



TEACHER ATTRITION AND RETENTION IN ELEMENTARY EDUCATION: A SYSTEMATIC REVIEW OF EVIDENCE AND POLICY IMPLICATIONS FOR PUNJAB

Noreen Tahira

Lecturer of Education Department of Educational Research & Assessment, University of Okara, Pakistan

noreentahira9@gmail.com

Dr. Shehzad Ahmed,

Associate Professor, Department of Educational Research & Assessment, University of Okara, Pakistan

dr.shehzad@uo.edu.pk

Abstract

This systematic review was designed to synthesize the empirical evidence regarding teachers' attrition and retention problems among the elementary school teachers focusing on implications for Punjab. Teacher turnover is an issue of concern for education systems due to implications for teacher availability, instructional continuity, school stability, learning outcomes and students. The review was carried out according to PRISMA 2020 guidelines, employing a structured process of identification, screening, eligibility and inclusion of relevant studies. Scopus, Web of Science, ERIC, ScienceDirect, SAGE Journals, Taylor & Francis Online, SpringerLink and Google Scholar were searched for empirical studies published between 2000 and 2026. There were initially 384 records. Following duplicate removal, title/abstract screening, and full-text eligibility assessment, 28 empirical studies were finally included for qualitative thematic synthesis. They found that teacher attrition can be traced to factors such as excessive workload, job dissatisfaction, burnout, low pay, promotion opportunities, working conditions, pressure coming from administration, lack of recognition, distance from work and poor leadership support. The review also identified that supportive school leadership, professional development, teacher mentoring, fair workload sharing, career advancement, teacher recognition and better working conditions are ways to improve teacher retention. High teacher turnover also negatively impacts school operation via disruption of curriculum delivery, additional workload for other teachers, loss of teacher–student continuity, and loss of instructional stability. It is determined in the review that coordinated interventions are needed at institutional and policy levels to reduce teacher attrition at the elementary level. In Punjab, evidence-based retention policies are required to boost teacher retention, strengthen primary education and enhance the learning outcomes of the students.

Key Words: Teacher attrition, teacher retention, elementary school teachers, teacher turnover, teacher shortage, Punjab, systematic review.

1.1 Introduction

In the context of education systems, teachers are at the heart of the issue of their quality, continuity and effectiveness. In addition to classroom teaching they make a contribution to students' learning, motivation, socialisation and school stability. In particular, at the elementary level, they have a crucial role, as it is during this stage that literacy, numeracy, behaviour formation, and future education progress are established. But, there are a growing shortage of teachers, high turnover and retention problems around the world. By 2030, millions of new teachers, both primary and secondary, will be needed to ensure inclusive and equitable education of quality (UNESCO & International Task Force on Teachers for Education 2030, 2024). Teacher attrition is the movement of teachers out of the profession and/or teaching position by resignation, retirement, career change, dissatisfaction, burnout or other personal and institutional reasons. A certain amount of workforce turnover is acceptable, but if it leads to a staffing shortage, the lack of continuity in instruction, higher recruitment expenses, and diminished school functioning, it poses an issue. The OECD (2025) has recently found that

teacher turnover is not just an administrative problem but a major concern in terms of workforce and educational quality across the globe. Repeatedly losing teachers can be a challenge for schools to ensure a stable learning environment, effective curriculum delivery, and consistent academic and emotional support for students.

Teacher turnover is especially significant with regard to student learning and school improvement. Teacher turnover can have an impact on student achievement by decreasing access to experienced teachers and disrupting the collective professional culture of schools (Ronfeldt et al., 2013). It can also result in diminished instructional continuity, decreased teacher teamwork, and heightened stress for different teachers (Carver-Thomas & Darling-Hammond, 2017). These concerns are particularly pertinent at the elementary level where students rely on ongoing teacher support, classroom structures, and teacher–student interaction for learning and social and emotional growth. Teacher turnover has many factors. Research has long indicated that teachers can leave for various reasons, including low pay, lack of administrative support, low job satisfaction, poor working conditions, overworked, professional isolation, student related issues and stress/burnout (Billingsley & Bettini, 2019; Carver-Thomas & Darling-Hammond, 2017; Madigan & Kim, 2021). In addition, personal and demographic characteristics like age, sex, marital status, qualification, teaching experience, family responsibilities, distance from work, and teacher career aspirations might have an impact on teachers leaving or staying in the profession. Thus, teacher attrition must be regarded as a product of the play of individual, institutional, professional, policy and socio-economic factors.

