

Teachers' Stress and Wellbeing in North Macedonia: A Scoping Review

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KEYWORDS

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ABSTRACT

This scoping review aimed to analyze peer-reviewed studies on teachers' work stress and wellbeing status in North Macedonia, addressing the stress prevalence among teachers and identifying gaps for future research. A database search was conducted in PubMed, Google Scholar, and EBSCO, and Google.com in English, Macedonian and Albanian Languages from 2010 to December 2023. The search yielded 631 articles, of which 11 were screened for eligibility, and six met the inclusion criteria. Four studies focused on work stress, two on burnout; however, none addressed teachers' wellbeing, leaving this aspect unknown. The stress level among teachers was moderate to high, attributed to various work stressors and demographic factors. The findings highlight the need for more research on wellbeing and other aspects of mental health among teachers. Additionally, to support teacher wellbeing, the review suggests the substantial need for health promotion programs at both individual and institutional levels

1. Introduction

Teachers constitute a large global workforce of over 90 million individuals (Billaudeau, Alexander, Magnard, Temam, & Vercambre, 2022). While many teachers find fulfillment, joy, and value in their profession (Gearhart, Blaydes, & McCarthy, 2022; Nwoko, Emeto, Malau-Aduli, & Malau-Aduli, 2023) stress among educators remains a prevalent and common issue worldwide (Acton & Glasgow, 2015; Gearhart et al., 2022; Primack, Splett, & Graham, 2023) leading to poor mental and physical wellbeing (Nwoko et al., 2023).

The National Institute for Occupational Health and Safety Administration (NIOSH) defines work stress as the harmful physical and emotional responses arising when job requirements do not match with the workers; capabilities, resources, or needs (Gates, 2001). The literature emphasizes six aspects of a working environment that can contribute to work related stress: work demands, control or (the degree of autonomy in task execution), support, interpersonal relationships at work, role within the organization, and the management of organizational change (Pimenta, Ramos, Santos, Rodrigues, & Doiro, 2023; White, 2020). The COVID-19 pandemic coupled with the fear of personal health, worsened stress levels among teachers (Erdogan, Bulut, Akgün, & Kahraman, 2022; Flores, Caqueo-Úrizar, Escobar, & Irrázaval, 2022; García-Álvarez, Soler, & Achard-Braga, 2021; Pyżalski & Poleszak, 2022), and the enduring effects of COVID-19 on students' learning, health and wellbeing are anticipated for years to come (Billaudeau et al., 2022).

Decreases in wellbeing (Katsarou, Chatzipanagiotou, & Sougari, 2023; Pyżalski & Poleszak, 2022) and long-term exposure to high levels of work-related stress have been associated with burnout, teachers' absenteeism, increased healthcare costs, poor job performance, increases in teachers' attrition, and their intention to leave the profession (Acton & Glasgow, 2015; White, 2020). Teachers' stress also results in a range of physical issues including an increased incidence of cardiovascular disease (Pyżalski & Poleszak, 2022), depression and anxiety (Turner, Thielking, & Prochazka, 2022; White, 2020), as well as feelings of displeasure, fatigue, and reduced commitment at work (Primack et al., 2023). Moreover, the mental health and wellbeing of teachers have been linked to students' academic achievement and wellbeing (Billaudeau et al., 2022), as well as students' learning and psychological development (Özel & Yurtsever, 2023; White, 2020).

Teachers' Well-being

According to the World Health Organization (WHO), mental health is characterized by a state of well-being in which individuals recognize their own capabilities, effectively manage life's typical stressors, perform productively in their work, and make positive contributions to their community (World Health Organization, 2023). The concept of occupational well-being, which is not just the mere absence of illness at work (Benevene, De Stasio, & Fiorilli, 2020), is multidimensional, comprising four core dimensions: cognitive well-being, subjective well-being, physical and mental well-being, and social well-being (Cann et al., 2020). In this context, teachers' well-being is defined as their responses to cognitive, emotional, health, and social conditions within their profession (Viac & Fraser, 2020). In addition, it refers to the ability of teachers to develop a positive equilibrium between their resources and environmental, social, individual, physical, mental, psychological challenges/demands (Benevene et al., 2020).

