*Language Related Research*
*E-ISSN: 2383-0816*
*https://lrr.modares.ac.ir*
*https://doi.org/10.48311/LRR/lrr.2026.23998*
*https://lrr.modares.ac.ir/article_23998.html*

Tarbiat Modares University

**Vol. 17, No. 1**
**pp. 33-76**
**Spring 2026**

**Received: 29 March 2025**
**Received in revised form: 2 July 2025**
**Accepted: 22 July 2025**

# Reframing Teacher Well-Being Scholarship: A Dual Analysis of Evolving Themes, Methodological Challenges, and Global Collaboration Patterns

*Belgin Elmas*[1*] *& Erdem Aksoy*[2]

**Abstract**

This study aims to provide a comprehensive synthesis of the research landscape on Teacher Well-Being by integrating bibliometric and qualitative content analyses. Drawing on 1,256 peer-reviewed articles indexed in the Web of Science database between 1995 and 2025, the study first employs bibliometric techniques using R and VOSviewer to map trends, collaborations, and thematic tracks. Subsequently, a content analysis was conducted on a selected subset of 107 high-impact articles to categorize research purposes and contextual characteristics. Findings reveal strong thematic topics around resilience, burnout, job satisfaction, emotion regulation, positive psychology, equity, self-efficacy, reflective practice, and self-reflection. Both analyses highlight critical gaps in theoretical integration, methodological rigor, and international collaboration. While the United States, Australia, and the United Kingdom dominate in output and citations, emerging hubs such as China exhibit increasing engagement but limited global connectivity. The study underscores the need for longitudinal designs, culturally responsive research, and comparative international studies to advance the field. This research helps create a clearer, more

[1] Corresponding Author: TED University, Faculty of Education, Department of Foreign Language Teaching, Ön Cebeci, Ziya Gökalp Cd. 48/A, 06420 Çankaya/Ankara/Turkey,
*E mail: belgin.elmas@tedu.edu.tr*, ORCID ID: https://orcid.org/0000-0002-4719-7440
[2] TED University, Faculty of Education, Department of Foreign Language Teaching, Ön Cebeci, Ziya Gökalp Cd. 48/A, 06420 Çankaya/Ankara/Turkey,
*E mail: erdem.aksoy@tedu.edu.tr*, ORCID ID: https://orcid.org/0000-0002-8395-1738

inclusive and policy-relevant understanding of teacher well-being by emphasizing its systemic and relational aspects.

***Keywords:*** bibliometric analysis, content analysis, cross-cultural research, international collaboration, teacher well-being.

پژوهشگاه علوم انسانی و مطالعات فرهنگی
پرتال جامع علوم انسانی

## 1. Introduction

Teacher well-being (TWB) has become a central focus in discussions of educational quality and student learning, especially as classrooms worldwide grow more diverse and complex (Murphy & Mannix-McNamara, 2021). TWB contains the mental, emotional, and physical states that enable teachers to maintain balance, resilience, and professional effectiveness as responsibilities continue to change. It is increasingly recognized as essential not only for teachers' personal health but also for fostering inclusive, ethical, and culturally responsive practices that enhance student outcomes (Taylor et al., 2024). Although well-being is broadly defined as the alignment of mental and physical states fostering a sense of balance and comfort (Holmes, 2005), this general concept acquires unique dimensions in the teaching profession. Teachers are neither disengaged and apathetic nor overwhelmed by stress and demands when they experience professional well-being, which sustains their capacity to support diverse learners and navigate educational challenges.

Global recognition of the importance of well-being has intensified in recent years (Derakhshan et al., 2024; Taguma et al., 2018; Wang & Derakhshan, 2025). The COVID-19 pandemic further highlighted the urgent need to prioritize well-being within school communities. During this period, educators focused on maintaining students' emotional stability, fostering belonging, and sustaining engagement in learning—tasks that significantly impacted teachers' own well-being. While student well-being is consistently linked to cognitive gains, emotional regulation, and healthier lifestyles (Yu et al., 2018), there is growing acknowledgment that supporting TWB is equally critical.

Even as household incomes and employment rates stabilized post-pandemic (Pan et al., 2023; Wang et al., 2024; Zhi & Derakhshan, 2024), financial pressures and social inequities persist, placing additional strain on teachers and schools (OECD, 2024). Alongside these challenges, teachers face expanding responsibilities, fostering social and emotional competencies, addressing diverse learning needs, integrating digital tools, and collaborating with families and colleagues (Schleicher, 2018). These compounded demands underscore the urgency of addressing TWB systematically.

Despite a steadily growing literature on TWB (Hascher & Waber, 2021), research

remains fragmented in focus, scope, and methodological rigor. While several systematic reviews have sought to consolidate knowledge (Dreer, 2023), much of the research remains scattered and narrow in scope (Mo, 2024), limiting coherent and actionable insights. Many existing reviews rely on limited samples or address isolated aspects of TWB, such as resilience or mentoring, without adopting a holistic perspective.

This study aims to provide an updated synthesis of the TWB literature by systematically analyzing high-quality peer-reviewed articles and categorizing them meaningfully. By addressing fragmentation and theoretical inconsistencies, this research aims to contribute to developing a more cohesive, comprehensive, and policy-relevant understanding of TWB

The research questions guiding this study are:

1. What are the bibliometric characteristics of publications related to TWB?

2. What are the content analysis characteristics of articles on TWB published within the SSCI category?

## 2. Literature Review

### *2.1. Theoretical Framework*

This study is grounded in a dual theoretical foundation: Positive Psychology—specifically through the PERMA model—and Scientometric Theory. These frameworks provide complementary perspectives for examining both the conceptual dimensions of TWB and the structure and evolution of its scholarly discourse.

### *2.2. Positive Psychology Framework – PERMA Model*

The conceptual analysis in this study is informed by Seligman's (2011) PERMA model, which outlines five core elements of well-being: Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment**.** PERMA provides a clear and complete framework for understanding well-being, with each part adding something unique to a person's overall happiness and success. As Seligman (2018)

explains, these components can be measured separately and are moderately linked, showing that they are connected but not the same.

In the context of teacher education, this framework allows the study to assess whether and how published research operationalizes these five dimensions in their treatment of TWB — for example, via attention to emotional resilience (P), professional engagement (E), collegial and student relationships (R), career purpose (M), and achievements or recognition (A).

### *2.3. Scientometric Theory*

Scientometric theory, grounded in the foundational principles of Price's Law, Lotka's Law, and Bradford's Law, provides the analytical lens for the bibliometric aspect of this study. These laws help interpret patterns of scholarly productivity, author concentration, and journal diffusion in academic publishing. As Glänzel and Moed (2002) describe, "Scientometrics is not merely a set of bibliographic indicators, but a theory-driven approach to understanding the structure and dynamics of science" (p. 180).

Using tools such as VOSviewer and Biblioshiny, this study applies these principles to examine patterns of authorship, institutional and international collaboration, thematic trends, and source influence within the TWB research landscape. This dual approach not only maps the intellectual structure of the field but also identifies dominant voices and underrepresented areas, offering insights into how TWB has been conceptualized, developed, and disseminated across scholarly communities.

### *2.4. Antecedents and Outcomes of TWB*

TWB has become a noticeable concern in education, particularly as teachers face increasing responsibilities and systemic pressures all around the world. A consistent finding in the literature is the impact of TWB on both teachers and students. As Taylor et al. 2024 describe the TWB framework places teacher job satisfaction at its core, supported by interrelated personal and contextual factors. These include physical

health, emotional skills, confidence in teaching, resilience, and problem-solving, all influenced by wider working conditions like a supportive school environment, reasonable class sizes, and a healthy work-life balance (Hascher & Waber, 2021). Studies show that high levels of well-being are positively associated with teacher retention, instructional quality, teacher–student relationships, and even student achievement (Dreer, 2023; Skaalvik & Skaalvik, 2018). Conversely, poor TWB can disrupt educational systems, leading to staff turnover, absenteeism, and diminished classroom effectiveness (Albulescu & Tușer, 2018). Cumming (2017), focusing on early childhood educators, argues for a socio-ecological framing of TWB, positioning it as not only a determinant of practice but a social justice issue shaped by structural and relational dynamics.

OECD report in 2018 pointed out that teachers now navigate increasingly diverse classrooms, with wide variations in students' academic abilities, socio-economic statuses, and demographic backgrounds across many education systems. Moreover, schools are becoming more bureaucratic, and teachers often report limited professional autonomy and heavy workloads (Skaalvik & Skaalvik, 2018), particularly due to the burden of non-instructional duties such as administrative tasks (Albulescu & Tușer, 2018; Collie et al., 2012)

### *2.5. Methodological Trends and Limitations*

Despite growing interest, TWB research remains fragmented and methodologically inconsistent. Reviews by Hascher and Waber (2021), Turner and Garvis (2023), and Zhang et al. (2024) all point to the predominance of correlational studies, the scarcity of longitudinal or experimental designs, and the limited use of validated instruments. Turner and Garvis (2023) highlight a particular lack of methodological diversity in teacher educator research, while Zhang et al. 2024 document a shift toward qualitative and mixed-method approaches in recent years. However, the field continues to lack deep thematic or content analyses that move beyond descriptive summaries.

### *2.6. Systemic and Policy-Level Considerations*

Beyond individual and school-level factors, systemic efforts to improve TWB have gained visibility in policy discussions. Schleicher (2018) notes the increasing role of well-being in educational discourse, and the Council of the European Union (2022) outlines strategies to address declining student belonging, bullying, and mental health. These strategies call for inclusive, evidence-based frameworks that combine universal and targeted interventions. However, existing literature remains largely centered on Western contexts, particularly European and Anglo-American systems (e.g., OECD, EU). There is a clear need for cross-cultural and regionally diverse perspectives on TWB to inform more inclusive policies and practices.

### *2.7. Gaps in the Literature and Rationale for the Present Study*

While the literature has expanded significantly in recent years (Zhang et al., 2024), it still suffers from conceptual fragmentation and methodological limitations. Few studies offer cumulative insights across theoretical, empirical, and systemic dimensions. Notably underexplored areas include the institutional and policy-level determinants of TWB, longitudinal tracking of its development, and its variability across global contexts. In response, this study aims to systematically analyze high-quality peer-reviewed articles to develop a more coherent and comprehensive understanding of TWB. By addressing gaps in theory, method, and scope, it seeks to contribute toward a unified research agenda and practical guidance for educational stakeholders.

## 3. Method

This study employed a bibliometric approach to systematically analyze TWB publications from the Web of Science database, complemented by content analysis based on strict inclusion criteria. Bibliometric methods, valued for highlighting research trends and gaps, use quantitative evaluation techniques (Linnenluecke et al., 2019) and enable graphical displays of data such as publication trends, geographic and institutional productivity, keyword evolution, and co-citation networks (Aria & Cuccurullo, 2017). The dataset, covering TWB

articles from 1995 to April 5, 2025, was analyzed using R and VOSviewer. Key areas of focus included annual publication volume, national and institutional contributions, and keyword co-occurrence patterns.

