

Methodological and Contextual Trends of Teacher Work Engagement and its Conceptualization: A Systematic Literature Review (2018-2022)

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Abstract

Teachers play a crucial role in shaping the educational landscape, with their commitment to influencing student performance and educational quality. Despite extensive research on work engagement, the majority focuses on psychology and business, leaving a gap in educational studies. This systematic literature review addresses this gap by exploring methodological trends and conceptualizations of work engagement in educational context from 2018 to 2022. Scopus and Science Direct databases were utilized to identify relevant literature. Adopting the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) approach, 35 articles were systematically analyzed. The findings indicate a rising trend in the number of articles over the years, predominantly consisting of quantitative studies conducted globally, with China and the United States leading in research output. Many studies have utilized Schaufeli et al.'s (2002) model and Klassen et al.'s (2013) multidimensional view to define teacher work engagement. However, diverse perspectives emerge, highlighting teacher work engagement as a holistic construct encompassing personal expression, goal-directed activities, and proactive behaviours, which is associated with enthusiasm, meaning, and satisfaction. The study may stimulate future research and serve as a reference for scholars interested in the topic of engagement in the educational field, providing valuable insights for research directions.

Keywords: Teacher Work Engagement, Systematic Literature Review, Methodological Trends, Contextual Trends, Conceptualization

Introduction

The influence of teachers in crafting the educational journey is paramount; their unwavering dedication serves as the cornerstone for the perpetual advancement of education (Cai et al., 2022). The roles played by teachers, especially work engagement, have a direct impact on student performance and the quality of education achievement (Minghui et al., 2018; Shu, 2022). Although there is a diversity of research on work engagement, the majority of the studies were conducted in fields of psychology e.g. Bakker et al (2008); Evans et al (2022);

Tomietto et al (2019) and business e.g. Friesenbichler & Selenko (2017); Laguna & Razmus (2019); Seppälä et al (2020), with only a small number of studies conducted in the field of education (Cui, 2022).

Indeed, many scholars have explored the definition of work engagement. For example, Yang (2022) considered work engagement involves an active dedication to both personal and organizational success amidst challenges, along with active involvement. Dong and Xu (2022) emphasize that work engagement underscores the significance of personal enjoyment, vitality, and enthusiasm in driving job performance. Lipscomb et al (2022) posit that work engagement for teachers entails active involvement physically, emotionally, and cognitively in their teaching responsibilities. Despite these insights, there's still a lack of consensus on the definition of work engagement, especially within education (Bailey et al., 2015; Kossyva et al., 2023; Perera et al., 2021). Consequently, conducting a systematic literature review on work engagement in the educational context is imperative to gain insights into the prevailing trends, identify gaps in research, and inform future educational endeavours.

To achieve the above objective, the research question was crafted as follows:

- i) What are the methodological and contextual trends in the existing research on teacher work engagement?
- ii) What is the conceptualization of teacher work engagement in the existing literature?

Methodology

A systematic review is a specialized type of literature review, that follows predefined research questions using explicit methods to identify and evaluate the findings of primary research studies (Higgins & Green, 2008; Pollock & Berge, 2018). It involves a thorough search to locate all relevant works on a topic, systematically integrate search results, and evaluate the extent, nature, and quality of a specific research question (Higgins & Green, 2008; Siddaway et al., 2019). Additionally, the systematic method reduces subjectivity and bias by clearly stating and consistently applying criteria for including and excluding studies in the review (PRISMA-P Group et al., 2015). Overall, it enables readers to evaluate the author's assumptions, procedures, and conclusions, while also facilitating the potential for future updates and extensions of research by other researchers (Higgins & Green, 2008.; Pollock & Berge, 2018; Siddaway et al., 2019).

The current review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The process involves three primary stages: identification, screening, and eligibility Pollock & Berge (2018); Siddaway et al (2019), as depicted in Figure 1. The identification stage involves systematically searching databases to identify all potentially relevant studies on a particular topic, aiming to capture a comprehensive pool of studies that could potentially be included in the review. At the screening stage, the identified studies are screened based on predefined inclusion and exclusion criteria to determine whether they meet the initial eligibility criteria. At the eligibility stage, the titles and abstracts are first reviewed to exclude the articles that are irrelevant, subsequently, the full-text articles of the remaining studies are obtained for thorough reading in more detail. This step aims to determine whether the studies meet the specific criteria for inclusion in the systematic review (Pollock & Berge, 2018; Siddaway et al., 2019).

