



Natural disasters and teachers' well-being: An intervention model for improving the occupational well-being of teachers in a post-disaster situation

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ABSTRACT

Background: In disaster situations the hardships and adversities for teachers are amplified because their work is drastically deviated from their normal routine and are expected to take the additional role of socio-psychological guide for the communities, exerting mounting pressure on their professional responsibilities and their well-being. **Methods:** Therefore, a small-scale intervention was carried out to help the teachers to improve their well-being in a post-disaster situation for two years. Alongside this intervention, a longitudinal qualitative study was carried out to measure the changes in the well-being of the targeted five teachers over a period of two years in a remote, isolated context. The data was collected in three rounds. Round one was carried out at the start, followed by round two in the middle of the intervention, and the final round of data collection was carried out at the end of the study. This study employed the OECD's tool for measuring the occupational well-being of the teachers. **Findings:** The study found a gradual and consistent improvement in the cognitive, subjective and social well-being of the teachers. However, satisfaction with profession reflects a stable level of discontent about their career choice and the data suggests that there is a certain level of regret for career choice. In the dimension of physical and mental well-being, the data suggests that participants are facing a variety of physical and emotional symptoms like headache, back pain, stomach pain, feeling nervous, irritability, and sleep deprivation. **Conclusions:** Teachers must be trained and prepared for an expanded role of leadership in remote contexts not only for education in emergencies but also for community cohesion and well-being in post-disaster situations. Therefore, aid organizations must prioritize the well-being of teachers in post-disaster situations. **Novelty/Originality of this article:** A small-scale longitudinal qualitative study over two years measuring cognitive, subjective, social, physical, and mental well-being changes of teachers in a remote, isolated post-disaster context using the OECD's occupational well-being tool.

KEYWORDS: disaster management in rural contexts; teachers in disasters; well-being of teachers; teachers as community leaders; psycho-social role of teachers in disasters.

1. Introduction

Teaching has been traditionally famed as a worthy occupation and teachers are considered noble figures; accordingly, teachers should enjoy an attractive and joyful professional life. However, contemporary literature denies this proposition and reflects a bleak scenario of teachers' conditions, characterized by work related stresses, anxiety, depression, frequent turnover, and low attraction to the profession which are negatively impacting their teaching and learning performances (Martinsone & Vanaga, 2024; Education Support, 2023; Ozturk et al., 2024). In low-income countries the teachers are

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facing even more challenges and hardships that are deteriorating their well-being and effectiveness in the classroom (Wolf et al., 2015).

In disaster situations the hardships and adversities for teachers are amplified because their work is drastically deviated from their normal routines of teaching and learning. In addition to their normal duties, they are expected to play an expanded and complex role as socio-psychological guide for the communities, exerting mounting pressure on their professional responsibilities and their well-being (Henderson, 2023; Parrott et al., 2024). The role of teachers in disasters becomes more complex in remote isolated contexts where they are placed at the heart of the community for coping the disaster effects (Fu & Zhang, 2024). To help teachers to effectively enact their complex role in disasters, many of the studies (Cahill et al., 2020; Brocque et al., 2017; Chondekar, 2019; Gokmenoglu et al., 2021, Sonmeza & Gokmenoglu, 2023) have made interventions of teachers' professional development, primarily focused on improving their knowledge and skills to provide psycho-educative support to students. There is an abundance of interventions that have focused teachers to improve their knowledge and skills so that they are in a better position to support children to improve their well-being and learning; however, very few studies have focused teachers themselves to improve their well-being and ease their personal lives in challenging circumstances.

