

The Factors Affecting School Teachers' Well-being during Pandemic Era: A Scoping Review

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Abstract

The new uncertain and vulnerable environment practically magnified fear and conflict relationship among people across the globe. With the rising cases of pandemic COVID-19, people's well-being is at stake, specifically teachers, who must accustom themselves to immediate education changes. As teachers being the common profession with a higher level of stress, the long run and significant effect of pandemic become the notable cause to teachers to experience deteriorated well-being. However, teachers are not only struggling due to the environment but the factors that contribute to affecting their well-being. Therefore, this scoping review aims to uncover the factors affecting teachers' well-being during pandemic and its impact on teachers' well-being. The scoping review followed Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRIMA-ScR) guidelines. From 588 articles, ten articles were finalised and included in the study. The findings reported that varied factors correlated with the teachers' well-being, and each factor could influence teachers' well-being either positively or negatively.

Keywords: Socioemotional, Education, Psychological Issues, School Educators.

Introduction

World Health Organization (WHO) has declared the novel coronavirus outbreak an international public health emergency and it is rapidly transitioned into a pandemic on 11 March 2020 (WHO, 2021). Therefore, unprecedented containment measures are taken globally to ensure physical distancing and minimise the risk of infection. Due to actions taken, people have limitations to interact and communicate face-to-face, and technology has become the dominant tool used by people from all walks of life. With the instantaneous restriction enforced, people from all sectors, from children to elderlies, need to adjust and adapt themselves to the present ways of work and life. Despite the fact that everyone is troubled and experiencing difficulties during the pandemic, the uncertain environment of the pandemic poses an urgent need for a global change in education, particularly the schools. The changes in education resulted in schools closing, which safeguards the children's and teachers' health.

The current change in education enquires teachers to shift their traditional teaching to emergency remote teaching in which technology becomes fully utilised. However, the sudden school closure and abrupt changes of teaching and learning causes teachers' stress and discomfort and significantly affecting teachers' well-being (Hascher et al., 2021). Besides, the affected well-being is not solely due to new teaching and learning but also teachers have to fully commit to their families while carrying out their responsibilities as teachers (Kraft et al., 2020). Being at home and having limited time to prepare for teaching and learning overwhelmed teachers with unnecessary stress and unstable emotions. Teachers' strain during the pandemic reflects Johnson et al. (2005) statement in which he mentioned that teachers have always been on top-ranked among the most stressful profession. Moreover, the pandemic outbreak leaves teachers to deal with new stressors (Truzoli et al., 2020).

Pertaining to teachers' well-being, Gray et al (2017) and School Mental Health Group (2019) stated that teachers' well-being is fundamental to teachers' lives as poor well-being threatens their health. Detrimental health of a teacher added more reason to teachers' incapability to adapt and be well regulated during the pandemic. In addition, their unstable condition can be the primary cause of adverse or poor student outcomes. In conjunction, teachers' well-being is a focal point emphasising the education field during pandemic because teachers are the foundation of students' academic success and school effectiveness. It is because teachers can relate mutually with their capability and connectedness with the students (Collie et al., 2016). Herman et al (2018) also mentioned that the education outcome of a student could be influenced negatively if the teachers experience higher stress and pressure the sustain relationships of the teacher and student (Whitaker et al., 2015).

To maintain and avoid deteriorating teachers' well-being, it is vital to determine the factors affecting teachers' well-being during pandemic Covid-19. By identifying the factors, this scoping review is significant to discover the teachers' well-being during pandemic and which factors majorly affect the teachers' well-being.

Research Method

According to Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines, this scoping review was reported. The scoping review is conducted in five stages referring to Arksey and O'Malley's (2005) methodological framework: (1) identifying research questions; (2) identifying relevant studies; (3) selecting relevant studies; (4) charting the data; and (5) collating, summarising and reporting the results. Figure 1 represents the methodological framework stages in which the following sub-sections integrate the stages and explain it more thoroughly.