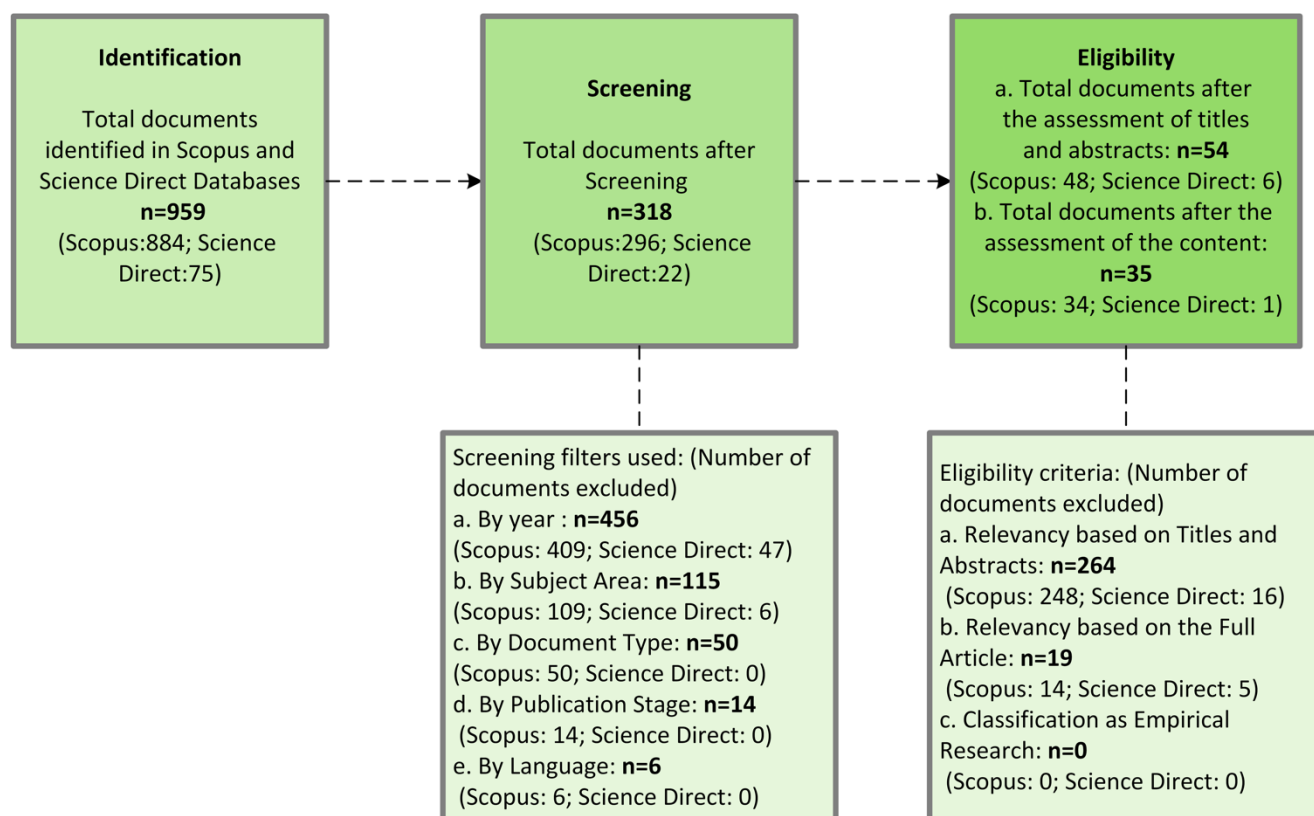


Figure 1

Selection Process of the Studies of Teacher Work Engagement for Analysis

Stage One: Identification

To identify the potential articles, the Scopus and Science Direct databases were chosen as they contain sufficient and high-quality journals in education (Kulkarni, 2009; Relx group, 2014). The search in these databases utilized the keywords "teacher engagement" or "teacher work engagement," focusing on the article title, abstract, and keywords through the default search function. This process yielded a total of 959 papers, with 884 originating from the Scopus database and 75 from the Science Direct database (Figure 1).