Teacher retention is defined as the capacity of school and education systems to keep teachers in the profession over time. Retention isn't just about teachers staying, it's about teachers working in conditions where they feel like they are valued and supported, paid fairly and feel professionally involved. Supportive leadership, manageable workload, professional development, collegial collaboration, recognition, teacher autonomy and fair career progression are all frequently associated with effective retention (UNESCO & International Task Force on Teachers for Education 2030, 2024). Therefore, teacher retention is not only a human resource issue, but a quality education issue as a stable and committed staff helps to make the school effective and the students successful. Teacher attrition and retention is a significant concern in Pakistan and specifically in Punjab as public elementary schools cater to a large number of students and are the backbone of basic education. Elementary teachers operate in a system that is influenced by administration's demands for accountability, workload, transfer rules, resources, socio-economic pressures, and student performance expectations. These factors can have an impact on teachers' motivation, job satisfaction, and professional commitment. While recruitment is one of the tools that can be applied to the issue of teacher shortages, without a systematic understanding of the causes of attrition and retention there is no way to solve the problem through recruitment. As the interest and concern in the topic has increased, the literature on teacher attrition and retention has become disjointed in terms of context, level of education, methodology, and factors given for explaining attrition. The bulk of the research focuses on teacher shortage, teacher burnout, job satisfaction, work conditions, or teacher turnover intention, but few studies investigate the relationship between these factors in relation to teacher attrition and retention, especially among elementary school teachers. Hence, it is imperative to have a systematic review to collate evidence and point out the major issues of teacher attrition, problems in teacher retention, research gaps, and implications for elementary education in Punjab. Hence, the systematic review looks at the issue of teacher attrition and teacher retention issues with special reference to Punjab. It aims to identify

individual, institutional, professional and policy factors related to teacher attrition and retention. It also looks at the impact of teacher attrition on school functioning and student learning and what strategies can be used to address teacher retention and potentially increase teacher commitment, continuity, and educational quality. The results should inform researchers, school leaders, school administrators, and policymakers to help them create evidence-based practices to increase teacher retention and decrease unnecessary teacher turnover at the elementary level.

Table 1

Alignment of Research Objectives and Research Questions

Research Objectives	Corresponding Research Questions
RO1: To synthesize empirical studies on teacher attrition and retention challenges among elementary school teachers.	RQ1: How have teacher attrition and retention challenges been examined in empirical educational research?
RO2: To identify the major factors contributing to teacher attrition at the elementary school level.	RQ2: What are the major individual, institutional, professional, and policy-related factors contributing to teacher attrition among elementary school teachers?
RO3: To examine the retention challenges faced by elementary school teachers.	RQ3: What major challenges affect the retention of elementary school teachers?
RO4: To analyze the effects of teacher attrition on school functioning and students' learning outcomes.	RQ4: How does teacher attrition affect school functioning, instructional continuity, and students' learning outcomes?
RO5: To identify evidence-based strategies that may support teacher retention in elementary schools.	RQ5: What evidence-based retention strategies are suggested in the existing literature to reduce teacher attrition and improve teacher stability?

Methodology

This systematic review was undertaken following the PRISMA 2020 guidelines to ensure a clear, transparent and replicable process of the study identification, screening, eligibility assessment and inclusion (Page et al., 2021). The review discussed the empirical results of teacher attrition and teacher retention issues in the elementary education context with specific implications for Punjab. It centered on the research on teacher attrition, teacher turnover, intention to leave, teacher shortage, job dissatisfaction, teacher burnout, teacher workload, working conditions, administrative pressure and retention strategies in school education.

Scopus, Web of Science, ERIC, ScienceDirect, SAGE Journals, Taylor & Francis Online, SpringerLink and Google Scholar were used to search for relevant studies. To include evidence-based and recent content, the search included studies published from 2000 to 2026. The key words Boolean search string was “teacher attrition” OR “teacher turnover” OR “teacher retention” OR “teacher shortage” OR “teacher migration” OR “teacher dropout” OR “intention to leave” AND “elementary school teachers” OR “primary school teachers” OR “school teachers” OR “public school teachers” AND “retention challenges” OR “working conditions” OR “job satisfaction” OR “burnout” OR “workload” OR “administrative support” OR “teacher motivation” AND “Pakistan” OR “Punjab” OR “developing countries” OR

“school education”. Other search terms included teacher recruitment, teacher stability, teacher commitment, teacher stress, and teacher workforce sustainability.

Studies were selected if they were empirical, written in English, and concerned with school education and/or teacher attrition, teacher turnover, teacher retention, teacher shortage, or teacher intention to leave. Both quantitative and qualitative studies and mixed method studies were eligible. However, studies that focus on salary, workload, leadership support, working conditions, professional development, motivation, burnout, job satisfaction, policy issues, transfer practices, or the demographic influences on attrition and retention also were included. Conceptual papers, editorials, opinion papers, book reviews, unpublished theses, non-English papers and studies that were not in the educational context were excluded. Also excluded from the studies were those conducted exclusively among higher education teachers, among professionals in a company, among doctors or among employees in the field of occupation without qualification.

