Routledge
Taylor & Francis Group

Oxford Review of Education

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/core20

Leadership for teacher retention: exploring the evidence base on why and how to support teacher autonomy, development, and voice

Dong Nguyen, Beng Huat See, Chris Brown & Dimitra Kokotsaki

To cite this article: Dong Nguyen, Beng Huat See, Chris Brown & Dimitra Kokotsaki (04 Dec 2024): Leadership for teacher retention: exploring the evidence base on why and how to support teacher autonomy, development, and voice, Oxford Review of Education, DOI: 10.1080/03054985.2024.2432635

To link to this article: https://doi.org/10.1080/03054985.2024.2432635

Published online: 04 Dec 2024.

OXFORD REVIEW OF EDUCATION
https://doi.org/10.1080/03054985.2024.2432635

Routledge
Taylor & Francis Group

Leadership for teacher retention: exploring the evidence base on why and how to support teacher autonomy, development, and voice

Dong Nguyen [a], Beng Huat See [b], Chris Brown [c] and Dimitra Kokotsaki [a]

[a]School of Education, Durham University, Durham, UK; [b]School of Education, University of Birmingham, Birmingham, UK; [c]Southampton Education School, University of Southampton, Southampton, UK

ABSTRACT

Teacher retention has been a persistent challenge globally. School leadership plays a central role in retaining teachers. Drawing on a major review of 355 research outputs, this article develops and discusses an international empirical evidence base specifically on the potential effects and leadership practices of promoting teacher professional autonomy, development, and voice in relation to teacher retention. The evidence suggests that promotion of teacher autonomy, development and voice is likely to interactively enhance teacher well-being, commitment, and retention. It categorically highlights five domains of salient leadership practices to promote these teacher outcomes. The article discusses some gaps in the evidence base and proposes directions for future research to inform policy and practice on leadership for teacher retention.

KEYWORDS

Leadership; professional development; teacher autonomy; teacher retention; teacher-well-being

Introduction

Teacher retention has been a persistent challenge internationally. Aligned with previous work (e.g. See et al., 2020), we define teacher retention as (the goal of) keeping qualified teachers in schools and reducing the number of qualified teachers making premature exits from the profession. Failure to recruit and retain effective teachers has concerning implications for student learning (Sorensen & Ladd, 2018). Supporting teacher retention has therefore found its way to being a crucial topic of enquiry. In this article, 'support' refers to providing teachers with intellectual, practical, and emotional assistance to perform their professional duties and responsibilities.

Theoretical perspectives on retaining employees across sectors and in education (e.g. Bakker & Demerouti, 2007; Bronfenbrenner, 1979) have highlighted a confluence of factors at all levels, from individual to organisational and national levels that influence teacher attrition (as opposite to teacher retention). Previous reviews of the empirical literature have been useful in verifying the broad assumptions of these theoretical perspectives (e.g. Borman & Dowling, 2008; Boyce & Bowers, 2018). The two reviews of empirical evidence by Borman and Dowling (2008) and Nguyen et al.

CONTACT Dong Nguyen Dong.Nguyen@durham.ac.uk School of Education, Durham University, Durham, UK

(2019) maintain individual teachers' characteristics as influencing factors of teacher retention. A multiplicity of organisational conditions makes significant contributions to informing teacher turnover (e.g. Liebowitz & Porter, 2019; Nguyen et al., 2019). These factors pertain to organisational climate, culture, professional development opportunities, and leadership. Factors beyond the organisational settings have major influences on teacher retention as well (Nguyen et al., 2019; See et al., 2020). See et al. (2020), for example, underscore financial incentives as a vital approach to attract and retain teachers in challenging schools.

It is clear from these previous reviews that school leadership is central in retaining teachers. However, no major reviews of empirical research across countries have systematically and centrally focused on the characteristics of school leadership, climate, and culture in relation to teacher retention. The absence of such a systematic, focused exploration of the extant evidence base is a barrier to an in-depth and conceptual understanding of how these organisational characteristics interactively influence teacher retention (Issue 1). For instance, it is evident that school leadership support matters in motivating and retaining teachers in schools. However, before commencing this research we knew little about what leadership practices, through which pathways and with what effects, potentially contribute to support teacher retention. To respond to Issue 1, we were commissioned to conduct a major review of the empirical research evidence specifically on leadership for teacher retention. The current article is part of this larger review.

Interpretation of relevant theories (e.g. Bakker & Demerouti, 2007; Ryan & Deci, 2000) suggests employees' sense of professional autonomy, development, and voice as a vital cluster of job resources in promoting positive outcomes such as job satisfaction and retention. Single empirical studies in school contexts (e.g. Kim, 2019; Kraft et al., 2016; Ladd, 2011) have found potential links between these factors and teacher retention. The previous reviews have generally asserted the centrality of school leadership in supporting job resources to motivate and retain teachers (e.g. Boyce & Bowers, 2018; Liebowitz & Porter, 2019). Nevertheless, we lack a systematic synthesis of the extant research evidence to enable an in-depth understanding on how school leadership might promote these job resources to motivate and retain teachers (Issue 2). Our systematic search using comprehensive databases, as noted in the review process below, found no previous reviews centring on the current topic of this article. To respond to Issue 2, we focus this article on discussing the leadership strategies to promote teachers' sense of professional autonomy, development and voice and their potential associated effects. The current article draws on an evidence base identified and appraised, as part of a major review, to address two main research questions (RQs) as follows.

RQ1. How might supporting teacher professional autonomy, development, and voice matter in retaining teachers in schools?

RQ2. How might school leaders support teacher professional autonomy, development, and voice?

Addressing these research questions provides evidence-based insights into effective school leadership to support teacher retention. The next section presents the conceptual framework that informs the current review.

Conceptual framework

To guide this review and presentation of the current article, we developed a basic conceptual framework as visualised in Figure 1. This framework is built on theoretical perspectives (Bakker & Demerouti, 2007; Bronfenbrenner, 1979; Ryan & Deci, 2000) on motivating and retaining employees in organisations across sectors including education. Teacher retention, as defined above, is influenced by a multiplicity of factors, and centrally placed in this framework (Circle 1).

The current framework (Circle 2) considers the concepts and outcomes that are proximally linked, as suggested in the previous reviews (e.g. Madigan & Kim, 2021; Nguyen et al., 2019), with teacher retention. These are: teacher intent to leave/stay, teacher well-being, and organisational/professional commitment. Similar to Liebowitz and Porter (2019), this review conceptualises teacher well-being as a broad term to include teacher job satisfaction and engagement. The logic of Self-Determination Theory (SDT by Ryan & Deci, 2000) and Job Demands and Resources (JD-R by Bakker & Demerouti, 2007) allows us to reason that these outcomes might be influenced by teachers' sense of professional autonomy, development, and voice.

Conceptually, autonomy concerns two key aspects of employees' discretion and capacity to make informed decisions (Lamb & Reinders, 2008). ***Teacher autonomy*** (Circle 3) is accordingly defined as the freedom and capacity of teachers to make decisions

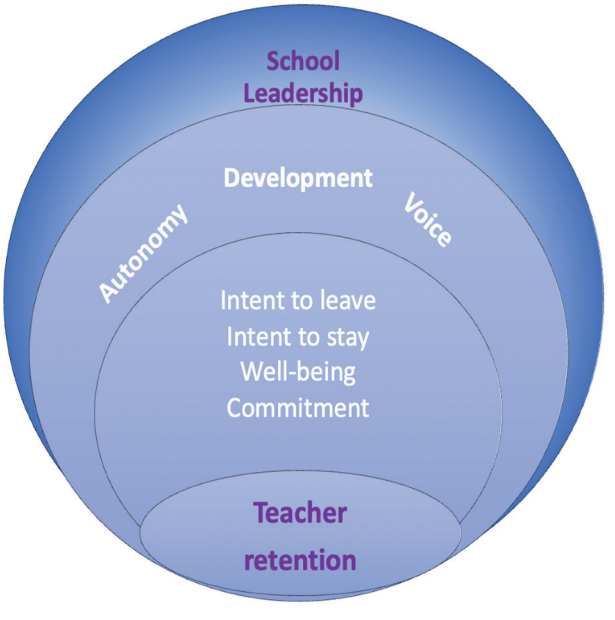

Figure 1. Conceptual framework for the review.

on pedagogical methods, curriculum, assessment of student learning, student discipline, and their own professional development. The effects of autonomy on other teacher outcomes are subject to their preparedness and readiness to exercise their professional discretion, morally and ethically.