Stage Two: Screening

During the second stage, the screening process involved refining the search by narrowing down the publication years to the most recent five years, spanning from 2018 to 2022. A total of 455 papers were excluded during this stage, with 409 originating from the Scopus database and 47 from the Science Direct database, resulting in a total of 626 papers (475 from Scopus and 28 from Science Direct) (Figure 1). Subsequently, the next step was to filter out papers that did not pertain to the field of social sciences. In this phase, a total of 388 papers were retained, comprising 366 from the Scopus database and 22 from the Science Direct database (Figure 1).

Further refinement was undertaken by eliminating book chapters, reviews, books, conference papers, notes, and editorials, resulting in the exclusion of 50 papers from the Scopus database, with no exclusions from Science Direct, ultimately yielding a total of 338 articles, including 316 from the Scopus database and 22 from the Science Direct database (Figure 1). A subsequent round of refinement excluded articles that were still in the press, resulting in a total of 324 articles, with 302 from Scopus and 22 from Science Direct (Figure

1). Finally, the search was narrowed down to exclusively English-language articles, leading to the exclusion of six additional articles from the Scopus database. After completing these iterations, the review comprised 318 articles, with 296 articles from Scopus and 22 articles from the Science Direct database (Figure 1).

Stage Three: Eligibility

In the third stage, referred to as eligibility, a comprehensive review of the titles and abstracts was carried out to eliminate articles that were not relevant. After this assessment, 264 articles were deemed irrelevant, with 248 articles originating from the Scopus database and 16 from the Science Direct database (Figure 1). For instance, some of these articles concentrated solely on specific aspects of a teacher's engagement, such as engagement in teaching Doño & Mangila (2021), engagement in curriculum implementation Yang et al., (2022), engagement in the professional development programme (Murphy et al., 2021). These articles predominantly delved into context-specific instances of teacher work engagement, which somewhat diverged from the focal point of the teacher work engagement concept in this study. Subsequently, the full text of 54 articles was acquired for a comprehensive examination. After meticulous reading and evaluation of their relevance to the predefined search criteria, 15 articles were excluded from this review. In the end, 35 articles were selected for the final analysis, comprising 34 from the Scopus database and one from the Science Direct database (Figure 1).

Results

During the systematic review process, initially, a total of 959 articles on teacher work engagement were accessed for comprehensive examination. Through abstract analysis, full-text review, and adherence to inclusion criteria, 35 articles were yielded for final analysis (Figure 1). Following these, the classification of research papers related to teacher work engagement was explored, considering factors like publication year, research methodology, and study location. As previously mentioned, the review time frame was established from 2018 to 2022. The distribution of papers based on their publication years is visualized in Figure 2. The data extracted from the Scopus database revealed a discernible upward trajectory in the number of articles concerning this subject. Notably, the initial years of the reviewed period, 2018 and 2019, featured three articles each. This was followed by a noticeable increase in 2020, with five articles. Subsequently, in 2021, the number of articles was expanded to 10. The culmination of this trend occurred in 2022, with the highest count of 13 articles. This trend reflects the growing scholarly interest in research pertaining to teacher work engagement. Within the Science Direct database, one article was documented in 2019.

