresses). We are also unable to investigate what the implications of our findings are for staff and student outcomes (e.g. when leaders are much more positive about working conditions in the school than teachers, are the latter more likely to leave their jobs)?

Despite these limitations, there remains some important implications stemming from our research. In particular, our findings are generally encouraging for studies that measure school-level attributes of the work environment based solely upon samples of teachers. This is likely to provide a good proxy for the work environment shared across all staff at the school, particularly in distinguishing between those that are “better” and “worse” places to work. At the same time, it has also demonstrated the need for policymakers and school leaders to appreciate the heterogeneity of views that exist across staff in different roles. We also advise researchers to exercise caution in interpreting results about work environments based only upon information reported by management (i.e. school leaders). The Programme for Student Assessment, for example, asks headteachers various questions about whether student behaviour hinders instruction within the school. Our analysis has highlighted how rather different views may be expressed in response to such questions across senior and more junior members of staff. This then leads one to question whether analyses based upon management-reported views of the organisational climate are likely to be sufficiently robust.

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**Table 1. Survey response rates by staff characteristics**

<b>Variable</b>	<b>Group</b>	<b>Response %</b>	<b>N respondents</b>
Job role	Middle Leader	86%	490
	Senior Leader	82%	725
	Class Teacher	76%	2,249
	Office Staff	73%	489
	Teaching Assistant / Learning Support	73%	1,268
	Other	57%	330
	Facilities Staff	52%	134
	Pastoral Support	51%	511
Age group	16 – 24	61%	420
	25 – 34	72%	1618
	35 – 44	74%	1906
	45 – 54	72%	1460
	55+	59%	1092
Length of employment	Under 1 year	66%	1,134
	1 to 2 years	68%	1,744
	3 to 5 years	72%	1,398
	6 to 10 years	70%	1,235
	11 to 20 years	70%	618
	Over 20 years	71%	175
Gender	Female	70%	4,941
	Male	66%	1,556

**Notes:** Figures refer to the percent of all staff that provided a response.

**Table 2. The characteristics of participating schools compared to the broader school population (November 2023)**

	<b>In sample</b>	<b>National figures</b>
% EAL pupils	19	17
% ever FSM	31	27
% EHC plan	3	10
% SEN support	15	13
% secondary	57%	26%
Average progress 8 score	-0.20	-0.19
Average attainment 8 score	42.3	39.7
% pupil absence	9	7
% pupil persistent absence	26	21
% teachers taking absence	64	65
Average days sick all teachers	6.5	6.1
Average teacher salary	£43,515	£42,330
% teachers on leadership range	14	17
Pupil : qualified teachers ratio	19.8	19.6
Pupil : all teachers ratio	19.2	19.2
Pupil : adult ratio	12.3	10.8

**Notes:** The “in sample” group refers to the schools in our analytic sample. National figures refer to the average values across England amongst schools not in the sample. Figures based upon schools where data is available for the relevant variable.

**Table 3. Differences in views of working conditions across staff groups**

(a) Average standardised scores

	Leadership	Relationships	Workload	Diversity & inclusion	Pay	Professional development	Wellbeing	Resources	Overall satisfaction
Office Staff	0.12	0.02	0.38	0.13	-0.06	0.04	0.25	0.32	0.19
Pastoral Support	0.15	0.02	0.47	-0.01	-0.06	-0.02	0.23	0.22	0.18
Teaching Assistant	-0.02	-0.06	0.37	-0.05	-0.24	-0.16	0.09	-0.04	0.06
Facilities Staff	-0.27	-0.27	0.32	-0.14	0.03	-0.29	0.17	0.07	-0.05
Middle Leader	-0.15	0.03	-0.54	0.02	0.03	0.06	-0.19	-0.18	-0.13
Class Teacher	-0.13	-0.05	-0.36	-0.11	0.09	-0.01	-0.24	-0.17	-0.18

(b) Regression estimates

	Leadership	Relationships	Workload	Diversity & inclusion	Pay	Professional development	Wellbeing	Resources	Overall satisfaction
Facilities	-0.07	-0.18	0.59**	0.00	-0.13	-0.21*	0.36**	0.31**	0.16
Middle leader	0.06	0.15**	-0.13*	0.18**	0.00	0.15**	0.07	0.03	0.12**
Office	0.24**	0.09*	0.68**	0.25**	-0.26**	0.05	0.44**	0.46**	0.35**
Pastoral	0.31**	0.10	0.79**	0.13**	-0.25**	0.03	0.45**	0.37**	0.36**
Teaching assistant	-0.02	-0.09**	0.61**	0.01	-0.47**	-0.21**	0.24**	0.06	0.13**
<b>N</b>	<b>6342</b>	<b>6407</b>	<b>6316</b>	<b>6429</b>	<b>6378</b>	<b>6383</b>	<b>6317</b>	<b>6329</b>	<b>6455</b>

**Notes:** Figures in panel (a) refer to average scores. Figures in panel (b) are OLS regression estimates controlling for age, gender, length of employment and school fixed effects. The results in panel (b) are differences in standard deviations compared to class teachers as the reference group (see Appendix C for the estimated standard errors). \* and \*\* indicate that the difference from teachers in panel (b) is significantly different at the 10% or 5% level. The mean of each score is 0 across the sample and standard deviation 1. Green / red shading in panel (a) indicates better / worse scores.

**Table 4. School-level correlations between teacher and support staff views of the working environment**

	<b>Teachers vs support staff</b>	<b>Teachers vs whole school</b>
Leadership	0.63	0.90
Overall satisfaction	0.63	0.91
Resources	0.62	0.85
Professional development	0.60	0.85
Relationships	0.59	0.82
Diversity & inclusion	0.51	0.84
Wellbeing	0.44	0.81
Pay	0.37	0.76
Workload	0.25	0.75

**Notes:** Figures refer to correlations between school-level averages.

**Table 5. School-level correlations of the spread (standard deviation) of working environment measures based upon teacher versus all-staff reports**

	<b>Teachers vs whole school</b>
Leadership	0.77
Professional development	0.76
Diversity & inclusion	0.73
Overall satisfaction	0.73
Resources	0.72
Relationships	0.70
Workload	0.68
Wellbeing	0.61
Pay	0.47

**Notes:** Figures refer to the school-level correlation between the spread of views in the school based upon (a) teacher reports and (b) the reports of all school staff.