Teacher development (Circle 3) hereby refers to activities intended to support teachers' development of professional competences. Building on the literature on organisational behaviour (see a review by Van Dyne et al., 2003), we conceptualise ***teacher voice*** (Circle 3) as intentionally expressing ideas, concerns, and opinions related to their work through channels of communication.

School leadership (Circle 4) in this article is defined as a combination of observable approaches, practices, and/or strategies, related to leadership, management, and development and implementation of school-level policy, enacted by senior leaders in schools. These senior leaders comprise principals/head teachers and vice-principals/deputy head teachers. This positioning of school leadership concurs with the previous reviews (e.g. Liebowitz & Porter, 2019), suggesting the significant influences of school leaders on supporting various teacher outcomes.

In summary, the current conceptual framework proposes:

- school leadership may have an influence on the factors of teacher professional autonomy, development, and voice;
- these factors may influence other teacher outcomes such as organisational commitment and well-being; and
- these teacher outcomes may have mutual influences on teacher retention.

It is likely that there are other factors, beyond the scope and focus of this article, potentially influencing teacher outcomes through multiple pathways in Circles 1, 2, and 3.

Review process

This review process has five iterative stages, as visualised in Figure 2. At the outset of the review, we formulated eight criteria for inclusion and exclusion of research outputs, as outlined in Table 1. We included empirical studies (Criterion 1) conducted in public/state school settings (Criterion 2). These studies were published in academic journals, book chapters, and research reports (Criterion 3) from January 2000 to May 2023 (Criterion 4). We chose January 2000 as a starting point to locate more contemporary sources of evidence and to focus the scope of this review. However, we also engaged with the previous, relevant reviews that included studies published before 2000 (e.g. Liebowitz & Porter, 2019), as detailed further in the next section. The engagement was to justify further the scope of the current review and article and, where applicable, to discuss some specific findings (see the Findings section) and overall implications (see the Discussion and Conclusions section). The previous reviews cited in this article are marked with 'R' (e.g. Liebowitz & Porter, 2019[R]) in the subsequent parts and reference list. May 2023 was the cut-off point for this current review.

We shortlisted only research outputs that centrally discuss the issues in response to the research questions (Criterion 5). The shortlisted outputs must be based on those studies that centre on school leaders (e.g. principal and vice-principal) and teachers (Criterion 6).

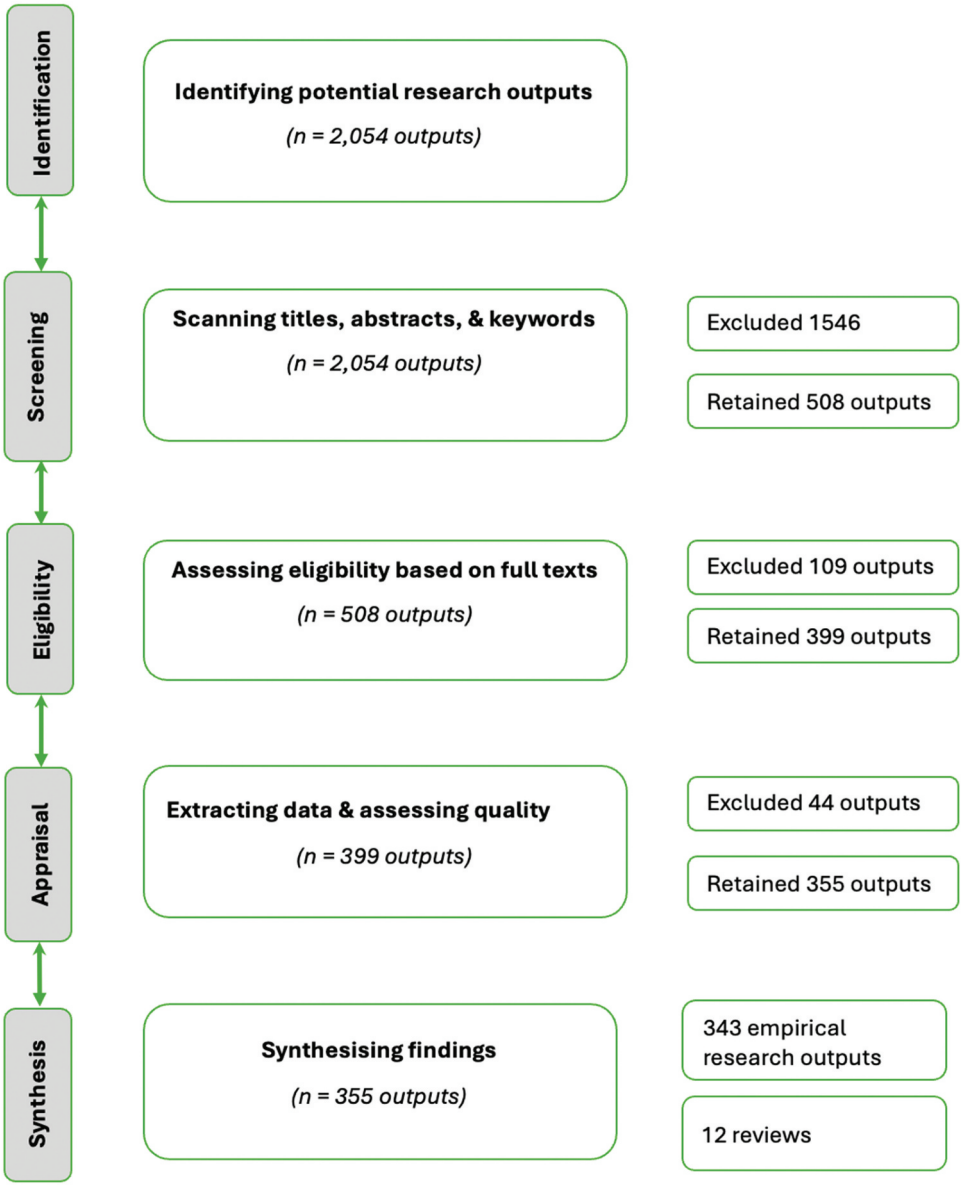

Figure 2. PRISMA flow diagram of steps in the current review.

These teachers can be in-service, retired or have left the teaching profession. This review was inclusive of empirical research undertaken in any geographical contexts and included outputs written in English only (Criteria 7 and 8).

Stage 1. Identifying research outputs

We utilised two large academic databases (Scopus and the Web of Science) and two major search engines (Google Scholar and Google) to search for relevant research outputs.

Table 1. Inclusion criteria for the current review.

Category of criteria	Included
1. Study design	• Empirical, primary studies • Reviews of empirical literature
2. School levels	• K-12 settings: Primary/elementary, secondary/middle, high schools. • Note: K-12 settings typically include schools for students aged 5 to 18.
3. Types of evidence sources	• Peer-reviewed journal articles • Other publications including *research reports*, and *books/book chapters* drawn from empirical research.
4. Timeframe	January 2000–May 2023
5. Content	A research output ***centrally*** discusses the core issues around (i) school leadership OR (ii) school culture/climate/structure AND (iii) teacher retention.
6. Population	• School leaders • Teachers
7. Geographical locus	Outputs drawn from empirical research in any countries or nations.
8. Language	Outputs written in English.