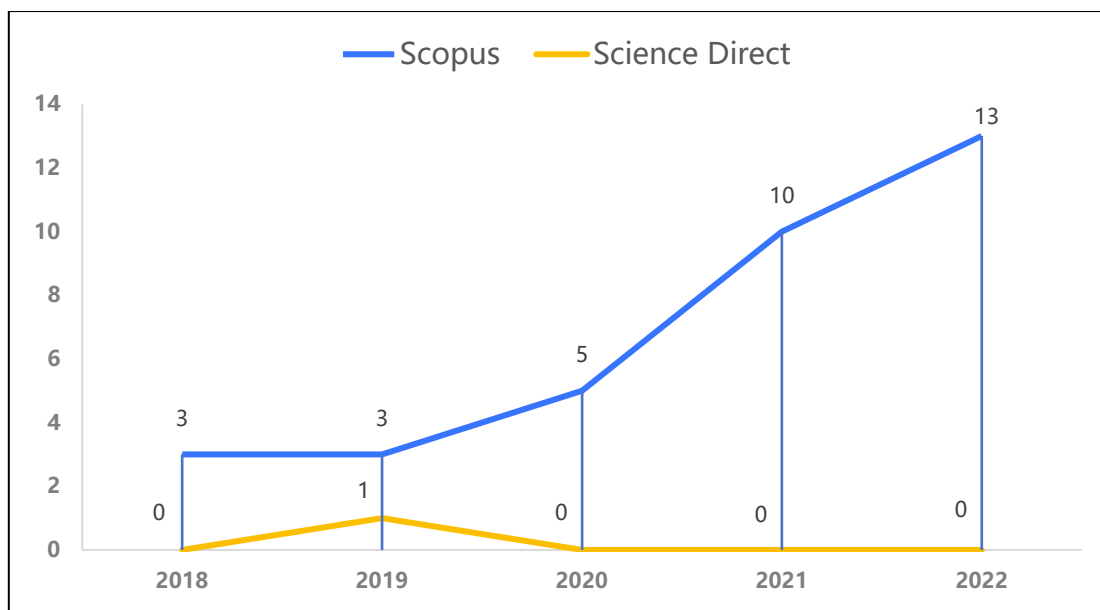


Figure 2: *Distribution of Articles by Year of Publication*

In terms of research methodologies, it is evident that quantitative approaches largely dominate the landscape throughout the review period. As presented in Figure 3, in the Scopus database, 30 articles, accounting for 88% of the total, were categorized as quantitative. Additionally, one article in the Science Direct database was also identified as quantitative. Moreover, three articles were recognized as employing mixed methods, while one article was classified as qualitative research within the Scopus database. This preference for quantitative approaches, evidenced by the considerable proportion of articles categorized as such, reflects a propensity within the academic community to utilize data-driven and statistical analyses when investigating the various facets of teacher work engagement.

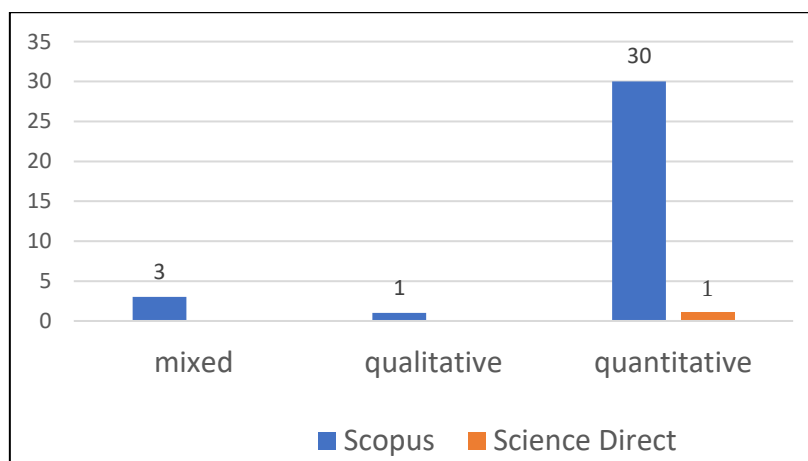


Figure 3 *Distribution of Articles by Research Methods*

In terms of study locations, investigations into teacher work engagement have been carried out on a global scale. China is represented as the most prolific contributor, featuring in the highest number of studies, encompassing 5 articles in the Scopus database and one article in the Science Direct database. Following closely, the United States emerges with the second-highest number of studies, comprising three articles. Turkey, Italy, India, and Finland each contribute two articles. Furthermore, individual articles were identified in countries such as

the Philippines, Thailand, Spain, Romania, Pakistan, Kuwait, Israel, Iran, Indonesia, Germany, Croatia, Chile, the Czech Republic, and Australia.