### *3.1. Data Collection Process*

The Web of Science (WoS) database was selected for its reputation as a comprehensive source of peer-reviewed scholarly literature. Record selection for the bibliometric analysis followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, a widely accepted protocol for systematic article selection (Page et al., 2021). Data retrieval occurred in four phases: identification, screening, eligibility assessment, and final inclusion, as shown in Figure 1.

### *3.2. Data Analysis Tools*

In the first phase of the study (bibliometric analysis), the principal analytical instruments employed included *Biblioshiny* within the R programming environment (R Core Team, 2021) and *VOSviewer* (van Eck & Waltman, 2010). Quantitative bibliometric techniques were applied to systematically examine the body of literature within this research domain. By utilizing these two advanced data visualization platforms, the curated dataset was subjected to bibliometric mapping, enabling the identification of prominent thematic trajectories and the intellectual structure underpinning the field's development. These tools facilitated the graphical representation of complex bibliometric relationships, thus supporting a data-informed interpretation of academic discourse. As noted by Lim et al. 2024, both platforms generate a range of visual outputs that enhance the depth and clarity of research landscape assessments. The rationale for employing both tools in tandem was to capitalize on their respective analytical strengths, thereby offering more nuanced, interpretable, and comprehensive insights for the readership.

### *3.3. Data Analysis*

During the bibliometric analysis phase, which is the first stage of research, the

following steps were taken: first, a clear research question was articulated, followed by a targeted literature review aligned with the study's objectives. Then, an appropriate database was selected (Web of Science), key search terms were determined, and inclusion and exclusion criteria were established. Subsequently, suitable bibliometric tools and software for data analysis were identified (R and VOSviewer), the collected data was organized and classified in accordance with the research objectives and the selected analytical framework, and finally, visual representations were generated, the results were interpreted, and conclusions along with relevant recommendations were formulated.

In the second phase of the study, a qualitative content analysis was conducted on a selected subset of articles derived from the broader bibliometric dataset. During this process, the researchers established a conceptual framework to clarify how the data aligned with the study's objectives. Key terms were operationally defined, and purposive sampling techniques were employed. The unit of analysis was clearly delineated, and coding categories were developed in line with established methodological guidance (Fraenkel et al., 2012). The information collected during the research was systematically examined through a detailed coding process conducted independently by the researchers. A content analysis approach was applied. Initially, we each analyzed approximately 30% of the dataset on our own, after which we cross-checked the coding to enhance trustworthiness and reduce potential subjectivity. This approach of dual analysis not only improves the accuracy of interpretation but also functions as a strong mechanism for verifying coding reliability. As noted by Miles and Huberman, "Cross-checking codes not only helps sharpen definitions but also offers a solid measure of consistency" (1994, p. 65). Following this individual coding phase, the results were reviewed and discussed collaboratively to ensure coherence in the analytical process. Although one researcher finalized the analysis, all decisions regarding theme identification and category development were made jointly through discussion and agreement. The level of agreement between the codes was calculated to ensure internal consistency in coding using the reliability formula proposed by Miles and Huberman (1994). The agreement rate among the researchers was found 95% which indicates a high level of consistency among the researchers performing the coding. The content analysis

process was carried out using the MAXQDA software.

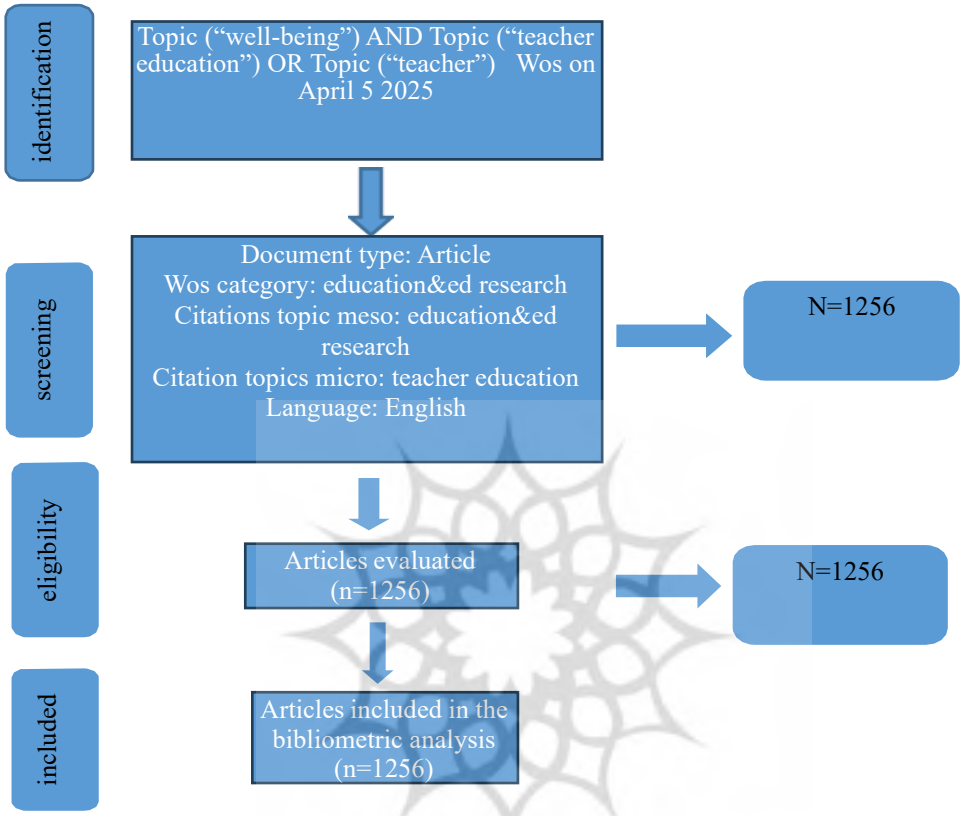
The content analysis focused on studies with the keywords ("well-being") AND ("teacher education" OR "teacher") appeared explicitly in the article titles (not only abstract or keywords). After applying the inclusion and exclusion criteria, 114 articles represented were foregrounded, allowing for an in-depth categorical and descriptive analysis of their defining characteristics. This number represents the complete result set obtained after applying our predefined inclusion criteria. Specifically, only those articles in which the keywords ("well-being") AND ("teacher education" OR "teacher") appeared explicitly in the article titles, rather than solely in abstracts or keywords were included. Additionally, the search to English-language articles indexed in the Social Sciences Citation Index (SSCI) within the "Education & Educational Research" category of the Web of Science database was restricted. No further filtering based on citation count, journal ranking, or publication date was applied. This systematic and replicable filtering process yielded a focused, high-relevance sample of 114 studies suitable for in-depth content analysis.

### *3.4. Inclusion and Exclusion Criteria*

In the first stage of the analysis, a search was conducted in the Web of Science (WoS) database on April 5, 2025, using the Topic keywords ("well-being") AND ("teacher education" OR "teacher"), which resulted in 3,728 documents. To narrow the scope of the study, specific inclusion criteria were applied: the document type was limited to articles, the WoS category was set to Education & Educational Research, and the citation topics were specified as meso: Education & Educational Research and micro: Teacher Education. Additionally, only documents written in English were included. After applying these filters, 1,256 articles were identified and used for further analysis. Materials excluded from the analysis included Early Access, Review Articles, Proceedings Papers, Book Chapters, Editorial Material, Meeting Abstracts, Book Reviews, Corrections, Biographical Items, and Books. Figure 1 presents information on PRISMA guidelines.

**Figure 1**

*PRISMA Guidelines on TWB Research*




The subsequent section provides an overview of the prevailing trends and defining characteristics within the body of literature on TWB. Table 1 presents a summary of key descriptive statistics pertaining to the dataset utilized in this analysis.

**Table 1**

*Summary of Core Dataset Characteristics*

| Documents (articles) | 1256 |
|---|---|
| Annual Growth Rate % | 7,78% |
| Document Average Age | 7,99 |
| Average citations per doc | 18,23 |
| References | 38377 |
| Authors | 2300 |
| Authors of single-authored docs | 398 |
| International co-authorships % | 13,77% |

The present study incorporates the analysis of a dataset composed exclusively of journal articles. Accordingly, all examined documents fall within this publication type. The annual average growth rate in publication frequency—reflecting the year-over-year increase in the number of articles on this subject—is 7, 78 %. On average, each article received 18.23 citations. The cumulative number of references cited across the articles amounts to 38377, and a total of 2300 authors contributed to these 1256 publications. Among these, 398 were single-authored works. Notably, the proportion of articles featuring international collaboration is relatively low, standing at 13, 77 %.

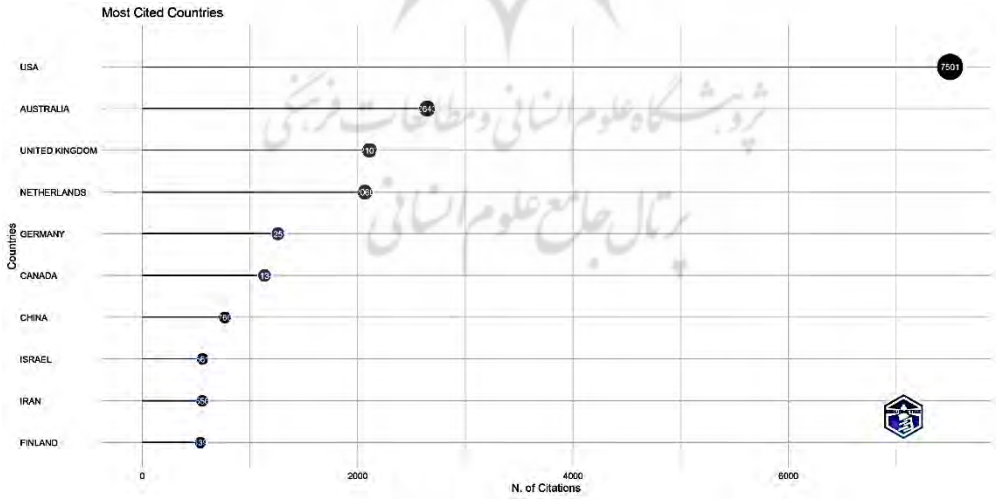
## 4. Findings

This part first outlines the results derived from the bibliometric examination concerning 1256 articles on TWB and then the content analysis results of selected articles.

### *4.1. Countries and Academic Institutions*

Figure 2 shows the most cited countries on TWB studies over time.

**Figure 2**
*Most Cited Countries*



The United States leads citation impact in TWB research with 7,501 citations—nearly equal to the combined total of all other countries—demonstrating its dominant position in shaping global discourse on TWB. Australia (2,643), the United Kingdom (2,107), and the Netherlands (2,066) also stand out, collectively forming a central cluster of citations predominantly located in the Global North. This concentration is consistent with broader trends in academic publishing, where research from English-speaking and institutionally resourced countries garners disproportionate visibility and influence.