Teaching "comes with huge responsibilities, and it certainly seems like everyone expects a lot from teachers" (UNESCO, 2014). Teachers are the first responders to disasters and are expected to give immediate care to the students despite the fact that they have also suffered devastations and have their own feelings as human beings (Cahill et al., 2020). Teachers have been found to conceal their own emotions in disaster situations while psychologically and emotionally supporting others (Parrott et al., 2024). Hence, resilience is the cornerstone for the teachers to enact their role to face the adversaries of a disaster and move forward to support others. However, resilience and well-being are interrelated because a person can only be resilient if her/his well-being is improved (OECD, 2024). The higher level of teacher well-being is the foundation for the continuity of education and improving the resilience of the community at large in disaster-affected contexts. Teachers in remote context are the leaders; hence they are placed in an ideal situation to influence the resilience and well-being of their communities in difficult circumstances (Fu & Zhang, 2024).

"Teacher well-being is commonly seen as an instrumental step in supporting student well-being. While both outcomes are important, teacher well-being must be valued as an end to itself" (INEE, 2021). Because teachers are at the heart of the resilience of community in disasters, therefore, "Incorporating teacher resilience and well-being into the broader framework of community resilience is not just significant; it's paramount... Their well-being, or lack thereof, has a cascading effect on their students, impacting the overall efficacy of disaster education initiatives" (Fu & Zhang, 2024). In a nutshell, education is strongly linked with community well-being; therefore, it is indispensable to invest in the well-being of educators who are expected to lead the communities in disaster situations. The well-being of teachers plays a more vital role in low resources and crisis circumstances (Falk et al., 2019). Hence this intervention-based study is focused on the well-being of teachers in a post-disaster situation and intended to longitudinally measure the changes in the well-being of teachers over the period of two years in a remote isolated context of Pakistan.

This intervention was planned and implemented in a disaster-hit isolated school in a mountainous village in northern Pakistan. The small village was devastated by a glacial flood which destroyed their homes, agricultural lands, livestock, water source for the village and their weak infrastructure. The community before the disaster was dwelling in low-socio-economic conditions which are further aggravated by the natural disaster. Teachers at this school belong to the same village and have personally experienced the devastations of the disaster and the traumatic effects of the event.

While planning an intervention, it is imperative to explore the factors that can positively influence the well-being of teachers. In this regard, Yıldırım (2014) identified six main factors of teachers' professional well-being which are cooperation among staff, fair

and helpful assessment and feedback, positive school climate, student oriented teaching practices, classroom climate and professional development of teachers. Similarly, Taylor et al. (2024) have highlighted five key dimensions of teacher well-being in school environment, which are the participation of teachers in decision-making and autonomy, good teacher-student relationships, a feeling of belonging and affiliation with the school, the openness of the school to change and innovations, and having sufficient resources for teachers to perform. At the practical level, García-Álvarez et al. (2023) launched a character education program to develop professional competencies of the teachers and strengthen their well-being in the Eastern Republic of Uruguay. They found that the planned intervention has yielded positive results in the form of improved teacher well-being. Their program was a combination of theory and practice focused on the socio-emotional competencies of teachers. According to Abubakar & Jaafar (2020), professional development of teachers is defined as professional learning, which is closely related to their well-being and effectiveness in the school. Teachers' professional development helps the teachers to gain more control over what they do, which will ultimately contribute to their well-being. Studies like Samosa et al. (2023) have urged to provide a scientific base for improving teachers' well-being through professional intervention and have suggested investing more in it to improve the well-being of teachers and the organizational health of the schools.

Therefore, this intervention was carried out for a period of two years, focusing on improving the school's physical and social climate to make it an inviting and pleasing place for the teachers to work. Secondly, capacity building of the teachers on teaching pure academic subjects to equip them with effective strategies and activities to engage students and maximize their learning outcomes. Third, capacity building of teachers on life skills to help them manage their emotions and stress, improve their communication skills, self-awareness, problem-solving skills, and decision-making. Fourth, regular celebration of events at school, to create a sense of happiness and hope and reward the teachers in public so that they can feel good about themselves. Finally, arranging study tours for the teachers to visit other schools in the region and learn from the good practices of the other teachers.