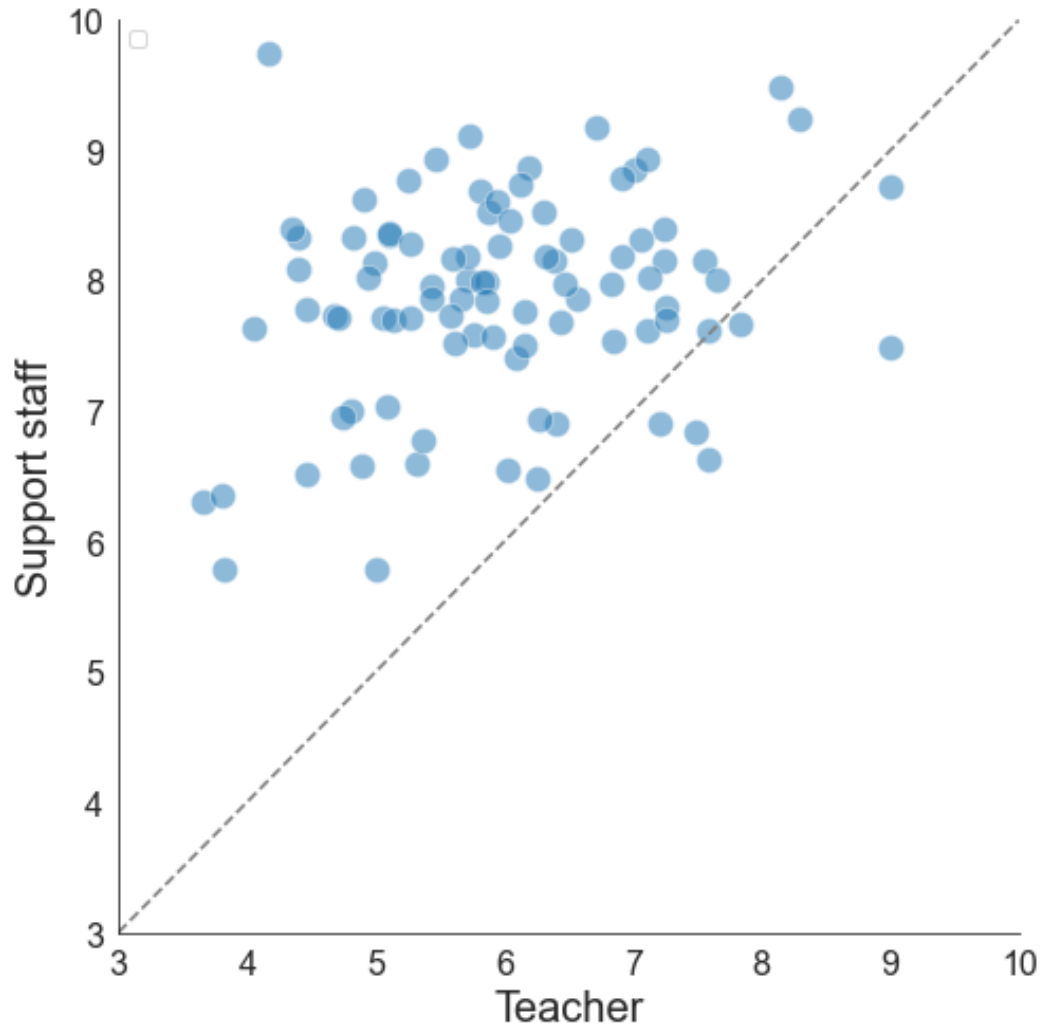
**Table 6. The correlation between senior leader’s views of aspects of the work environment with the views of (a) teachers and (b) support staff**

	<b>Teachers vs Leaders</b>	<b>Support staff vs leaders</b>
I think that there are effective systems for managing pupil behaviour in this school	0.64	0.49
The leaders and managers in this school communicate effectively about what is happening	0.57	0.45
At this school there are policies and ways of working that support the physical and mental wellbeing of its staff	0.47	0.27
People, regardless of race, gender, sexual orientation, religion, age, or social background, have equal opportunities and support to succeed at this school	0.43	0.30
This school actively seeks employee input	0.42	0.27

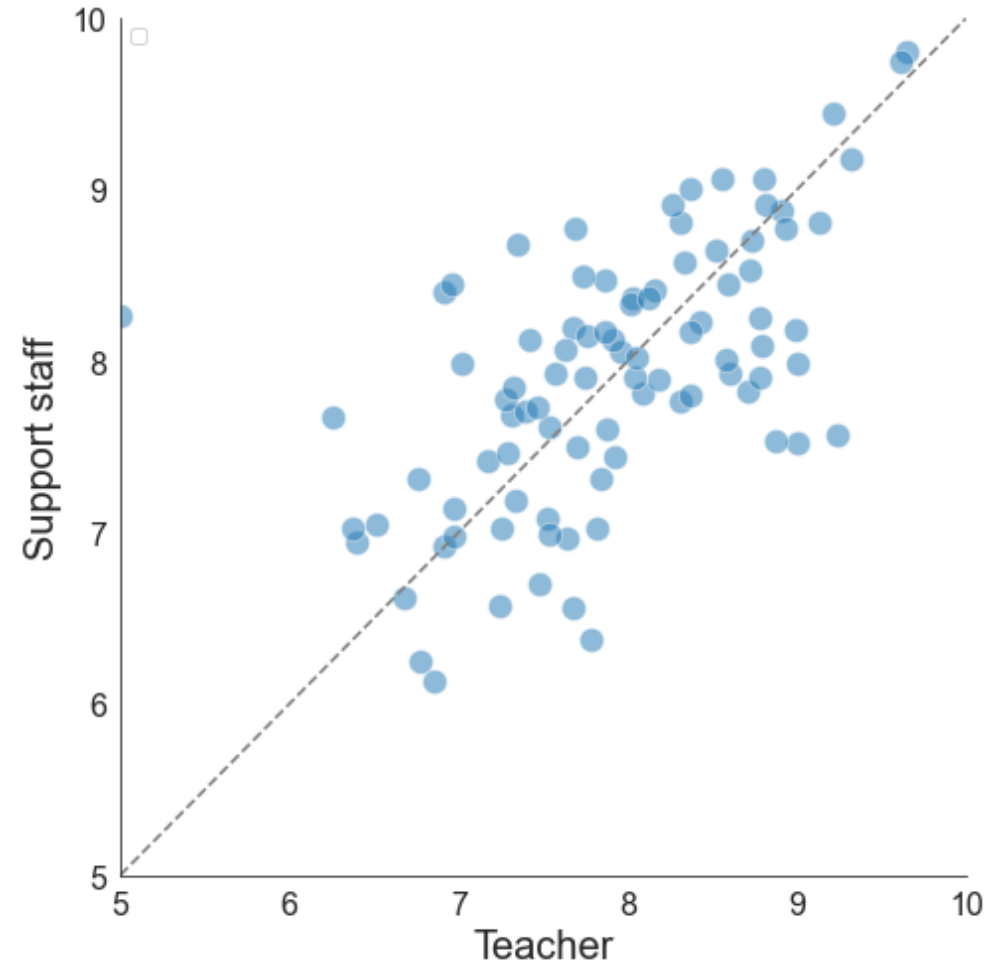
**Notes:** Figures refer to correlations between school-level averages.