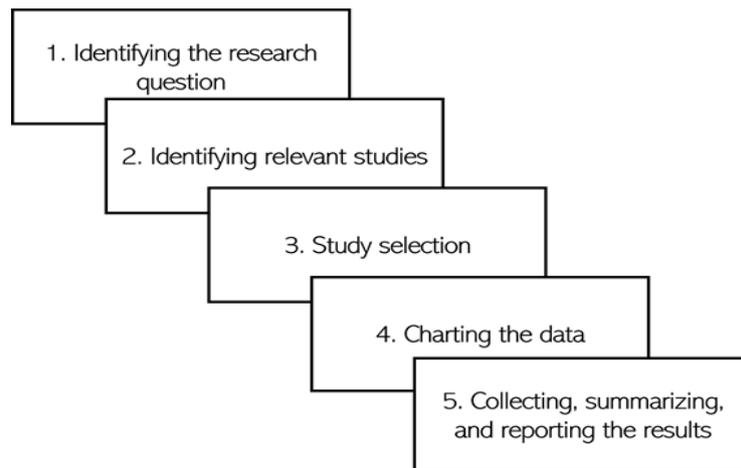


Figure 1. Methodological Framework (Arksley & O’Malley, 2005)

Identify the Research Question

The topic of factors affecting teachers’ well-being during pandemic is yet widely reviewed due varied and distinct focus in highlight the new emerging pandemic of Covid-19. Centred to factors’ affecting teachers’ well-being during pandemic, the following research questions and specific objectives in Table 1 are constructed based on PCC framework.

Table 1

Research questions were constructed based on PCC (Population/Concept/Context)

Research Questions	Specific Objectives
1. How is the research focused on teachers’ well-being during pandemic distributed?	1. Explore the temporal and geographical relationship and the setting in which studies on teachers’ well during pandemic have been developed.
2. What are the design types of the studies related to teachers’ well-being during pandemic?	2. To identify the main types design in studies on teachers’ well-being during pandemic.
3. What are the purposes and topic for which teachers’ well-being during pandemic are developed?	3. To identify the purpose and topics most frequently investigated in the studies about teachers’ well-being during pandemic.
4. What are the factors that affect teachers’ well-being during pandemic?	4. To identify the factors that affect teachers’ well-being during pandemic
5. What are the instruments used to emphasise on the teachers’ well-being during pandemic?	5. To identify the instruments used to understand teachers’ well-being during pandemic
6. What are the current conditions of teachers’ well-being?	6. To find out the teachers’ well-being during pandemic.

Identifying Relevant Studies

The search strategy was administered to extend the scope of all relevant and potential studies. Thus, the search terms related to teachers' well-being during pandemic is used for the three databases.

Table 2

Search String

Search Directory	Search String
Scopus	TITLE-ABS-KEY (("factor*" OR "cause*" OR "effect" OR "consequence" OR "result*" OR "impact") AND ("teacher*" OR "educator*" OR "instructor*") AND ("well-being" OR "emotion*" OR "psycholog*" OR "content*") AND ("pandemic" OR "Covid-19" OR "lockdown") AND NOT ("child*" OR "student" OR "learner*") AND NOT ("tertiary" OR "universit*"))
WoS	TS= (("factor*" OR "cause*" OR "effect" OR "consequence" OR "result*" OR "impact") AND ("teacher*" OR "educator*" OR "instructor*") AND ("well-being" OR "emotion*" OR "psycholog*" OR "content*") AND ("pandemic" OR "covid-19" OR "lockdown") NOT ("child*" OR "student" OR "learner*") NOT ("tertiary" OR "universit*"))
ERIC	(factor OR cause OR effect OR consequences OR result OR impact) AND (teacher OR educator OR instructor) AND (well-being OR emotional OR psychology) AND (pandemic OR could-19 OR lockdown)

Study Selection

Study inclusion criteria are provided in Table 3. The study selection is based on inclusion and exclusion criteria following the research question constructed for the scoping review. The findings are presented according to PRISMA guidelines. Hence, two of the research team members had conducted the screening process which focused on the title and abstract of all papers. The screening process was based on the predetermined inclusion and exclusion criteria.

Table 3

Inclusion and Exclusion Criteria

Inclusion Criterion	Exclusion Criterion
1. Articles published from 2019-2021	1. Full text not attained
2. English language	2. Before VUCA environment/ Pandemic Covid-19
3. Journal Articles	3. Related to medical education
4. Focus on teachers' well-being	4. Related to tertiary education
5. Focus on factors affecting teachers' well-being	5. Focus on the impact of teachers' well-being
6. Focus on teachers (Primary and Secondary)	6. Focus on education in general
7. Focus on VUCA environment/ Pandemic Covid-19	7. Focus on students' well-being

Charting the Data

Final data extraction from each eligible study included: author(s), country of origin, study design, topic, setting, theoretical model, target group, factors affecting teachers' well-being, purpose and key findings. For each included article, author used extraction form design to extract the data. Data was extracted and charted by the first author based on the articles retrieved. Completed data extractions and charting form were finalised and updated by the senior author in an iterative process.

Collating, Summarising, and Reporting the Results

The information in the literature matrix was reviewed again to make sure it fits the predetermined inclusion and exclusion criteria and the aim of this scoping review. The data was then finalised to be presented in the report by the research team. Lastly, the team went through a thorough check to see if it answered the initially set research question.

Results

This scoping review identified a total of 588 research from three databases. Figure 2 showed that 171 articles were found from Scopus database, 187 articles were extracted from ERIC while 230 articles were identified from WoS. The acquired articles were based on the different search strings applied. 269 articles remained after considering the inclusion and exclusion criteria during the identification of the article. The duplication checked has excluded 38 articles, and the remaining 231 articles were included for the title and abstract screening. After the screening process, 184 articles were excluded and 47 articles were measured for eligibility. The 47 articles that went through the eligibility process resulted in 39 articles were excluded as they did not meet the criteria of teachers' well-being. 8 articles were unattainable, 8 focused on education technology, 5 emphasised education in general, 3 articles highlighted on socioemotional competencies, and 2 articles looked into teaching and learning. The remaining 13 articles were not related to the focus of the scoping review. However, 2 articles were obtained through hand-search. Thus, 10 research were finalised and to be included in this scoping review.

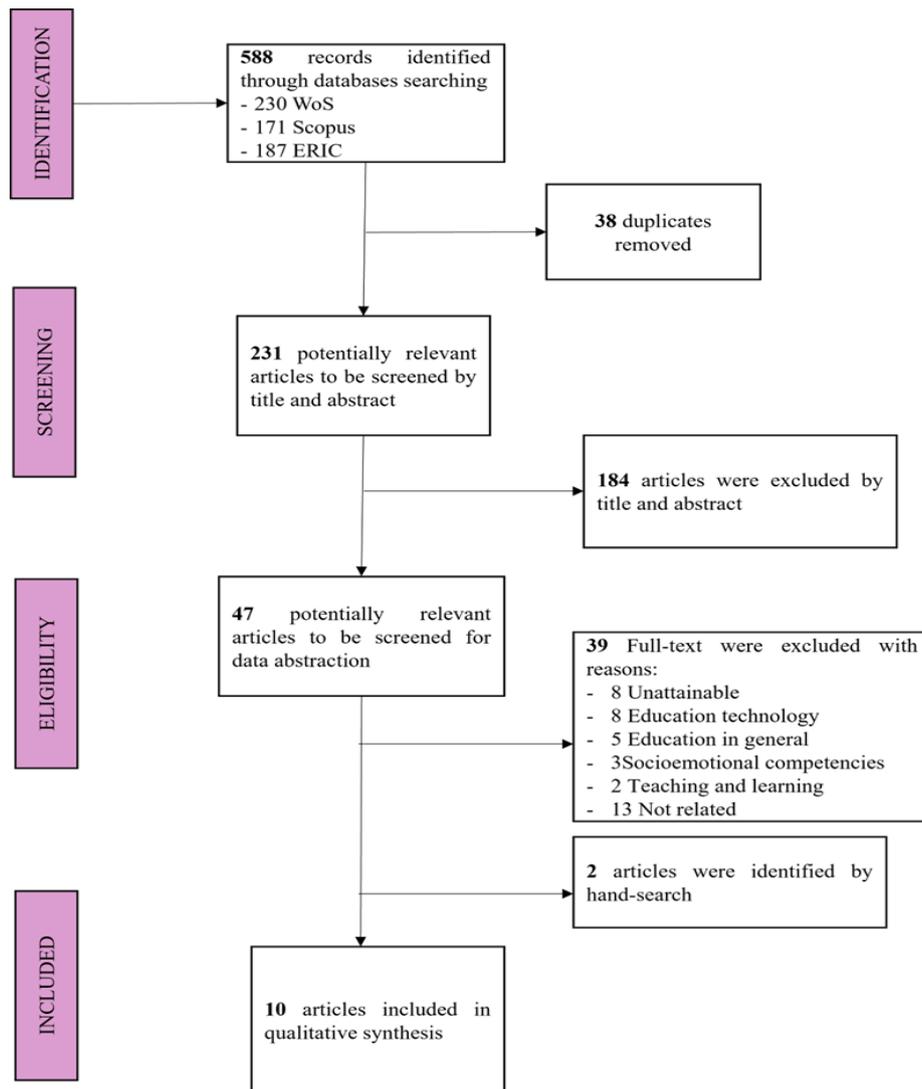


Figure 2. Flow Diagram of the Scoping Review

Table 4

Literature Matrix

Reference s & Title	Country	Study Design	Factors	Instrumen ts	Descriptio ns	Results
Kim et al. (2021) “My brain feels like a browser with 100 tabs open”: A longitudinal study of teachers’ mental health and well-being during the COVID-19 pandemic	England	Qualitative Longitudinal Trajectory qualitative analysis	Six job demands Uncertainty workload, negative perception of the profession, concern for others’ well-being, health struggles and multiple roles	Open interview items of MHWB	The study investigate d teachers’ mental health and well-being (MHWB) from both primary and secondary schools for three times point (April, July, and November, 2020).	During the pandemic, there was a declined in teachers MHWB, particularly the primary school leaders. Six job demands were identified to negatively affect teachers while three job resources positively contributed to teachers’ MHWB.
Hascher et al. 2021 Swiss primary teachers’ professional well-being during school closure due to the COVID-19 pandemic	Swiss	Qualitative Retrospective interviews / semi- structured online interviews	High workload, social distancing, feelings lack of competence, self- efficacy, sudden school closure, unprepared shift to online teaching	Semi- structured interviews Teacher profession al biography, teaching roles before and during pandemic, resources, and challenges of teacher well-being during	The study focused on understan ding how the changes in Swiss primary school teachers’ profession al lives affect their well-being during the pandemic school closure.	Medium to high levels of teacher well-being could overcome the negative evaluation due to distance teaching. Various factors became the unpleasant aspect of distance

				distance learning		learning in which that there were closely related to worsening professional well-being.
Carreon et al. 2021	Philippines	Quantitative	Fear of Covid-19	Fear of Covid-19 (Ahorsu et al., 2020)	Paper aimed to compare and relate fear of Covid-19 to remote teaching burnout across sample characteristics	Teachers' level of fear of Covid-19 is high, while teachers' burnout was moderate. The study indicated that remote teaching burnout was significantly differed according to several factors, including age, monthly income, educational attainment, and teaching experience.
Fear of COVID-19 and remote teaching burnout of Philippine K to 12 teachers		Correlational design		Online teaching burnout (Panisoara et al., 2020)		
Pöysä et al. (2021)	Finland	Quantitative	Highest stress, work management, emotional exhaustion	Occupational Stress Questionnaire (Elo et al., 2003)	The study aimed to investigate teachers' occupational during pandemic	Teachers' occupational well-being differed between individuals,
Patterns of teachers' occupational		Statistical analyses and				

<p>nal well-being during the COVID-19 pandemic: Relations to experiences of exhaustion, recovery, and interactional styles of teaching</p>	<p>descriptive statistics</p>	<p>Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2002; Seppala et al., 2009)</p> <p>Bergen Burnout Inventory (Salmela-Aro et al., 2011)</p> <p>Recovery Experience Questionnaire (Sonnentag and Fritz, 2007; Siltaloppi et al., 2011)</p> <p>Teachers Interactional Style Scale (Aunola et al., 2005; Pakarinen et al., 2010)</p>	<p>school closures.</p>	<p>and distinct patterns of occupational well-being were drawn according to positive and negative aspects.</p>
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Mari et al. (2021)	Italy	Quantitative	Difficulty in navigating the digital tools, structure of the classroom (online) and affected attentiveness	Attitudes and Moods about the New Coronavirus Attitudes and Opinions on Smart Working Perceived Stress Scale (PSS) Coping Orientation to Problems Experiences (New Italian Version- COPE-NVI) Stanford Time Perspective Inventory (STPI)	Purpose of the study was to investigate whether there are differences in the psychological variables related to professional categories, particularly the teacher group.	Significant differences between the groups of smart workers but teachers were the most affected, both in the perception of their psychological well-being and in the management of the smart working mode.
Teaching during the pandemic: A comparison in psychological wellbeing among smart working professions		Qualtrics platform online survey				
Yong et al. (2021)	Malaysia	Mixed method	Psychological issue Sleep quality, muscle tension Emotional Issue Stress and anxiety	Pre and Post-test Questionnaire Perceived Stress Scale (PSS-10)	Study investigated the consequence of music listening and progressive muscle relaxation (PMR) towards Malaysia novice music	Quantitative result showed that most of the novice music teachers from high-moderate stress groups experienced a significant decreased
The effect of music listening and progressive muscle relaxation on the stress level of novice music		Quasi-experimental study				

<p>teachers during Coronavirus disease 2019 (Covid-19) in Malaysia</p>	<p>teachers' stress level.</p>	<p>stress scores while low-stress groups did not show notable difference.</p>			
<p>Bigras et al. (2021) Quebec (Canada) Early childhood educators' perceptions of their emotional state, relationships with parents, challenges, and opportuni</p>	<p>Quantitative</p>	<p>Work related demands</p>	<p>Not stated</p>	<p>Study examined the impact of COVID-19 towards childcare centre educators in Quebec</p>	<p>Qualitative findings were assigned into professional and non-professional challenges; online teaching and learning, time management, financial, psychological and emotional issues. Early childhood educators' well-being at work declined but their stress level increased. Compared to when working at they daycare, teachers working</p>

ties during the early stage of the pandemic

remotely reported a low-level of stress.

Gregersen et al. (2020)

Language teacher perspectives on stress and coping

Europe, North America, Asia, Middle, South America and other parts of the world.

Quantitative

Amount of time spent online, practical issues, increased workload, problems with managing work/life balance, limits on freedom, unable to socialise, financial concern, job precarity and uncertain future

Open-ended questions

Perceived stressors and potential uplifts and offer advice for peers

Study intended to rigorously explore the teachers' thoughts according to the questions regarding their perceived stressors, uplifts and advice.

The teachers' perceived stressors were coded into six categories including general uncertainty, finances, limits on freedom, life at home, online teaching and health.

Uplifts coded were assigned into three categories namely teacher learning and growth, students responses to online teaching and sense of time.

Sokal et al. (2020)	Canada	Mixed-method Longitudinal national survey and qualitative interview	Attitudes towards technology, self-efficacy	Stress and Coping (Eddy et al., 2019) Attitudes toward technology (Edison & Geissler, 2003) The Teacher Attitudes towards Change Scale (TATC; Kin & Karen, 2017)	The study investigated how teachers' attitudes toward change and technology are associated with resilience and burnout during COVID-19 pandemic.	Results showed that Teachers' self-efficacy, attitudes toward change, and perceptions of administrative support were correlated with teachers' resilience during pandemic.
Pressly (2021)	United States	Quantitative Empirical studies	Anxiety related to Covid-19, anxiety about teaching demands, parent communication and administrative support.	COVID Anxiety Scale (CAS; Lee, 2020) Anxiety Questionnaire (Davey et al. 2007) Teacher Burnout	Study aimed to identify the COVID-19 effect on teacher anxiety and burnout.	Study had determined significant causes of teacher burnout-stress including COVID-19 anxiety, current teaching anxiety,

Subscales (Seidman & Zager, 1986)	anxiety communica ting with parents, and administrati ve support.
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RQ1: How is the research focused on teachers' well-being during pandemic distributed?

The ten included articles were published between 2020 and 2021, with the majority ($n=8$) conducted in 2021. The distribution of the journals took place across many countries ($n=8$) except for ($n=2$) studies, which focused on teachers' well-being in Canada. The eight studies were identified from the Philippines, Malaysia, Swiss, England, Italy, United States and North America. However, ($n=1$) study covered different countries including Europe, North and South America, Asia Middle, and other parts of the world.

RQ 2: What are the design types of the studies related to teachers' well-being during pandemic?

Based on the literature matrix, each article applied a different type of study design. Out of 10 articles included, there were ($n=6$) articles integrated quantitative study. The quantitative studies were conducted through correlational design, statistical and descriptive statistics, and the Qualtrics platform online survey. Few articles had conducted qualitative studies ($n=2$) by implementing longitudinal qualitative trajectories analysis and retrospective interviews. The remaining ($n=2$) articles were performed using the mixed method, including a longitudinal national survey and qualitative interview.

RQ 3: What are the purposes for which teachers' well-being during pandemic are developed?

Studies on teachers' well-being were highlighted with distinct purposes. A significant number of ($n=4$) articles were conducted to discover the teachers' profession or occupational well-being during the pandemic. In addition, there were also ($n=2$) studies that focused on determining the teachers' stress level during pandemic. Besides, ($n=3$) studies were conducted to investigate the causes of teachers' burnout. However, there was ($n=1$) study that majorly researched on Early Childhood Educator's emotional states during the pandemic Covid-19.

RQ 4: What are the factors affecting teachers' well-being during pandemic that had been researched into by past research?

Various factors affecting teachers' well-being during pandemic gained from the past research. Each of the research resulted in more than one factor with ($n=6$) studies came out with psychological issues (i.e., stress, anxiety, fear) as one of the factors affecting teachers' well-being. Uncertain work which closely related to the life management charted as the common factor affecting teachers' well-being with ($n=3$) articles highlighting this factor.

Moreover, (n=3) studies summarise indefinite workload as the factor affecting teachers' well-being. Furthermore, data summarised other factors affecting teacher's well-being during pandemic with (n=4) studies on teachers' knowledge on technology, (n=2) studies on school closure, (n=1) study on health issue, (n=5) on other related social issue and (n=1) on financial issue.

RQ 5: What are the instruments used to emphasised on the teachers' well-being during pandemic?

To determine the teachers' well-being during pandemic, several distinct instruments were administered in the studies. Summarising the table above, there were n=6 studies that adapted and adopted survey questionnaire from various resources that focused on psychological issues. In relation to the psychological instrument, n=2 studies used Perceived Stress Scale as the survey questionnaire. In addition, there were articles that reported to used different types of burnout questionnaire as a way to analyse the teachers' condition during the pandemic namely Online Teaching Burnout, Bergen Burnout Inventory and Teacher Burnout Subscales (n=3). Besides, there were n=2 articles that emphasised on different angles of teachers; attitudes by applying four sets of different instruments. The attitudes instruments were distributed to attitudes and moods on coronavirus, attitudes and opinions on smart working, attitudes on technology and attitudes towards change scale. Furthermore, there was n=1 articles used work engagement and management instrument namely Utrecht Work Engagement Scale and Teachers Interactional Style Scale as a mean to achieve the purpose of study. However, there were identified studies that conducted their data collection through interviews (n=3). On top of that, n=1 article did not include the instruments used for the study.

RQ 6: What are the current conditions of teachers' well-being

The findings of the studies somewhat varied due to different focus and aim. Nevertheless, scoping review was able to summarise the general findings from journals included. 3 studies indicated teachers' well-being was the most affected and their well-being declined particularly in the first few months of the pandemic Covid-19 breakout. However, findings from a study showed that teachers' well-being were able to sustain due to the implementation of distance teaching and contentment towards their ability as a teacher. There were also findings stating that teachers' well-being was diverse and could result in positive or negative outcomes according to the approach or coping strategy incorporated to mitigate the effect of pandemic (n=3).

Discussion

Relation of stress, burnout, and anxiety with teachers' well-being

According to De Stasio et al (2017), teachers view their work as very stressful due to excessive workload, limited resources, students' poor feedback, and insufficient support from the parents. The enormous factors that trigger their stress level do not stand on its own because stress correlates with burnout and anxiety. Moreover, their intensity could eventually be the factors that are affecting the teachers' well-being. Based on the study by Poysa et al (2021), 21% of teachers are assigned into a group where their well-being is dominated by burnout Besides, prolonged stress due to specific environments will also cause burnout. Malureanu et al (2021) stated that teachers' would experience burnout due to

professional changes and in this particular time, the changes are made due to COVID-19 pandemic.

Changes in education include school closures and social isolation worldwide, have raised anxiety among the teachers (Talidong & Toquero, 2020). Moreover, a hazardous level of stress and anxiety could worsen because the uncertain environment of the COVID-19 pandemic could seriously threaten teachers' mental health and well-being (Rabacal et al., 2021). However, the persistent threatening condition of teachers' well-being will restraint teachers from adapting to the current volatile environment. Therefore, it is crucial for the teachers to overcome the negative consequence of the COVID-19 pandemic and breakthrough from their affected well-being to perform better in teaching and learning and, most importantly, maintain a healthy condition of their well-being.

Importance of Teachers' Well-being in Building Resilience

The review focusing on teachers' well-being acknowledge the importance of building resilience towards teacher' well-being. Gaining solid resilience and understanding the relation between well-being and resilience aid the teachers in dealing with the job demands, particularly when working in complex circumstances (Hascher et al., 2021). Besides, Day and Gu (2014); Schleider (2008) expressed that well-being and resilience promote positive teachers' outcomes as it helps with their teaching and learning quality, self-efficacy, commitment, and job satisfaction.

Thus, it is essential for teachers to build resilience as it professionally influences their ability to teach, connect with the students, and ensure students' learning and school success. Regardless of the complex environment we live in now, teachers are advised to maintain and build their resilience through teachers' education. It crucially helps them overcome the situations where workload keeps piling up, stress takes control, and the uncertain uncertainty environment is not foreseeable.

Conclusion

Our study reviewed identified a diverse body of literature that concentrated on teachers' well-being. However, the number of articles discovering and emphasising the factors affecting teachers' well-being specifically during pandemic were limited. Regardless of the limitation in searching for relevant studies, this scoping review found that factors affecting teachers' well-being came in varied forms, including psychological issues, work-related issues, teachers' knowledge, and life management. In addition, teachers' well-being were much determined by the factors impacting their well-being. Besides, teachers' well-being could be high or moderate or low depending on the factors and the impact would not only be negative. Therefore, more thorough studies are needed to investigate the difference in teachers' well-being during pre and post-pandemic by focusing on the common or significant factors that contribute to changes in teachers' well-being.

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