These databases and search engines were used due to their multidisciplinary and comprehensive coverage (see Martín-Martín et al., 2018).

This stage formally lasted from 14 April 2023 to 31 May 2023. We piloted an initial search and discussed methodological adjustments, for example, of key words, in early April 2023. We formulated three sets of keywords based on a consideration of the previous key work and reviews (e.g. See et al., 2020[R]; Liebowitz & Porter, 2019[R]) and our pilot study. In total, these sets comprise 68 keywords and their synonyms.

- Set 1: keywords related to *school leadership* such as *principal leadership*, *headship*, and *school leader*.
- Set 2: keywords related to *school culture, climate*, and *structure* such as *organisational culture*, *school environment*, and *working condition*.
- Set 3: *teacher retention* and *other related teacher outcomes* such as *job satisfaction*, *well-being*, *intent to stay/leave*, *teacher shortage*, and *teacher mobility*.

We subsequently combined the research results from all the separate searches into a single Excel file and then removed duplicates. A total of 2,054 outputs results were retained in this stage.

Stage 2. Screening titles and abstracts

This stage involved screening titles, abstracts and, where available, keywords in the outputs found in Stage 1. Two reviewers scanned the same first 100 results from each search and discussed the rationale for inclusion or exclusion of each output. Once we had established an agreement on this practice, we proceeded with scanning the remaining results for each search for immediate relevance. All research outputs that seemed, at face value, to discuss - *(i) leadership/management* and/or *(ii) culture/climate/structure in relation to (iii) teacher retention and/or related outcomes* were retained in this stage. We shortlisted 508 research outputs for the subsequent stage. The full texts of these research outputs were downloaded and stored in a folder for reading.

Stage 3. Assessing eligibility based on full-texts

Full texts of the included studies were first read by one reviewer to assess for relevance. Where the reviewer was unsure about its inclusion, the study was double screened by another reviewer. A consensus was reached following some discussions. A further 109 that did not meet the inclusion criteria were excluded at this stage, retaining 399. Key information about each of these studies was extracted in an integrated Excel file. These 399 outputs comprised 386 refereed journal articles, four book chapters, and nine research reports.

Stage 4. Assessing quality of evidence

The current review aimed to identify evidence-informed characteristics of school leadership, structure, climate, and culture that support teacher retention. Having considered this key aim and the afore-mentioned research questions, we used three appraisal tools to assess the quality of evidence and research for the purposes of this review.

We used Gorard's (2021) appraisal tool to evaluate the strength or credibility of the correlational and causal evidence of the included studies in this review. This appraisal tool has five key evaluation criteria, namely: design, scale of study, scale of missing data, data quality, and other threats to validity, as summarised in Appendix A.

As a complementary evaluation practice, we employed an appraisal checklist for qualitative research in Appendix B to appraise the outputs drawn from analyses of qualitative (mainly in-depth interview) data, considering teachers' perspectives and experiences. This practice was inclusive of teachers' narrative evidence on (a) the factors that might influence their retention, well-being, and organisational commitment, and (b) leadership practices for promoting teacher autonomy, development, and well-being.

To shortlist the relevant review studies, we utilised an adapted critical appraisal checklist for reviews of empirical research in Appendix B. This tool has a checklist of eight items that evaluate the appropriateness of their adopted methods to search for and appraise studies and synthesise the findings from those shortlisted studies, to respond to the explicitly stated research questions. This exercise was aimed at selecting quality reviews of empirical research evidence on the issues (e.g. teacher mobility) pertaining to this review.

As an inter-rater reliability exercise, a random sample of 10% of the total number of these shortlisted outputs were double screened between the reviewers. Any disparities in the assessment and ratings were discussed in moderation meetings to reach an agreement among reviewers.

In this round of evidence assessment, we excluded 44 research outputs, rated 0*, because of the undesirable quality. No research outputs were rated 4*. In this review, the outputs rated 3* provided the strongest correlational and causal evidence, followed

Table 2. Outcomes of the evidence assessment.

Number of research outputs	Assessment
203 empirical research outputs	1*
83 empirical research outputs	2*
5 empirical research outputs	3*
52 empirical research outputs	Met the appraisal of narrative evidence.
12 review outputs	Met the appraisal of reviews of the empirical literature.

by thoserated 2* and then 1* (see Appendix B for further elaboration). We retained 355 outputs upon this stage, as detailed in Table 2.

Stage 5. Synthesising evidence

Stage 5 synthesised the evidence relevant to this review from the included studies. This involved (a) identifying the relationships and characteristics of leadership practices in relation to teacher-retention-related outcomes, and (b) commenting on evidence generation of (a). In addition, we engaged with teachers' narrative evidence from the list of included studies. Inclusion of teachers' narrative evidence was expected to support elaboration of this review's key findings and/or consideration of the diversity of evidence sources.

The key findings and implications presented in the current article are based on a cross-synthesis of research outputs rated 3*, 2*, and 1* and narrative evidence of the relevant outputs retained in Stage 4. To inform readers of the strength and diversity of evidence, we cite publications with an indication of evidence rating (e.g. Griffith, 2004[2*]), as shown in the section of the findings. Where we cite a study of teachers' narrative evidence (NE), there was no indication of evidence rating (e.g. Brown & Wynn, 2007[NE]).

Findings

This section presents evidence on the potential effects and leadership practices of promoting teacher autonomy, development, and voice in relation to teacher retention, drawn from a larger review. It also clarifies the number of research outputs that inform the findings of this article. One research output may contribute to the findings and therefore be listed in more than one sub-section below. All research outputs listed in each section below contribute insights into the current article. However, not all reviewed publications are cited in this article, given the limited space.

Teacher autonomy

The findings related to teacher autonomy are based mainly on an analysis of 29 empirical research outputs. Teacher autonomy hereby tends to be conceptualised as their sense of professional discretion or control within the classroom, on implementation of school-wide policies and their own professional development (e.g. Pan et al., 2023[2*]; S. Liu et al., 2021[2*]; Van Droogenbroeck & Spruyt, 2014[2*]). The professional areas within the classroom include course content, teaching methods, pace and progression of instruction, classroom management, the amount of homework, and student holistic development.

How supporting teacher autonomy matters

The evidence base highlights associations between teachers' sense of professional autonomy and their well-being (e.g. Kraft et al., 2016[3*]; Pan et al., 2023[2*]; Van Droogenbroeck & Spruyt, 2014[2*]) and organisational commitment (e.g. Lee & Nie, 2014[1*]).

At least five articles found direct associations between teachers' sense of professional autonomy and some affective teacher outcomes (e.g. Campoli & Conrad Popova, 2017[2*]; Lee & Nie, 2014[1*]; S. Liu et al., 2021[2*]). The analysis of the 2018 TALIS[1] dataset of schools in mainland China, conducted by S. Liu et al. (2021[2*]),

indicated a positive association between teacher autonomy and their job satisfaction. The two studies in the US (Boyd et al., 2011[2*]; Campoli & Conrad Popova, 2017[2*]) suggested that giving teachers greater influence on selecting content, instructional materials, and teaching techniques, student evaluation and student discipline might be useful in satisfying and retaining them. Lee and Nie (2014[1*]) surveyed 304 Singapore teachers and found a link between teacher autonomy and their organisational commitment.