Noticeably, countries like Israel (561) and Iran (556) appear further down the list but still outperform expectations based on overall output volume, indicating high citation intensity relative to their size and resources. This suggests that in specific national contexts, TWB research has achieved remarkable scholarly resonance, perhaps due to localized innovations, contextually rich studies, or global interest in how TWB is conceptualized in distinct sociopolitical environments.

The marked drop in citations after the top four countries also points to a hierarchical structure of knowledge production, where influence is concentrated in a few research centers. This raises important questions about academic visibility, citation bias, and access to influential publication channels—factors that may marginalize valuable contributions from less dominant regions.

Conceptually, these patterns reflect not only research productivity but also epistemic power—the ability of certain academic systems to define what is cited, circulated, and legitimized as authoritative knowledge. While countries like the U.S. benefit from robust academic infrastructure and international reach, emerging actors like Iran and Israel show that impactful research can also emerge from non-traditional centers, challenging monolithic narratives and offering fresh perspectives on TWB.

These findings highlight both the concentration and diversification of scholarly influence in the field, suggesting a need to further support global inclusivity and citation equity in TWB scholarship to enrich its theoretical and practical contributions.

Figure 3 illustrates the country collaboration network in TWB-related research. A network analysis reveals that the United States functions as the most prominent central actor, characterized by high degree and betweenness centrality. It maintains direct collaborative ties with numerous countries, indicating its hub-like role in

facilitating global scholarly exchange. Similarly, the United Kingdom and Australia also serve as secondary hubs with extensive transnational links, reinforcing their influence in shaping the TWB research agenda.

In contrast, countries such as Chile, Brazil, Turkey, and Japan demonstrate more limited degrees of connectivity, suggesting their position on the network periphery and potential status as emerging contributors. Notably, China appears to be evolving into a regional connector, particularly linking with countries like Malaysia, Iran, Taiwan, Scotland, and Turkey, forming a potential emerging cluster in the TWB research landscape.

From a structural standpoint, several countries can be identified as partial isolates or under-connected nodes. For example, South Korea and Singapore show no direct collaboration with a number of other active countries (e.g., China, Sweden, Iran, and Taiwan). Likewise, France, Spain, Chile, and Portugal appear relatively disconnected from major hubs and each other. These gaps highlight opportunities for enhanced international collaboration and knowledge sharing, particularly between Global South and Global North countries.

**Figure 3**

*The Country Collaboration Networks in TWB-Related Studies*

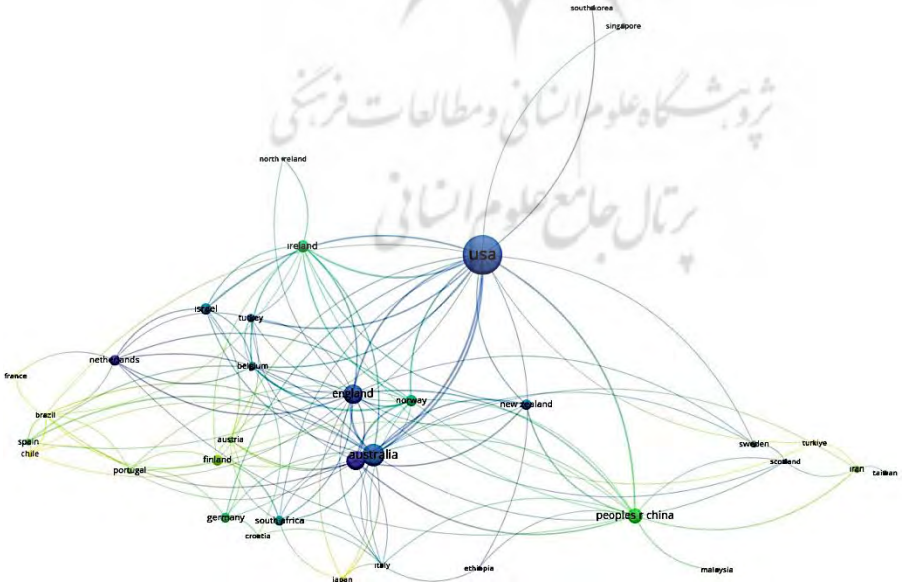
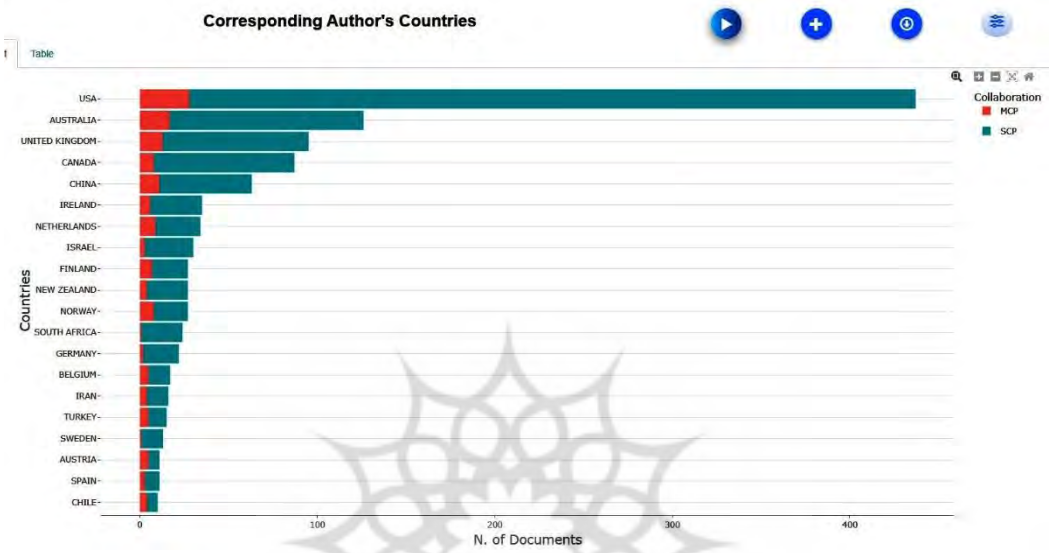


Figure 4 shows the corresponding author's countries on TWB research.

**Figure 4**

*The Corresponding Author's Countries on TWB Research*




Among the 437 publications originating from the United States, only 28 are multiple country productions (MCPs), while Australia has 17 out of 126, China 11 out of 63, Ireland 6 out of 35, and the Netherlands 9 out of 34. This indicates a consistently low ratio of international collaboration among high-publication countries, raising important questions about the insularity of dominant academic hubs in the field of TWB.

Despite the global relevance of TWB—given the shared challenges teachers face across diverse systems—these figures suggest a preference for nationally bounded research agendas, especially in leading countries such as the U.S. and Australia. This domestic orientation could reflect strong national education policy frameworks, institutional self-sufficiency, or even linguistic centrality in English-speaking academia, which may reduce the perceived necessity for cross-national partnerships.

In contrast, countries with lower total output (e.g., South Africa: 1 MCP out of 24; Germany: 2 MCPs out of 22) also display minimal international collaboration, though

the underlying factors may differ. In these cases, resource limitations, funding constraints, or structural barriers (e.g., language, access to networks) could play a more significant role. Notably, the pattern of limited MCPs is not exclusive to either high- or low-output countries, suggesting a broader structural challenge in achieving international integration within TWB research.

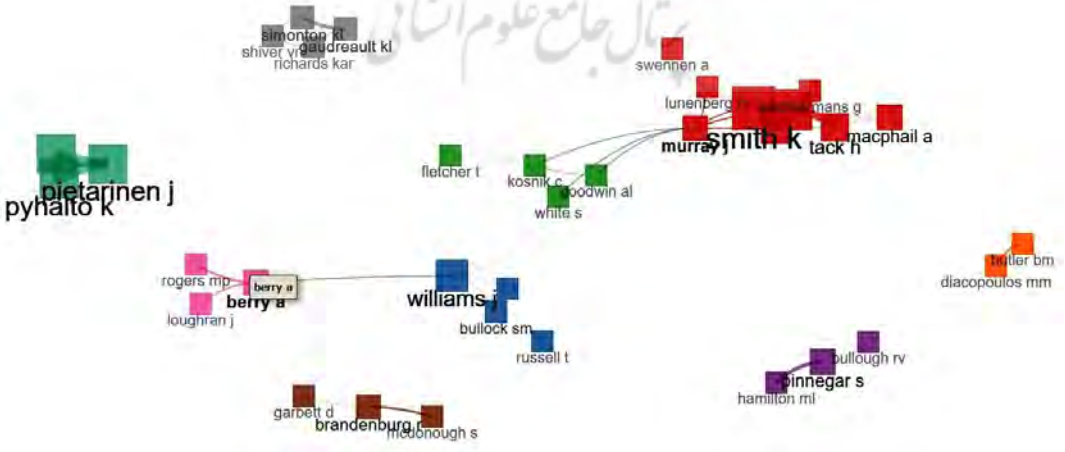
From a conceptual perspective, the observed patterns point to a fragmented global research landscape, where TWB scholarship may be dominated by national discourses rather than truly global or comparative ones. This undermines opportunities for cross-cultural learning, policy transfer, and the development of more universal conceptual frameworks. The lack of global connectivity also risks reinforcing epistemic silos, where solutions or insights developed in one context remain untested or unadapted elsewhere.

These findings underline the need to foster more inclusive and internationally collaborative research practices. Encouraging MCPs not only enhances methodological rigor and cultural sensitivity but also aligns TWB research more closely with the increasingly transnational nature of teaching challenges and teacher mobility.

### *4.2. Network and Collaboration among Researchers*

Figure 5 shows the network on TWB research among writers.

**Figure 5**
*The Network on TWB Research among Writers*



A co-authorship network analysis reveals several prominent researcher clusters within the TWB literature. Leadership designations in these clusters are determined based on authors' centrality scores (degree and betweenness centrality), publication volume, and their position as key connectors within the network.

The most densely connected cluster is anchored by Smith and Murray, whose frequent co-authorships and high centrality scores establish them as central figures. This group also includes Swennen, Lunenberg, Macphail, Tack, and Kelchtermans, characterized by strong internal linkages (high density), suggesting robust intra-group collaboration. Notably, Murray functions as a "bridge node" between this cluster and another influential group formed by Goodwin, White, Kosnik, and Fletcher, indicating Murray's pivotal role in fostering inter-group connectivity.

A second major network is centered around Williams, based on co-authorship frequency and intermediate betweenness centrality. Williams connects to both Bullock and Russell and also acts as a linking actor to a separate, but related cluster including Berry, Loughran, and Rogers. Together, they form an extended collaborative network with multiple thematic intersections.