Figure 1. School level measures of workload amongst teaching and support staff

(a) Workload



(b) Relationship with colleagues

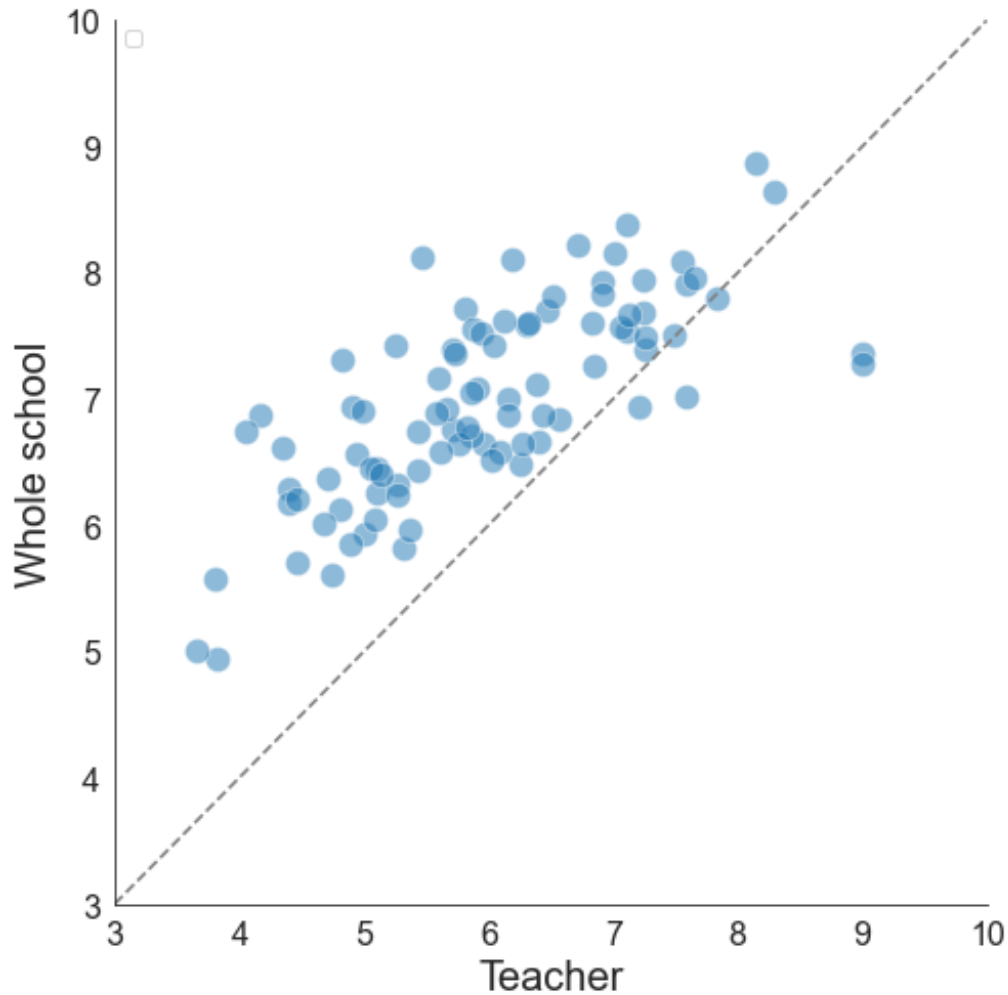


Notes: Each data point refers to one school. The horizontal axis records the average factor score for teachers, with the average for support staff on the vertical axis. The dashed 45 degree line illustrates where the responses of teachers and support staff. Pearson correlations are 0.25 for workload and 0.59 for relationship with colleagues.