Other studies (e.g. Pan et al., 2023[2*]; Skaalvik & Skaalvik, 2020[1*]) evidenced indirect links between teacher autonomy and other affective outcomes. Pan et al. (2023[2*]) suggested teachers' perceived autonomy was indirectly related to well-being through the teaching workload. Skaalvik & Skaalvik (2020[1*]) identified an indirect link between teacher autonomy and their job satisfaction through teacher emotional exhaustion.

The analyses of interview studies (e.g. Gallant & Riley, 2017[NE]; Hobson & Maxwell, 2017[NE]; Brady & Wilson, 2021[NE]) provided further evidence on the potential benefits of enhancing teachers' sense of professional autonomy identified in the correlational studies above. Enhancing teachers' sense of autonomy is likely to support their professional well-being (Brady & Wilson, 2021[NE]; Hobson & Maxwell, 2017[NE]). Brady and Wilson (2021)[NE]) interviewed 51 teachers about the types of school-level teacher well-being initiatives. They suggested that the initiatives aimed at maximising teacher feelings of autonomy, development and decreasing heavy workload are instrumental in supporting teacher well-being. Early career male teachers in Gallant and Riley's (2017[NE]) review felt that a good perception of autonomy would stimulate their sense of creativity and professional development.

Leadership practices to support teacher autonomy

The current review highlights the importance of autonomy-supportive school leadership in enhancing teachers' feelings of professional autonomy, given the potential benefits as discussed above. Two categories of practices associated with autonomy-support leadership are identified as follows.

Supporting teachers' professional freedom in the classroom. Collie et al. (2020[2*]) documented autonomy-supportive leadership as a critical factor in influencing teacher well-being and job satisfaction. Autonomy-supportive leadership refers to granting teachers necessary professional freedom and control on their delivery of tasks and considering teacher voice in school-policy decisions. On the contrary, controlling leadership practices would lower teachers' sense of job satisfaction. Controlling leadership focuses on critiquing teachers on their lesson planning and teaching in professional conversations and disrespecting teacher classroom autonomy (Gamero Burón & Lassibille, 2016[2*]).

Ebersold et al. (2019[1*]) suggested that *listening to understand how teachers view and do things before making suggestions* appears to be a good practice linked with autonomy-supportive leadership. Encouraging teachers and recognising them for innovating their ways of performing educational practices would be useful in enhancing teachers' sense of autonomy (Lee & Nie, 2014[1*]). Cooper-Gibson Research (2018[NE]) interviewed 101 former teachers in the UK who had left the teaching profession. Their thematic analyses highlighted the importance of school leaders to give teachers freedom on planning their work and marking student work.

Establishing an effective communication structure. A range of reviewed studies (e.g. Player et al., 2017[2*]; Kraft et al., 2016[3*]; Van Droogenbroeck & Spruyt, 2014[2*]) suggested the significance of establishing an effective communication structure to promote teachers' sense of autonomy and control of information. Van Droogenbroek et al. (2014[2*]) argued that effective communication about policy change is critical in enhancing teachers' perceptions of control of the contexts and needs for change. A good sense of autonomy would enable teachers to cope actively and creatively with changes in schools. This argument is based on an analysis of the responses of 1,878 senior teachers aged from 45 to 65 in Belgium. Player et al. (2017[2*]) utilised data from around 3,000 teachers in the United States from two surveys from 2011 to 2013 to explore the relationship between leadership and person-job fit and teacher mobility. The results indicated that teachers who reported positive school leadership were less likely than those who reported weaker leadership to leave a school. *'Clear communication of school vision'* to teachers was evidenced as one of the key characteristics of positive principal leadership in this study. Similarly, the analysis by Kraft et al. (2016[3*]) of administrative data in New York, the US, identified *'communicating a clear vision and encouraging open communication on important school issues'* as a potentially effective practice in retaining teachers.

The narrative evidence by Scallon et al. (2023[NE]) highlighted *'clearly communicating the school's vision around high-quality teaching'* as a potentially effective principalship practice to contribute to low teacher turnover. On the contrary, principals' implicit expectations for teachers might adversely affect teacher-principal relationships, and this issue could challenge teacher retention (Torres, 2016[NE]).

Teacher development

The findings in this section draw on an analysis of 45 empirical research outputs.

How supporting teacher professional development matters

A range of evidence from correlational studies suggests a positive link between promotion of teacher professional development and their well-being (e.g. Barbieri et al., 2019[2*]; Gamero Burón & Lassibille, 2016[2*]; Cha & Cohen-Vogel, 2011[2*]) and organisational commitment (e.g. Ni, 2017[2*]). The narrative evidence echoes the potential benefits of quality teacher professional development in promoting their well-being (e.g. Cann et al., 2021[NE]) and intention to stay in a school (e.g. Zavelevsky et al., 2022[NE]). This range of evidence strengthens the confidence in the finding, of the previous review by Nguyen et al. (2019[R]), on the influence of teacher professional development on their decisions to stay or leave a school.

Leadership practices to support teacher development

Leadership for teacher development attends to improving support and opportunities for teachers' professional growth. This review identifies three categories of leadership practices of supporting teacher development.

Providing instructional support. The reviewed studies evidence three practices or strategies that school leaders can enact to provide teachers with instructional support. Conducting classroom observation and offering constructive feedback on teachers'

classroom and instruction tends to be cited as a positive strategy to develop teachers' sense of professional growth (Griffith, 2004[2*]; Kim, 2019[2*]; Kraft et al., 2016[3*]; Y. Liu et al., 2021[2*]). The feedback should be worded and delivered with the aim to encourage teachers to innovate their teaching (Boyd et al., 2011[2*]; Kim, 2019[2*]). Working collaboratively with teachers to address instructional challenges arising in schools is another practice of demonstrating instructional support (Y. Liu et al., 2021[2*]).

The potential benefits of these practices in retaining teachers are evidenced across a number of cross-sectional studies (e.g. Kraft et al., 2016[3*]; Griffith, 2004[2*]; Kim, 2019[2*]; Y. Liu et al., 2021[2*]). These studies used administrative data from the United States (e.g. Kim, 2019[2*]) and the TALIS data (e.g. Y. Liu et al., 2021[2*]) to examine the relationships between (a) instructional support for teachers and (b) teacher job satisfaction, efficacy, and turnover intentions. For example, Y. Liu et al. (2021[2*]) drew on an analysis of the 2013 TALIS dataset to examine the relationships between instructional leadership and teacher job satisfaction and self-efficacy. The sample included 104,358 teachers from 6,045 schools in 32 countries. Instructional leadership in this study included leadership practices focussing on supporting teachers' instruction such as *collaborating with teachers to solve classroom discipline issues*, *conducting classroom observations*, and *encouraging teachers to innovate their teaching*. Instructional leadership is indirectly associated with teacher job satisfaction through the effects of supportive school culture and teacher collaboration.

Studies (Ladd, 2011[2*]; Player et al., 2017[2*]; Kim, 2019[2*]; Kraft et al., 2016[3*]) in the US suggested that supporting teachers, especially early career teachers (ECTs), with classroom management skills of student behaviours and enforcement of school rules would contribute to motivating and retaining teachers. The issues of school discipline and classroom management matter in influencing teacher job satisfaction and turnover retentions (e.g. Kim, 2019[2*]; Kraft et al., 2016[3*]; Toropova et al., 2021[2*]).

Promoting professional development opportunities for teachers. Providing teachers with opportunities for and removing barriers to their professional development contributes to retaining teachers (e.g. Barbieri et al., 2019[2*]; Kraft et al., 2016[3*]; Ni, 2017[2*]). This practice is important in keeping teachers professionally engaged and motivated. Barbieri et al. (2019[2*]) analysed responses from 6,491 teachers in Italy and suggested that school leaders could support teacher well-being with providing professional development opportunities and educational resources for teachers. Dissatisfied teachers in Cha and Cohen-Vogel's (2011[2*]) study reported 'less useful' professional development opportunities and experiences and less favourable working conditions.