Another distinct cluster is comprised of Simonton and Gaudreault, with collaborators such as Shiver and Richards, operating more independently from the main networks. Similarly, the cluster involving Pietarinen and Pyhältö is defined by high co-authorship intensity but exhibits low external connectivity, making it structurally peripheral.

Several additional clusters, including those formed by Brandenburg, Garbett, and McDonough, Pinnegar, Hamilton, and Bullough, as well as Butler and Diacopoulos, appear as isolated components in the collaboration network. These clusters show strong internal collaboration but lack bridging ties to other researcher groups, indicating structural fragmentation in the broader TWB research community.

Overall, the analysis reveals two dominant, interconnected research networks centered around Murray and Williams–Berry, while other clusters remain relatively siloed. This suggests a concentration of scholarly influence in a few highly connected figures, alongside opportunities for greater integration and cross-cluster collaboration in the field.

### *4.3. Niche and Trend Topics*

Figure 6 shows trend topics on TWB research.

**Figure 6**
*Trend Topics on TWB Research*

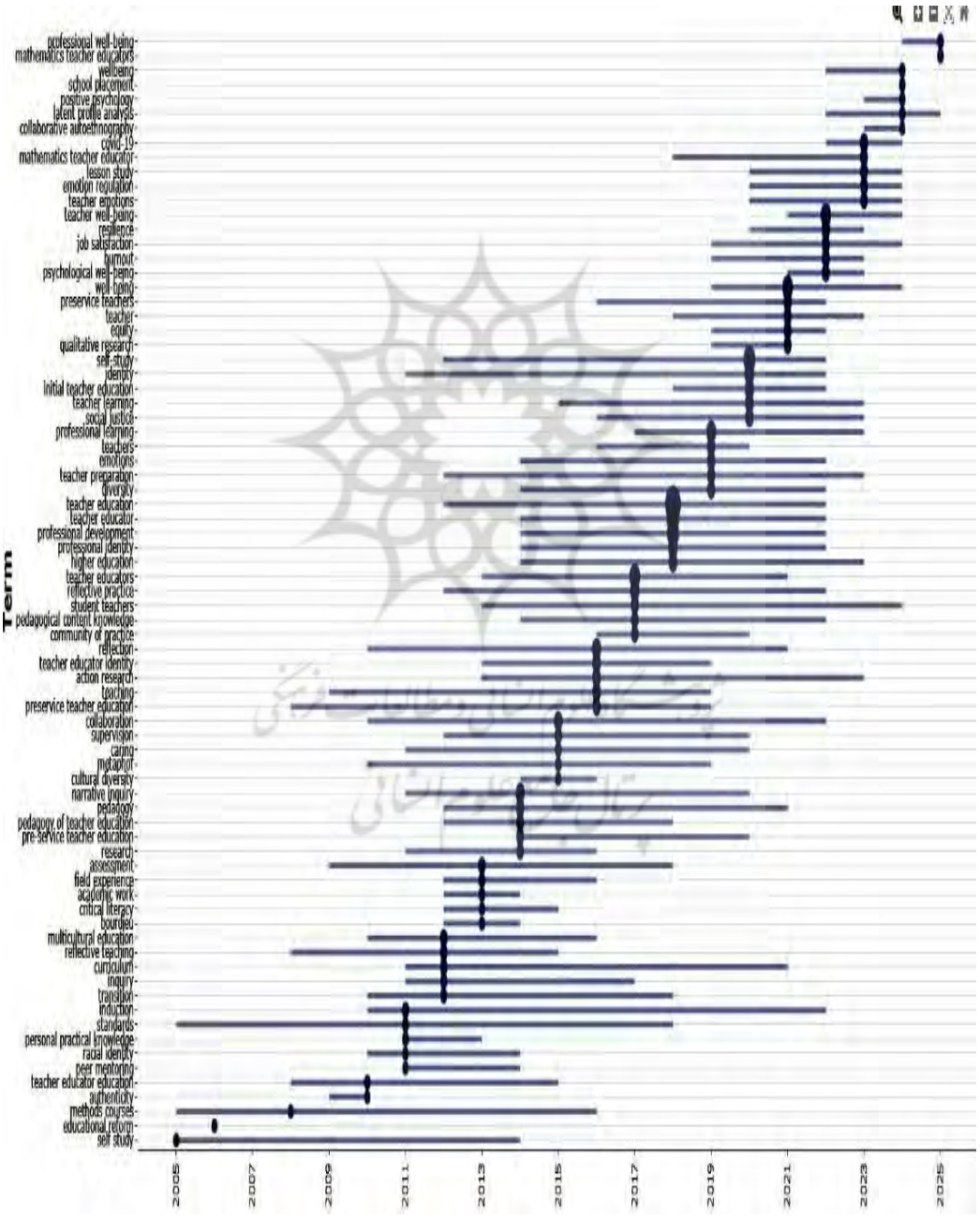


Figure 6 identifies several topics that have gained traction in the last five years and are projected to shape the future of TWB research. These include professional well-being, mathematics teacher educators, school placement, positive psychology, latent profile analysis, collaborative auto ethnography, lesson study, emotion regulation, resilience, satisfaction, burnout, equity, reflective practice, and self-study.

A closer analysis reveals three broad thematic clusters:

1. Psychological and Emotional Dimensions: Topics like *emotion regulation, resilience, satisfaction, burnout,* and *positive psychology* reflect a deepening interest in the affective and cognitive components of TWB. This aligns with a broader turn in education research toward mental health, emotional labor, and teacher identity, particularly in post-pandemic contexts where emotional demands on educators have intensified.

2. Methodological Innovations: The rise of *latent profile analysis, collaborative auto ethnography,* and *self-study (reflection)* suggests growing methodological diversity and a move toward more nuanced, participatory, and context-sensitive approaches. These methods allow for deeper insight into the heterogeneity of teacher experiences, moving beyond generalizations to explore subpopulations and personal narratives.

3. Contextual and Structural Considerations: Topics such as *school placement, equity, lesson study,* and *mathematics teacher educators* point to a growing interest in the institutional and systemic factors that shape TWB. For instance, attention to equity reflects increased awareness of how race, class, and gender dynamics influence teacher experience, while the focus on school placement highlights transitional stressors for pre-service teachers.

This trend analysis indicates a field that is both diversifying and maturing—shifting from early general discussions of burnout and stress toward multidimensional and intersectional understandings of well-being. It also reveals a research agenda increasingly concerned with teacher agency, identity, and professional learning, as reflected in the rise of reflective practice and self-study.

However, some critical gaps remain. For example, while emotional well-being is well-represented, sociopolitical dimensions of TWB—such as policy pressures, labor conditions, and governance—are less visible in the trending topics. This suggests an opportunity for future research to more explicitly link personal well-being to broader structural contexts.

Figure 7 shows niche research areas on TWB research.

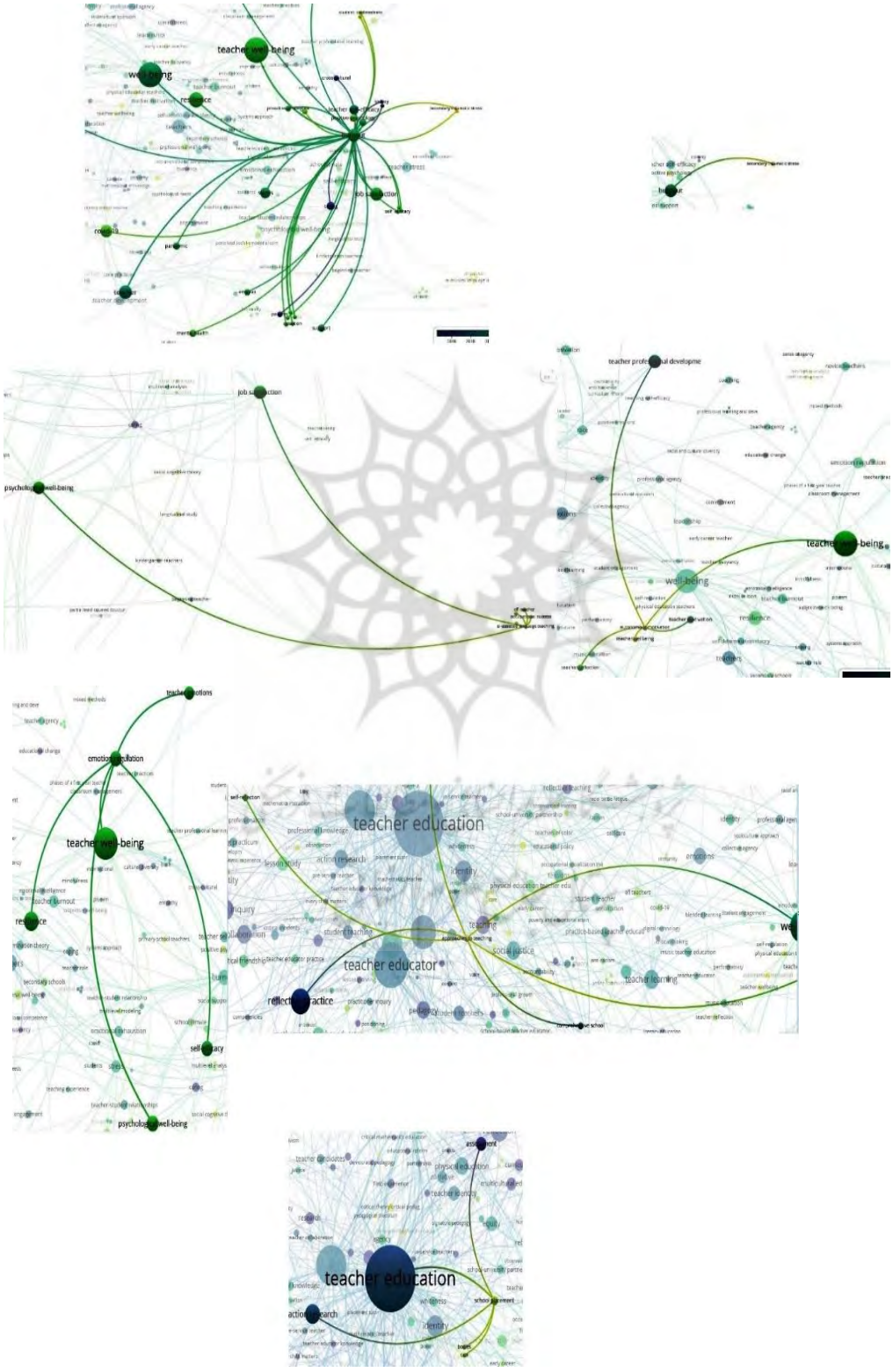
The figure and associated analysis reveal a complex and evolving landscape of niche and emerging research areas related to TWB. Several recurring themes — such as resilience, burnout, job satisfaction, self-efficacy, and emotion regulation — appear across multiple subdomains, indicating their central role as psychological constructs underpinning TWB research. Their presence in both established and niche areas reflects a sustained scholarly concern with the individual-level emotional and cognitive resources that shape teachers' professional experiences.