Subjective well-being (SWB) has been suggested as a potential mitigator of the daily stressors experienced by teachers and is recognized as a key determinant of educational quality and excellence (Katsarou et al., 2023). Given the pivotal role teachers play in students' achievement, success, and satisfaction, prioritizing their wellbeing is key for the future of education and the creation of healthy learning environments (Acton & Glasgow, 2015). Increasing teachers' wellbeing could lead to increased effectiveness in their professional roles, thereby improving teaching quality and student achievement (Katsarou et al., 2023). More recently, research on teachers' positive mental health and wellbeing has gained growing international attention (Dreer, 2023; Gray et al., 2019; Katsarou et al., 2023; Nwoko et al., 2023; Primack et al., 2023; Pyżalski & Poleszak, 2022; van Agteren et al., 2021). Moreover, the COVID-19 pandemic highlighted the urgent need for teachers' support and assistance in managing and coping with increased work demands (Arbia, Carbone, Stanzione, & Szpunar, 2023).

Rationale for the current review

Currently, the authors of this review are planning a study on assessment of the prevalence of work stress and wellbeing status among high school teachers in Skopje, North Macedonia. Within this context, this scoping review aims to:

To identify the scope, main topics and gaps in knowledge concerning teachers' work stress and wellbeing status in North Macedonia for future research and development of early interventions which can be implemented to address these problems.

to identify and summarize the literature on the prevalence of teachers' work stress and well-being status.

Methods

Study Design

Given the underexplored nature of this topic in North Macedonia, a scoping review was conducted. Scoping reviews aim to identify and map the existing body of literature (research) on a topic and knowledge gaps, identify main themes, scope the breadth of literature, or investigate research conduct (Munn et al., 2018), rather than assess the quality of research itself (Villarroel, Hannigan, Severoni, Puthooppambal, & MacFarlane, 2019). This review followed a similar approach to a

previous scoping review (Agyapong, Obuobi-Donkor, Burbach, & Wei, 2022), according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guideline (Tricco et al., 2018). The process involved stages: identification of the research question, searching for relevant studies, study selection, data charting, summarizing, and reporting the results (Agyapong et al., 2022).

Stage One: Developing the Research Question

Research Question 1: What is the scope of research, main topics, characteristics of the reviewed studies and gaps on teachers' work stress and wellbeing in North Macedonia?

Research Question 2: What is the prevalence of teachers' work stress and wellbeing status in North Macedonia?

Stage Two: Information Sources and Searching Strategy

The literature search was conducted across multiple database, including PubMed, Google Scholar, and EBSCOHOST, as well as through Google.com search engine using English, Macedonian and Albanian Languages. Additionally, citation screenings of relevant articles meeting the inclusion criteria was performed. The search terms included the following keywords: work stress, occupational stress, wellbeing, mental health, burnout, depression, anxiety, teachers, stress management, Macedonia, North Macedonia in different combinations. The search included articles published from 2010 to January 2024.

Stage Three: Study Selection

Articles were eligible for inclusion in the review if they focused on mental health aspects such as work stress, anxiety, depression, and burnout, as well as the teachers' subjective wellbeing across educational levels (pre-school, elementary school, secondary school, universities) in North Macedonia. Only full text original articles published in peer-reviewed journals, as well as all study designs and intervention types were considered. Projects, reported concepts or frameworks were excluded (Dreer, 2023).

Articles were excluded if: 1) studies were conducted in countries other than RNM, 2) the title or the abstract of the paper did not include assessment of work stress or depression, anxiety, burnout or wellbeing of teachers 3) articles reported projects, reviews or reports, 8) as well as if full text of the article was not available.

Stage Four: Data Extraction and Coding (Data Charting)

Retrieved articles and extracted data were organized and managed with EndNOTE software, categorized under the following headings: authors' name, year of publication, study design, target population, sample size, data collection scale, outcome variable and main findings (Table 1).

Stage Five: Collating, Summarizing and Reporting the Results

All the relevant data were organized into tables and cross validated by three reviews. The first round of analysis was conducted by UDSH and EBO. Then, UDSH and AXH completed the second analyses. The findings and the final analyses was agreed by all authors. Key information from each research paper included in the review is summarized and shown in Table 1.

Results

Research Question 1: What is the scope of research, main topics, characteristics of the reviewed studies and gaps on teachers' work stress and wellbeing in North Macedonia?