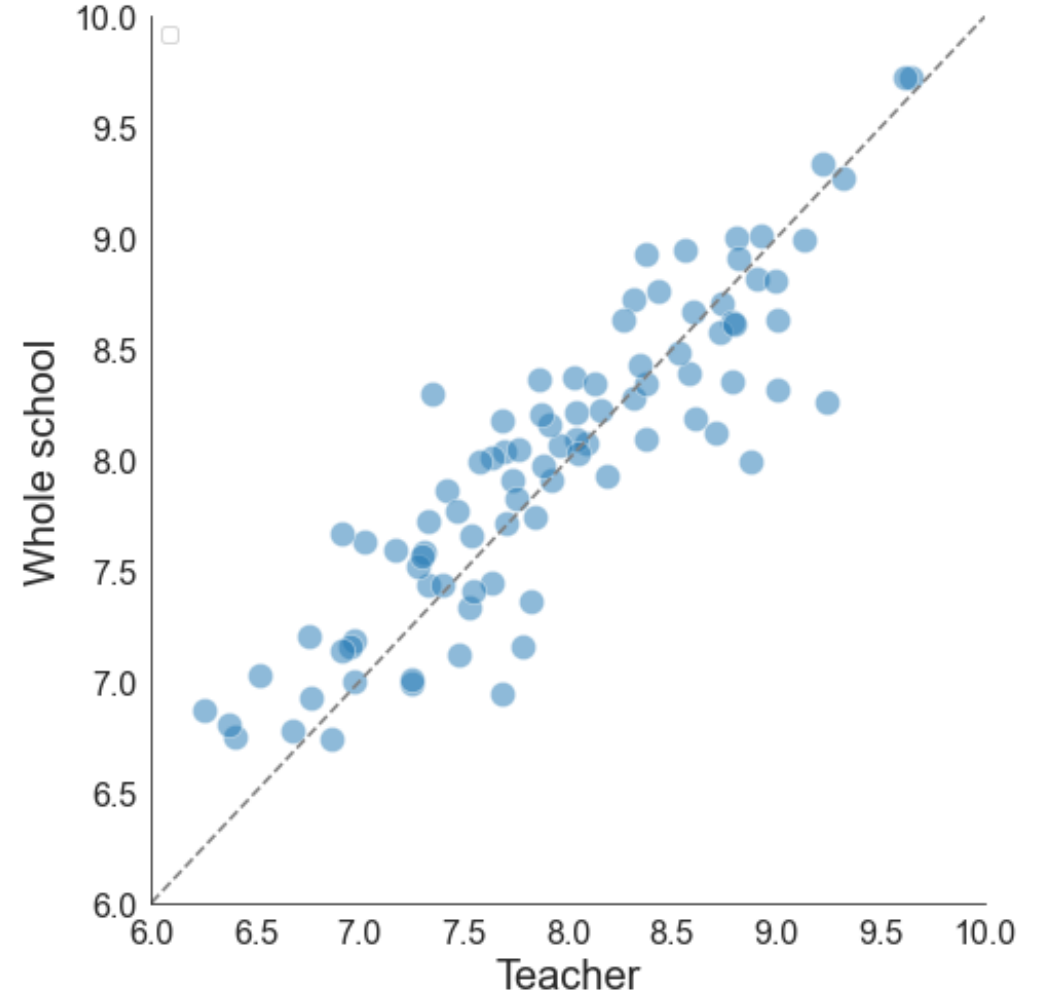


Figure 2. Are the responses provided by teachers a good proxy for the whole school working environment? Average scores.

(a) Workload

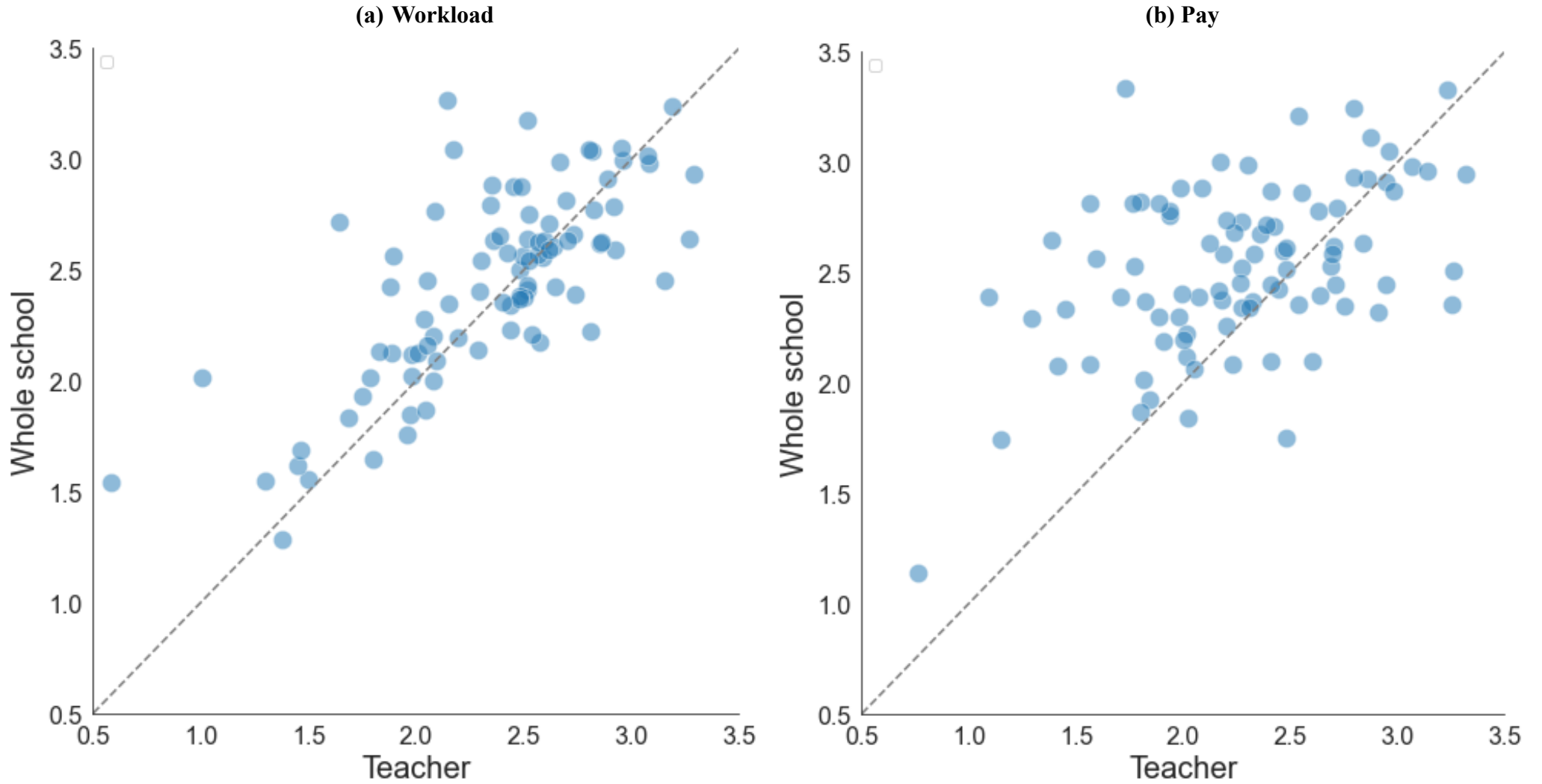


(b) Relationship with colleagues



Notes: Each data point refers to one school. The horizontal axis records the average factor score for the school based upon just the responses of teachers. Figures on the vertical axis are based upon all staff within the school. The dashed 45 degree line illustrates where the averages are equal. Pearson correlations are 0.75 for workload and 0.82 for relationship with colleagues.