At the intersection of TWB and reflective practice, the prominence of topics like *approaches to teaching* and *self-reflection* signals an important shift toward professional agency and teacher-led learning. This aligns with the increasing integration of self-study and practitioner inquiry in teacher education, where well-being is framed not only as an outcome but also as a process facilitated by intentional pedagogical reflection.

پژوهشگاه علوم انسانی و مطالعات فرهنگی
پرتال جامع علوم انسانی

**Figure 7**

*Niche Research Areas on TWB Research*



The emerging connection between TWB and teacher motivation, particularly in relation to *autonomous motivation* and *teacher reflection*, points to a growing recognition of intrinsic psychological needs (e.g., autonomy, competence, relatedness) as drivers of well-being. This suggests that motivation and well-being are increasingly seen as mutually reinforcing constructs, especially in self-determined learning and teaching environments.

In niche clusters focused on job satisfaction and psychological well-being, new topical directions such as *AI-assisted language teaching*, *occupational success*, and the context of *EFL teachers* reflect an intersection between technological change, language education, and occupational psychology. These areas suggest that TWB is being recontextualized considering digital transformation, globalization, and linguistic diversity, expanding the boundaries of TWB research beyond generalist frameworks.

When evaluated together, these trends illustrate a field that is broadening in both depth and scope -moving from general stress-and-burnout narratives toward more multidimensional, context-sensitive, and future-oriented inquiries. At the same time, the persistent emphasis on individual resilience and emotional coping suggests that structural factors (e.g., institutional policies, working conditions, systemic inequality) remain underexplored. Notably, while topics like *equity* are beginning to emerge, their current marginality signals a potential blind spot in how TWB is conceptualized, often centered on the individual rather than the systemic level.

### *4.4. Content Analysis Results of Selected Articles*

From the 1,256 studies included in the bibliometric analysis, a more restricted sample was selected for content analysis. Titles were searched in the Web of Science database for the keywords ("well-being") AND ("teacher education" OR "teacher") both of which had to appear. The search was further limited to articles under the Web of Science Categories: Education and Educational Research, indexed in SSCI, and published in English, as SSCI articles are generally considered higher quality. This process identified 114 articles; however, articles numbered 13, 19, 35, 51, 65, 97, and 114 could not be retrieved due to download restrictions. Consequently, the content

analysis was based on 107 articles.

The content analysis of the 107 articles was conducted using a systematic and collaborative coding process to ensure methodological rigor. A qualitative content analysis approach was applied to examine the research purposes and thematic emphases of the selected studies. The coding process was carried out independently by both researchers using MAXQDA software.

Initially, each researcher analyzed approximately 30% of the dataset independently, applying open coding to identify emerging patterns and themes. This dual coding strategy enhanced the trustworthiness of the findings and reduced potential subjectivity. After the initial independent phase, the coding was cross-checked and compared, allowing for clarification and refinement of code definitions. As Miles and Huberman (1994, p. 65) suggest, "Cross-checking codes not only helps sharpen definitions but also offers a solid measure of consistency."

Following this stage, both researchers engaged in collaborative discussions to resolve any discrepancies and jointly develop a codebook and thematic framework. Although one researcher conducted the final round of coding, all theme identification and category development decisions were made jointly, ensuring coherence and consensus in the analytical process.

To verify internal consistency, the inter-coder agreement was calculated using the reliability formula proposed by Miles and Huberman (1994). The agreement rate was found to be 95%, indicating a high level of coding reliability. This process ensured both thematic saturation—as no new themes emerged after reviewing approximately 85% of the articles—and analytical consistency across the dataset.

Table 2 categorizes the articles based on their research purposes.

**Table 2**

*Purposes of TWB Studies*

| Purpose Theme | Description | Article Numbers |
|---|---|---|
| Understanding Factors Influencing TWB | Identifying factors influencing TWB —such as workload, autonomy, student behavior, and organizational climate—helps clarify which elements most significantly contribute to teacher | 1, 6, 8, 10, 13, 14, 21, 24, 33, 37, 51, 63, 70, 83, 90, 104 |

| Purpose Theme | Description | Article Numbers |
|---|---|---|
| | stress or flourishing. | |
| Evaluating Interventions or Support Programs | Assessing strategies such as mindfulness, SEL training, and resilience workshops to enhance TWB, these studies evaluate both their effectiveness and the durability of their impacts. | 5, 15, 19, 23, 36, 39, 41, 52, 73, 77, 93, 102, 111 |
| Exploring Emotional Labor and Regulation | Exploring how teachers manage emotions at work, focusing on emotional labor and its impact on burnout. | 9, 10, 24, 33, 36, 40, 54, 61, 66, 87, 98 |
| Linking TWB to Student Outcomes | Linking TWB to student engagement, behavior, achievement, and classroom climate, showing its direct impact on learners. | 4, 7, 16, 18, 22, 35, 43, 47, 56, 60, 71, 91, 101 |
| Investigating the Role of Leadership | Analyzing how leadership styles (e.g., distributed, servant) impact morale, motivation, and support, highlighting how leaders can protect or undermine staff well-being. | 1, 17, 21, 24, 37, 42, 50, 58, 63, 70, 76, 82 |
| Examining Racial, Cultural, or Equity Issues | Examining race-conscious and culturally responsive frameworks, particularly for Teachers of Color or in marginalized contexts, highlighting systemic disparities. | 1, 28, 31, 32, 38, 45, 53, 67, 74, 84, 92, 100, 110 |
| Measuring Well-being through Tool Development | Developing and validating tools to measure TWB across cultural and domain-specific contexts (emotional, cognitive, and social). | 9, 29, 30, 33, 41, 48, 62, 69, 78, 86, 96, 109, 113 |
| Analyzing Teacher Identity and Professional Purpose | Investigating intersections between well-being, motivation, identity, and purpose, often linked to career commitment and meaning making. | 3, 11, 15, 32, 44, 49, 55, 64, 68, 75, 88, 97, 108 |
| Describing Context-Specific Challenges (e.g., COVID, Refugee Settings) | Documenting how crisis or under-resourced settings (e.g., COVID-19, refugee camps) intensify well-being challenges beyond typical school stressors. | 2, 12, 14, 20, 25, 27, 30, 46, 59, 65, 72, 79, 94, 103 |

Research on TWB encompasses a range of interrelated purposes that collectively deepen our understanding of the multifaceted nature of teacher experiences. Central to this body of work is the investigation of factors influencing TWB, where studies highlight how workload, autonomy, student behavior, and organizational climate coalesce to shape teacher stress and flourishing (e.g., 1, 6, 8, 10, 13, 14, 21, 24, 33, 37, 51, 63, 70, 83, 90, and 104). These factors reveal the systemic and interpersonal dimensions affecting well-being, suggesting that both individual and structural conditions must be addressed to support teachers effectively.

Building on this foundational understanding, a significant cluster of research evaluates interventions aimed at enhancing TWB, such as mindfulness, social-

emotional learning (SEL), and resilience training (e.g., 5, 15, 19, 23, 36, 39, 41, 52, 73, 77, 93, 102, 111). These studies emphasize not only immediate effectiveness but also the sustainability of benefits, reflecting an emerging focus on long-term well-being rather than short-term fixes. Complementing this, explorations of emotional labor and regulation underscore the emotional demands of teaching, illustrating how teachers' management of workplace emotions can either mitigate or exacerbate burnout (e.g., 9, 10, 24, 33, 36, 40, 54, 61, 66, 87, and 98). Together, these lines of inquiry articulate the emotional complexities inherent in teaching and the necessity for emotional support mechanisms within schools.

A third strand of research links TWB directly to student outcomes, demonstrating a reciprocal dynamic where TWB influences—and is influenced by—student engagement, behavior, achievement, and classroom climate (e.g., 4, 7, 16, 18, 22, 35, 43, 47, 56, 60, 71, 91, 101). This underscores the argument that teacher wellness is not an isolated construct but integral to the broader educational ecosystem, reinforcing calls for holistic interventions that benefit both educators and learners.

Leadership emerges as a critical context shaping TWB, with studies examining how distributed and servant leadership styles foster supportive environments that boost morale and motivation, while counterproductive leadership practices risk undermining well-being (e.g., 1, 17, 21, 24, 37, 42, 50, 58, 63, 70, 76, and 82). This research highlights the pivotal role of school leaders in shaping the conditions for teacher thriving. Simultaneously, an important equity-oriented dimension addresses racial, cultural, and systemic disparities, foregrounding culturally responsive frameworks that recognize the unique challenges faced by Teachers of Color and those in marginalized communities (e.g., 1, 28, 31, 32, 38, 45, 53, 67, 74, 84, 92, 100, and 110). These studies call for interventions that are not only supportive but also justice oriented.

Methodologically, the development and validation of TWB measurement tools reflect the field's growing sophistication in capturing the construct's multidimensionality across diverse cultural and contextual settings (e.g., 9, 29, 30, 33, 41, 48, 62, 69, 78, 86, 96, 109, 113). This progress is essential for both research rigor and practical application in policy and school contexts. Relatedly, investigations into teacher identity and professional purpose illuminate how motivation, meaning

making, and career commitment intersect with well-being, suggesting that supporting teachers' sense of purpose may be as crucial as addressing external stressors (e.g., 3, 11, 15, 32, 44, 49, 55, 64, 68, 75, 88, 97, 108).

Finally, context-specific challenges, particularly those emerging from crises such as COVID-19 and refugee settings, highlight how under-resourced and unstable environments compound teacher stress and vulnerability (e.g., 2, 12, 14, 20, 25, 27, 30, 46, 59, 65, 72, 79, 94, and 103). These studies reveal the critical importance of tailoring well-being supports to the realities of varied teaching contexts, especially where teachers operate under extraordinary pressures.

Table 3 presents information on Geographic and Situational Contexts of TWB Studies.