The selection process of the studies comprised four stages: identification, removal of duplicates, title and abstract screening, and full-text eligibility assessment. Records were obtained from all databases, and then duplicate records were eliminated. Second, titles and abstracts were filtered out to remove studies that were not related to teacher attrition, teacher retention, school education, or teacher workforce issues. Third, the full-text articles were evaluated based on inclusion/exclusion criteria. Finally, eligible studies were kept for qualitative thematic synthesis. Thematic synthesis was performed to identify the recurring patterns, concepts and themes through the selected empirical studies (Thomas & Harden, 2008). The findings were organized into four main categories: reasons for teacher attrition, teacher retention problems, impact of teacher attrition on school operation and student learning, and strategies to retain teachers.

Table 2

PRISMA-Based Screening and Selection Procedure

Stage	Procedure
Identification	Relevant studies were identified through Scopus, Web of Science, ERIC, ScienceDirect, SAGE Journals, Taylor & Francis Online, SpringerLink, and Google Scholar using predefined Boolean search strings related to teacher attrition, teacher turnover, teacher retention, teacher shortage, and intention to leave.
Duplicate Removal	Duplicate records retrieved from multiple databases were removed before the screening stage.
Title and Abstract Screening	Titles and abstracts were screened to exclude studies that were irrelevant, non-empirical, non-teacher-focused, non-school-based, or unrelated to teacher attrition and retention.
Full-Text Eligibility Assessment	Full-text articles were assessed according to the inclusion and exclusion criteria, with attention to empirical design, school context, teacher-focused participants, and relevance to attrition or retention.
Full-Text Exclusion	Studies were excluded if they lacked methodological clarity, did not focus on school teachers, did not examine attrition or retention, or were conducted outside the school education context.
Final Inclusion	Eligible studies were retained for qualitative thematic synthesis.



Table 3
Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Study Type	Empirical quantitative, qualitative, and mixed-method studies	Conceptual papers, editorials, opinion articles, book reviews, commentaries, and non-empirical papers
Participants	Elementary, primary, middle, or school teachers; school leaders where teacher attrition or retention was directly examined	University faculty only, students only, corporate employees, medical staff, or non-teaching professionals
Core Focus	Studies addressing teacher attrition, teacher turnover, teacher retention, teacher shortage, intention to leave, burnout, job dissatisfaction, workload, working conditions, administrative support, teacher motivation, or retention strategies	Studies not addressing teacher attrition, retention, turnover, intention to leave, or related teacher workforce issues
Context	School education settings, especially elementary or primary schools, with relevance to Punjab or comparable educational contexts	Corporate, industrial, medical, higher education-only, or non-educational organizational settings
Publication Type	Peer-reviewed journal articles and credible empirical research reports	Unpublished theses, dissertations, conference abstracts, non-academic reports, and incomplete papers
Language	Studies published in English	Non-English publications
Timeframe	Studies published from 2000 to 2026	Studies published outside the defined timeframe
Relevance	Studies providing empirical evidence on causes, effects, challenges, or strategies related to teacher attrition and retention	Studies with no direct relevance to teacher attrition, teacher retention, or teacher workforce stability

PRISMA Flow of Study Selection

Database search in Scopus, Web of Science, ERIC, ScienceDirect, SAGE Journals, Taylor & Francis Online, SpringerLink and Google scholar resulted in the identification of 384 records. 316 records were left after deleting 68 duplicate records for title and abstract screening. 254 records were excluded due to their non-empirical nature, failure to center on teachers, non-school education related, or being unrelated to teacher attrition, teacher turnover, teacher retention, teacher shortage, or teacher intention to leave, at this stage.

The rest of the 62 full text articles were evaluated for eligibility based on the inclusion and exclusion criteria. Thirty-four articles were excluded after full-text review for inadequate methodological clarity, inadequate focus on higher education faculty members, inadequate focus on non-teaching professionals, lack of focus on the issues of attrition or retention, and

insufficient evidence related to elementary or school-level teachers. Finally, 28 empirical studies met the inclusion criteria and were included in the qualitative thematic synthesis.