Notably, four studies were identified as cross-national. One study was conducted in both Canada and Australia, while another was undertaken in the United Kingdom and Iran. Moreover, a study encompassed six European countries, including Ireland, Romania, Slovenia, Spain, Switzerland, and Turkey. Additionally, one study spanned nearly 20 countries, showcasing a truly international perspective in the exploration of teacher work engagement. Figure 4 illustrates the geographic distribution of studies based on their respective research locations.

In summary, with a review timeframe from 2018 to 2022, data extracted from Scopus revealed a noticeable upward trend in articles over the years. This trend indicates a growing scholarly interest in teacher work engagement. Quantitative methodologies predominated, constituting 88% of articles, reflecting a strong inclination within the academic community toward employing data-driven analyses. Studies on teacher work engagement were conducted globally, with China leading in contributions, followed by the United States, Turkey, Italy, India, and Finland. Cross-national studies showcased an international perspective, with research spanning numerous countries, exemplifying the broad exploration of teacher work engagement.

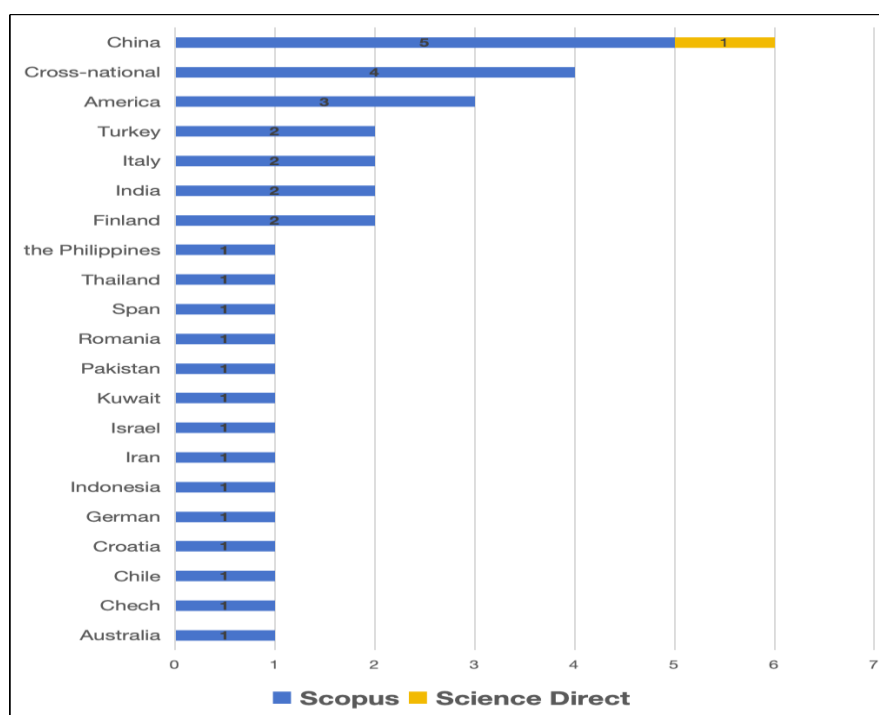


Figure 4

Distribution of Articles by study location

Definition of Teacher Work Engagement

Among the identified 35 articles, only 22 articles discussed the definition of teacher work engagement. In other words, although the remaining 13 articles studied teacher work engagement, no definition was given. Further, among the above 22 articles, Schaufeli et al.'s (2002.) work engagement model has garnered considerable acceptance and recognition within the literature. Schaufeli et al (2002) conducted a study on work engagement and developed a three-dimensional work engagement model. This model gained broad

acceptance after undergoing testing across various cultures and occupational groups (Zhang & Gan, 2005; Willmer et al., 2019). Earlier than this, Maslach and Leiter (1997) explored engagement within the context of burnout, defining it in terms of high energy, involvement, and efficacy that directly contrast the elements of burnout, which involve exhaustion, cynicism, and inefficacy. The measurement of engagement was proposed through the utilization of the Maslach Burnout Inventory (Maslach & Jackson, 1981).