**Table 3**

*Geographic and Situational Contexts of TWB Studies*

| Context Type | Description | Study Numbers |
|---|---|---|
| United States | Studies often focus on equity, stress, and accountability. | 1, 10, 14, 17, 25, 31, 36, 39, 45, 67, 74, 84, 100, 110 |
| Europe (e.g., Finland, Norway, UK) | Studies emphasize TWB and trust-based education models. | 3, 6, 15, 23, 34, 38, 50, 58, 63, 70, 76, 82, 91, 103 |
| East Asia (e.g., China, Hong Kong, Japan) | Studies highlight cultural emphasis on effort and achievement. | 9, 12, 24, 29, 33, 41, 48, 54, 66, 78, 96 |
| Sub-Saharan Africa (e.g., South Sudan, Uganda, South Africa) | Studies in under-resourced contexts examine relational care and community-driven models. | 2, 13, 19, 20, 27, 30, 46, 59, 65, 72, 79, 94 |
| Middle East/North Africa | Studies reflect traditional roles and instability. | 11, 16, 26, 43, 60 |
| South and Southeast Asia | Studies from countries balancing tradition and reform highlight identity and workload stress. | 5, 7, 18, 22, 28, 35, 44, 49, 55, 64, 68, 75, 88, 97, 108 |
| Latin America | Studies explore public-private and urban-rural disparities. | 8, 32, 40, 47, 56 |
| Global North – Multinational (OECD, TALIS) | Studies using international datasets offer Global North comparisons. | 4, 21, 37, 52, 62, 69, 86, 93, 102, 109, 113 |
| Conflict/Crisis or Refugee Contexts | Studies in conflict zones or refugee education settings examine trauma, safety, and teacher-student bonds. | 25, 27, 30, 46, 59, 65, 72, 79, 94, 101 |

The geographic and situational contexts of TWB research reveal how cultural, economic, and systemic factors shape teachers' lived experiences globally. In the United States (e.g., 1, 10, 14, 17, 25, 31, 36, 39, 45, 67, 74, 84, 100, 110), studies frequently focus on issues of equity, accountability pressures, and systemic stressors linked to high stakes testing and policy demands. These studies collectively highlight how social justice concerns and performance expectations intersect to influence teacher wellness in complex ways.

European research (e.g., 3, 6, 15, 23, 34, 38, 50, 58, 63, 70, 76, 82, 91, and 103) tends to emphasize trust-based education models and the cultivation of supportive school cultures. The prioritization of collaborative leadership and strong social supports reflects regional values of social welfare and collective responsibility, suggesting that TWB in Europe is closely tied to organizational climate and relational dynamics within schools.

In East Asia (e.g., 9, 12, 24, 29, 33, 41, 48, 54, 66, 78, 96), the cultural emphasis on effort, achievement, and exam success creates a unique pressure-cooker environment for teachers. Here, TWB is often challenged by high expectations for student performance and rigid educational norms, underscoring the emotional labor teachers must undertake to maintain classroom discipline and morale.

Sub-Saharan African contexts (e.g., 2, 13, 19, 20, 27, 30, 46, 59, 65, 72, 79, and 94) present challenges due to under-resourcing and infrastructural limitations. Yet, research highlights how community-driven and relational care models act as important protective factors for TWB, reflecting the central role of social cohesion and collective resilience in these environments.

Middle Eastern and North African studies (e.g., 11, 16, 26, 43, and 60) reflect contexts marked by political instability and traditional gender roles, which contribute additional layers of stress and complexity for teachers, particularly female educators navigating shifting social expectations alongside professional demands.

In South and Southeast Asia (e.g., 5, 7, 18, 22, 28, 35, 44, 49, 55, 64, 68, 75, 88, 97, 108), research often grapples with the tension between entrenched cultural traditions and ongoing educational reforms. This duality influences teacher identity and workload stress, revealing the nuanced interplay between modernization and

heritage in shaping TWB.

Latin American studies (e.g., 8, 32, 40, 47, and 56) tend to explore disparities between public and private education sectors, alongside urban-rural divides, reflecting broader socio-economic inequalities that impact teacher experiences and resources.

Global North multinational datasets (e.g., 4, 21, 37, 52, 62, 69, 86, 93, 102, 109, 113), such as those from OECD countries, provide comparative perspectives that highlight both shared challenges and distinct national policy environments. These studies enable cross-cultural understanding of TWB, while also cautioning against one-size-fits-all approaches.

Lastly, research situated in conflict, crisis, or refugee contexts (e.g., 25, 27, 30, 46, 59, 65, 72, 79, 94, and 101) underscores the profound impact of trauma, safety concerns, and disrupted educational systems on TWB. These studies bring to light the resilience and relational care that teachers must embody to support vulnerable student populations under extraordinary conditions.

Together, these geographic and situational analyses emphasize that TWB is deeply embedded within local realities—cultural values, systemic structures, and socio-political contexts—necessitating context-sensitive approaches to research and intervention.

Table 4 presents information on Implications of TWB Studies.

**Table 4**

*Implications of TWB Studies*

| Implication Theme | Description | Implication | Study Numbers |
|---|---|---|---|
| Leadership and Recognition | Promote distributed, servant, and responsible leadership that centers recognition and emotional support. | Schools should develop professional pathways that foster trusting, emotionally intelligent leadership, training leaders to recognize and advocate for TWB structurally. | 1, 17, 21, 24, 37, 41, 42, 43, 50, 58, 63, 70, 76, 82, 91, 99, 105 |

| Implication Theme | Description | Implication | Study Numbers |
|---|---|---|---|
| Teacher Preparation and Professional Development | Integrate well-being, emotional intelligence, and SEL into teacher education and ongoing training. | Teacher education programs must integrate well-being, SEL, and emotion regulation into curricula, with professional development extending beyond pedagogy to mental health and sustainability practices. | 5, 11, 15, 32, 36, 39, 44, 49, 55, 64, 68, 75, 88, 97, 108 |
| Organizational and Workload Reforms | Reform administrative workload, role clarity, and organizational structures to reduce stress. | Policy and school reforms should balance instructional and administrative duties, protecting planning time and reducing bureaucratic burdens to prevent burnout. | 14, 21, 25, 27, 30, 33, 46, 51, 59, 65, 72, 79, 83, 90, 102 |
| Cultural Responsiveness and Equity | Develop race-conscious and culturally responsive interventions to support Teachers of Color. | Interventions must be race-, language-, and culture-responsive, with investments in racial affinity spaces, culturally responsive mentoring, and bias-aware leadership pipelines. | 1, 28, 31, 32, 38, 45, 53, 67, 74, 84, 92, 100, 110 |
| Student-Teacher Relationships | Enhance mutual respect, engagement, and care within teacher-student relationships. | Schools should prioritize relational pedagogies, student voice, empathy-building, and peer interaction—to strengthen teacher-student trust and reduce emotional isolation. | 4, 7, 16, 18, 22, 26, 35, 47, 52, 60, 71, 81, 87, 101 |
| Emotion Regulation and Self-Care | Implement mindfulness, reappraisal, and stress-management strategies to build resilience. | Mindfulness, journaling, and self-care must be normalized as essential survival strategies within teaching practice and professional learning communities. | 10, 15, 24, 33, 36, 40, 48, 54, 61, 66, 73, 77, 89, 98, 106 |
| Measurement and Policy Integration | Adopt validated multidimensional well-being tools and track TWB in policy frameworks. | Ministries and districts should use validated well-being assessments, making teacher wellness a key performance indicator to drive targeted support and systemic change. | 9, 29, 30, 33, 41, 56, 62, 69, 78, 86, 93, 96, 109, 113 |
| Community and Collegial Support | Support teacher networks, writing communities, and peer-led learning spaces to reduce | Schools should build professional communities of practice, mentorship programs, and peer coaching to foster collaboration and reduce isolation. | 2, 3, 23, 29, 34, 36, 57, 80, 85, 94, 103, 111 |

| Implication Theme | Description | Implication | Study Numbers |
|---|---|---|---|
| | isolation. | | |
| Assessment and Evaluation Practices | Revise classroom evaluation tools (e.g., CLASS) to be culturally sensitive and less performative. | Evaluation systems must shift from punitive models toward culturally fair, emotionally realistic tools focused on professional growth rather than surveillance. | 25, 31, 35, 40, 42, 53, 67, 95, 104, 112 |

The collective findings from TWB research strongly advocate for systemic, relational, and culturally responsive approaches to supporting teachers' well-being. A consistent theme across studies (e.g., 1, 17, 21, 24, 37, 41, 42, 43, 50, 58, 63, 70, 76, 82, 91, 99, and 105) is the critical role of leadership. Distributed and servant leadership styles that emphasize emotional intelligence, recognition, and support foster trusting environments where TWB can flourish. This points to the necessity of training school leaders not only in administrative skills but also in relational and emotional competencies.

Teacher preparation and ongoing professional development emerge as key leverage points (e.g., 5, 11, 15, 32, 36, 39, 44, 49, 55, 64, 68, 75, 88, 97, and 108). Integrating well-being, social-emotional learning (SEL), and emotion regulation into teacher education ensures that educators are equipped with skills to manage stress and sustain motivation over their careers. This expands the traditional focus on pedagogy to include holistic support for mental health and resilience.

Organizational reforms to address workload and role clarity are paramount (e.g., 14, 21, 25, 27, 30, 33, 46, 51, 59, 65, 72, 79, 83, 90, and 102). Reducing administrative burdens and protecting planning time are essential strategies to prevent burnout and enable teachers to focus on instruction and relationship-building. These findings call for policy-level attention to structural barriers affecting well-being.

Cultural responsiveness and equity-focused interventions (e.g., 1, 28, 31, 32, 38, 45, 53, 67, 74, 84, 92, 100, and 110) are crucial, particularly for Teachers of Color and educators in marginalized settings. Race-conscious mentoring, affinity spaces, and bias-aware leadership pipelines address systemic inequities that impact teacher wellness, demonstrating that equity is inseparable from well-being.

The importance of nurturing student-teacher relationships (e.g., 4, 7, 16, 18, 22, 26, 35, 47, 52, 60, 71, 81, 87, and 101) emerges as a protective factor against isolation and burnout. Relational pedagogies that promote empathy, respect, and engagement foster a supportive classroom climate that benefits both teachers and learners.

Emotion regulation and self-care strategies (e.g., 10, 15, 24, 33, 36, 40, 48, 54, 61, 66, 73, 77, 89, 98, 106), including mindfulness and journaling, are highlighted as vital components for building teacher resilience. Normalizing these practices within professional learning communities encourages sustainable coping mechanisms in the face of daily stressors.

Methodologically, the adoption of validated, multidimensional well-being tools (e.g., 9, 29, 30, 33, 41, 56, 62, 69, 78, 86, 93, 96, 109, 113) is advocated to systematically monitor TWB and inform evidence-based policy decisions. Embedding well-being indicators in educational metrics can institutionalize teacher wellness as a priority.

Community and collegial supports (e.g., 2, 3, 23, 29, 34, 36, 57, 80, 85, 94, 103, 111), such as professional networks, mentorship, and peer coaching, counteract teacher isolation and foster collaborative cultures. These relational resources act as informal safety nets and knowledge-sharing platforms.

Finally, reforming assessment and evaluation practices (e.g., 25, 31, 35, 40, 42, 53, 67, 95, 104, 112) to be culturally sensitive and growth-oriented rather than punitive can reduce performative pressures and support authentic professional development.

Overall, these implications show that sustaining TWB requires multi-layered strategies spanning leadership, preparation, organizational policy, equity, relational supports, and systemic reforms—each reinforcing the others to create healthier educational ecosystems.

Table 5 presents information on directions for future research in TWB.