Table 4

PRISMA Numerical Reporting

PRISMA Phase	Number (n)
Records identified through database searching	384
Duplicate records removed	68
Records after duplicates removed	316
Records screened by title and abstract	316
Records excluded after title and abstract screening	254
Full-text articles assessed for eligibility	62
Full-text articles excluded	34
Studies included in qualitative synthesis	28

Results

The studies included in the overview are:

After completing the PRISMA screening and eligibility process, 28 empirical studies were included in the qualitative thematic synthesis. The studies reviewed focused on teacher attrition, teacher turnover, teacher retention, teacher shortage, intention to leave and similar teacher workforce issues in school education. Studies were found in various educational environments such as public school, private schools, rural communities, urban communities, primary, elementary and general school level teaching populations. Previous evidence also indicates that studies on teacher attrition and retention frequently examine factors related to personal experiences, school experiences and policy experiences (Nguyen et al., 2019). The majority of studies included in this review employed quantitative designs, especially cross-sectional surveys, aimed at investigating teachers' intention to leave, job satisfaction, burnout, workload, administrative support, working conditions, and teacher demographic predictors of teacher attrition. Less attention has been paid to teachers' experiences, problems, constraints, and their motivations for remaining or departing from the profession through qualitative or mixed methods. This suggests that there has been primarily survey based research in the area of teacher attrition, with less extensive qualitative research.

The synthesis revealed that teacher attrition is a complex phenomenon with four dimensions: individual, institutional, professional and policy. Individual factors were age, sex, qualification, marital status, teaching experience, family responsibilities, career aspirations and distance from workplace. Institutional factors encompassed school leadership, administrative support, school climate, workload, student-related challenges, resources and collegial relationships. Professional factors encompassed salary, job satisfaction, promotion opportunities, professional development, stress, burnout and recognition. Policy factors were recruitment, transfer policies, pressure of accountability, monitoring systems and rural-urban distribution of teachers. The other challenge was teacher retention as it is crucial for continuity of instruction, school stability, and student learning to keep qualified, motivated teachers. As evidenced reviewed, supportive leadership, fair workload, professional respect, mentoring, growth opportunities, safe working environment, and professional growth were likely to enhance retention. Weak institutional support, high administrative pressure, low recognition, poor working conditions and low incentives, however, were associated with increased intention to leave.

The studies reviewed also indicated that teachers' turnover negatively impacts the performance of schools, leading to teacher shortages, greater workload for remaining teachers, inability to maintain the classroom routine, curriculum delivery disruption, and teacher-student continuity. These impacts are particularly significant at the elementary level where children need constant and consistent teaching support, guidance in the classroom, and ongoing academic and emotional relationships with teachers. Thus, teacher attrition is not just a staffing problem, but it is also an issue of educational quality. The findings were grouped into five themes: the major factors causing teacher attrition, the challenges to teacher retention in elementary schools, the impact of teacher attrition on school functioning and student learning, institutional and policy related factors, and suggestions for enhancing teacher retention.

Theme 1: Major Factors Causing Teacher Attrition

The reviewed studies revealed that teacher attrition is attributed to personal, institutional, professional and policy-related factors. Personal factors included qualification, age, gender distance from workplace, desire for better employment opportunities and marital status and family responsibilities. The institutional factors ranged from poor working conditions, inadequate administrative support, weak school leadership, limited resources, difficult school climate and students' behavioural problems. Job dissatisfaction, stress and burnout, heavy workload, insufficient pay, and lack of promotion opportunities were cited as a recurring reason for teachers' decisions to leave the profession. These results align with past reviews demonstrating that teacher attrition is influenced by teacher characteristics, school climate, teacher salaries, school administrative support, and overall labor market opportunities (Billingsley & Bettini, 2019; Carver-Thomas & Darling-Hammond, 2017; Nguyen et al., 2019).

Theme 2: Retention Challenges for Elementary School Teachers

The synthesis revealed that teachers' retention remains challenging when teachers feel they lack professional support and recognition, have a high workload, low motivation, and lack of a clear career trajectory. Often, elementary educators are responsible for the basics of learning, classroom management, student diversity, parent expectations and administration. If these duties are not accompanied by the necessary resources, mentoring, the fair distribution of workload, and supportive leadership, teacher frustration and diminished professional commitment can occur. It is much harder to retain teachers in a school that does not value, isolate, or exclude them from decision making. As well, there is evidence that supporting teacher conditions—such as supportive leadership, professional development, collegial support, autonomy, reasonable workload, and fair working conditions—also increase retention rates (Carver-Thomas & Darling-Hammond, 2017; Nguyen et al., 2019; UNESCO & International Task Force on Teachers for Education 2030, 2024).