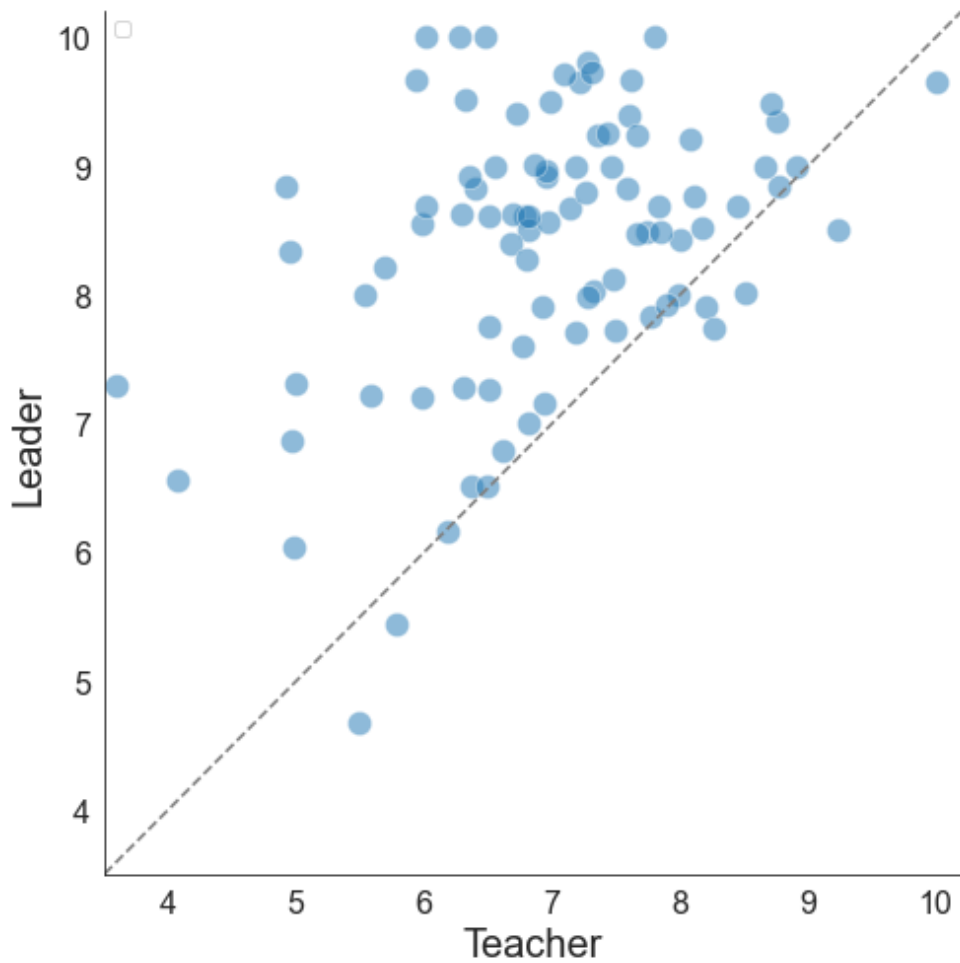
Figure 3. To what extent do the responses provide a good proxy for variability in staff views of the working environment?



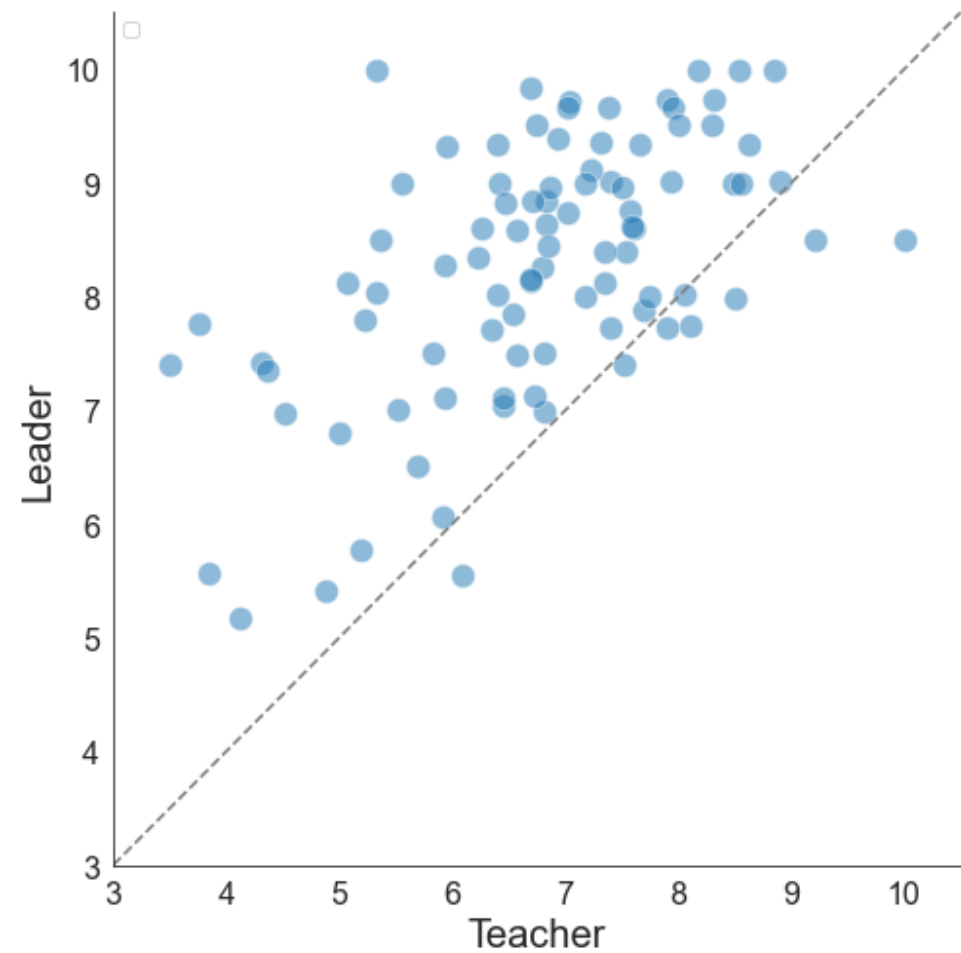
Notes: Each data point refers to one school. The horizontal axis records the standard deviation of the factor score for the school based upon just the responses of teachers. Figures on the vertical axis refer to the standard deviation based upon all staff within the school. The dashed 45 degree line illustrates where the standard deviations are equal. Pearson correlations are 0.68 for workload and 0.47 for views on pay.

Figure 4. How do the views of teachers and leaders differ in their views of the working environment?