The initial search strategy identified 631 studies, which underwent screening based on their titles and abstracts. Following the inclusion criteria, 11 articles were selected for full-text screening. During this phase, an additional 5 studies were excluded as they did not measure work stress, wellbeing or other mental health issues. Consequently, six articles met the eligibility criteria for inclusion in the review (Figure 1).

As indicated in Table 1, work stress was assessed in four studies, (N=4), while two studies measured levels of burnout (N=2), with one of this studies also investigating life satisfaction (N=1). Notably, none of the reviewed studies examined teachers' subjective wellbeing or other mental health issues. All articles reported quantitative cross-sectional designs. The sample sizes for teachers ranged from 60 to 300 (see Table 1). The reviewed studies included elementary schools (n=4) and secondary school teachers (N=2) (Georgievska, 2018; Georgioska & Gruevski, 2020). These studies were conducted across various cities, including Ohrid, Stip, Prilep, Skopje, and one study included schools across different cities across North Macedonia. Additionally, one study compared stress levels between teachers in North Macedonia and Turkey (Eres & Atanasoska, 2011).

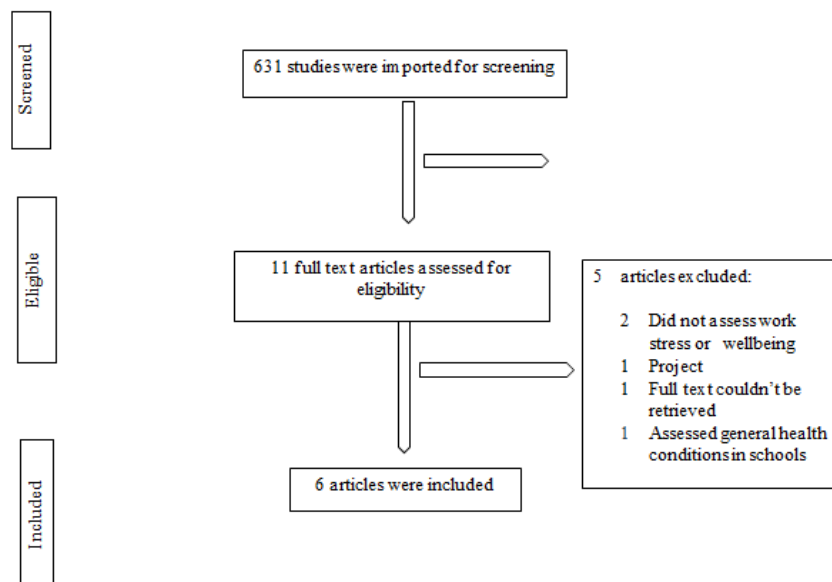


Figure 1. Prisma Flow chart

Questionnaires that were utilized to measure work stress included the adapted Inventory of Occupational Stressors for Secondary School Teachers; the modified University and College Union (UCU) Stress Model Questionnaire; a specially designed Teachers' Stress Survey; and the scale for measuring stress sources in teachers (Seidman and Zager, 1986), translated into Macedonian language. Burnout was measured with Maslach Burnout Inventory, while life satisfaction was measured using a customized scale from Penezić, the Sale for Measuring Life Satisfaction. All questionnaires used in the reviewed studies were translated in Macedonian Language. However,

apart from one study (Eres & Atanasoska, 2011), there was absence of data on psychometric characteristics such as reliability and validity of the applied measures. While not explicitly stated, it can be inferred from the instruments used that study participants in all six studies were of Macedonian ethnic background. In addition, the majority of studies did not provide information on statistical test for data analysis. Table 1. Shows the list of included studies with a short summary of their research methods and key findings.

Excluded Studies

After reading the full text, five studies were excluded from the review. One study aimed to compare primary school teachers' job satisfaction in Bulgaria and Macedonia, but it did not measure subjective wellbeing or work stress (Mileva, Ivanova, Popeska, & Jovanova-Mitkovska, 2020). Similarly, a study by Antić (2023) did not assess subjective wellbeing or work stress, instead, it focused on comparing the attitudes of Higher Education (HE) teachers and students from different countries about online classes (Antić, 2023). Another study report on a project aimed at improving the wellbeing of university students and teachers in one university in North Macedonia, yet data on levels of work stress or wellbeing were not provided (Karapejovski, Ager Ončevska, Kitanovska-Kimovska, Tasevska Hadji Boškova, & Maleska, 2022). Furthermore, one recent study explored the perceptions of faculty members in higher education institutions in North Macedonia regarding changes in the academic profession's environment and their potential impact on academic identity and well-being. However, no full paper was accessible for this study (Spasovski & Pecakovska, 2020), and the attempts to contact the authors yielded no response. Additionally, another study aimed to evaluate the conditions in schools related to the health of teachers and non-teaching staff in North Macedonia, along with the challenges encountered in improving these conditions in 320 primary schools. The questionnaire was completed by school representatives including the school principal, psychologist or pedagogist (Kjosevska, Stefanovska, Memeti, & Prosheva, 2022).