Theme 3: Effects of Teacher Attrition on School Functioning and Student Learning

Reviewed evidence showed that teacher attrition has an impact on staffing and school functioning. Disruptions to the continuity of school curriculum and classroom management, a heavier workload for teachers who remain in the school, and issues of continuity of teacher–student relationships when teachers depart. In elementary grades, such disruptions can be more severe as young students rely on consistent schedules, ongoing teaching assistance and sustained emotional interaction with their teachers. When teachers move from school to school, it causes problems for the students and weakens efforts to improve the school. As noted earlier, previous studies have demonstrated that greater teacher turnover is linked to decreases in student achievement and increases in organizational disruption in schools (Ronfeldt et al.,

2013). Hence, teacher turnover is an issue of educational quality and not just a management problem.

Theme 4: Institutional and Policy-Related Influences on Attrition and Retention

The studies included indicated that institutional and policy-related factors are important in teacher attrition and retention. Teachers' decisions to either stay or leave their job relate to recruitment practices, transfer policies, monitoring systems, pressure of accountability, rural – urban placement differences, promotion policies, and workload policies. Many school systems have experienced teacher shortages even after they recruit new teachers, due to the fact that the underlying teacher retention issues are not corrected. Distant postings, administrative pressure, inadequate professional supports, and unfair transfers or promotions can lead to a higher likelihood of teacher attrition. The theme demonstrates that teacher retention needs attention in policies on teacher placement, support, workload, incentives, promotion and working conditions at the school level.

Theme 5: Strategies for Improving Teacher Retention

The reviewed studies indicated some strategies for the retention of teachers at elementary school. These included: Improving working conditions, Cutting down on unnecessary workload, Enhancing the leadership in schools, Mentoring for newly appointed teachers, Training and development, Fair promotion, Improving salary and incentives to teachers, and Understanding teachers' professional contributions. Supportive leadership was a key factor, as principals and head teachers have an impact on school climate, teacher morale, collaboration, workload management, and professional respect. Therefore, the goal of retention efforts should be to make schools places that teachers feel valued and supported, professionally capable, and motivated to stay on.

Summary of Results

Thematic synthesis in general identified that attrition and retention rates of teachers are multifaceted and interrelated issues. Personal characteristics, school setting characteristics, workload, salary, lack of job satisfaction, and burnout, administrative support and policy-related factors are all significant in teacher attrition. When teachers are treated with professional respect, supported in leadership, workload is fairly distributed, opportunities for growth are provided, mentored, recognized and have improved working conditions, retention is enhanced. The findings have significance in the context of Punjab as the elementary teacher has an important role in the learning of students, stability of schools and improvement of basic education.

Discussion

This systematic review combined together the empirical evidence on teacher attrition and teacher retention problems of elementary school teachers with implications for Punjab. The results suggest that there is no one cause of teacher attrition, but multiple factors that are interactive – both within the person, within the institution, professional and policy. This finding aligns with other evidence based on a meta-analysis that included data on teacher attrition and retention and identified teacher, school, working context, and policy factors as having an impact (Nguyen et al., 2019). Thus, teacher turnover is not just an individual teacher's decision to leave but also is a larger issue of workforce quality and education that is related to leadership, workload, compensation, professional support, promotion and school climate. One of the significant insights from this review is that job dissatisfaction, occupational stress and burnout are all important factors in teachers' intent to leave. If teachers feel overloaded with work, disrespected by others, and/or under-supported by administration, and career opportunities are lacking, they will eventually become demotivated and disengaged. Burnout and job satisfaction

were found to have a strong correlation with teachers' intentions to leave, according to Madigan and Kim (2021) which underscores the importance of teachers' psychological and emotional working conditions. This is especially important at the elementary level, where the teacher is expected to teach the basics, maintain order in the classroom, engage students, communicate with parents and handle other administrative tasks. If not accompanied by support from appropriate institutions, these duties can lead to emotional exhaustion and less on-going commitment.

The review also reveals that conditions at the school level are key determinants for teacher retention. Teachers are encouraged to stay in the profession with supportive leadership, collegial relationships, fair workload distribution, mentoring, professional development and teaching resources. Conversely, a lack of leadership, recognition, autonomy, working conditions, and school climate are all factors that can lead to increased risk of attrition. Carver-Thomas and Darling-Hammond (2017) also argued that the effects of working conditions, administrative support, compensation, and professional growth opportunities are all powerful indicators of teacher turnover. This implies that improving retention is not just about recruitment but it's about creating school climates where teachers are respected, supported and professionally safe. Another key discovery is that teacher attrition is an issue that impacts teachers, students and schools. Turnover has an impact on continuity of instruction, teacher-student relationships, the workload of the teachers who stay and the curriculum implementation. Teacher turnover can have negative impacts for students' achievement and disrupt the broader functioning of schools, as was identified by Ronfeldt et al. (2013). These impacts can be more severe at the elementary level, as young learners need routines and structure, clear directions, and ongoing academic and emotional support. The issue of teacher attrition should then not only be viewed as a staffing or administrative one, but also one that is of educational quality.