In summary, the evidence, mostly based on cross-sectional research in this review, highlights the importance of *supporting teacher development* in retaining teachers. The narrative evidence, drawing from analyses of teacher experiences in qualitative research across countries, corroborates this finding. This source of narrative evidence particularly advocates for proactive leadership to promote professional development of ECTs (Brown & Wynn, 2007[NE]; Scallon et al., 2023[NE]; Chaaban & Du, 2017[NE]). Supportive leadership practices for teacher development include *encouraging teachers to experiment teaching innovations*, *leading or actively involving in developing solid mentoring programmes for teachers*, and *sourcing for teacher professional development opportunities*. These practices

potentially enhance professional well-being and retention of teachers, especially of ECTs (e.g. Brown & Wynn, 2007[NE]; Cann et al., 2021[NE]; Chaaban & Du, 2017[NE]).

Teacher voice

The findings relevant to teacher voice are based on an analysis of 33 empirical research outputs.

How supporting teacher voice matters

A range of narrative evidence calls for promoting teacher voice to enhance their well-being and retention in schools (e.g. Cann et al., 2021[NE]; Scallon et al., 2023[NE]; Waddell, 2010[NE]). The prominent finding across these studies is that teachers tend to have a stronger sense of professional belonging, self-efficacy, and well-being when they have opportunities to participate in school decision-making. The evidence also underscores the need for school leaders to recognise teachers as valued contributors to school decision-making process to satisfy and retain them (e.g. Cann et al., 2021[NE]; Waddell, 2010[NE]).

The correlational evidence base provides a more nuanced picture of the potential effects of enhancing teacher voice on retention and other teacher outcomes. This range of evidence was derived from two groups of research outputs – the first group utilised TALIS datasets; the second one drew on other sources of data.

At least seven publications from the first group (e.g. S. Liu et al., 2021[2*]; Collie et al., 2020[2*]; Sun & Xia, 2018[2*]; García Torres, 2019[2*]) used three items in the scale of '*participation among stakeholders*' in the OECD's datasets. These items elicit teachers' views and experiences on the opportunities and culture of shared decision-making and responsibility in their schools. The analyses found direct and/or indirect links between teacher voice and retention.

Possible direct links between teacher voice and retention. There appears to be a direct positive relationship between promotion of teacher voice and teachers' well-being (e.g. Gouëdard et al., 2023[2*]; S. Liu et al., 2021[2*]; Lee et al., 2023[2*]; Collie et al., 2020[2*]; Sun & Xia, 2018[2*]) and professional commitment (e.g. Collie et al., 2020[2*]; Lee et al., 2023[2*]).

Indirect links between teacher voice and retention depends on mediating factors. The relationship between the promotion of teacher voice and those teacher-retention-related outcomes is influenced by a compound of factors such as professional collaboration (García Torres, 2019[2*]; S. Liu et al., 2021[2*]; Y. Liu et al., 2021[2*]), exchange and co-ordination (S. Liu et al., 2021[2*]), self-efficacy (García Torres, 2019[2*]; Sun & Xia, 2018[2*]), and interpersonal trust (Liu et al., 2022[2*]).

The findings in the second group of publications that drew on analyses of other sources of data beyond TALIS datasets appear to be less consistent.

Possible links between teacher voice and retention. At least six studies in this group identified relationships between teacher voice and their well-being and/or professional development (e.g. Lee et al., 2023[2*]; Ladd, 2011[2*]). For example, Lee et al. (2023[2*]) investigated the extent of teacher influence in the areas of *curriculum*, *performance*

standards for students, *content of professional development programmes for teachers*, *teacher recruitment*, *teacher evaluation*, *school discipline*, and *budgetary decisions*. Their analysis suggested that teacher influence in those areas in schools corresponds positively with their job satisfaction and professional commitment. Ladd (2011[2*]) analysed an administrative dataset of teachers in North Carolina, US, in 2006 to understand the associations between working conditions and the departures of elementary, middle, and high-school teachers. Ladd (2011[2*]) labelled the scale of Expanded Roles of 8 items that ask teachers about their involvement in *selection of instructional materials*, *assessment*, *teaching staff recruitment*, and *school improvement plans*. Teacher involvement in these areas was found to be negatively linked with teacher departures, but in middle schools only.

No links between teacher voice and retention. At least two studies in Israel (Da'as, 2021[3*]) and South Korea (You et al., 2017[2*]) found no links between promoting teacher voice and teacher retention. Da'as (2021[3*]) employed a natural experiment to compare principals' cognitive and interpersonal skills in (a) schools that implemented an education reform with (b) those that did not. The samples for group (a) were 106 principals and 1,370 teachers. Group (b) had a sample of 101 principals and 1,203 teachers. These participants were randomly selected elementary schools in Israel. Overall, the findings from both groups indicated no association between providing teachers with opportunities to participate in decision-making and their sense of job satisfaction. The analysis, by You et al. (2017[2*]), of the data collected from 2,908 teachers in South Korea, identified no significant association between involving teachers in the process of making schoolwide decisions and their job satisfaction.

Leadership practices to support teacher voice

Most research outputs in this sub-section centre on identifying the associations between teacher voice (i.e. teacher influence in the school-wide decision-making processes) and outcomes related to teacher retention, with little specificity on leadership practices to enhance teacher voice. However, two categories of practices can be identified from an analytical look across scales and question items used in the studies that identified the positive relationships between promoting teacher influence in school decision-making and outcomes relevant to this review. These include *creating organisational structures for teachers' authentic participation in school decisions* (e.g. Ladd, 2011[2*]; Lee et al., 2023[2*]) and *developing a collaborative culture of shared responsibility for school issues* (e.g. Gouëdard et al., 2023[2*]; S. Liu et al., 2021[2*]).

Discussion and conclusions

This section discusses some insights from the evidence base on school leadership for promoting teacher professional autonomy, development, and voice in relation to teacher retention. Before highlighting the implications, it is important to discuss the limitations and suggestions for future research.

Limitations and suggestions for future research

The current review covers research outputs published in English from 2000 to 2023. It therefore potentially misses the work in other languages and its evidence base risks geographical and cultural bias. This limitation leaves space for the country-specific reviews that consider research outputs, written in other languages, relevant to leadership for teacher retention.

Methodologically, many included studies that specifically analyse models or types of school leadership are correlational in nature and of small-scale (e.g. with around 200 self-selected teacher participants in a large geographical area). Most of these studies tend to focus on leadership styles or models and rarely account for other potential factors that might explain the results.

This limitation is exacerbated by an over-reliance on cross-sectional data. These data fail to account for changes in other potential influencing factors happening at the time of the data collection. For example, changes in education reforms, increased accountability pressure on principals and teachers, and teacher workforce may influence teacher well-being and their turnover intentions. In addition, analyses on cross-sectional data do not support firm causal claims on effective leadership practices for teacher retention. The lack of causal evidence is also well-noted in the previous, relevant review (Liebowitz & Porter, 2019[R]). The current issues underscore a need for more longitudinal studies and those rigorously employing (quasi)experimental designs and considering a variety of potential factors in analytical procedures.

In this review, the outputs based on analyses of larger-scale administrative datasets from, for example, the OECD and the United States, tend to be rated higher in terms of the quality of evidence. Nonetheless, there are two potential issues. First, most of these studies relied on data on teacher intent to stay/leave, rather than actual departure. Second, some studies utilised the data on teachers' actual departures as an outcome variable, but they employed subjective measurements of independent variables. This methodological issue weakened those studies. To support more nuanced conclusions with stronger confidence, the increased use of objective measurements is a necessary next step.