Research Question 2: What is the prevalence of teachers' work stress and wellbeing status in North Macedonia?

Overall, findings from the six reviewed studies indicate that elementary schools teachers perceived their work-related stress to be moderate (Eres & Atanasoska, 2011), high or very high (Agai–Demjaha, Bislimovska, & Mijakoski, 2015; Georgievska, 2018). Moreover, high levels of burnout were observed among elementary school teachers in Shtip (Kamcheva – Panova, 2022) and secondary school teachers in Ohrid municipality (Georgievska, 2018). However, none of the reviewed studies examined work stress outcomes and wellbeing status, with only one study exploring the concept of life satisfaction among secondary school teachers (Georgievska, 2018). In addition, there was lack of evidence regarding intervention programs that aimed to support teacher's mental health and wellbeing.

The majority of the reviewed studies provided correlational analysis regarding the association between teachers' demographic characteristics and work stress. Gender, age, years of work experience, and marital status emerged as the most prevalent socio-demographic factors correlated with work stress. Specifically, in three studies female teachers reported statistically significantly higher levels of work stress compared to their male counterparts (Agai–Demjaha, Karadzinska-Bislimovska, & Mijakoski, 2015; Georgievska, 2018; Georgioska & Gruevski, 2020). It was suggested that female teachers experienced elevated stress levels primarily due to students' behavior, aggression among students, and challenges in conflict management (Georgioska & Gruevski, 2020). Additionally, apart from gender, the level of work-related stress showed statistically significant positive association with age, grades levels taught, years of work experience, and teachers' level of education (Agai–Demjaha, Bislimovska, et al., 2015). Regarding the relationship between work stress and teachers' age, findings from various studies diverged. One study revealed positive correlated between years of work experience and burnout, indicating that teachers with more than 16 years of experience reported higher levels of burnout (Kamcheva – Panova, 2022). Similarly, another

study found significant correlation between teachers' age and burnout, suggesting that older teachers with more years of work experience were more susceptible to professional burnout (Georgievska, 2018).

However, in contrast to these findings, Georgievska and Gruevski (2020) showed that younger teachers (under 35 years old) and teachers with 10 – 29 years of work experience had higher stress levels compared to their older counterparts and teachers with more than 29 years of work experience, respectively (Georgioska & Gruevski, 2020). In another study, it was observed that married teachers reported significantly higher stress levels than their single counterparts (Eres & Atanasoska, 2011). Notably, this same study found no statistically significant difference in total stress level between female and male teachers, among teachers with different educational levels, or among teachers with varying levels of seniority (Eres & Atanasoska, 2011).

Moreover, the present review highlighted the most common work-related stressors experienced by teachers, including fear of job loss, limited access to adequate teaching resources, and a perceived sense of injustice (Georgioska & Gruevski, 2020). Additionally, lack of decision-making control, insufficient support, inadequate resources, and limited access to training were identified as significant sources of stress among teachers (Agai–Demjaha, Minov, Stoleski, & Zafirova, 2015). Similarly, Eres and Atanasoska (2011), noted that constant changes in the educational system, heightened expectations, lack of stress management education during teachers' initial training, and ongoing job insecurity were the prevalent stressors among teachers (Eres & Atanasoska, 2011). Whereas, organizational factors associated with burnout in teachers included a lack of administrative support, satisfaction or dissatisfaction with the chosen profession, and challenges in coping with workplace stress (Kamcheva – Panova, 2022).