The results also indicate a close association between the policy and system conditions and the retention issues. Teachers' decision to stay or leave the system could be affected by recruitment policies, transfers, accountability pressures, promotion policies, rural-urban placement differences, and monitoring systems. Policy responses that only address recruiting new teachers might not solve the problem of teacher shortages, as teacher attrition will persist as long as it does. Internationally there is also evidence that addressing the teacher shortage needs to involve the support and working conditions of teachers, teachers' professional status, and workforce planning (OECD, 2025; UNESCO & International Task Force on Teachers for Education 2030, 2024). In the context of Punjab, it means that retention strategies need to take into account factors like location of schools, distribution of load among schools, administrative requirements, transfer arrangements, promotion opportunities and access to professional development. Another key feature of the review is the need for support for early-career teachers. Many teachers begin with enthusiasm but then lose the drive if they are overworked, lack of support from others, are poorly equipped and do not receive support from the institution. Existing literature indicates that induction support, mentoring, a collaborative culture and teacher professional development are factors that can positively impact teacher retention (Billingsley & Bettini, 2019; Carver-Thomas & Darling-Hammond, 2017). This support is particularly critical in elementary schools where teachers have many responsibilities in teaching, behavior management and administration. Enhanced mentoring of early-career teachers could thus mitigate the number of premature teacher exits and lead to greater teacher retention.

Overall, this review indicates that teacher attrition and teacher retention are interwoven issues and should be dealt with simultaneously from the institutional and policy levels. While salary increases and headteachers may be helpful, they are not enough when teachers still face large workloads, lack adequate support, recognition and promotion opportunities and limited professional development opportunities. Supportive school leadership, mentoring systems, professional development, fair workload management, recognition of teachers contribution, transparent promotion pathways and context sensitive policies for rural and urban schools should all be included in a sustainable retention approach. In the context of the elementary education system in Punjab, such measures could contribute to more stable teachers, continuity in teaching and learning, and ultimately, better learning outcomes for students. This review also highlights a number of research gaps. Most of the research in the literature is quantitative and cross sectional survey; less research offers an in-depth qualitative understanding of teachers' lived experience, particularly at the elementary level. Furthermore, studies on attrition, burnout, job satisfaction and retention typically focus on one without considering the others as integral components of the sustainability of teacher workforce. Longitudinal mixed-method and Punjab-specific studies are thus warranted in the future to explore the reasons for teachers' attrition from elementary schools, the reasons for their stay, and the most effective institutional and/or policy interventions to enhance teacher retention.

Methodological and Educational Implications

There are important methodological implications for future research on teacher attrition and retention for this systematic review. The participants first reported that a considerable amount of evidence available is quantitative and cross-sectional survey. These designs are helpful for exploring the interrelationships between workload, burnout, job satisfaction, administrative support, and intention to leave, but do not necessarily offer much information on causal patterns. Future research should adopt longitudinal designs, as future teachers' professional experiences may evolve over time, carrying them to a point of dissatisfaction, stress, workload or weak support to intentions to leave or actual exit from the profession (Billingsley & Bettini, 2019; Madigan & Kim, 2021). Secondly, there is need for further research that involves more qualitative and mixed method studies. The teacher turnover crisis is not just one of numbers; it's a human, lived, emotional, cultural, family, career, and policy issue. Interviews, focus groups, case studies and narrative approaches can be used to gain a better understanding of the reasons for teacher attrition or retention. Mixed-method research can be particularly appropriate as it is a combination of statistical evidence and teachers' personal explanations and contextual experiences (Thomas & Harden, 2008). This is especially relevant in Punjab where teacher retention might be due to the location, travel arrangements, monitoring by administration, transfers, promotion experiences, workload and other factors.

Third, this review suggests the need for context specific research at the elementary school level. Teacher attrition is a topic of many studies with fewer studies more specific in nature related to elementary teachers. This distinction is significant as the elementary teacher is working at a very base level where students need constant academic, behavioural and emotional support. Therefore, future research should focus on attrition and retention at the primary, elementary, secondary and higher secondary level separately and not as a whole group of teachers. Other empirical studies in Pakistan are also needed to determine which of the above factors—salary, promotion, workload, distance from the school, burnout, transfer policy, professional recognition, or other factors—more strongly predicts teacher attrition in Pakistan. The results also have significant implications for the field of education. Teacher retention needs to be seen as one of the key elements of school improvement and educational quality. When teachers

leave the profession, it has an impact on continuity of instruction, teacher–student relationships, workload of remaining teachers, and school stability. Prior studies have indicated that teacher shortages can have a negative effect on student performance and organizational functioning of schools (Ronfeldt et al., 2013). Thus, decreasing teacher turnover is not only a staffing issue, but also directly impacts the student's learning, stability in the classroom, and long term effectiveness of elementary schools.