Implications from the review

The analysis of the evidence base above highlights a cluster of professional autonomy, development, and voice as contributory factors to teacher retention. This cluster of factors influences teacher retention through a multiplicity of possible pathways that tend to be indirect. Some studies (e.g. Gouëdard et al., 2023[2*]) found potential direct associations between these three factors and teacher affective outcomes. Nevertheless, incorporating factors such as workload (e.g. Pan et al., 2023[2*]), and interpersonal trust (Liu et al., 2022[2*]) in the equation tends to make these relationships indirect.

These three distinguishable factors are interactive in influencing teacher turnover intentions. The previous section notes two key intertwined elements of teacher autonomy: professional discretion and competence in decision-making. The degree of teachers' well-being resulting from their discretion is subject to their professional competence and efficacy. This reasoning implies *the need for*

developmental support to enhance teachers' professional competence in alignment with respecting their autonomy (**point i**). For example, unlike more experienced teachers, ECTs may feel professionally dissatisfied if they are left 'solely independent' to decide on the teaching methods and instructional materials for a challenging class. This review stresses the need for school leaders' quality professional development support to satisfy and retain teachers, as evidenced in the previous section.

The current review suggests that teacher development can be promoted through direct mentorship and creating a culture of professional learning within and beyond schools. School leaders' direct instructional support for teachers, however, does not automatically generate positive effects on teacher retention. This support and mentorship should be constructively built on a collaborative basis, in a collegial and intellectual culture of shared responsibility and mutual support.

The less consistent pattern of findings on teacher voice in relation to teacher retention in this review raises three implications. First, the potential effects of promoting teacher voice can be culturally sensitive. While the studies in the US (e.g. Ladd, 2011[2*]) identified links between promoting teacher voice and teacher-retention-related outcomes, those in Israel (Da'as, 2021[3*]) and South Korea (You et al., 2017[2*]) found no associations.

Second, the possible effects of teacher voice might be contextually and situationally contingent. Teacher voice tends to be embedded in collective structures such as staff platforms, unions, and staff surveys. These structures offer no guarantee to enhance teachers' professional wellbeing and retention. The effects of teacher voice are arguably dependent on employees' feelings of the extent to which their voice influences the decision-making process.

Third, this inconsistency implies a need for more nuanced operationalisation and enhanced specificity of the theoretical dimensions of teacher voice. The research outputs drawn from analyses of the same TALIS dataset generate a similar pattern of findings. The findings from the outputs based on the other sources of data are somewhat inconsistent. Distinct forms of employee voice might have differentiated effects on their well-being (see, for example, Shipton et al., 2024).

While autonomy and voice are two distinguishable concepts (Carr & Mellizo, 2013), *they are likely related to each other in influencing employee-focused outcomes* (**point ii**). For example, the empirical evidence in Kao et al. (2022) suggested that job autonomy might positively influence employee promotive voice behaviours intended for organisational improvements. The aforementioned points or observations (**i**) and (**ii**) and the patterns of findings from this review provide a basis to argue for *the potential interactivity of promoting teacher autonomy, development, and voice in influencing teacher-related-retention outcomes*. Equally importantly, this review develops five categories of evidence-informed leadership practices to promote teacher autonomy, development, and voice. These are:

- supporting teacher professional freedom in the classroom;
- developing organisational structures for teachers' participative decision making;
- establishing an effective communication structure;
- providing instructional support for teachers; and
- promoting professional development opportunities for teachers.

These leadership practices might be complementary in influencing teacher retention. The evidence from many studies (e.g. Kim, 2019[2*]; Kraft et al., 2016[3*]; Y. Liu et al., 2021[2*]) included in the current review suggests that exercising a combination of these leadership practices is likely to contribute to satisfying and retaining teachers in schools. This proposition would benefit from further empirical verification for stronger confidence.

Note

1. The Teaching and Learning International Survey (TALIS), developed by Organisation for Economic Co-operation and Development (OECD).

Acknowledgements

We would like to thank Nada El Soufi for assisting with the database searches and screening of the data and Fujia Yang for technical support.

Author contributions

Dong Nguyen: Principal Investigator of this review project, conceptualisation, data curation, data analysis, writing up the original draft, reviewing and editing.
Beng Huat See: Co-Investigator of this review project, data analysis, reviewing and editing.
Chris Brown: Co-Investigator of this review project, data analysis, reviewing and editing.
Dimitra Kokotsaki: Co-Investigator of this review project, data analysis, reviewing and editing.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This research was funded by the Education Endowment Foundation in England in 2023.

Notes on contributors

Dong Nguyen is currently Associate Professor in Educational Leadership at Durham University where he leads the MA Educational Leadership and Change. He has around 15 years of international professional experience across many education systems. He has conducted research across countries in Africa, Asia, and Europe. His research and publications focus on school leadership, professional development, and diffusion of innovations. Dong Nguyen is currently Co-Editor-in-Chief of the International Journal of Educational Management.

Beng Huat See is Professor of Teacher Education at the University of Birmingham. Her current research is focused on teacher supply, teacher wellbeing, professional development of teachers and school leaders, and improving the ethnic diversity of the teaching workforce. She currently leads an ESRC-funded project examining teacher education policies in OECD and partner countries to identify key political, cultural, institutional and economic drivers of teacher supply.

Chris Brown is Professor of Education, University of Southampton, Head of the Southampton Education School and Distinguished Visiting Professor, University of Tübingen. Chris has a long-

standing interest in how people go about harnessing great ideas to improve the human condition. Chris has written or edited some 21 books and nearly 100 journal articles in the broad sphere of research, leadership, evidence and ideas-use.

Dimitra Kokotsaki is an Associate Professor at the School of Education at Durham University. She teaches undergraduate and postgraduate modules on research methods, psychological perspectives on learning, student engagement and creativity, and the arts in education, and supervises research students. She currently holds the role of Director of Education in the school. She has published a number of research articles on teaching and learning, exploring specifically notions of creativity, engagement, student resilience and attitudes to learning. She has led and co-led major funded research projects on educational interventions and systematic reviews that aim to enhance the educational conditions for better teaching and learning across disciplines and phases of education, such as leadership behaviours, quality of teaching, creative thinking and tools for enriching student engagement and well-being.

ORCID

Dong Nguyen http://orcid.org/0000-0002-9119-7157
Beng Huat See http://orcid.org/0000-0001-7500-379X
Chris Brown http://orcid.org/0000-0002-9759-9624
Dimitra Kokotsaki http://orcid.org/0000-0003-0732-4895

References

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309–328. https://doi.org/10.1108/02683940710733115

Barbieri, B., Sulis, I., Porcu, M., & Toland, M. D. (2019). Italian teachers' well-being within the high school context: Evidence from a large scale survey. *Frontiers in Psychology*, *10*, 1926. https://doi.org/10.3389/fpsyg.2019.01926

Borman, G. D., & Dowling, N. M. (2008[R]). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of Educational Research*, *78*(3), 367–409. https://doi.org/10.3102/0034654308321455

Boyce, J., & Bowers, A. J. (2018[R]). Toward an evolving conceptualization of instructional leadership as leadership for learning: Meta-narrative review of 109 quantitative studies across 25 years. *Journal of Educational Administration*, *56*(2). https://doi.org/10.1108/JEA-06-2016-0064

Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S., & Wyckoff, J. (2011). The influence of school administrators on teacher retention decisions. *American Educational Research Journal*, *48*(2), 303–333. https://doi.org/10.3102/0002831210380788

Brady, J., & Wilson, E. (2021). Teacher wellbeing in England: Teacher responses to school-level initiatives. *Cambridge Journal of Education*, *51*(1), 45–63. https://doi.org/10.1080/0305764x.2020.1775789

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard university press.