Within the broader umbrella of well-being, teachers' professional well-being has been defined variously by different authors. According to Van Horn et al. (2004), "Occupational well-being is construed as a positive evaluation of various aspects of one's job, including affective, motivational, behavioral, cognitive, and psychosomatic dimensions". Bakker & Oerlemans (2011) developed their multilevel model of employee well-being, which was mainly based on the Job Demands-Resources Model. They defined their model in three positive and two negative dimensions. Their positive dimensions were work engagement, happiness at work, and job satisfaction. Their negative dimensions were workaholism and burnout. In addition, tools like the Work Meaning and Well-being UWES, (Schaufeli et al., 2006) and the Job Affective Related Well-Being Scale JAWS (Van Katwyk et al., 2000) have also been used for measuring the professional well-being of teachers.

Nevertheless, there is an absence of consensus on a single definition of teachers' well-being; therefore, Hascher & Waber (2021) suggested being very specific for studying the teachers' well-being. According to them, researchers must be careful about using the general term "teacher well-being" and explicitly define the teacher well-being model they are using and the valid reason behind opting for the model. Therefore, this study has specifically opted for the OECD (2020) model of teacher well-being to guide the research journey. The OECD (2020) proposed a conceptual framework that defines "teachers' occupational well-being around four key components: physical and mental well-being, cognitive well-being, subjective well-being, and social well-being. This conceptual model is adopted for this study which guided the process of gauging the well-being of teachers.

Teachers have their profession-related stresses and issues regarding their professional well-being. Studies (Zydzianaite & Rutkiene, 2024; Taylor et al., 2024; Howard et al., 2021). have reported a high level of stress, depression, anxiety, and low level of well-being among teachers in normal circumstances. In this regard, the Education Support (2022) reported that stress, depression, and anxiety have all remained at an unsustainable high level. Three-

quarters (75%) of the workforce are stressed, which rises to 84% for school leaders. This figure has been well above 60% for the last six years. Moreover, 55% of staff are actively looking to leave the profession. Nearly half of all staff (47%) report always working when unwell, and more than half of staff (59%) have a lack of confidence in talking about mental health challenges to their employer (p.44). On top of that, the teachers participating in this study are residents of a disaster-hit village and, therefore, have gone through the same traumatic situation as part of the broader community. They have witnessed the destruction of their homes, agricultural lands, and livestock; therefore, they are more prone to depression, distress, and low levels of well-being.

Despite the complexity of teachers' role in disasters, studies like Cahill et al. (2020) argue that most of the teachers are not skillful enough to provide psycho-educative support to students. Therefore, teachers must have evidence-based programs to improve their skills and knowledge so that they can effectively support children. Similarly, Brocque et al. (2017) argue that teachers are uniquely well-placed in the school therefore, they can provide vital support to children after a traumatic event and can identify children with the need for psychological help. Hence, they have proposed a guide for teachers to better understand children after a post-traumatic event and can employ effective classroom strategies. Chondekar (2019) proposed a set of content for teachers' professional development to make them more prepared for effectively exercising their role in disaster situations. In Turkey, a cascade model of teachers' professional development for disaster management was carried out and reached 135,375 teachers in 67 provinces to better prepare them for supporting students in difficult circumstances (Gokmenoglu et al., 2021). However, this study deems teachers as independent beings, amid the complexity of their highly demanding professional role in disaster situations. Hence, it is focused on improvement of the occupational well-being of the teachers as an end point not a mean for supporting their students. It is primarily focused on the improvement of teachers' well-being to help them minimize their pressures and gain better control over their expanded and complex professional lives in disaster situations.

2. Methods

This small-scale study was carried out in a school with five teachers in a disaster-hit remote village to measure the changes in teachers' occupational well-being. The intervention was made for a period of two years; therefore, the data collection was carried out in three rounds. The first round of data collection was carried out at the start of the intervention which was followed by the second round in mid-intervention. The final round of data collection was carried out at the end of the intervention. Hence, the study followed the frame of longitudinal approach with a small sample size of five teachers.