Schaufeli et al (2002) challenged the perspective of Maslach and Leiter (1997), asserting that engagement while serving as the positive counterpart to burnout constitutes a distinct concept. Schaufeli et al (2002) argue that burnout is characterized by a combination of exhaustion and cynicism. In contrast, engagement is characterized by vigour and dedication, presenting direct opposition to the corresponding elements in burnout (exhaustion vs. vigour and cynicism vs. dedication). Additionally, burnout encompasses reduced professional efficacy, while engagement involves absorption. However, these two elements are not direct opposites but rather conceptually distinct aspects. They contended that engagement should not be assessed using a burnout scale. Their definition of work engagement revolves around a state of mind characterized by vigour, dedication, and absorption (Schaufeli et al., 2002). To gauge this construct, they introduced the Utrecht Work Engagement Scale (UWES).

Although Schaufeli et al (2002) did not specifically define work engagement for teachers, their concept of work engagement has gained wide acceptance in the educational context. Among the 22 articles exploring the concept of teacher work engagement within this literature, 15 articles, accounting for 68%, have adapted or adopted Schaufeli et al.'s (2002) definition to explain teacher work engagement. Notably, some articles directly quote Schaufeli et al.'s (2002) definition of work engagement (Begum & Thomas, 2020; Dixit & Upadhyay, 2021.; Han et al., 2021). For example, Begum and Thomas (2020) state,

"The study adopted the most often cited definition provided by Schaufeli and Bakker (2002), which is 'work engagement can be defined as an active, positive work-related state that is characterized by vigour, dedication, and absorption'." (p.1063)

Han et al (2021) explain,

"Engagement refers to a positive and fulfilling work-related state of mind characterized by vigour, dedication and absorption (Schaufeli et al., 2002)." (p.3)

There are also 11 articles that provide detailed explanations of the three dimensions of Schaufeli et al.'s (2002) work engagement model, i.e. vigour, dedication, and absorption, to conceptualize teacher work engagement (Alazmi & Al-Mahdy, n.d.; Bilal et al., 2021; Cacciamani et al., 2022; Lipscomb et al., 2022; Nalipay et al., 2021). This literature review consolidates definitions and perspectives on these dimensions from various scholarly works.

Vigour is consistently described across studies as the manifestation of high energy, effort, and persistence in teachers' work (e.g. Alazmi & Al-Mahdy, 2020; Bilal et al., 2021; Cacciamani et al., 2022; Kulophas et al., 2018). As described by Bilal et al (2021), vigour entails a strong willingness to invest in students' learning activities, exert additional effort, and channel increased energy in lecture delivery and addressing students' needs; teachers characterized by vigour demonstrate heightened resilience and persistence when tackling challenging tasks. This physical and mental resilience is echoed by Cacciamani et al (2022), who emphasize the connection between vigour and positive emotions devoted to job tasks. Kulophas et al (2018) underscore the importance of emotional resilience in the face of obstacles, emphasizing the demonstration of high energy in the workplace. Alazmi and Al-

Mahdy (2022) characterize vigour as a teacher's exuberance for their job, unaffected by challenges.

Dedication involves a deep and meaningful connection to the teacher's work (e.g. Alazmi & Al-Mahdy, n.d.; Cacciamani et al., 2022; Nalipay et al., 2021; Vujčić et al., 2022). According to Nalipay et al (2021), dedication entails recognizing the significance of teachers' work and approaching it with enthusiasm and inspiration, while Alazmi and Al-Mahdy (2022) highlight dedication entails a profound sense of pride, motivation, and passion. Vujčić et al (2022) define dedication as experiences of enthusiasm, achievement, and challenge. This sentiment is echoed by Cacciamani et al (2022), who view dedication as a state of deep involvement in teachers' work, deriving a sense of meaning, enthusiasm, inspiration, pride, and challenge from it.