(a) School seeks employee input



(b) Leaders and managers communicate effectively



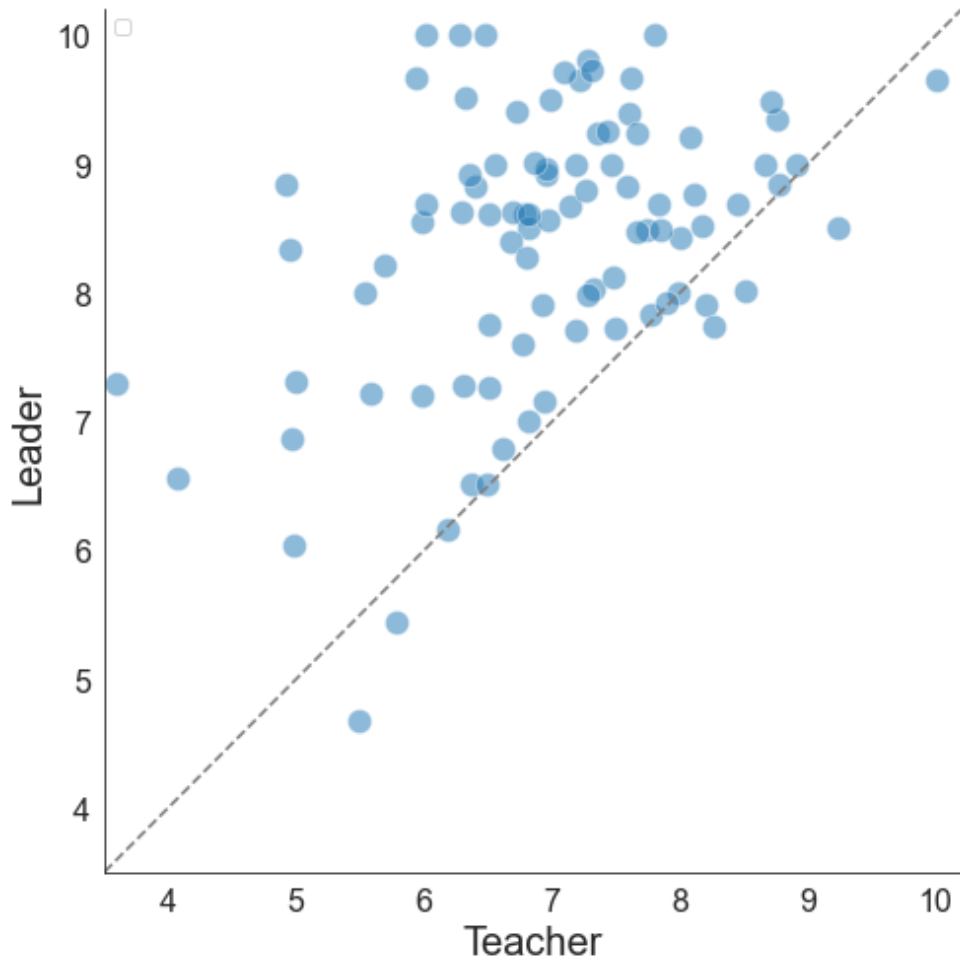
Notes: Each data point refers to one school. The horizontal axis records the average response provided by teachers along the 0-10 response scale. Figures on the vertical axis provides the average response of teachers along the 0-10 scale. The dashed 45 degree line illustrates where the average scores provided by teachers and leaders are equal. Pearson correlations are 0.42 for the question “*this school actively seeks employee input*” and 0.57 for the question “*the leaders and managers in this school communicate effectively about what is happening*”.

### Appendix A. Distribution of responses

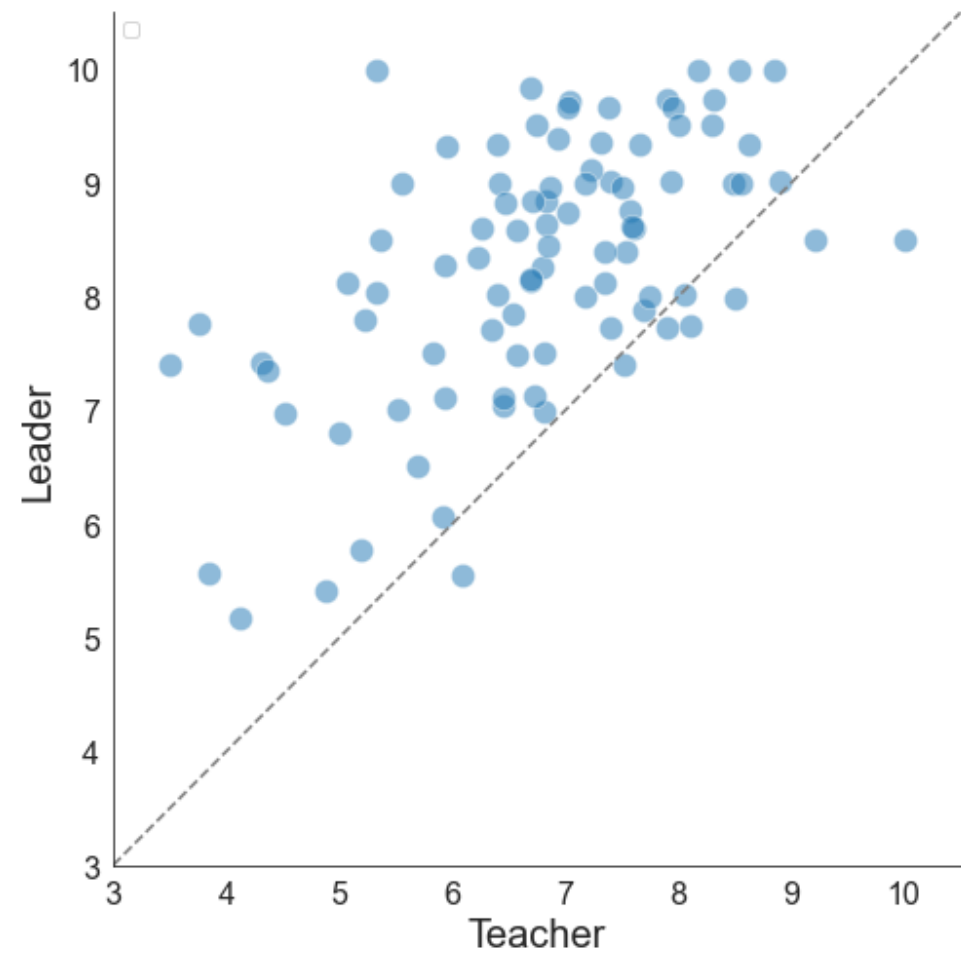
	Leadership	Relationship with colleagues	Workload	Inclusion	Pay	Professional development	Wellbeing	Resources	Overall satisfaction
0	2%	1%	2%	0%	3%	2%	1%	1%	1%
1	2%	1%	2%	0%	2%	1%	1%	1%	1%
2	3%	2%	4%	1%	3%	2%	2%	2%	2%
3	4%	2%	5%	1%	4%	3%	3%	3%	3%
4	5%	3%	6%	1%	5%	3%	4%	4%	3%
5	8%	6%	9%	4%	10%	8%	7%	6%	8%
6	11%	7%	10%	4%	9%	8%	8%	8%	9%
7	15%	11%	14%	8%	14%	14%	13%	15%	16%
8	19%	19%	18%	17%	20%	20%	20%	21%	22%
9	13%	17%	11%	17%	13%	15%	17%	16%	17%
10	17%	32%	18%	45%	17%	24%	26%	22%	18%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Appendix B. How do the views of teachers and leaders differ in their views of the working environment?