Brown, K. M., & Wynn, S. R. (2007). Teacher retention issues: How some principals are supporting and keeping new teachers. *Journal of School Leadership*, *17*(6), 664–698. https://doi.org/10.1177/105268460701700601

Campoli, A. K., & Conrad Popova, D. (2017). Invisible threads: Working conditions, interpersonal relationships, and turnover among black female teachers. In *Black female teachers: Diversifying the United States' teacher workforce* (pp. 117–134). Emerald Publishing Limited. https://doi.org/10.1108/s2051-231720170000006007

Cann, R. F., Riedel-Prabhakar, R., & Powell, D. (2021). A model of positive school leadership to improve teacher wellbeing. *International Journal of Applied Positive Psychology*, *6*(2), 195–218. https://doi.org/10.1007/s41042-020-00045-5

Carr, M. D., & Mellizo, P. (2013). The relative effect of voice, autonomy, and the wage on satisfaction with work. *International Journal of Human Resource Management*, *24*(6), 1186–1201. https://doi.org/10.1080/09585192.2012.706818

Cha, S. H., & Cohen-Vogel, L. (2011). Why they quit: A focused look at teachers who leave for other occupations. *School Effectiveness and School Improvement*, *22*(4), 371–392. https://doi.org/10.1080/09243453.2011.587437

Chaaban, Y., & Du, X. (2017). Novice teachers' job satisfaction and coping strategies: Overcoming contextual challenges at Qatari government schools. *Teaching & Teacher Education*, *67*, 340–350. https://doi.org/10.1016/j.tate.2017.07.002

Collie, R. J., Malmberg, L. E., Martin, A. J., Sammons, P., & Morin, A. J. (2020). A multilevel person-centered examination of teachers' workplace demands and resources: Links with work-related well-being. *Frontiers in Psychology*, *11*, 626. https://doi.org/10.3389/fpsyg.2020.00626

Cooper-Gibson Research. (2018). *Factors affecting teacher retention: Qualitative investigation*. Department for Education.

Da'as, R. A. (2021). School principals' skills and teacher absenteeism during Israeli educational reform: Exploring the mediating role of participation in decision-making, trust and job satisfaction. *Journal of Educational Change*, *22*(1), 53–84. https://doi.org/10.1007/s10833-020-09385-0

Ebersold, S., Rahm, T., & Heise, E. (2019). Autonomy support and well-being in teachers: Differential mediations through basic psychological need satisfaction and frustration. *Social Psychology of Education*, *22*(4), 921–942. https://doi.org/10.1007/s11218-019-09499-1

Gallant, A., & Riley, P. (2017). Early career teacher attrition in Australia: Inconvenient truths about new public management. *Teachers & Teaching*, *23*(8), 896–913. https://doi.org/10.1080/13540602.2017.1358707

Gamero Burón, C., & Lassibille, G. (2016). Job satisfaction among primary school personnel in Madagascar. *The Journal of Development Studies*, *52*(11), 1628–1646. https://doi.org/10.1080/00220388.2016.1187726

García Torres, D. (2019[2*]). Distributed leadership, professional collaboration, and teachers' job satisfaction in US schools. *Teaching & Teacher Education*, *79*, 111–123. https://doi.org/10.1016/j.tate.2018.12.001

Gorard, S. (2021). *How to make sense of statistics*. SAGE Publications Ltd.

Gouëdard, P., Kools, M., & George, B. (2023). The impact of schools as learning organisations on teachers' self-efficacy and job satisfaction: A cross-country analysis. *School Effectiveness and School Improvement*, *34*(3), 331–357. https://doi.org/10.1080/09243453.2023.2196081

Griffith, J. (2004). Relation of principal transformational leadership to school staff job satisfaction, staff turnover, and school performance. *Journal of Educational Administration*, *42*(3), 333–356. https://doi.org/10.1108/09578230410534667

Hobson, A. J., & Maxwell, B. (2017). Supporting and inhibiting the well-being of early career secondary school teachers: Extending self-determination theory. *British Educational Research Journal*, *43*(1), 168–191. https://doi.org/10.1002/berj.3261

Kao, K. Y., Hsu, H. H., Thomas, C. L., Cheng, Y.-C., Lin, M.-T., & Li, H.-F. (2022). Motivating employees to speak up: Linking job autonomy, P-O fit, and employee voice behaviours through work engagement. *Current Psychology*, *41*(11), 7762–7776. https://doi.org/10.1007/s12144-020-01222-0

Kim, J. (2019). How principal leadership seems to affect early career teacher turnover. *American Journal of Education*, *126*(1), 101–137. https://doi.org/10.1086/705533

Kraft, M. A., Marinell, W. H., & Shen-Wei Yee, D. (2016). School organizational contexts, teacher turnover, and student achievement: Evidence from panel data. *American Educational Research Journal*, *53*(5), 1411–1449. https://doi.org/10.3102/0002831216667478

Ladd, H. F. (2011). Teachers' perceptions of their working conditions: How predictive of planned and actual teacher movement? *Educational Evaluation and Policy Analysis*, *33*(2), 235–261. https://doi.org/10.3102/0162373711398128

Lamb, T. E., & Reinders, H. (2008). *Learner and teacher autonomy: Concepts, realities and responses*. John Benjamins.

Lee, A. N., & Nie, Y. (2014). Understanding teacher empowerment: Teachers' perceptions of principal's and immediate supervisor's empowering behaviours, psychological empowerment and

work-related outcomes. *Teaching & Teacher Education*, *41*, 67–79. https://doi.org/10.1016/j.tate.2014.03.006

Lee, J. Y., Park, J. H., & Lee, I. H. (2023). The effect of teacher influence relative to principal influence in school decision-making on teacher job attitudes. *Educational Studies*, *49*(3), 529–546. https://doi.org/10.1080/03055698.2023.2174799

Liebowitz, D. D., & Porter, L. (2019[R]). The effect of principal behaviours on student, teacher, and school outcomes: A systematic review and meta-analysis of the empirical literature. *Review of Educational Research*, *89*(5), 785–827. https://doi.org/10.3102/0034654319866133

Liu, L., Liu, P., Yang, H., Yao, H., & Thien, L. M. (2022). The relationship between distributed leadership and teacher well-being: The mediating roles of organisational trust. *Educational Management Administration & Leadership*, *52*(4), 837–853. https://doi.org/10.1177/17411432221113683

Liu, S., Keeley, J. W., Sui, Y., & Sang, L. (2021). Impact of distributed leadership on teacher job satisfaction in China: The mediating roles of teacher autonomy and teacher collaboration. *Studies in Educational Evaluation*, *71*, 101099. https://doi.org/10.1016/j.stueduc.2021.101099

Liu, Y., Bellibaş, M. Ş., & Gümüş, S. (2021). The effect of instructional leadership and distributed leadership on teacher self-efficacy and job satisfaction: Mediating roles of supportive school culture and teacher collaboration. *Educational Management Administration & Leadership*, *49*(3), 430–453. https://doi.org/10.1177/1741143220910438

Madigan, D. J., & Kim, L. E. (2021[R]). Towards an understanding of teacher attrition: A meta-analysis of burnout, job satisfaction, and teachers' intentions to quit. *Teaching & Teacher Education*, *105*, 103425. https://doi.org/10.1016/j.tate.2021.103425

Martín-Martín, A., Orduna-Malea, E., Thelwall, M., & López-Cózar, E. D. (2018). Google Scholar, web of science, and scopus: A systematic comparison of citations in 252 subject categories. *Journal of Informetrics*, *12*(4), 1160–1177. https://doi.org/10.1016/j.joi.2018.09.002

Nguyen, T. D., Pham, L., Springer, M. G., & Crouch, M. (2019[R]). *The factors of teacher attrition and retention: An updated and expanded meta-analysis of the literature*. Annenberg Institute at Brown University. https://doi.org/10.26300/cdf3-4555