Leaders and head teachers have a significant influence in a teacher's decision to stay in the school. Teachers can be supported in their commitment to their school through supportive leadership, fair workload sharing, professional respect, mentoring, recognition, and collegial collaboration. However, low leaderships, high pressure of administration, low autonomy, and low recognition can lead to a higher level of job dissatisfaction and turnover. Additionally, working conditions, administrative support, salaries, and teacher career advancement are other factors that have been shown to affect teacher turnover and retention in previous literature (Carver-Thomas & Darling-Hammond, 2017; Nguyen et al., 2019).

The results indicate that a simple solution to teacher shortages is to recruit teachers, and this is what policymakers have been doing. Unless reasons for attrition are addressed, new teachers may be at risk of dissatisfaction, leaving or transferring. Thus, the main emphasis of retention policies should be placed on improving working conditions, decreasing inappropriate workload, making transfer and promotion systems transparent, offering professional development opportunities, supporting early career teachers and enhancing teacher motivation. International reports also highlight the need for sustainable workforce planning, the professionalization of teachers, and enhanced support systems, as well as retention measures (OECD, 2025; UNESCO & International Task Force on Teachers for Education 2030, 2024). These findings can also be utilized by teacher preparation institutions to further enhance pre-service and in-service teacher education. Teacher training should also include teaching teachers how to manage the classroom, how to manage stress, how to be resilient as a professional, how to communicate with parents, how to collaborate with colleagues, and how to adapt to institutional expectations. Finally, early-career mentoring should be bolstered, as beginning teachers might be more at risk for stress, dissatisfaction, and for unsure about career continuation. Literature indicates that mentoring, induction support, professional development and supportive working conditions can help with teacher retention (Carver-Thomas & Darling-Hammond, 2017; Billingsley & Bettini, 2019).

The implications of these are significant for the School Education Department, the district education authorities, school heads and teacher educators in Punjab. Elementary teachers need to have workload, supportive supervision, equitable posting and transfer, timely promotion and professional recognition. Consideration should be paid to hard to reach and rural schools where a lack of resources, staffing and distance could make teachers less happy. Retention of teachers, especially at the elementary level, can increase continuity of instruction, mitigate teacher shortages, create greater stability in the operation of the schools, and enhance learning outcomes. This review as a whole indicates that a multifaceted and research-informed approach is needed to teacher retention. No single policy or incentive can be effective in retaining students. It involves collaboration between school leaders, teacher educator institutions, district administrators and provincial policy makers. If the problem of teachers' attrition is understood at the personal, institutional, professional and policy levels, then Punjab's elementary education system can strive to achieve teacher stability, better teaching quality and better learning outcomes.

References

- Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 89(5), 697–744. doi:10.3102/0034654319862495
- Borman, G. D., & Dowling, N. M. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of Educational Research*, 78(3), 367–409. doi:10.3102/0034654308321455
- Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S., O'Brien, R., & Wyckoff, J. (2011). The effectiveness and retention of teachers with prior career experience. *Economics of Education Review*, 30(6), 1229–1241. doi:10.1016/j.econedurev.2011.08.004
- 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. doi:10.3102/0002831210380788
- Boyd, D., Lankford, H., Loeb, S., Ronfeldt, M., & Wyckoff, J. (2011). The role of teacher quality in retention and hiring: Using applications-to-transfer to uncover preferences of teachers and schools. *Journal of Policy Analysis and Management*, 30(1), 88–110. doi:10.1002/pam.20545
- Carver-Thomas, D., & Darling-Hammond, L. (2017). *Teacher turnover: Why it matters and what we can do about it*. Learning Policy Institute. doi:10.54300/454.278
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership*, 60(8), 6–13.
- DeAngelis, K. J., & Presley, J. B. (2011). Toward a more nuanced understanding of new teacher attrition. *Education and Urban Society*, 43(5), 598–626. doi:10.1177/0013124510380724
- Dupriez, V., Delvaux, B., & Lothaire, S. (2016). Teacher shortage and attrition: Why do they leave? *British Educational Research Journal*, 42(1), 21–39. doi:10.1002/berj.3193
- Farahmandpour, Z., & Voelkel, R. H. (2025). Teacher turnover factors and school-level influences: A meta-analysis of the literature. *Education Sciences*, 15(2), Article 219. doi:10.3390/educsci15020219
- Geiger, T., & Pivovarova, M. (2018). The effects of working conditions on teacher retention. *Teachers and Teaching*, 24(6), 604–625. doi:10.1080/13540602.2018.1457524
- Glazer, J. (2018). Learning from those who no longer teach: Viewing teacher attrition through a resistance lens. *Teaching and Teacher Education*, 74, 62–71. doi:10.1016/j.tate.2018.04.011
- Goldring, R., Taie, S., & Riddles, M. (2014). *Teacher attrition and mobility: Results from the 2012–13 Teacher Follow-up Survey* (NCES 2014-077). National Center for Education Statistics.
- Grissom, J. A. (2011). Can good principals keep teachers in disadvantaged schools? Linking principal effectiveness to teacher satisfaction and turnover in hard-to-staff environments. *Teachers College Record*, 113(11), 2552–2585. doi:10.1177/016146811111301102
- Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76(2), 173–208. doi:10.3102/00346543076002173
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2004). Why public schools lose teachers. *Journal of Human Resources*, 39(2), 326–354. doi:10.3368/jhr.XXXIX.2.326

- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499–534. doi:10.3102/00028312038003499
- Ingersoll, R. M., & Perda, D. (2010). Is the supply of mathematics and science teachers sufficient? *American Educational Research Journal*, 47(3), 563–594. doi:10.3102/0002831210370711
- Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30–33.
- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, 81(2), 201–233. doi:10.3102/0034654311403323
- Johnson, S. M., Kraft, M. A., & Papay, J. P. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. *Teachers College Record*, 114(10), 1–39. doi:10.1177/016146811211401004
- Khan, F. U., Khan, A., & Khan, S. (2021). Factors affecting teachers' turnover intention: A study of cadet colleges in Khyber Pakhtunkhwa. *Global Educational Studies Review*, VI(1), 426–437.
- Kraft, M. A., & Papay, J. P. (2014). Can professional environments in schools promote teacher development? Explaining heterogeneity in returns to teaching experience. *Educational Evaluation and Policy Analysis*, 36(4), 476–500. doi:10.3102/0162373713519496
- 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. doi:10.3102/0162373711398128
- Loeb, S., Darling-Hammond, L., & Luczak, J. (2005). How teaching conditions predict teacher turnover in California schools. *Peabody Journal of Education*, 80(3), 44–70. doi:10.1207/s15327930pje8003_4
- Madigan, D. J., & Kim, L. E. (2021). Towards an understanding of teacher attrition: A meta-analysis of burnout, job satisfaction, and teachers' intentions to quit. *Teaching and Teacher Education*, 105, Article 103425. doi:10.1016/j.tate.2021.103425
- Naureen, R. (2022). Factors affecting teachers' turnover in private schools of Karachi. *Pakistan Journal of Education*.
- Nguyen, T. D., Pham, L., Springer, M. G., & Crouch, M. (2019). *The factors of teacher attrition and retention: An updated and expanded meta-analysis of the literature* (EdWorkingPaper No. 19-149). Annenberg Institute at Brown University. doi:10.26300/cdf3-4555
- OECD. (2025). *Education at a glance 2025: OECD indicators*. OECD Publishing. doi:10.1787/1c0d9c79-en
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., Stewart, L. A., Thomas, J., Tricco, A. C., Welch, V. A., Whiting, P., & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, Article n71. doi:10.1136/bmj.n71
- Räsänen, K., Pietarinen, J., Pyhältö, K., Soini, T., & Väisänen, P. (2020). Why leave the teaching profession? A longitudinal approach to the prevalence and persistence of



- teacher turnover intentions. *Social Psychology of Education*, 23, 837–859. doi:10.1007/s11218-020-09567-x
- Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. *American Educational Research Journal*, 50(1), 4–36. doi:10.3102/0002831212463813
- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27(6), 1029–1038. doi:10.1016/j.tate.2011.04.001
- Skaalvik, E. M., & Skaalvik, S. (2017). Teacher stress and teacher self-efficacy as predictors of engagement, emotional exhaustion, and motivation to leave the teaching profession. *Creative Education*, 8(12), 1785–1799. doi:10.4236/ce.2017.812121
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681–714. doi:10.3102/00028312041003681
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Learning Policy Institute.
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8, Article 45. doi:10.1186/1471-2288-8-45
- UNESCO & International Task Force on Teachers for Education 2030. (2024). *Global report on teachers: Addressing teacher shortages and transforming the profession*. UNESCO. doi:10.54675/FIGU8035
- World Bank. (2024). *Missing school: The effect of crises on students and systems in Pakistan*. World Bank.
- Pakistan Institute of Education. (2024). *Pakistan education statistics 2022–23*. Ministry of Federal Education and Professional Training, Government of Pakistan.
- Idara-e-Taleem-o-Aagahi. (2024). *Annual Status of Education Report: ASER Pakistan 2023*. ASER Pakistan.