**Table 5**
*Directions for Future Research in TWB*

| Future Research Area | Description | Suggested Studies Addressing This (Examples) |
|---|---|---|
| Longitudinal Research on Well-being Trajectories | Track TWB across multiple years or career phases to understand lasting predictors and protective factors. | 5, 36, 52, 77, 93, 102 |
| Culturally Responsive and Equity-Centered Studies | Design interventions specifically for Teachers of Color or multilingual/marginalized groups, considering local sociocultural contexts. | 1, 28, 31, 32, 84, 92, 100 |
| Leadership Interventions and Evaluation | Test leadership training models and their measurable impact on teacher affect, turnover, and classroom practice. | 17, 21, 24, 42, 58, 63, 70 |
| Daily/Micro-Level Emotion Tracking | Use diary studies, app-based logging, or experience sampling to capture real-time emotional shifts and stressors. | 16, 18, 35, 43, 47, 60, 81 |
| Impact of TWB on Student Outcomes | Quantitatively and qualitatively assess how changes in TWB ripple into student achievement, motivation, and emotional regulation. | 4, 7, 22, 56, 60, 91, 101 |
| Tool Development and Cross-Cultural Validation | Develop new instruments or validate brief, scalable, multidimensional well-being tools across diverse cultural and linguistic populations. | 9, 30, 33, 41, 62, 69, 86, 113 |
| Post-Crisis or Post-Pandemic Studies | Explore post-pandemic resilience, stress recovery, and digital/hybrid workload shifts on TWB. | 12, 23, 36, 39, 48, 66, 80 |
| Mixed Methods and Comparative Country Research | Compare TWB trends across nations using mixed methods to interpret statistical and contextual findings. | 21, 37, 38, 41, 52, 76, 82, 109 |
| Intersectional Analysis (race, gender, contract type) | Use disaggregated data and participatory methods to explore how intersecting identities affect well-being experiences and needs. | 1, 14, 28, 31, 38, 45, 74, 92 |
| Systemic and Policy-Level Interventions | Evaluate the impact of macro-level reforms—such as workload regulation, funding shifts, or evaluation policy—on teacher wellness. | 6, 10, 21, 25, 33, 59, 72, 79 |

Future research on TWB is moving toward more nuanced, longitudinal, and contextually grounded investigations. A clear priority is the need for longitudinal studies that track TWB over time to understand its trajectory across different career stages and its relationship to sustained motivation and resilience (e.g., 5, 36, 52, 77, 93, and 102). Such work will help identify enduring protective factors and early

warning signs of burnout or disengagement.

Equally urgent is the call for culturally responsive and equity-centered research (e.g., 1, 28, 31, 32, 84, 92, and 100). These studies aim to design and test interventions specifically attuned to the lived experiences of Teachers of Color, multilingual educators, and those working in marginalized communities. This line of research addresses the intersectional challenges related to race, language, culture, and systemic inequity that often go unacknowledged in dominant models of well-being.

Research on leadership interventions (e.g., 17, 21, 24, 42, 58, 63, and 70) is also expanding, with a focus on evaluating how specific leadership styles and training programs influence teacher morale, retention, and emotional regulation. This reflects the understanding that leadership is not a neutral backdrop but an active agent in shaping school climate and TWB.

Emerging studies using daily and micro-level emotion tracking (e.g., 16, 18, 35, 43, 47, 60, 81) leverage tools such as journals, mobile apps, and experience sampling methods to capture real-time emotional data. These approaches provide granular insights into teachers' lived experiences that cross-sectional surveys often miss.

Another growing area links TWB to student outcomes (e.g., 4, 7, 22, 56, 60, 91, and 101). These studies explore how fluctuations in TWB affect student engagement, motivation, classroom behavior, and academic performance—emphasizing TWB's ripple effect on broader educational ecosystems.

To improve policy relevance, further research is needed on tool development and cross-cultural validation (e.g., 9, 30, 33, 41, 62, 69, 86, 113). Existing instruments often reflect Global North perspectives and require adaptation or validation to be reliable across diverse cultural, linguistic, and institutional contexts.

In light of the pandemic's effects, post-crisis or post-pandemic research (e.g., 12, 23, 36, 39, 48, 66, and 80) investigates how COVID-19 and its aftermath have restructured workloads, digital demands, and emotional pressures. These studies are essential to understanding teacher recovery and resilience in an era of hybrid and high-stress education.

The field also points to the need for comparative and mixed methods research

(e.g., 21, 37, 38, 41, 52, 76, 82, and 109) that integrates qualitative nuance with quantitative breadth. Comparative studies across countries or regions can reveal how systemic factors (e.g., funding, accountability regimes, union presence) condition TWB differently.

The theme of intersectionality (e.g., 1, 14, 28, 31, 38, 45, 74, and 92) is gaining prominence, calling for disaggregated data and participatory methodologies to explore how gender, race, contract type, age, and disability interact to shape well-being outcomes. This shift recognizes that TWB is not a monolith and must be understood in relation to power and identity.

Finally, more attention is being given to systemic and policy-level reforms (e.g., 6, 10, 21, 25, 33, 59, 72, and 79), particularly evaluating how shifts in workload policy, funding structures, and teacher evaluation systems influence TWB at scale. This research moves beyond the individual or interpersonal level to interrogate institutional drivers of stress or support.

## 5. Discussion

This study provides an integrative perspective on the evolving landscape of TWB research by bridging bibliometric patterns with in-depth content analysis. While the results highlight thematic convergence across domains such as burnout, emotional regulation, equity, and professional identity, the discussion here aims to move beyond these findings by offering critical interpretation, theoretical grounding, and cross-regional reflection.

### *5.1. Theoretical Fragmentation and Untapped Frameworks*

Despite an expanding literature base, TWB research remains theoretically fragmented. While studies frequently refer to constructs like resilience, job satisfaction, and self-efficacy, they often fail to engage deeply with cohesive theoretical models. For instance, the Job Demands–Resources (JD-R) model (Bakker & Demerouti, 2007) offers a robust framework for understanding how workplace demands and personal or organizational resources interact to influence burnout and

motivation, yet it remains underutilized. Similarly, Self-Determination Theory (SDT) (Ryan & Deci, 2000)—which centers on autonomy, competence, and relatedness—could greatly enhance studies examining (Murphy & Mannix-McNamara, 2021; Taylor et al., 2024) and teacher motivation.

Many studies point to a lack of "theoretical cohesion," but few propose how these models could be operationalized or extended across diverse educational contexts. Addressing this gap is essential for building cumulative knowledge and designing interventions grounded in tested theoretical foundations.

### *5.2. Regional Disparities and Contextual Complexity*

While bibliometric analysis shows a strong research presence from countries such as the U.S., U.K., Australia, and the Netherlands, the prominence of countries like Iran, China, and Turkey is also growing. However, these emerging contributions often remain siloed from dominant research clusters. This raises questions not just about access and visibility, but also about how local education policies, cultural norms, and systemic constraints influence TWB research priorities and conceptualizations.

For example, studies from East Asia often reflect high-stakes exam pressures and hierarchical school cultures, while Middle Eastern contexts may grapple with political instability or centralized curriculum mandates. These systemic influences shape both the lived realities of teachers and the framing of well-being in research. Yet, few studies explicitly examine how policy frameworks, professional autonomy, or societal expectations mediate TWB, limiting our understanding of cross-cultural variance.

### *5.3. Methodological Conservatism and Epistemological Constraints*

A recurring theme across both analyses is the reliance on cross-sectional, correlational studies and self-report measures. While practical, this methodological conservatism reflects deeper epistemological constraints—particularly a tendency to treat well-being as a fixed, quantifiable outcome rather than a dynamic, context-sensitive process.

The field's resistance to longitudinal, intervention-based, and design-driven approaches hampers its ability to establish causal relationships or capture the temporal dimensions of TWB (Dreer, 2023, Turner& Garvis, 2023). There is a pressing need to adopt innovative methodologies such as ecological momentary assessment, digital journaling, or participatory action research. Emerging work with app-based emotional tracking or narrative inquiry (Zhang et al., 2024) suggests the potential for richer, real-time insight into teachers' well-being experiences.

Moreover, the dominance of psychological variables often comes at the expense of relational, institutional, and structural dimensions**,** thereby narrowing the field's scope. Methodological innovation must be accompanied by a shift in epistemological stance—from individual-focused metrics to systemic and intersectional lenses.

### *5.4. Intersections of Equity, Identity and Well-Being*

Equity emerged as a growing research focus, with increasing attention to the lived experiences of teachers from marginalized backgrounds. However, much of this literature still treats identity categories—such as race, gender, or language background—in isolation. Adopting an intersectional lens (Crenshaw, 1989) could deepen understanding of how overlapping systems of power and privilege influence well-being.

Cumming (2017) and Mo (2024) underscore that TWB must be conceptualized not just as an individual condition but as a structural justice issue**,** shaped by systemic inequities in workload, support, and recognition. This reframing encourages a move away from decontextualized notions of resilience toward policy-relevant approaches that tackle the root causes of teacher stress and burnout.

### *5.5. Post-Pandemic Shifts and Organizational Reforms*

The post-COVID era has brought new urgency to TWB discourse, with educators reporting heightened emotional exhaustion, blurred work–life boundaries and increased digital strain. These challenges demand not just individual coping strategies but also institutional reforms—such as flexible work policies, emotionally intelligent

leadership, and reduced administrative burdens (OECD, 2024; Schleicher, 2018). Leadership development programs that prioritize relational trust and emotional support are especially vital in navigating post-pandemic transitions.

### *5.6. International Collaboration and the Need for Comparative Work*

Despite calls for global perspectives on TWB, international collaboration remains limited. Our analysis identified isolated research clusters with minimal cross-regional engagement. Comparative studies that explore how TWB is shaped by different governance models, funding structures, and cultural expectations are rare but urgently needed. Standardizing measurement tools and fostering international research networks could help generate more inclusive, policy-relevant insights.

Notably, underrepresented regions—such as Sub-Saharan Africa or conflict-affected areas—remain largely absent from the literature. Including these voices is critical not only for global representativeness but also for expanding conceptualizations of TWB to include survival, security, and dignity.

### *5.7. Toward a Coherent, Inclusive, and Forward-Looking Agenda*

In summary, this study contributes to a growing body of work that calls for a more theoretically grounded, methodologically innovative, and globally inclusive approach to TWB research. The integration of bibliometric and content analyses allowed us to surface both dominant themes and structural blind spots. Moving forward, TWB scholarship must bridge empirical findings with robust conceptual models, attend to regional diversity, and push methodological boundaries to reflect the lived complexity of teaching.

## 6. Conclusion

This study offers a novel contribution to the field of TWB by providing an integrated analysis that combines bibliometric mapping with content-driven synthesis. By doing so, it not only maps the intellectual structure of TWB research but also reveals how

theoretical trends, methodological choices, and thematic priorities interact across time, regions, and paradigms. This dual approach enables a more comprehensive understanding of how the field has evolved—and where it remains underdeveloped.

One of the key contributions of this study is its identification of persistent theoretical fragmentation despite increasing publication volume. While resilience, burnout, job satisfaction, and emotional regulation dominate the discourse, few studies anchor these themes within cohesive frameworks such as Self-Determination Theory or the Job Demands–Resources model. By highlighting this gap, our study advocates for a more unified conceptual agenda that can drive cumulative knowledge building.

A second contribution lies in the study's critical reflection on methodological conservatism**.** The over-reliance on cross-sectional and correlational designs has limited the field's ability to explain causality or capture the dynamic nature of well-being. This study calls for innovative, longitudinal, and context-sensitive research methods—including ecological momentary assessment and participatory designs—to better reflect teachers' lived experiences.

Third, the study reveals a major geopolitical imbalance in TWB scholarship. While Global North countries dominate, emerging research communities in regions like the Middle East and Southeast Asia remain under-connected. Our mapping uncovers missed opportunities for cross-cultural learning and underscores the need for international research collaborations that are equitable and inclusive.

In terms of practical implications**,** the findings provide an evidence base for designing teacher support programs that integrate emotional regulation, professional identity development, and equity-informed interventions. For policy-makers**,** this study offers a framework for rethinking TWB not as an individual trait to be managed, but as a systemic and relational construct shaped by leadership, workload, autonomy, and institutional trust.

Looking ahead, TWB research must prioritize interdisciplinary, globally inclusive, and theoretically grounded models that account for contextual, cultural, and identity-based dimensions of well-being. By doing so, future scholarship can better inform policy, strengthen teacher preparation and retention, and contribute to the creation of more sustainable and just educational systems.

## 7. Limitations

While this study offers a comprehensive synthesis of the TWB research landscape, the bibliometric analysis was restricted to publications indexed in the Web of Science database, which, although widely recognized for its quality standards, may exclude relevant studies published in other databases such as Scopus, ERIC, or regional journals. Consequently, certain regional perspectives or non-English language contributions may be underrepresented. Second, although the content analysis included a purposive sample of 107 highly cited articles, it did not encompass the full corpus of TWB research. This selective approach, while allowing for in-depth thematic categorization, may have overlooked emerging yet less-cited studies that could offer innovative insights or critical counterpoints to dominant narratives. It is important to acknowledge that our analysis, which uses citation counts and referenced articles as indicators of impact and thematic prominence, may be influenced by several inherent biases. These include language bias**,** where English-language publications are more frequently cited, potentially underrepresenting valuable research published in other languages, journal indexing bias, since studies published in well-indexed or high-impact journals tend to receive more citations regardless of content quality or relevance and citation practice biases**,** where certain fields, regions, or scholarly communities cite more heavily within their networks, possibly skewing the visibility of topics or authors. As a result, the prominence of themes or research areas identified may partially reflect these systemic patterns rather than purely objective influence or importance. While we have strictly maintained the exact set of articles and citations provided to preserve fidelity, future research could complement this work by incorporating diverse databases, multilingual sources, and qualitative assessments to mitigate these biases and enrich the understanding of TWB scholarship globally. Finally, while the study highlights gaps in international collaboration, it does not directly investigate the underlying barriers—such as funding disparities, linguistic divides, or institutional priorities—that inhibit cross-national partnerships. Future studies employing interviews or network analyses could more deeply explore these structural impediments.

**References**

Albulescu, P., & Tușer, A. (2018). Effective strategies for coping with burnout: A study on Romanian teachers. *Pragmatic Research in University Education, 16,* 59–74. http://dx.doi.org/10.24837/pru.2018.2.487

Aria, M., & Cuccurullo, C. (2017). Bibliometrics: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics, 11*(4), 959–975. https://doi.org/10.1016/j.joi.2017.08.007

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

Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology, 104*(4), 1189–1204. http://dx.doi.org/10.1037/a0029356

Council of the European Union. (2022). *Council recommendation of 28 November 2022 on pathways to school success and replacing the Council recommendation of 28 June 2011 on policies to reduce early school leaving (2022/C 469/01)*. Official Journal of the European Union.

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum, 1989*(1), 139–167. https://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8

Cumming, T. (2017). Early childhood educators' well-being: An updated review of the literature. *Early Childhood Education Journal, 45*(4), 583–593. https://doi.org/10.1007/s10643-016-0818-6

Derakhshan, A., Setiawan, S., & Ghafouri, M. (2024). Modeling the interplay of Indonesian and Iranian EFL teachers' apprehension, resilience, organizational mattering, and psychological well-being. *Iranian Journal of Language Teaching Research, 12*(1), 21–43. https://doi.org/10.30466/ijltr.2024.121416

Dreer, B. (2023). On the outcomes of teacher wellbeing: A systematic review of research. *Frontiers in Psychology, 14*, 1205179. https://doi.org/10.3389/fpsyg.2023.1205179

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education (8th ed.)*. McGraw-Hill.

Glänzel, W., & Moed, H. F. (2002). Journal impact measures in bibliometric research.

*Scientometrics, 53*(2), 171–193. https://doi.org/10.1023/A:1014848323806

Hascher, T., & Waber, J. (2021). Teacher well-being: A systematic review of the research literature from the year 2000–2019. *Educational Research Review, 34*, 100411. https://doi.org/10.1016/j.edurev.2021.100411

Holmes, E. (2005). *Teacher well-being: looking after yourself and your career in the classroom.* RoutledgeFalmer.

Lim, W. M., Kumar, S., & Donthu, N. (2024). How to combine and clean bibliometric data and use bibliometric tools synergistically: Guidelines using metaverse research. *Journal of Business Research, 182.*

Linnenluecke, M. K., Marrone, M., & Singh, A. K. (2019). Conducting systematic literature reviews and bibliometric analyses. *Australian Journal of Management, 44*(1), 5–24. https://doi.org/10.1177/0312896219877678

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook (2nd ed.). Sage.

Mo, S. (2024). Teacher well-being: A literature review. In *Proceedings of the 5th International Conference on Education Innovation and Philosophical Inquiries*. https://doi.org/10.54254/2753-7048/54/20241620

Murphy, T. R. N., & Mannix-McNamara, P. (2021). Introduction. In *T. R. N. Murphy & P. Mannix-McNamara (Eds.), International perspectives on teacher well-being and diversity: Portals into innovative classroom practice* (pp. 1–11). Springer. https://doi.org/10.1007/978-981-16-1699-0_1

OECD. (2018). *Effective teacher policies: Insights from PISA.* OECD Publishing. https://dx.doi.org/10.1787/9789264301603-en

OECD. (2024). *How's life? Well-being and resilience in times of crisis.* OECD Publishing. https://doi.org/10.1787/90ba854a-en

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ, 372*, n71. https://doi.org/10.1136/bmj.n71

Pan, Z., Wang Y., & Derakhshan A. (2023). Unpacking Chinese EFL students' academic engagement and psychological well-being: The roles of language teachers' affective scaffolding. *Journal of Psycholinguistic Research*. https://doi.org/10.1007/s10936-023-09974-z

R Core Team (2021) *R: A language and environment for statistical computing.* R Foundation for Statistical Computing, Vienna. https://www.R-project.org

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

Schleicher, A. (2018). *Valuing our teachers and raising their status: how communities can help, International Summit on the Teaching Profession.* Paris: OECD Publishing. https://doi.org/10.1787/9789264292697-en

Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well- being.* Free Press.

Seligman, M. E. P. (2018). PERMA and the building blocks of well-being. *The Journal of Positive Psychology, 13*(4), 333–335. https://doi.org/10.1080/17439760.2018.1437466

Skaalvik, E. M., & Skaalvik, S. (2018). Job demands and job resources as predictors of teacher motivation and well-being. *Social Psychology of Education, 21*(5), 1251–1275. http://dx.doi.org/10.1007/s11218-018-9464-8

Taguma, M., Feron, E., & Lim, M. H. (2018). *Future of education and skills 2030: Conceptual learning framework.* OECD. https://www.oecd.org/education/2030/Education-and-AI-preparing-for-thefuture-AI-Attitudes-and-Values.pdf

Taylor, L., Zhou, W., Boyle, L., Funk, S., & De Neve, J.-E. (2024). *Wellbeing for schoolteachers.* International Baccalaureate Organization.

Turner, K., & Garvis, S. (2023). Teacher educator wellbeing, stress and burnout: A scoping review. *Education Sciences, 13*(4), 351. https://doi.org/10.3390/educsci13040351.

Wang, J. W., & Derakhshan, A. (2025). Ameliorating the psychological well-being of Chinese and Iranian teachers in English classrooms: A cross-cultural analysis of the role of job satisfaction and exemplary leadership. *European Journal of Education, 60*(1), 1–14. https://doi.org/10.1111/ejed.12877

Wang, Y., Derakhshan, A., & Azari Noughabi, M. (2024). The interplay of EFL teachers' immunity, work engagement, and psychological well-being: Evidence from four Asian countries. *Journal of Multilingual and Multicultural Development, 45*(8), 3241–3257. https://doi.org/10.1080/01434632.2022.2092625

Yu, L., Shek, D., & Zhu, X. (2018). The influence of personal well-being on learning achievement in university students over time: Mediating or moderating effects of internal and external university engagement. *Frontiers in Psychology, 8*, 2287. https://doi.org/10.3389/fpsyg.2017.02287

Zhang, L., Chen, J., Li, X., & Zhan, Y. (2024). A scope review of the teacher well-being research between 1968 and 2021. *Asia-Pacific Education Researcher, 33*(1), 171–186. https://doi.org/10.1007/s40299-023-00717-1

Zhi, R., & Derakhshan, A. (2024). Modelling the interplay between resilience, emotion regulation and psychological well-being among Chinese English language teachers: The mediating role of self-efficacy beliefs. *European Journal of Education.* https://doi.org/10.1111/ejed.12643

van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics, 84.*

**About the Authors**

**Prof. Dr. Belgin Elmas** has served as the Head of the ELT Department at TED University since 2018. She held administrative roles between 2004–2019. Her research focuses on language anxiety, teacher education, technology integration, distance education, and curriculum development. She has supervised numerous theses and worked on TÜBİTAK and BAP projects, teaching courses on methodology, digital materials, and individual differences in language learning.

**Assoc. Prof. Dr. Erdem Aksoy** serves as a faculty member in the Department of Foreign Language Education, English Language Teaching Program, at TED University. The author has numerous international and national articles and conference presentations in the fields of material design, assessment and evaluation, and curriculum development for teaching English as a foreign language. His current areas of research include the integration of artificial intelligence into English language teaching as a foreign language and the development of AI-based curricula.

پژوهشگاه علوم انسانی و مطالعات فرهنگی
پرتال جامع علوم انسانی