Ni, Y. (2017). Teacher working conditions, teacher commitment, and charter schools. *Teachers College Record*, *119*(6), 1–38. https://doi.org/10.1177/016146811711900606

Pan, H. L. W., Chung, C. H., & Lin, Y. C. (2023). Exploring the predictors of teacher well-being: An analysis of teacher training preparedness, autonomy, and workload. *Sustainability*, *15*(7), 5804. https://doi.org/10.3390/su15075804

Player, D., Youngs, P., Perrone, F., & Grogan, E. (2017). How principal leadership and person-job fit are associated with teacher mobility and attrition. *Teaching & Teacher Education*, *67*, 330–339. https://doi.org/10.1016/j.tate.2017.06.017

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist*, *55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Scallon, A. M., Bristol, T. J., & Esboldt, J. (2023). Teachers' perceptions of principal leadership practices that influence teacher turnover. *Journal of Research on Leadership Education*, *18*(1), 80–102. https://doi.org/10.1177/19427751211034214

See, B. H., Morris, R., Gorard, S., & El Soufi, N. (2020[R]). What works in attracting and retaining teachers in challenging schools and areas? *Oxford Review of Education*, *46*(6), 678–697. https://doi.org/10.1080/03054985.2020.1775566

Shipton, H., Kougiannou, N., Do, H., Minbashian, A., Pautz, N., & King, D. (2024). Organisational voice and employee-focused voice: Two distinct voice forms and their effects on burnout and innovative behavior. *Human Resource Management Journal*, *34*(1), 177–196. https://doi.org/10.1111/1748-8583.12518

Skaalvik, E. M., & Skaalvik, S. (2020). Teacher burnout: Relations between dimensions of burnout, perceived school context, job satisfaction and motivation for teaching. A longitudinal study. *Teachers & Teaching*, *26*(7–8), 602–616. https://doi.org/10.1080/13540602.2021.1913404

Sorensen, L. C., & Ladd, H. F. (2018). *The hidden costs of Teacher turnover*. *CALDER working paper No. 203-0918-1*. CALDER. https://files.eric.ed.gov/fulltext/ED591843.pdf

Sun, A., & Xia, J. (2018). Teacher-perceived distributed leadership, teacher self-efficacy and job satisfaction: A multilevel SEM approach using the 2013 TALIS data. *International Journal of Educational Research*, *92*, 86–97. https://doi.org/10.1016/j.ijer.2018.09.006

Toropova, A., Myrberg, E., & Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review*, *73*(1), 71–97. https://doi.org/10.1080/00131911.2019.1705247

Torres, A. C. (2016). The uncertainty of high expectations: How principals influence relational trust and teacher turnover in no excuses charter schools. *Journal of School Leadership*, *26*(1), 61–91. https://doi.org/10.1177/105268461602600103

Van Droogenbroeck, F., & Spruyt, B. (2014). To stop or not to stop: An empirical assessment of the determinants of early retirement among active and retired senior teachers. *Research on Aging*, *36* (6), 753–777. https://doi.org/10.1177/0164027513519449

Van Dyne, L., Ang, S., & Botero, I. C. (2003). Conceptualizing employee silence and employee voice as multidimensional constructs. *Journal of Management Studies*, *40*(6), 1359–1392. https://doi.org/10.1111/1467-6486.00384

Waddell, J. H. (2010). Fostering relationships to increase teacher retention in urban schools. *Journal of Curriculum and Instruction*, *4*(1), 70–85. https://doi.org/10.3776/joci.2010.v4n1p70-85

You, S., Kim, A. Y., & Lim, S. A. (2017). Job satisfaction among secondary teachers in Korea: Effects of teachers' sense of efficacy and school culture. *Educational Management Administration & Leadership*, *45*(2), 284–297. https://doi.org/10.1177/1741143215587311

Zavelevsky, E., Shapira-Lishchinsky, O., Benoliel, P., Klein, J., & Schechter, C. (2022). Ecological school culture for novice teachers' retention: Principals' perceptions. *Leadership and Policy in Schools*, *21* (4), 922–937. https://doi.org/10.1080/15700763.2021.1879170

Appendices

Appendix A. Criteria for judging the strength of research evidence

Criteria for judging the strength of research evidence.
(Gorard, 2021)
Reviewer……Date……
Author …… Year …… Record Number ……..
Does this need to be cross-checked? YES □ NO □
Comments: ……

Design	Scale	Dropout	Data quality	Threats	Rating
Strong design for research question (RQ) (e.g., randomised controlled trial)	Large number of cases (per comparison group)	Minimal attrition, no evidence of impact on findings	Standardised, pre-specified independent outcome	No evidence of diffusion, demand, or other threat	4★
Good design for RQ (balanced comparisons, e.g., regression discontinuity design, difference in differences, administrative datasets using population data)	Medium number of cases (per comparison group)	Some attrition (or initial imbalance)	Outcome pre-specified, but not standardised or independent	Little evidence of diffusion, demand, or other threat	3★
Weak design for RQ (e.g., unmatched comparison, e.g., volunteers)	Small number of cases (per comparison group)	Moderate attrition (or initial imbalance)	Not pre-specified but valid in context	Evidence of diffusion, demand, or other threat	2★
Very weak design for RQ (e.g., single group, pre-post, or observational studies)	Very small number of cases (per comparison group)	High attrition (or initial imbalance)	Issues of validity or appropriateness	Strong indication of diffusion, demand, or other threat	1★
No consideration of design (no report of a comparator)	A trivial scale of study, or N unclear	Attrition huge or not reported	Poor reliability, too many outcomes, weak measures	No consideration of threats to validity	0

This appraisal tool (Gorard, 2021) is to be read from left to right and top to bottom, starting with the criterion of research design. As the research questions in this review imply causality, the strongest design would be a randomised controlled trial. These will be rated 4*. Moving across the scale, if the randomised controlled trial has a large sample in each arm, then it stays as 4*. It will drop to 3* if it is a small-scale study. Moving along to the right, if there is no or low attrition, then it remains at 3*. If there is high attrition, for example over 20% then it drops a star to 2* and so on.

Appendix B. Critical appraisal checklist for qualitative research & reviews of empirical research

Critical appraisal checklist for qualitative research
(Adapted from Joanna Briggs Institute Critical Appraisal Checklist for Qualitative Research)
Reviewer……Date……
Author …… Year …… Record Number ……..
Overall appraisal: Include □ Exclude □ Seek further info □ Comments (Including reason for exclusion): …….

	Yes	No	Unclear
1. Is there congruity between the research methodology/method used and the study's research questions and/or aims?			
2. Were the criteria for inclusion in the sample clearly defined?			
3. Were the study participants and the setting described in detail?			
4. Is there congruity between the research methodology/method and the representation and analysis of data?			
5. Are the findings accompanied by data/an illustration that offer clear support to the researcher's interpretation?			
6. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?			

Critical appraisal checklist for reviews of empirical research
(Adapted from Joanna Briggs Institute Critical Checklist for Systematic Reviews and Research Syntheses)
Reviewer …… Date ……
Author …… Year …… Record Number ……..
Overall appraisal: Include □ Exclude □ Seek further info □ Comments (Including reason for exclusion): …….

	Yes	No	Unclear
1. Is the review question clearly and explicitly stated?			
2. Were the inclusion criteria appropriate for the review question?			
3. Was the search strategy appropriate?			
4. Were the sources and resources used to search for studies adequate?			
5. Were the criteria for appraising studies appropriate?			
6. Was critical appraisal conducted?			
7. Were there methods to minimise errors in data extraction?			
8. Were the methods used to combine studies appropriate?			