(b) School seeks employee input

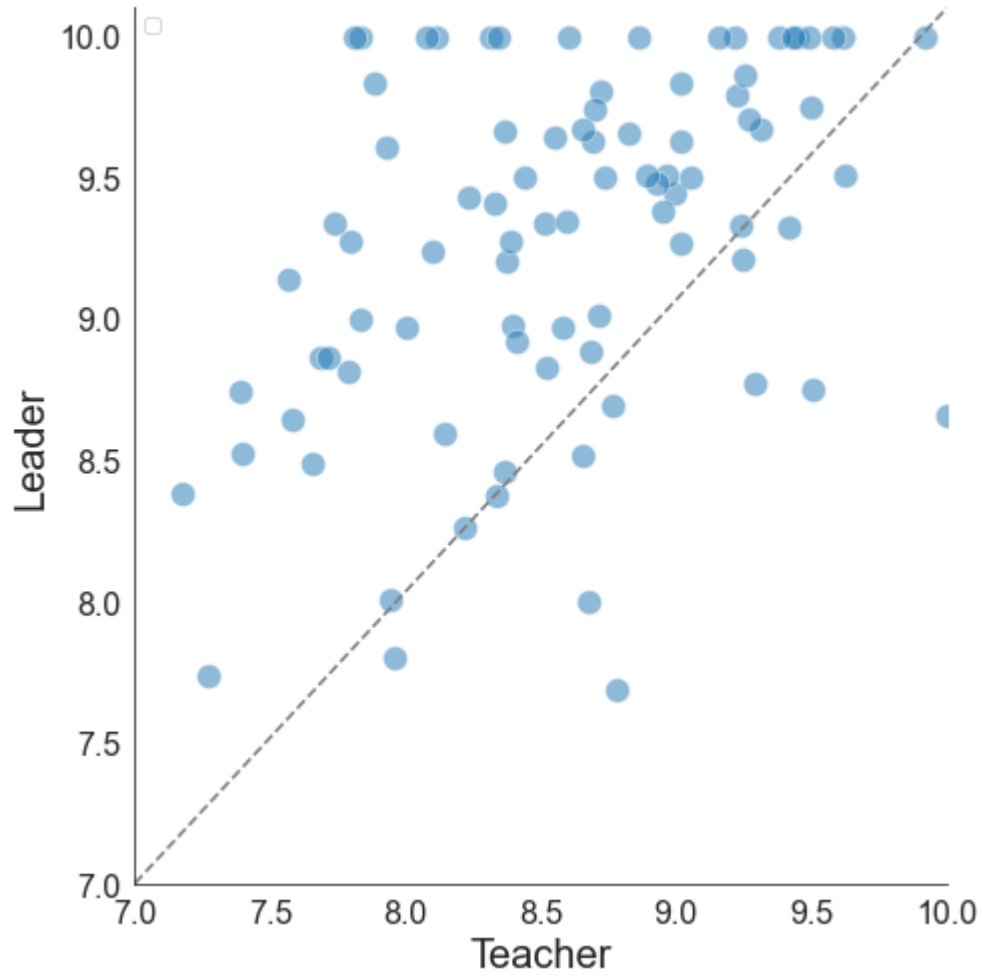


(b) Leaders and managers communicate effectively

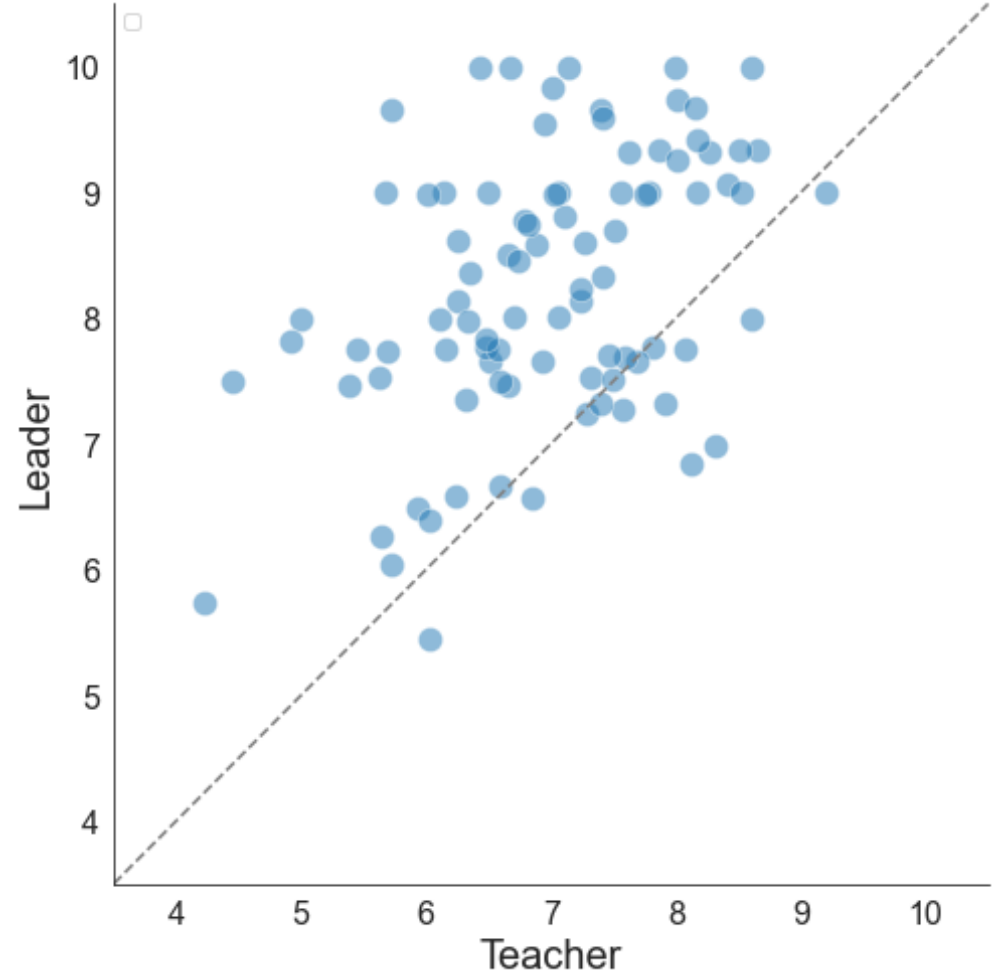


Notes: Each data point refers to one school. The horizontal axis records the average response provided by teachers along the 0-10 response scale. Figures on the vertical axis provides the average response of teachers along the 0-10 scale. The dashed 45 degree line illustrates where the average scores provided by teachers and leaders are equal. Pearson correlations are 0.42 for the question “*this school actively seeks employee input*” and 0.57 for the question “*the leaders and managers in this school communicate effectively about what is happening*”.

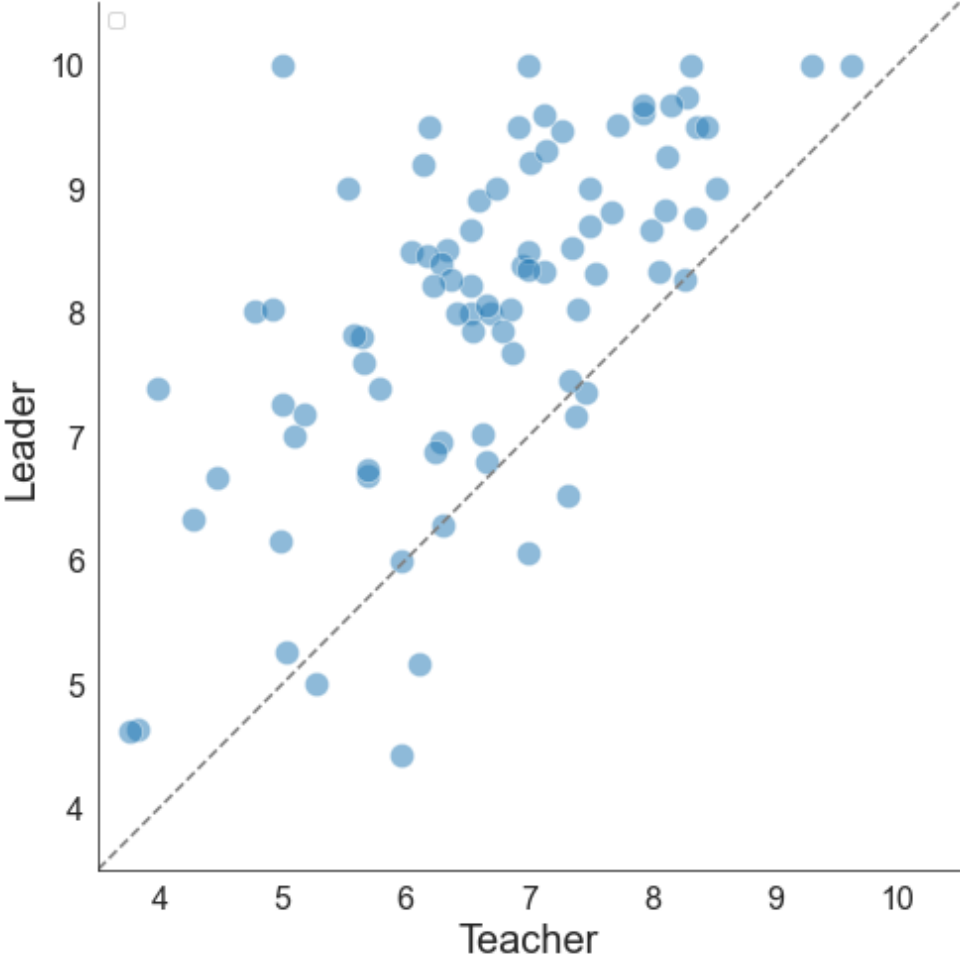
**(c) People have equal opportunities**



**(d) School policies support staff wellbeing**



Effective systems for managing pupil behaviour