Absorption pertains to a teacher's immersion and concentration in their work, reflecting a state of being happily engrossed (e.g. Bilal et al., 2021; Burić et al., 2022; Fiorilli et al., 2020; Penttinen & Pakarinen, 2020). Burić et al (2022) note that absorption is characterized by complete concentration and deep engrossment in the work as teachers, leading to a sense that time passes swiftly. This sentiment is reiterated by Penttinen and Pakarinen (2020), who also emphasize absorption as teachers focus and perceive a quick passage of time during their work. Bilal et al (2021) assert that absorption refers to the ability to be completely and joyfully engrossed in teachers' work, while Fiorilli et al (2020) explain that absorption involves being entirely focused on teachers' jobs. Engaged teachers, as a result, undergo positive emotions, exhibit increased activity, happiness, and openness to new experiences, and adopt a more creative approach to job opportunities.

In addition to Schaufeli et al.'s (2002) work engagement model, another study that has been recognized by many scholars is Klassen et al.'s (2013) *multidimensional conceptualization of teacher engagement*. Three articles within this literature adopted Klassen et al.'s (2013) model to define teacher work engagement (e.g. Johnson, 2022; Perera et al., 2021; Sariçoban & Kırmızı, 2021). Klassen et al (2013) emphasize that work engagement is rooted in two fundamental conceptual dimensions: energy and involvement. Within this framework, three commonly suggested domains of engagement include physical, emotional, and cognitive aspects. Aligning with this perspective, teacher work engagement is categorized into four domains: emotional, cognitive, and social in terms of students and colleagues (Klassen et al., 2013). Emotional pertains to positive emotional responses to teachers' work aligning with Schaufeli et al.'s (2002) dedication dimension. Cognitive relates to the extent of teachers' attention and effort invested in work-related tasks, corresponding to the vigour and absorption dimensions proposed by (Schaufeli et al., 2002). The social components, encompassing relationships and empathy with both students and colleagues, are categorized as social in terms of students and colleagues, respectively (Klassen et al., 2013).

Furthermore, certain scholars explore *the intricacies of understanding teacher work engagement* (Granziera, 2019; Rahmadani & Kurniawati, 2021; Wilcox & Lawson, 2018; Zhao et al., 2019). The researchers delved into the nuanced dimensions and theoretical underpinnings of teacher work engagement, providing valuable insights to further illuminate the concept of teacher work engagement. For instance, Rahmadani and Kurniawati (2021) conceptualize teacher work engagement in accordance with Klassen et al.'s (2013) multidimensional view of teacher engagement. This conceptualization posits that engaged teachers showcase involvement in physical, emotional, and cognitive dimensions in their teaching, which, in turn, stimulates students to enhance their dedication to their work. Therefore, Rahmadani and Kurniawati (2021) define teachers' engagement as a form of self-

expression, involving the presentation of their personal being on physical, cognitive, and emotional levels to optimally fulfil their role as educators.

Moreover, Granziera (2019) defines teacher work engagement as theoretically grounded on the social cognitive career theory (SCCT) of work satisfaction, focusing on the interconnectedness of self-efficacy, engagement, and satisfaction within career and educational domains. Drawing from SCCT, engagement is conceptualized as participation in goal-directed activity. The study resonates with the models proposed by Klassen et al (2013); Schaufeli et al (2002), which underscores that engagement involves a voluntary commitment of cognitive, physical, and affective resources to work-related tasks. According to Granziera (2019), cognitively and physically engaged teachers focus on tasks and invest effort, while emotionally engaged teachers experience positive affective responses to their work.

Additionally, in the study by Wilcox and Lawson (2018), it is highlighted that the traditional approach focuses on teachers' relations-as-engagement with students, emphasizing the influence of individual and shared beliefs, perceptions, and experiences with students. Nevertheless, their research introduces a complementary framework that goes beyond the dominant conception. This alternative framework views engagement as both an individual and a collective phenomenon, exploring how frontline professionals like teachers engage cognitively, affectively, and behaviorally.

On the other hand, in the context of China, Zhao et al (2019) define teacher work engagement as "active involvement, commitment, and passion." (p.3). This definition not only centres on teachers' proactive attitudes toward their activities but also encompasses their actual behaviours. Clearly, the concept of engagement in Chinese society is characterized by its multidimensionality, encompassing both emotional and behavioural aspects. Emotional engagement pertains to a teacher's inner interest and high motivation, while behavioural engagement relates to active participation in activities.