Discussion

The aim of this scoping review is to identify and map peer-reviewed studies that have investigated teachers' work stress, well-being and mental health in North Macedonia (NM). To our best knowledge this is the first review that offers a synthesis and significant insights on relevant empirical evidence on teachers work stress and wellbeing in the country. A total of six articles met the inclusion criteria. These articles focused on assessment of work stress and burnout prevalence among primary and secondary school teachers. We noted lack of research on teachers' wellbeing status, and other mental health issues such as depression and anxiety. Overall, the six included studies in the review showed that level of work stress among elementary and secondary school teachers in North Macedonia were moderate to very high. Likewise, levels of burnout among teachers were reported to be high (Kamcheva – Panova, 2022). These findings are consistent with studies conducted in UK, Scotland and USA where teachers have reported significantly higher levels of work-related stress and lower wellbeing than the average across all industries (Jerrim, Sims, Taylor, & Allen, 2021; Primack et al., 2023; White, 2020).

Although, in recent years, the research on teachers' wellbeing has been explored in many countries (Dreer, 2023; Katsarou et al., 2023; Nwoko et al., 2023; Primack et al., 2023; Pyżalski & Poleszak, 2022; van Agteren et al., 2021), the current review found that in North Macedonia this theme remains unexplored. This scoping review identified several determinants of work related stress including: gender, age, years of experience, job satisfaction, limited access to appropriate teaching resources, perceived sense of injustice, lack of decision-making control, insufficient support, inadequate resources, limited access to training and classroom disruption, were identified as main sources of teachers stress. Moreover, sources of burnout included lack of administrative support, satisfaction with the chosen occupation, and coping with stress at the workplace. One study reported that 35% of teachers were not happy with their profession and given the opportunity they would not choose teaching as an occupation in the future (Kamcheva – Panova, 2022). This finding is consistent with literature, which shows that teachers who report higher stress levels are less satisfied with teaching, are more frequently absent from work, as well as are more likely to leave the teaching profession

(Borg & Riding, 1991).

Furthermore, work stress can result in poor wellbeing and can jeopardize teachers' mental health (Kidger et al., 2016; Pyżalski & Poleszak, 2022). In addition, poor wellbeing (Gearhart et al., 2022) and long-term exposure to high levels of work-related stress have been associated with burnout, teachers' absenteeism, health care cost increase and poor job performance, increases in teachers' attrition, and greater inclination of teachers to leave the profession (Acton & Glasgow, 2015; White, 2020).

Nevertheless, as highlighted in this review, there is a significant gap in knowledge and understanding of teachers' wellbeing in North Macedonia. Our findings are supported by another study that investigated the current health conditions of school staff in North Macedonia. This study indicated a concerning trend wherein schools in North Macedonia pay little attention and allocate minimal resources towards the health of both the teaching and non-teaching staff, suggesting that the health of teachers is often perceived as an individual obligation rather than an institutional concern (Kjosevska et al., 2022). Furthermore, our findings are reinforced by the World Health Organization (WHO) country profile report, which underlines the absence of school-based programs on mental health prevention and promotion in North Macedonia (World Health Organization, 2020). It is important to note that institutions in North Macedonia are mandated by the law on Occupational Safety and Health to assess workplace risks, including psychosocial risk. This legal requirement aligns with the EU Framework Directive on Safety and Health at Work (Directive 89/391/EEC). However, even though risk assessment serves as a fundamental principle of Occupational Health and Safety (OSH) practice, the Third European Survey of Enterprises on New and Emerging Risks (ESENER-3) showed that in 2019 only around 53% of surveyed institutions in the country carried out workplace risk assessments regularly, down from 67% in 2014 (Howard, Antczak, & Albertsen, 2022). The same report showed that although psychosocial risk related to patients, customers and students were key risk factors in many EU-27 establishments, their assessment was not a priority (Howard et al., 2022).

In the context of North Macedonia, more research is needed to expand evidence on teachers' work stress, well-being and mental health. In addition, schools would benefit from addressing the psychosocial risks assessment and from designing efficient and practical measures to stress management (Wischnitzki, Amler, Hiller, & Drexler, 2020). As suggested by Kjosevska et al. (2022) it is imperative to develop and implement a comprehensive health promotion strategy across all educational institutions in the country, and to allocate more resources to support the mental health of school staff (Kjosevska et al., 2022). Assessment of various factors that may impact teachers' mental health, both on a personal and organizational level is essential. This includes assessment of work-related stressors, wellbeing predictors, as well as preventive measures to mitigate potential adverse outcomes of prolonged work stress on the mental health of teachers (Kidger et al., 2016). As other studies have pointed out, combining organizational-level stress management strategies with individual approaches (e.g. mindfulness interventions) may be more effective in reducing work stress and improving wellbeing (Pyżalski & Poleszak, 2022; White, 2020).