**Appendix C. Differences in views of working conditions across staff groups. Parameter estimates and standard errors**

	Leadership		Relationships		Workload		Diversity & inclusion		Pay		Professional development		Wellbeing		Resources		Overall satisfaction	
	Effect size	SE	Effect size	SE	Effect size	SE	Effect size	SE	Effect size	SE	Effect size	SE	Effect size	SE	Effect size	SE	Effect size	SE
Facilities	-0.072	0.140	-0.181	0.121	0.593	0.125	0.001	0.111	-0.128	0.094	-0.211	0.114	0.355	0.101	0.313	0.124	0.162	0.123
Middle leader	0.061	0.056	0.147	0.056	-0.133	0.072	0.177	0.054	0.000	0.062	0.149	0.055	0.068	0.075	0.029	0.061	0.118	0.057
Office	0.242	0.064	0.091	0.052	0.685	0.051	0.253	0.054	-0.261	0.061	0.054	0.055	0.444	0.053	0.460	0.049	0.347	0.062
Pastoral	0.312	0.076	0.101	0.071	0.793	0.062	0.127	0.061	-0.246	0.087	0.031	0.066	0.452	0.061	0.372	0.069	0.358	0.077
Teaching assistant	-0.025	0.045	-0.086	0.039	0.614	0.050	0.014	0.043	-0.466	0.048	-0.207	0.047	0.238	0.045	0.062	0.050	0.135	0.050
<b>N</b>	<b>6342</b>		<b>6407</b>		<b>6316</b>		<b>6429</b>		<b>6378</b>		<b>6383</b>		<b>6317</b>		<b>6329</b>		<b>6455</b>	