At the end of each data collection round, the items in the OECD teachers' wellbeing scale filled by the participants were evaluated on the given rating scales in the tool. The sample size of teachers was too small for quantitative and statistical calculations; therefore, the data was analyzed qualitatively. The results, trends, and inclinations, for each round of data collection are reflected and portrayed in the form of tables and percentages, followed by explanations. At the second level, the trends, tendencies, and learnings across the three rounds of data collections are elaborated to report the core findings of the study. This analysis has been carried out within the frame of constructionism (Silverman, 2013), and social activism (Atkinson, 2017) to portray the big picture of the journey of the study and deep discussion on the core findings revealed. Therefore, the results of this study are confined to the reality of the remote village, the school and the five teachers and may not be used for generalization purposes. However, readers may find similarities and links between these results and any other context elsewhere. The study is a university approved project therefore, all ethical guidelines for conducting a study, ranging from informed consent to the secrecy and anonymity of participants have been actively followed.

As has been mentioned above, this study is guided by the conceptual framework of physical and mental well-being, cognitive well-being, subjective well-being, and social well-

being proposed by OECD (2020). The cognitive dimension of teachers' occupational well-being encompasses processes such as attention, the formation of knowledge, judgment and evaluation, problem-solving and decision-making. These are the set of skills and abilities teachers need to work effectively. Cognitive well-being also relates to teachers' self-efficacy, which represents teachers' beliefs in their abilities to perform.

The subjective dimension of teachers' professional well-being includes job satisfaction, life satisfaction, affects, and purposefulness. Job satisfaction has two parts: the level of overall satisfaction with the profession and the satisfaction with the current working environment. Life satisfaction is related to their assessments, and reflections about their entire life. Affects are related to their positivity and activeness in engaging in the work assignment and the purposefulness is the sense of having a purpose in profession and life.

The physical and mental dimension of teachers' professional well-being refers to good health. Difficult working conditions and high levels of stress can alter good health. The stress that teachers experience may result in psychosomatic symptoms and complaints. The social dimension of teachers' occupational well-being refers to the relationships in the school, including their interactions and relations with their colleagues, headteacher, students, parents, and the wider community. This relationship aspect plays a vital role for the overall success of the school and can have positive or negative influences on the well-being of the teachers.

In this regard, OECD has picked items from the PISA 2021 school questionnaire and student questionnaire and included some new items to develop a measurement tool for teachers' occupational well-being. The distinguishing feature of this tool is its ability to cover the entire personality of a teacher in her/his professional circumstances, focusing on the four important dimensions of social, cognitive, subjective and physical and mental well-being. Therefore, due to its comprehensive nature and the tested items in PISA 2021, this study employed the OECD's tool for measuring the occupational well-being of the teachers.

3. Results and Discussions

The study has followed the conceptual framework of OECD; therefore, the data has been presented and analyzed in the distinct components of cognitive, subjective, social, and physical and mental well-being of the teachers working in a disaster-affected remote context.

3.1 *The cognitive dimension of teachers' occupational well-being*

The cognitive dimension consisted of the indicators of capacity to concentrate at work, efficacy in classroom management, efficacy in instruction, and efficacy in student engagement. The changes in the responses of the teachers for the two positive statements were analyzed across three rounds of the data collection on a scale of 'Never', 'Seldom', 'Often' and 'Always'. In the indicator of capacity to concentrate on work, the mean percentages for 'Never' were observed at 0% in round 1, which remained constant in round 2 and round 3, and these mean percentages for 'Seldom' were found to be 30% in round 1, which gradually decreased to 20% in round 2 and 10% in round 3. The mean responses for 'Often' were found to be 50% in round 1, which dipped to 40% in round 2 and increased again in round 3 to 50%. A steady improvement was observed for 'