SUSTAINING TEACHER NEEDS: A SYSTEMATIC NARRATIVE REVIEW EXPLORING TEACHER RETENTION, ATTRITION, AND MOTIVATION

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This systematic narrative review analyzed 35 studies and sources to identify the factors most commonly associated with teacher retention and teacher attrition. This review, moreover, incorporated McClelland's (2009) theory of needs to explore how these retention and attrition factors related to meeting teachers' needs for achievement, affiliation, and power. Through this theoretical framing, the analysis revealed that teachers are more often retained when their needs for achievement are met through supportive and nurturing work environments, sustained by administrators focused on staff development. Teacher needs for affiliation are met through strong induction and mentoring programs coupled with a focus on cultivating a supportive staff through ongoing professional development and learning communities. Finally, teachers' needs for power were most often met by providing teachers with autonomy, influence, and adequate financial compensation.

Keywords: teacher retention, teacher attrition, systematic narrative review, McClelland's theory of needs, empirical studies

While the attrition rates of teachers are a recent topic of education conversation nationally due to the impact of COVID, this issue has actually plagued education for more than half a century. In 1983 Chapman, starting with Sergiovanni (1966), reviewed previous research on retention to create a model of factors that influenced retention and attrition and concluded that the "retention of public-school teachers is an issue of increasing concern in education" (p. 43). Unfortunately, Chapman's (1983) concern persists as teacher attrition has been significantly exacerbated by the recent COVID pandemic. From February 2021 to 2022 more than 600,000 teachers have left the profession (U.S. Bureau of Labor Statistics, 2022), and according to a 2022 National Education Association teacher survey, 55% of respondents indicated they planned to retire sooner than they had planned due to the impact of COVID with 90% reporting burnout as a serious concern (GBAO, 2022). These statistics forecast that teacher attrition will more than likely continue to increase as teachers leave the profession due to both retirement or burnout. To efficaciously recruit and retain highly qualified teachers it is critical that universities, schools, and future educators understand the historical and contemporary factors that influenced retention as well as how these factors impact and relate to teacher motivation and meeting teachers' needs (Cochran-Smith, 2004; Darling-Hammond, 2003; Hope, 1999; Inman & Marlow, 2004; Kaden et al., 2016; McClelland, 2009).

Chapman (1983) identified the following factors as influencing a teacher's decision to remain in the profession:

(a) the personal characteristics of the teacher, (b) the nature of teacher training and early teaching experience, (c) the degree to which the teacher is socially and professionally integrated into the teaching profession, (d) the satisfaction teachers derive from their career, and (e) the external environmental influences impinging on the teacher's career. (p. 47)

Ingersoll (2001) expanded these considerations in the analysis of 20+ years of data from the Schools and Staffing Survey and the Teacher Follow-up Survey, revealing that "improvements in the conditions of the teaching job, such as increased support from school administrations, increased salaries, reduction of student discipline problems, and enhanced faculty input into school decision-making, would all contribute to lower rates of turnover" (p. 7). In response to pressures created by No Child Left Behind, Darling-Hammond (2003) further reviewed teacher retention and attrition, determining that salaries, working conditions, teacher preparation, and mentoring support all significantly impact retention and attrition. While these seminal studies have indicated the substantial role salaries, work environments, and teacher preparation programs play in teacher retention and attrition, this systematic narrative review of literature develops findings across studies to explore how factors identified in these empirical studies relate to meeting teacher needs and teacher motivation.

Theoretical Framework

McClelland's (2009) theory of needs states that human motivation stems from three basic needs: achievement, affiliation, and power. Essentially, individuals will be motivated and satisfied when they have their specific needs met by an organization or institution. For some individuals, motivation is rooted in the need for achievement, which requires setting and accomplishing goals with feedback throughout to feel motivated. Harrell and Stahl (1984) described achievementmotivated individuals as being "attracted to work environments where they are personally responsible for accomplishing difficult, but feasible, goals and subsequently receive feedback information about their performance" (p. 242). In contrast, some individuals are motivated by their need for affiliation as their desire for collaboration and a general sense of belonging to a group is what motivates them the most. These individuals are "attracted to work environments which involve developing and maintaining warm, friendly relationships with other individuals" (Harrell & Stahl, 1984, p. 242). Still, others are most motivated by their need for power, craving recognition, influence, and control. Nayeri and Jafarpour (2014) highlighted that these individuals demand influence over their work environment. In nearly 60 years in the literature, this theory of needs has been heavily applied to the business and medical sectors; its emphasis on individual needs and motivation, however, makes it suitable if not underutilized in educational contexts, particularly in working to understand teacher retention and the factors that influence both retention and attrition. Theory of needs hinges on the idea that when needs are met in conjunction, individuals will be highly motivated and significantly more likely to remain in their current profession (Harrell & Stahl, 1984; McClelland, 2009; Nayeri & Jafarpour, 2014; Rybnicek et al., 2017). The meeting of needs in conjunction is an aspect of the framework that lends itself to the analysis of teacher retention literature as the concepts of achievement, affiliation, and power can be individually and collectively applied to previous findings.

Method and Research Question

To conceptualize the factors contributing to teacher retention and attrition, we conducted a systematic narrative review of empirical studies related to these topics utilizing established protocols and explicit selection criteria consistent with trends in reviews of literature that seek to mitigate concerns around criticisms of subjectivity and personal opinion as review guidelines in order to provide further transparency and reliability (Baumeister, 2003; Bennett et al., 2017; Green et al., 2006; Meglio & Risberg, 2011; Merrill, 2021; Nelson et al., 2020; Petticrew & Roberts, 2008; Purssell & McCrae, 2020). Our approach here not only is systemic but also aimed at engaging a critical and discussion-inducing approach through the inclusion of a theoretical framework and the subsequent analysis conducted (Baumeister, 2003; Bennett et al., 2017; Green et al., 2006; Meglio & Risberg, 2011; Merrill, 2021; Nelson et al., 2020; Petticrew & Roberts, 2008; Purssell & McCrae, 2020). We share our methodological approach here, resultantly, as well as the research question that guided our work: What have empirical studies of teacher retention and attrition identified as critical factors and how do these factors relate to teacher needs and teacher motivation?

Data Collection: Protocol and Selection Criteria

The protocol and selection criterion for this study necessitated a strict structure to maintain reliability and consistency throughout. Our protocol plan and selection criteria drew influence from Purssell and McCrae (2020), Gehanno et al. (2013), and Nelson et al. (2020) and the selection criteria were as follows:

- Online educational database searching (ERIC, Academic Search Complete, and Scopus):
 - a. full-text searches of *teacher retention*, *teacher attrition*, and *teacher retention study* since 2000 utilizing the Boolean operators "and" as well as "or" to include any sources that contained the search terms; and
 - b. secondary search of these terms organized strictly around citation frequency was conducted utilizing Scopus and Google Scholar to capture any seminal studies on retention/attrition outside the scope of the other databases and outside the timeframe of the initial search.
- Selection criteria included a predominant focus on articles related to teacher retention, teacher attrition, and those that explored the factors affiliated with these two concepts:
 - a. the initial timeframe for articles was 2000–2022; the timeframe was expanded to include several seminal sources regularly and repeatedly cited in the 2000–2022 literature and that also focused directly on factors influencing and relating to retention/attrition (n = 7, 20%);
 - b. sources were limited to peer-reviewed articles that employed empirical research designs and explored PreK-12 teacher retention/attrition both domestically and internationally;
 - c. particular attention was paid to domestic studies and sources; and
 - d. sources with participants not in this scope were excluded as well as those that lacked a central focus on teacher retention and attrition or those that failed to investigate the considerations that impacted retention and attrition.
- To ensure peer-reviewed articles met these criteria, they were then cataloged on a research matrix and categorized by author, publication date, article title, citation count, methodology,

the specific teacher population being studied (elementary, secondary, SPED, STEM, ELL, etc.) and the scope of the study (local, national, or international). The matrix also included two findings sections dedicated to relevant conclusions and outcomes relating to factors that contributed to retention and attrition. Any sources failing to meet these criteria were excluded and thus removed from the matrix.

In total over 75 articles were reviewed and included in the initial matrix. In the final matrix, a significant reduction occurred as articles largely deviating from a central focus on teacher retention and attrition, those that failed to explore the factors that impacted retention and attrition, and those that did not completely meet the other selection criteria were removed. The final research matrix consisted of 35 articles. Of those 35, 18 were local studies conducted in a specific state, provincial, or school context, 15 were national, and 2 were international. The international studies were included in the final matrix due to their alignment with the selection criteria as well as their frequency in references and overall citation count. The methodologies included but were not limited to case studies, regression analysis, descriptive analysis, literature analysis, and interview and survey analysis. Of these 15 were quantitative studies, 13 were qualitative studies, and 7 implemented a mixed-method approach. The analysis of these sources is detailed in the following section.

Data Analysis

Finding sections of the 35 studies that were dedicated to retention and attrition factors were coded individually in three cycles. The coding process employed in vivo, descriptive, and finally deductive coding utilizing McClelland's (2009) theory of needs and its concepts of achievement, affiliation, and power (Onwuegbuzie et al., 2016; Saldana, 2015). The first cycle focused on employing in vivo coding to identify keywords from each source, and this first cycle of coding was strictly in vivo to prioritize the authors' own words. The second cycle focused on descriptive coding that was conducive to identifying themes across the literature from the first cycle of coding and critical retention/attrition factors (Onwuegbuzie et al., 2016; Saldana, 2015). Descriptive coding analyzed those in vivo codes identified in the first cycle and then categorized these codes into factors and trends mentioned most frequently in relation to teacher retention and attrition. These descriptive categories coalesced into teacher factors, student factors, and environmental factors (e.g., codes relating to student behavior, student demographics, and student achievement were categorized under student factors, in-vivo codes relating to pay, salary, and teacher preparation were categorized under teacher factors). The final cycle of coding involved deductive coding framed by McClelland's (2009) theory of needs, incorporating the concepts of achievement, affiliation, and power as those deductive frames. The final round of analysis allotted the means to examine how previous research on retention and attrition and the subsequent descriptive categories, retention factors, and in vivo codes that emerged from it related to McClelland's concepts of achievement, affiliation, and power. Here, the concept of achievement was linked to teacher efficacy factors, teacher accountability, goal setting with feedback, and teacher support whereas affiliation was tied to mentoring, onboarding/induction practices, and school/work environment factors. Finally, power was connected to teacher autonomy, teacher influence, and teacher compensation (see Table 1). These connections and linkages are elucidated further in the findings and discussion sections. The general and overall results of the analysis are elucidated in the next section followed by sections highlighting the specific relationship between retention/attrition and the concepts of achievement, affiliation, and power.

Table 1Final Cycle Deductive Coding

Deductive Code	Relevance	Descriptive Code	In-vivo root codes
Achievement	Meeting teachers' needs for setting and accomplishing goals	Environmental Factor	"implementing regular, structured faculty development" - "administrative support requires goal setting & feedback"
Affiliation	Meeting teachers' needs for belonging	Environmental Factor	"pairing strong initial onboarding and funded mentoring" – "the importance of sharing goals, values, and professional growth: creating learning communities"
Power	Meeting teachers' needs for control and influence	Teacher - Environmental Factor	"lack of influence over decision making" — "the absence of teacher input on decisions" — "influence over school and teaching-related policies"

General Findings

From our deductive analysis, meeting teachers' motivational needs demonstrated a robust linkage to the critical retention factors as achievement, affiliation, and power all resulted in a significant and highly frequent connection to the critical teacher retention factors. Specifically, achievement and its associated factors were the most prevalent component of McClelland's (2009) theory of needs that emerged (n = 32, 91%). Power and its associated factors were the next most prevalent component (n = 31, 89%) thus leaving affiliation as the least pertinent component (n = 30, 86%). As for the subcategories and the critical factors related to retention and attrition, those specific factors and the frequency of sources for each can be found in Table 2. In the following sections, the critical retention and attrition factors as well as their relationship to each component are described individually followed by a holistic discussion of the findings as well as their implications.

Table 2McClelland's Theory of Needs (2009), Critical Retention Factors, and Sources

	%	n	
Achievement			
Teacher Background	26	9	
Student Factors	29	10	
School Facility & Workload	34	12	
Accountability	37	13	
Colleague & Admin Factors	69	24	
Affiliation			
Onboarding & Induction	14	5	
Community Engagement & Relationship	23	8	
Age Factors	26	9	
Mentoring	34	12	
Supportive Environment	60	21	
Power			
Expectations & Recognition	46	16	
Pay & Policy	49	17	
Autonomy & Influence	52	18	

Note. Thirty-five total articles.

Achievement

Meeting teacher needs for achievement was the most frequent component of McClelland's (2009) theory of needs found in reference to teacher retention and teacher attrition factors (n = 32, 91%). The concept of achievement was tied to concepts relating to teacher efficacy, teacher accountability, goal setting with feedback, and teacher support. The factors associated with these concepts (see Table 2) revolve around the following areas: colleague and administrative factors (n = 24, 69%), followed by accountability (n = 13, 37%), school facility and workload (n = 12, 34%), student factors (n = 10, 29%), and, lastly, teacher background (n = 9, 26%).

Teacher Background

The least frequent factors associated with meeting teachers' needs for achievement were categorized as teacher background. These factors refer to the teacher preparation programs and training received and how these pathways and experiences impact attrition and retention. The quality of a teacher preparation program and those catered to a more traditional preparation approach tend to have greater rates of teacher retention (Billingsley, 2004; Boyd et al., 2011; Cochran-Smith, 2004; Darling-Hammond, 2003; Geiger & Pivovarova, 2018; Kaufman & Al-Bataineh, 2011; Minarik et al., 2003; Zhang & Zeller, 2016). Teachers trained and educated in more traditional programs possess the training required to foster growth, achievement, and consequently accomplish goals (Billingsley, 2004; Boyd et al., 2011; Darling-Hammond, 2003; Geiger & Pivovarova, 2018; Kaufman & Al-Bataineh, 2011; Minarik et al., 2003). More traditional

training position teachers to better sustain goal accomplishment and achievement as they more adeptly navigate student performance fluctuations, adjusted instruction, and created interventions and individualized supports to mitigate and remedy those fluctuations (Billingsley, 2004; Boyd et al., 2011; Cochran-Smith, 2004; Darling-Hammond, 2003; Geiger & Pivovarova, 2018; Kaufman & Al-Bataineh, 2011; Minarik et al., 2003). Finally, both Billingsley and Buchanan et al. (2013) emphasized the positive impact of offering additional certifications and formal trainings to teachers as innovative strategies, practices, and collaborative conversations can help retain teachers by developing their pedagogy and supplementing teacher needs for achievement.

Students Factors

The second least frequent subcategory associated with meeting teachers' needs for achievement was labeled student factors. The following student factors all impact retention and meeting teachers' needs for achievement: student composition, student demographics, student behavior, and the physical school location and school context (Boyd et al., 2011; Darling-Hammond, 2003; Holmes et al., 2019; Hughes, 2012; Ingersoll, 2001; Minarik et al., 2003; Sass et al., 2011; Shen, 1997; Theobald, 1990; Thibodeaux et al., 2015). More often than not these factors and this subcategory result in teacher attrition rather than retention.

The socioeconomic status of a student body is often indicative of retention and attrition as schools in lower socioeconomic status brackets tend to have higher rates of attrition coupled with lower academic achievement (Boyd et al., 2011; Darling-Hammond, 2003; Hughes, 2012; Ingersoll, 2001; Shen, 1997; Theobald, 1990). Moreover, several researchers found that poor student behavior can significantly contribute to teacher attrition as behavior considerations take precedence over academics and achievement (Darling-Hammond, 2003; Hughes, 2012; Ingersoll, 2001; Minarik et al., 2003; Sass et al., 2011; Thibodeaux et al., 2015). Demographics were also tied to these trends as schools with a higher minoritized and non-White population have greater rates of attrition versus more White-populated school spaces (Boyd et al., 2011; Darling-Hammond, 2003; Hughes, 2012; Ingersoll, 2001; Shen, 1997). Darling-Hammond and Ingersoll also highlighted that schools located in rural and suburban areas tend to retain their teachers at a higher rate than their urban counterparts. Interestingly, more recent studies have partially debunked findings around student factors; these contradictory results will be addressed later in this article (Geiger & Pivovarova, 2018; Miller et al., 2020).

School Facility and Workload

The school facility and workload factors had a moderate frequency through the analysis in terms of keeping teachers retained and meeting their needs for achievement. This subcategory is comprised of factors relating to the physical school building and facility, teachers' access to resources or lack thereof, and the impact of the workload placed upon teachers (Billingsley, 2004; Boyd et al., 2011; Brill & McCartney, 2008; Buchanan et al., 2013; Darling-Hammond, 2003; Geiger & Pivovarova, 2018; Hope, 1999; Ingersoll, 2001; Kersaint et al., 2007; Locklear, 2010; Perryman & Calvert, 2020; Thibodeaux et al., 2015). For these subcategories and factors, their impact actually facilitate teacher attrition and inhibit teacher achievement.

The school facility and building factor hinder teacher achievement and generate teacher attrition when teachers feel unsafe in their school space or the state of the building and its resources are dilapidated (Brill & McCartney, 2008; Geiger & Pivovarova, 2018; Hope, 1999; Ingersoll,

2001; Locklear, 2010). Quite often a school's focus on academics, achievement, and accomplishing academic goals subordinates concerns of the state of the buildings and safety (Brill & McCartney, 2008; Geiger & Pivovarova, 2018; Hope, 1999; Ingersoll, 2001; Locklear, 2010). Additionally, the analysis yielded a negative correlation between resource inaccessibility and teacher retention as teachers' achievement is hindered by a lack of resource access (Billingsley, 2004; Brill & McCartney, 2008; Buchanan et al., 2013; Darling-Hammond, 2003). Finally, the burden of the workload also has a negative influence on teacher retention as teachers struggle to meet the demands of the profession (Billingsley, 2004; Brill & McCartney, 2008; Geiger & Pivovarova, 2018; Hope, 1999; Perryman & Calvert, 2020; Thibodeaux et al., 2015). In fact, for Perryman and Calvert workload is the strongest contributor to teacher attrition; their participants "thought they could cope with the workload, but lack of support and the target accountability culture seemed to be worse than they had thought" (p. 18).

Accountability

Accountability also had a moderate relationship with teacher retention and meeting their needs for achievement. Accountability is related to creating systematic structured measures and cultivating a staff committed to collaboratively approaching goals (Brown & Wynn, 2009; Buchanan et al., 2013; Chapman & Green, 1986; Cochran-Smith, 2004; Holmes et al., 2019; Hope, 1999; Inman & Marlow, 2004; Jacob et al., 2012; Kaden et al., 2016; Malloy & Allen, 2007; Miller et al., 2020; Minarik et al., 2003; Sass et al., 2011).

Accountability has a positive impact on retention when schools, administrators, and staff implement, approach, and enact accountability systems oriented around growth and goal accomplishment (Brown & Wynn, 2009; Chapman & Green, 1986; Cochran-Smith, 2004; Holmes et al., 2019; Hope, 1999; Inman & Marlow, 2004; Jacob et al., 2012; Kaden et al., 2016; Malloy & Allen, 2007; Minarik et al., 2003; Sass et al., 2011). In these systems, it is critical that these goals and expectations are set collaboratively and publicly and then intentionally monitored, supported, and modified. Additionally, these goals, conversations, and adjustments should be student-focused and student-driven (Brown & Wynn, 2009; Cochran-Smith, 2004; Holmes et al., 2019; Hope, 1999; Inman & Marlow, 2004; Jacob et al., 2012; Malloy & Allen, 2007; Sass et al., 2011). Moreover, these systems necessitate committed and consistent staff participation (Brown & Wynn, 2009; Buchanan et al., 2013; Cochran-Smith, 2004; Hope, 1999; Malloy & Allen, 2007; Miller et al., 2020; Minarik et al., 2003). Hope articulated that this participation prioritizes "coaching, conferencing, modeling, and sharing personal experiences" (p. 56).

Colleague and Administrative Factors

The most frequent factors associated with retention, attrition, and meeting teachers' needs for achievement were housed under colleague and administrative factors (n = 24, 69%). These factors relate to the impact of administration and colleagues on facilitating achievement and goal accomplishment. These factors are not focused on accountability but on the sharing of experiences, expertise, and learning, coupled with factors relating to the style and orientation required by staff and administration to facilitate achievement.

Teacher needs for achievement are facilitated when administrators foster an open network of communication, resource access, and instructional support (Billingsley, 2004; Buchanan et al., 2013; Brill & McCartney. 2008; Brown & Wynn, 2009; Geiger & Pivovarova, 2018; Hope, 1999;

Holmes et al., 2019; Ingersoll, 2001; Inman & Marlow, 2004; Kaden et al., 2016; Kaufman & Al-Bataineh, 2011; Kersaint et al., 2007; Locklear, 2010; Malloy & Allen, 2007; Miller et al., 2020; Minarik et al., 2003; Perryman & Calvert, 2020; Sass et al., 2011; Shen, 1997; Thibodeaux et al., 2015). Moreover, the leadership style and leadership orientation should focus on retaining teachers and supporting their need for achievement (Brill & McCartney, 2008; Brown & Wynn, 2009; Hope, 1999; Kaden et al., 2016; Sass et al., 2011; Thibodeaux et al., 2015). For Brown and Wynn, "situational leadership" (p. 48) provides teachers with individualized and catered support, sustaining their achievement whereas Sass et al. concluded that a "servant-leader" (p. 201) best supports, develops, and retains teachers. Similarly, the initial orientation of a leader in their support of teachers is a significant factor in retaining teachers and supporting their achievement (Brill & McCartney, 2008; Brown & Wynn, 2009; Hope, 1999; Kaden et al., 2016). For Hope, this orientation was described as an "open door policy" (p. 55), which Brill and McCartney later coined "positive and professional administrative support" (p. 771) in which administrators remain open, supportive, and focused on growth. Brown and Wynn further modified this orientation with their "Gumby Philosophy" (p. 48), articulating that administrators must "bend and build" with their staff to facilitate achievement. Kaden et al. developed this orientation by incorporating culturally responsive leadership practices. Finally, more than half of the sources in this subcategory highlighted the role of colleagues in retention, iterating that the sharing of resources, learning, and strategies leads to greater achievement (Billingsley, 2004; Buchanan et al., 2013; Chapman, 1983; Doney, 2013; Geiger & Pivovarova, 2018; Hope, 1999; Inman & Marlow, 2004; Kaufman & Al-Bataineh, 2011; Kersaint et al., 2007; Malloy & Allen, 2007; Minarik et al., 2003; Odell & Ferraro, 1992; Waterman & He, 2011).

Affiliation

Affiliation was the least frequent component of McClelland's (2009) theory of needs found in reference to teacher retention and teacher attrition (n = 30, 86%). The factors associated with affiliation through the analysis (see Table 2) were colleague and supportive environment (n = 21, 60%), mentoring (n = 12, 34%), age factors (n = 9, 26%), community engagement and relationship (n = 8, 23%), and onboarding and induction (n = 5, 14%).

Onboarding and Induction

Onboarding and induction were the least prevalent factor when considering how teacher motivation and teacher needs for affiliation are met. Still, the analysis highlighted a general consensus on this factor, emphasizing the importance of recurrent, structured onboarding and induction as a means of cultivating affiliation between staff and keeping teachers retained especially for new hires (Billingsley, 2004; Brill & McCartney, 2008; Chapman, 1983; Darling-Hammond, 2003; Doney, 2013). Even as early as 1983, Chapman's model identified the significant impact of induction as a means to facilitate "professional and social integration" (p. 46) for teachers. Moreover, Chapman attributed equal weight to these two forms of integration, concluding that the "degree to which the teacher is socially and professionally integrated" (p. 47) will be indicative of teacher retention. For Brill and McCartney, a 2-year structured induction process coupled with persistent mentoring was the most effective measure for keeping teachers retained. Doney determined that strong and early induction practices can develop "empathetic relationships" (p. 661) among staff and administration. In each of these studies, intentionally

structured induction and onboarding processes positively impacted teacher retention, supported teacher motivation, and met teachers' needs for affiliation and belonging.

Community Engagement and Relationship

Another critical factor that impacted retention and meeting teachers' needs for affiliation is the relationship between a school, its staff, and the greater community that it serves. This factor also has consensus around its impact on retention and supporting affiliation as schools, administrators, and teachers who are more committed to and engaged with their local community have significantly higher rates of retention (Billingsley, 2004; Brown & Wynn, 2009; Cochran-Smith, 2004; Inman & Marlow, 2004; Kaden et al., 2016; Malloy & Allen, 2007; Miller et al., 2020; Minarik et al., 2003). Retained teachers make a "professional commitment" (Billingsley, 2004, p. 50) to not just their school but also its local community. Others also highlighted how important this relationship is by discovering that the extent to which a teacher "fits" (Miller et al., 2020, p. 412) or "matches" (Inman & Marlow, 2004, p. 612) their local community will be indicative of their likelihood to be retained. Moreover, both Brown and Wynn as well as Minark et al. concluded that engagement and participation in the community positively impacts retention by countering teacher isolation and fostering a greater sense of belonging and affiliation. Finally, Cochran-Smith and Kaden et al. both found that teachers are more often retained when professional developments are focused on local community issues and involve community and staff participation in the selection and implementation of those professional trainings.

Age Factors

Teacher age factors had a moderate impact on teacher retention and meeting teachers' needs for affiliation. This factor yielded a majority consensus around its impact on retention and supporting teacher affiliation as older, veteran teachers and younger, newer teachers tend to be the most likely to leave and the least likely to be retained (Billingsley, 2004; Boyd et al., 2011; Hughes, 2012; Ingersoll, 2001; Jacob et al., 2012; Kaden et al., 2016; Kaufman & Al-Bataineh, 2011; Miller et al., 2020; Minarik et al., 2003). While these studies largely attributed these attrition trends as being the result of younger teachers being unable to cope with the new experience of teaching and veteran teachers retiring, several researchers also emphasized that both new and veteran teachers tend to be the most isolated and consequently the least affiliated in their school spaces (Billingsley, 2004; Hughes, 2012; Kaden et al., 2016; Kaufman & Al-Bataineh, 2011; Miller et al., 2020; Minarik et al., 2003). Interestingly, Zhang and Zeller (2016) found that age is a nonfactor when teachers are prepared in more traditional teacher models involving cohorts. Likewise, age is a nonfactor for Inman and Marlow (2004) who revealed that forming learning communities and coupling veteran mentor teachers with beginning teachers offset trends around these two age groups. In both of these instances, retention trends were reversed because intentional strategies and measures were implemented to cultivate affiliation and belonging amongst two traditionally alienated groups.

Mentoring

Mentoring was one of the most frequent factors in reference to retaining teachers and meeting their needs for affiliation. Logically, this factor has a positive impact on meeting teacher needs for affiliation and keeping teachers retained, but researchers accentuated that in these relationships,

individuals require explicit mentor training and that their mentoring process be programmatic and structured (Billingsley, 2004; Buchanan et al., 2013; Darling-Hammond, 2003; Kaufman & Al-Bataineh, 2011; Kersaint et al., 2007; Malloy & Allen, 2007; Shen, 1997; Thibodeaux et al., 2015; Waterman & He, 2011). Additionally, this factor positively impacts affiliation and retention when these mentoring partnerships involve individuals in the same grade level and subject area and when these partnerships are provided common planning time (Billingsley, 2004; Brill & McCartney, 2008; Waterman & He, 2011). For Darling-Hammond and Waterman and He, mentoring also needs to be funded and incentivized. Finally, for mentoring to fulfill teacher needs for affiliation and keep them retained, the analysis identified the importance of establishing learning communities in which holistic and emotional support are often as valuable as academic and instructional support (Inman & Marlow, 2004; Malloy & Allen, 2007; Odell & Ferraro, 1992; Waterman & He, 2011). In fact, Odell and Ferraro discovered that emotional support is the most significant mentorship practice even taking priority over instructional support.

Supportive Environment

The most frequent factor that impacted retention and met teacher needs for affiliation was labeled under the term supportive environment. Akin to mentoring, it seems logical that retaining teachers and meeting teacher needs for affiliation would frequently be connected to concepts around a supportive work environment. When the work environment is collegial, supportive, collaborative, and growth-focused, teachers are retained and their needs for affiliation are met (Billingsley, 2004; Boyd et al., 2011; Brown & Wynn, 2009; Chapman, 1983; Geiger & Pivovarova, 2018; Hope, 1999; Jacob et al., 2012; Kaden et al., 2016; Kaufman & Al-Bataineh, 2011; Locklear, 2010; Miller et al., 2020; Sass et al., 2011; Shen, 1997). In their concluding remarks, Brown and Wynn even stated this directly, "collaboration is necessary for teachers to practice and fine-tune their instruction, through collaboration a sense of affiliation to the school and to one another develops" (p. 57). Others highlighted the critical strategy of forming localized internal communities to cultivate a more supportive environment. These communities are often called learning communities, educational communities, or teacher communities and intentionally facilitate staff interactions, collaboration, and affiliation as a means to mitigate teacher isolation (Billingsley, 2004; Brill & McCartney, 2008; Cochran-Smith, 2004; Doney, 2013; Inman & Marlow, 2004; Malloy & Allen, 2007; Minarik et al., 2003). In addition to a collective focus on growth and collaboration, several researchers acknowledged that a supportive environment necessitates creating individual growth plans, oriented around peer support and peer observation coupled with feedback as a means to further develop staff affiliation (Buchanan et al., 2013; Brill & McCartney, 2008; Hope, 1999; Holmes et al., 2019; Malloy & Allen, 2007).

Power

As for power, it was the second most frequent component of McClelland's (2009) theory of needs found in reference to teacher retention and teacher attrition (n = 31, 89%). The factors found for power (see Table 2) were autonomy and influence (n = 18, 52%), followed closely by both pay and policy (n = 17, 49%), and expectations and recognition (n = 16, 46%).

Expectations and Recognition

In meeting teachers' needs for power, setting expectations and the recognition of staff both significantly impact teacher retention. Several researchers affirmed that setting and communicating clear expectations significantly contributes to teacher retention as the direct communication of expectations provides teachers with a more nuanced understanding of them as well as a better sense of control over how to accomplish them (Billingsley, 2004; Chapman, 1983; Geiger & Pivovarova, 2018; Hope, 1999; Jacob et al., 2012; Thibodeaux et al., 2015). Furthermore, other studies developed the role of expectations by recognizing that expectations better-supported teacher retention when they are created collaboratively between teachers and administration; these shared expectations allot teachers power through direct control over their expectations for their classroom, instruction, and students (Brill & McCartney, 2008; Brown & Wynn, 2009; Kaden et al., 2016; Malloy & Allen, 2007; Miller et al., 2020; Sass et al., 2011). Teacher retention and teacher needs for power are also supported when administrators intentionally, routinely, and publicly recognize teachers for their development and success (Buchanan et al., 2013; Chapman & Green, 1986; Holmes et al., 2019; Malloy & Allen, 2007; Minarik et al., 2003). Holmes et al. even concluded that any system implemented to effectively monitor teacher performance and achievement requires a recognition component.

Pay and Policy

Pay and higher salaries were a factor that resulted in consensus in terms of keeping teachers retained and meeting their needs for power. Teachers with higher salaries have their needs for power more fully met and are retained more often than their peers with lower salaries (Billingsley, 2004; Chapman & Green, 1986; Cochran-Smith, 2004; Darling-Hammond, 2003; Geiger & Pivovarova, 2018; Hughes, 2012; Ingersoll, 2001; Inman & Marlow, 2004; Kaufman & Al-Bataineh, 2011; Kersaint et al., 2007; Locklear, 2010; Miller et al., 2020; Perryman & Calvert, 2020; Shen, 1997; Theobald, 1990). Hughes, in fact, concluded that "the poverty level of the students and the schools did not seem to dissuade teachers from teaching only the personal school financial factor of salary was related to teacher retention" (p. 254). Moreover, the analysis established the positive impact of increased salaries, increased incentives, and the opportunity for upward mobility coupled with increased compensation as a means to retain teachers and meet their needs for power (Chapmen & Green, 1986; Cochran-Smith, 2004; Springer et al., 2016). Springer et al. found that "retention bonuses mitigate unwanted turnover and have the potential to strengthen leadership and institutional knowledge among the schools' faculty while avoiding financial burdens associated with turnover" (p. 217). Whereas increased financial incentives ubiquitously and positively impact teacher retention and meeting teacher needs for power, policy negatively impacts teacher retention and meeting teacher needs for power as government mandates and policies actually inhibit teacher control and serve as a barrier to teacher influence (Cochran-Smith, 2004; Jacob et al., 2012; Perryman & Calvert, 2020). Jacob et al. found that government-mandated policy is one of the most nefarious factors that impacts retention and has actually instigated additional retention, concluding that, "everyone who leads or sets policy for schools has helped create the real retention crisis" (p. 25).

Autonomy and Influence

The factors that had the strongest bearing on teacher retention and meeting teacher needs for power were autonomy and influence. Considering McClelland's (2009) concept of power is constructed around the idea of individual influence, the connection between teacher influence, meeting teacher needs for power, and positive teacher retention seems logical. However, the analysis revealed how impactful this factor truly was as a plethora of researchers articulated the positive relationship between teacher influence and teacher retention (Boyd et al., 2011; Brill & McCartney, 2008; Brown & Wynn, 2009; Darling-Hammond, 2003; Geiger & Pivovarova, 2018; Holmes et al., 2019; Hughes, 2012; Ingersoll, 2001; Kaden et al., 2016; Malloy & Allen, 2007; Miller et al., 2020; Minarik et al., 2003; Sass et al., 2011; Shen, 1997; Thibodeaux et al., 2015; Waterman & He, 2011). In this context, teacher influence was tied to the concept of shared decision-making between administration and staff as administrators who provide more shared input on decisions nurture staff needs for power and keep staff retained at a higher rate (Boyd et al., 2011; Brown & Wynn, 2009; Darling-Hammond, 2003; Holmes et al., 2019; Hughes, 2012; Ingersoll, 2001; Kaden et al., 2016; Malloy & Allen, 2007; Miller et al., 2020; Sass et al., 2011; Shen, 1997; Thibodeaux et al., 2015; Waterman & He, 2011). Moreover, Brill and McCartney, Geiger and Pivovarova, and Minarik et al. all emphasized the positive impact of professional developments on retention when these trainings are intentionally and strategically selected through shared decision-making processes. Lastly, to retain teachers as well as meet their needs for control and influence, researchers also stressed the importance of administration and schools cultivating and supporting teacher autonomy (Brown & Wynn, 2009; Cochran-Smith, 2004; Kaden et al., 2016; Malloy & Allen, 2007; Odell & Ferraro, 1992).

Discussion

While the findings above identified critical retention factors and how those related to McClelland's (2009) theory of needs and its components individually, it is crucial to reiterate that this theory is also contingent upon the idea that individuals will be more likely motivated, retained, and successful when each of their specific and separate needs are met. Consequently, the extent to which an organization or institution can meet these needs in conjunction will be indicative of its ability to retain a motivated and efficacious staff. In the following sections, several areas and factors will be addressed that not only yield positive teacher retention but also offer outlets and conduits to meet teacher needs for achievement, affiliation, and power in concert. Through intentional and staff-selected professional development, structured mentoring coupled with collaborative learning communities and effective, flexible administration, schools can offer strategies, opportunities, and avenues to meet unique, individual, and differentiated teacher motivational needs in conjunction to better mitigate teacher attrition and foster teacher retention.

Professional Development

The selection and implementation of professional developments is a consideration and a factor that offers the potential to retain teachers and assuage their needs for achievement, affiliation, and power simultaneously. Cochran-Smith (2004) and Kaden et al. (2016) emphasized the positive impact of professional developments derived from local and community considerations on teacher retention, and these localized trainings foster a sense of belonging and affiliation to the community

as staff becomes more aware of the community space, its individuals, and its needs. Other researchers (Brill & McCartney, 2008; Geiger & Pivovarova, 2018; Minarik et al., 2003) posited that shared decision-making and intentional staff involvement in the selection of professional developments yields positive teacher retention, and this influence provides a path to meet teacher needs for power. In the previous Accountability section, the impact of accountability systems on retention and meeting teacher needs for affiliation was detailed, and it highlights that these systems necessitate teacher participation and structured, regular contact between teachers and administrators. Similarly, in the Colleague and Administrative Factors section, a plethora of researchers identified the impact of teachers sharing resources, expertise, and learning to facilitate retention as well as achievement (Billingsley, 2004; Buchanan et al., 2013; Chapman, 1983; Doney, 2013; Geiger & Pivovarova, 2018; Hope, 1999; Inman & Marlow, 2004; Kaufman & Al-Bataineh, 2011; Kersaint et al., 2007; Malloy & Allen, 2007; Minarik et al., 2003; Odell & Ferraro, 1992; Waterman & He, 2011).

Professional developments provide a potential space where these findings can be amalgamated and subsequently ameliorate retention by better meeting the diverse needs of teachers. In other words, professional developments could offer a space where teachers can not only regularly conference to participate in their school's accountability system but also share their learning, resources, and expertise. Furthermore, if professional development sessions are selected through shared decision-making processes and are based on the local community and local needs, they can better retain staff and support their needs for achievement, affiliation, and power. Professional developments organized and implemented via involving the local community, deriving from teacher influence, and affording space for staff discussion and the sharing of expertise would more comprehensively meet teachers' motivational needs for achievement, affiliation, and power and, thus, support teacher retention.

Mentoring and Learning Community

One of the most effective interventions to keep staff retained and meet their motivational needs is the implementation of a structured, systematic, and supportive mentoring system. Mentoring, when structured in a programmatic orientation that involves formal training, regular contact, and a collective focus on growth, fosters teacher retention as it offers channels for meeting teacher needs for achievement, affiliation, and power. In the previous affiliation section on mentoring, the connections between mentoring, retention, and meeting teacher needs for belonging are documented and elucidated, but mentoring programs can also satiate teacher needs for achievement and power. When mentoring partnerships prioritize teacher and student growth, incorporate collaborative and shared decision-making processes, and integrate accountability measures, these partnerships can also meet teacher needs for achievement and power. Through collaborative decision-making processes, mentors and mentees are given influence and power over their pedagogy while also reinforcing their achievement by regularly "sharing expertise and resources" (Buchanan et al., 2013, p. 118). Furthermore, when these partnerships implement structured, growth-focused accountability measures and individual teacher growth plans involving observation, feedback, and recognition, teachers not only achieve at higher levels while developing their pedagogy but also have their need for power met through this recognition (Brown & Wynn, 2009; Buchanan et al., 2013; Cochran-Smith, 2004; Hope, 1999; Malloy & Allen, 2007; Miller et al., 2020; Minarik et al., 2003). When mentoring partnerships are implemented with fidelity in this orientation, they can also become the foundation for cultivating internal learning communities.

Waterman and He (2011) highlighted that such mentoring partnerships can facilitate learning communities and even mitigate negative retention trends (see Age Factors section), concluding that these mentoring networks create internal communities where "administrators and veteran teachers shared decision-making and planning so that newcomers felt welcome and encouraged to participate" (p. 143).

The impact of learning communities on retention and meeting teacher needs for affiliation and achievement were detailed in previous sections (Billingsley, 2004; Brill & McCartney, 2008; Cochran-Smith, 2004; Doney, 2013; Inman & Marlow, 2004; Malloy & Allen, 2007; Minarik et al., 2003; Waterman & He, 2011). To reiterate, learning communities sustain needs for achievement by providing a space for the sharing of expertise, learning, and developing teacher pedagogy schoolwide. Moreover, learning communities sustain affiliation needs by offering a "relational support system" (Doney, 2013, p. 655) that provides a "family-like atmosphere" (Malloy & Allen, 2007, p. 23). However, learning communities can offer an outlet to sustain teacher needs for power as well. Inman and Marlow concluded that learning communities provide "opportunities to work with (1) teacher education mentors, (2) colleagues with similar ideas about teaching and working cooperatively, (3) administrators who encourage and promote teachers' ideas, and (4) a community" (p. 613). Through this administrative encouragement and promotion teachers are provided influence over their school and its learning community. Additionally, several researchers identified learning communities as space for teacher autonomy, control, and influence through the cocreation, reinforcement, and articulation of school goals and values (Billingsley, 2004; Brill & McCartney, 2008; Brown & Wynn, 2009; Cochran-Smith, 2004; Holmes et al., 2019; Inman & Marlow, 2004; Waterman & He, 2011). Moreover, these learning communities provide a collective and public space for teacher recognition as well as a setting to discuss, influence, and control the selection of professional developments.

Administration

Another factor and area that can foster retention and potentially address and placate teacher needs for achievement, affiliation, and power is administration. In the previous section, the role of administration in promoting, encouraging, and recognizing teachers and their ideas in a learning community expressed the impact they can have on meeting teacher needs for power. Moreover, the ability of a teacher to be autonomous and influence their school is entirely dependent upon administrative commitment to shared and collaborative decision-making processes (Brown & Wynn, 2009; Cochran-Smith, 2004; Kaden et al., 2016; Malloy & Allen, 2007; Odell & Ferraro, 1992). In terms of achievement, the style and orientation of administrators as well as their ability to implement and monitor accountability measures can significantly impact teacher motivation and retention (Brill & McCartney, 2008; Brown & Wynn, 2009; Chapman & Green, 1986; Cochran-Smith, 2004; Holmes et al., 2019; Hope, 1999; Inman & Marlow, 2004; Jacob et al., 2012; Kaden et al., 2016; Malloy & Allen, 2007; Minarik et al., 2003; Sass et al., 2011; Thibodeaux et al., 2015). For affiliation, administrators influence almost every factor in the following ways:

- cultivating and enacting effective onboarding and induction (see Onboarding and Induction section),
- serving as the liaison and representative of the school to the greater community (see Community Engagement and Relationship section),

- ensuring that mentoring programs and mentoring partnerships are executed with fidelity (see Mentoring section), and
- fostering and sustaining a supportive environment (see Supportive Environment section).

The impact of administration on teacher retention and meeting teacher needs for achievement, affiliation, and power is significant. Several recent researchers, in fact, discovered that the impact of administration is so significant that it actually offsets other factors and retention trends; for example, both Geiger and Pivovarova (2018) and Miller et al. (2020) found that supportive and effective leadership more significantly impacts teacher retention than student socioeconomic status and student demographics. Kaden et al. also concluded that satisfaction with administrative support is the clearest indicator of teacher retention, and their culminating advice to potential school leaders highlights the overlap between effective administration and meeting teachers' motivational needs in conjunction:

Simple actions such as responding to the needs and suggestions of effective teachers [achievement, affiliation, and power], offering career advancement [power], communicating informal performance evaluations and appreciation of teachers' efforts and success with engaging students in learning activities [achievement, affiliation, and power], and acknowledging effective work with parents or the community may be first steps to retaining quality teachers [achievement, affiliation, and power]. (p. 143)

When administrators structure their leadership in this responsive, supportive, and flexible orientation, they are able to retain their staff and meet the diverse motivational needs of those individuals. While these considerations, coupled with the characteristics and concepts required of administrators above, seem cumbersome and borderline overwhelming, through the cultivation of learning communities and the intentional selection of professional developments, administrators can build motivated and supportive networks where "teachers seize opportunities to provide leadership in areas of curriculum, instruction, support services, parental engagement, and community development" (Malloy & Allen, 2007, p. 24).

Implications

This review of literature has potential implications for policy, research, and practice. Localized policies stipulating financial incentives or the opportunity for upward mobility has a positive impact on teacher retention and meeting teacher needs. Our review, however, also exposes the negative and restrictive impact policy can have on retention and meeting teachers' needs as it often serves as a barrier to teacher retention and stifles teacher needs, especially their need for power. Akin to the localized policy-generated financial incentives, this negative impact can be potentially ameliorated when the policy is locally influenced and constructed through shared collaboration between administration, staff, and the community as highlighted in the Discussion section. The negative impact of policy on teacher retention and meeting teacher needs, especially teacher needs for power, control, and influence, also warrants further research exploration: (a) Is mandated policy ubiquitously a barrier to teacher retention? or (b) How do/can local policies inform policy at higher levels? Our review also highlights that further research is needed in the fields of retention and attrition. Further extrapolating how both staff and student economic, racial, and linguistic demographics impact teacher retention and meeting teachers' needs is a specific need for more

study. Future research might, moreover, explore the extent to which administrative styles, professional developments, learning communities, and school cultures influence teacher retention and meet teacher needs. In terms of practice, we highlight the significant impact structured and formal mentoring, learning communities coupled with systems of accountability, and staff-derived professional developments can all have on teacher retention and consistently sustaining teacher needs. When these systems and communities are accompanied by flexible administrative styles, a supportive and familial school culture, and ongoing assessment and adjustment, teacher needs for achievement, affiliation, and power are more often met and teachers are retained. Our review and the discussion highlights the massive responsibility administrators face in keeping teachers retained and motivated; if attrition trends are to be mitigated and addressed, school leaders need more specific and intentional training and preparation around measures, strategies, and interventions that foster retention and support teacher motivational needs.

Conclusion

This study sought to identify the critical factors that contribute to teacher retention and attrition as well as how these factors relate to meeting teachers' motivational needs. Through the analysis, the connection between meeting teachers' motivational needs and teacher retention was reified as each of McClelland's (2009) concepts frequently emerged across the literature. When teacher motivational needs are more often met and supported, teachers are more often retained. If administrators and schools cultivate an accountable and supportive environment focused on teacher and student growth and provide teachers with more local influence, individual teacher motivational needs can be better met and teachers will be more likely retained. This study also highlights the significant role administrators play in retaining staff by providing opportunities and building intentional support mechanisms to better meet those needs in concert. Moreover, by providing teachers with influence over local policy as well as the selection and implementation of professional developments and creating learning communities consisting of trained, monitored, and incentivized mentoring partnerships, schools can better meet teacher motivational needs and retain their staff. While the impact of COVID has intensified the teacher shortage locally and nationally, through these efforts and interventions districts, schools, and administrators can better motivate their staff and mitigate attrition trends.

References

- Baumeister, R. F. (2003). Writing a literature review. In M. Prinstein & M. Patterson (Eds.), *The portable mentor: Expert guide to a successful career in psychology* (pp. 57–71). Springer.
- Bennett, J. S., Driver, M. K., & Trent, S. C. (2017). Real or ideal? A narrative literature review addressing white privilege in teacher education. *Urban Education*, 54(7), 891–918. https://doi.org/10.1177/0042085917690205
- Billingsley, B. S. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education*, *38*(1), 39–55.
- 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.
- Brill, S., & McCartney, A. (2008). Stopping the revolving door: Increasing teacher retention. *Politics & Policy*, *36*(5), 750–774.

- Brown, M. K., & Wynn, R. S. (2009). Finding, supporting, and keeping: The role of the principal in teacher retention issues. *Leadership and Policy in Schools*, 8(1), 37–63.
- Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., & Burke, P. (2013). Teacher retention and attrition: Views of early career teachers. *Australian Journal of Teacher Education (Online)*, 38(3), 124–141.
- Chapman, D. W. (1983). A model of the influences on teacher retention. *Journal of Teacher Education*, 34(5), 43–49.
- Chapman, D. W., & Green, M. S. (1986). Teacher retention: A further examination. *The Journal of Educational Research*, 79(5), 273–279.
- Cochran-Smith, M. (2004). Stayers, leavers, lovers, and dreamers: Insights about teacher retention. *Journal of Teacher Education*, *55*(5), 387–392.
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership*, 60(8), 6–13.
- Doney, P. A. (2013). Fostering resilience: A necessary skill for teacher retention. *Journal of Science Teacher Education*, 24(4), 645–664.
- GBAO. (2022). *Poll results: Stress and burnout pose threat of educator shortages*. https://www.nea.org/sites/default/files/2022-02/NEA%20Member%20COVID-19%20Survey%20Summary.pdf
- Gehanno, J.-F., Rollin, L., & Darmoni, S. (2013). Is the coverage of google scholar enough to be used alone for systematic reviews. *BMC Medical Informatics and Decision Making*, 13(1). https://doi.org/10.1186/1472-6947-13-7
- Geiger, T., & Pivovarova, M. (2018). The effects of working conditions on teacher retention. *Teachers and Teaching*, 24(6), 604–625.
- Green, B. N., Johnson, C. D., & Adams, A. (2006). Writing narrative literature reviews for peerreview journals: Secrets of the trade. *Journal of Chiropractic Medicine*, 5, 101–117.
- Harrell, A. M., & Stahl, M. J. (1984). McClelland's trichotomy of needs theory and the job satisfaction and work performance of CPA firm professionals. *Accounting, Organizations and Society*, 9(3–4), 241–252. https://doi.org/10.1016/0361-3682(84)90010-2
- Hernandez, R. (2022, July 29). Districts grapple with worsening teacher shortage as new school year nears. *The Nevada Independent*. https://thenevadaindependent.com/article/districts-grapple-with-worsening-teacher-shortage-as-new-school-year-nears
- Holmes, B., Parker, D. J., & Gibson, J. (2019). Rethinking teacher retention in hard-to-staff schools. *Contemporary Issues in Education Research*, 12(1), 27–32. https://doi.org/10.19030/cier.v12i1.10260
- Hope, W. C. (1999). Principals' orientation and induction activities as factors in teacher retention. *The Clearing House*, 73(1), 54–56.
- Hughes, G. D. (2012). Teacher retention: Teacher characteristics, school characteristics, organizational characteristics, and teacher efficacy. *The Journal of Educational Research*, 105(4), 245–255.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499–534.
- Inman, D., & Marlow, L. (2004). Teacher retention: Why do beginning teachers remain in the profession? *Education*, 124(4), 605–614.
- Jacob, A., Vidyarthi, E., & Carroll, K. (2012). The irreplaceables: Understanding the real retention crisis in America's urban schools. TNTP.

- Kaden, U., Patterson, P. P., Healy, J., & Adams, B. L. (2016). Stemming the revolving door: Teacher retention and attrition in arctic Alaska schools. *Global Education Review*, *3*(1), 129–147.
- Kaufman, M., & Al-Bataineh, A. (2011). Factors that influence teacher retention. *International Journal of the Humanities*, 9(3), 251–264.
- Kersaint, G., Lewis, J., Potter, R., & Meisels, G. (2007). Why teachers leave: Factors that influence retention and resignation. *Teaching and Teacher Education*, 23(6), 775–794.
- Locklear, T. M. (2010). Factors contributing to teacher retention in Georgia (Publication No. 3409034) [Doctoral dissertation, University of Alabama]. ProQuest Dissertations and Theses Global.
- Malloy, W. W., & Allen, T. (2007). Teacher retention in a teacher resiliency-building rural school. *The Rural Educator*, 28(2), 51–75.
- Meglio, O., & Risberg, A. (2011). The (mis)measurement of M&A performance—A systematic narrative literature review. *Scandinavian Journal of Management*, 27(4), 418–433. https://doi.org/10.1016/j.scaman.2011.09.002
- Merrill, B. C. (2021). Configuring a construct definition of teacher working conditions in the United States: A systematic narrative review of researcher concepts. *Review of Educational Research*, 91(2), 163–203. https://doi.org/10.3102/0034654320985611
- McClelland, D. C. (2009). Human motivation. Cambridge University Press.
- Miller, J. M., Youngs, P., Perrone, F., & Grogan, E. (2020). Using measures of fit to predict beginning teacher retention. *The Elementary School Journal*, 120(3), 399–421.
- Minarik, M. M., Thornton, B., & Perreault, G. (2003). Systems thinking can improve teacher retention. *The Clearing House*, 76(5), 230–234.
- Nayeri, N. D., & Jafarpour, H. (2014). Relationship between clinical competence and motivation needs of nurses based on the McClelland theory. *Nursing Practice Today*, 1(2), 86–92.
- Nelson, L. F., Yocum, V. K., Patel, K. D., Qeadan, F., Hsi, A., & Weitzen, S. (2020). Cognitive outcomes of young children after prenatal exposure to medications for opioid use disorder. *JAMA Network Open*, *3*(3). https://doi.org/10.1001/jamanetworkopen.2020.1195
- Odell, S. J., & Ferraro, D. P. (1992). Teacher mentoring and teacher retention. *Journal of Teacher Education*, 43(3), 200–204.
- Onwuegbuzie, A. J., Frels, R. K., & Hwang, E. (2016). Mapping Saldaňa's coding methods onto the literature review process. *Journal of Educational Issues*, 2(1), 130–150. https://doi.org/10.5296/jei.v2i1.8931
- Perryman, J., & Calvert, G. (2020). What motivates people to teach, and why do they leave? Accountability, performativity and teacher retention. *British Journal of Educational Studies*, 68(1), 3–23.
- Petticrew, M., & Roberts, H. (2008). Systematic reviews in the social sciences: A practical guide. John Wiley.
- Purssell, E., & McCrae, N. (2020). How to perform a systematic literature review: A guide for healthcare researchers, practitioners and students. Springer.
- Rybnicek, R., Bergner, S., & Gutschelhofer, A. (2017). How individual needs influence motivation effects: A neuroscientific study on McClelland's need theory. *Review of Managerial Science*, *13*(2), 443–482. https://doi.org/10.1007/s11846-017-0252-1
- Saldana, J. (2015). The coding manual for qualitative researchers. Sage Publications.

- Sass, D. A., Seal, A. K., & Martin, N. K. (2011). Predicting teacher retention using stress and support variables. *Journal of Educational Administration*, 49(2), 200–215. https://doi.org/10.1108/09578231111116734
- Sergiovanni, T. (1966). Satisfaction and dissatisfaction of teachers. Final report (ED011089). ERIC. https://eric.ed.gov/?id=ED011089
- Shen, J. (1997). Teacher retention and attrition in public schools: Evidence from SASS91. *The Journal of Educational Research*, 91(2), 81–88.
- Springer, M. G., Swain, W. A., & Rodriguez, L. A. (2016). Effective teacher retention bonuses: Evidence from Tennessee. *Educational Evaluation and Policy Analysis*, 38(2), 199–221.
- Theobald, N. D. (1990). An examination of the influence of personal, professional, and school district characteristics on public school teacher retention. *Economics of Education Review*, 9(3), 241–250.
- Thibodeaux, A. K., Labat, M. B., Lee, D. E., & Labat, C. A. (2015). The effects of leadership and high-stakes testing on teacher retention. *Academy of Educational Leadership Journal*, 19(1), 227–249.
- U.S. Bureau of Labor Statistics. (2022, January 22). https://www.bls.gov
- Waterman, S., & He, Y. (2011). Effects of mentoring programs on new teacher retention: A literature review. *Mentoring & Tutoring: Partnership in Learning*, 19(2), 139–156.
- Zhang, G., & Zeller, N. (2016). A longitudinal investigation of the relationship between teacher preparation and teacher retention. *Teacher Education Quarterly*, 43(2), 73–92.