Conclusion

This systematic literature review is motivated by the critical need to understand teacher work engagement within the educational context, an area that has been overshadowed by research predominantly focused on psychology and business. Recognizing the pivotal role teachers play in shaping educational outcomes, this review aims to gather the latest data on teacher work engagement, focusing on its methodological and contextual trends as well as its definitions in recent years.

In terms of the methodological and contextual trends in teacher work engagement research, there was a consistent annual rise in the number of published articles. Most of these articles employed quantitative methodologies. Additionally, a significant proportion of the studies originated from China, with cross-national research being the next most prevalent category.

The exploration of the definition of teacher work engagement reveals a rich and multifaceted construct. Schaufeli et al.'s (2002) influential model, emphasizing vigour, dedication, and absorption, has become a widely accepted framework, with numerous studies adopting or adapting its definition. Additionally, Klassen et al.'s (2013) multidimensional view, incorporating social engagement, further enriches the conceptualization of teacher work engagement and has been widely recognized by the field.

On the other hand, certain scholars explore the definition of teacher work engagement from a rich tapestry of perspectives. It is articulated as a manifestation of self-expression, encompassing the display of one's personal essence across physical, cognitive, and emotional

dimensions (Rahmadani & Kurniawati, 2021). Alternatively, it is characterized as involvement in goal-directed activities, grounded in the social cognitive career theory (Granziera, 2019). Additionally, emphasis is placed on its proactive and behavioural nature, highlighting a multidimensional outlook that incorporates both emotional and behavioural facets (Zhao et al., 2019). The literature contributes to a more holistic understanding of teacher work engagement, acknowledging its complexity and relevance across various professional domains.

Aligned with the literature review, the concept of teacher work engagement can be considered as a positive, fulfilling, work-related state of mind that teachers experience in working. Teachers with high work engagement will be enthusiastic about working and solving difficulties and finding work full of meaning, pride, challenge, and satisfaction. In addition, they are able to work attentively and happily. Rather than a momentary and specific state, teacher work engagement refers to a more persistent and pervasive affective cognitive state.

In summary, through the examination of 35 methodically selected articles, this study sheds light on the evolving landscape of research on teacher engagement, offering a detailed understanding of its conceptualization within educational contexts. By providing a comprehensive overview of current trends and definitions, this study makes a meaningful contribution to academic discourse and serves as a valuable reference for future scholarly work.

Limitations and Future Research Directions

Within the evidence base, a few limitations can be observed. Despite thorough searches on primary databases like Scopus and Science Direct, articles from other databases were not included in this literature review and remain further explored. Additionally, the study's timeframe spans only five years, constraining the inclusion of earlier research that could offer valuable insights and context.

Regarding the future research directions, based on the research findings, it's evident that while there exists a wealth of literature on teacher work engagement within databases, only a fraction of these articles, specifically 35, were found to be directly pertinent to teacher work engagement. Therefore, there is a pressing need for more targeted research focusing specifically on the dynamics of work engagement within educational contexts. Secondly, despite the prevalence of quantitative studies in the realm of teacher work engagement, there remains an unmet demand for qualitative or mixed inquiries that can offer nuanced understandings of the multifaceted nature of engagement among educators. Thirdly, although research on teacher work engagement spans across various nations, it's noteworthy that there's a noticeable dearth of studies from developing countries apart from China. This imbalance highlights the necessity for broader geographical representation and exploration of how cultural, socio-economic, and organizational factors may influence teacher engagement globally.

In addition, in the existing literature, the conceptualization of teacher work engagement has largely revolved around Schaufeli et al.'s (2002) three-dimensional model, with the UWES serving as the primary instrument for assessment. Future research endeavours could deepen the understanding by investigating alternative conceptualizations of work engagement across different occupational domains. Furthermore, there's a need for the development of new measurement tools tailored to capture the nuances of work engagement specific to various professional contexts. Overall, by addressing these research gaps, future studies can

contribute to a more comprehensive understanding of work engagement among educators and inform strategies for enhancing teacher well-being and performance at large.

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