Methodological Issues

Several methodological issues were identified in the current review, that can be summarized as follows: The overall level of quality of reviewed studies was low. The reviewed studies investigated mostly only one outcome variable (e.g. work stress or burnout). Hence, multi-source assessment to encourage systematic progress in the field is needed (Dreer, 2023). Future research should address these gaps by systematic exploration of a range of potential work stress outcomes and wellbeing predictors. Furthermore, future studies should be underpinned by robust theoretical frameworks, employ sophisticated study designs and data analysis. This includes incorporation of longitudinal studies and utilization of validated psychometric scales in the North Macedonia context. Furthermore, we found that the existing evidence on the teacher work stress focuses predominantly

on teachers of Macedonian ethnic background, limiting our understanding on how cultural factors influence and interact with the perception of work stress and 'wellbeing' between teachers of different ethnical background, particularly teachers of Albanian ethnical background, who constitute the largest ethnic group in the country (24.3% of the resident population). This will improve our understanding of the impact of cultural differences on the outcomes of teacher wellbeing and work stress (Dreer, 2023).

Limitations

The findings of this review should be interpreted with caution. First, this review included only peer-reviewed articles, this might have overlooked findings published in reports or policy papers. Second, because the numbers of schools involved in these studies was small, and studies were conducted in schools where the majority of teachers were of Macedonian ethnical background, the review findings are unlikely to be representative of the population of teachers in North Macedonia.

Nevertheless, by including papers written in English, Macedonian and Albanian Languages, this review incorporated crucial published evidence on teachers, work stress and wellbeing from diverse linguistic sources. To our best knowledge, it is the first review that assess teachers work stress and wellbeing in NM. The review is a useful addition to the current literature and will contribute to knowledge and understanding of teachers' work stress and wellbeing status in the country.

Implications for Future Research and Recommendations

This scoping review shows that teaching profession in North Macedonia is highly stressful. However, there were no studies on teachers' wellbeing, and the wellbeing status of teachers remains unknown. The practical implications for the teaching practice is that there is a need for:

- Research to investigate wellbeing status of teachers and its association with work stress and other mental health outcomes.
- Teachers' mental health and well-being should be seen not only as an individual concern, but as an organizational responsibility (Flores et al., 2022; Kjosevska et al., 2022). Development of prevention programs that will combine both organizational-level strategies with individual approaches is needed to reduce the prevalence of work stress and burnout (White, 2020).
- Besides organizational factors, future studies should examination individual factors associated with work stress and wellbeing (Kidger et al., 2016), because both personal characteristics and working conditions may contribute to teacher stress levels (Eres & Atanasoska, 2011).
- Teachers' mental health and well-being should be included in both, within pre-service teacher education programs (Acton & Glasgow, 2015; Eres & Atanasoska, 2011) and in the professional development of practicing teachers (Nwoko et al., 2023; White, 2017). Additionally, health promotion, wellbeing and prevention of work stress should be integrated and be part of teachers' educational curriculum and should be included in the development plan and further training of the practising teachers (Nwoko et al., 2023).
- Teachers in North Macedonia should be offered regular mental health training, reasonable workload, work-life balance support, as well as an environment that supports discussion about work stress and promotes health topics including mental health and wellbeing (Kjosevska et al., 2022).

Conclusions

This scoping review examined peer-reviewed studies focusing on teachers' work stress, well-being and mental health in North Macedonia. The majority of studies that met the inclusion criteria

primarily assessed prevalence of work stress and burnout; however, none addressed teachers' wellbeing, leaving this aspect unknown and largely unexplored. The review highlights the need for empirical research addressing teachers' wellbeing. Furthermore, there is a need for a strategy on health promotion that should be implemented in all educational institutions in the country (Kjosevska et al., 2022). Further investigation into teachers' health and wellbeing will contribute in enhancing teachers' efficacy and the overall quality of education. The evidence from this research is expected to inform policies regarding the status of work stress and psychosocial wellbeing of teachers in North Macedonia. Declaration of Conflicting Interests: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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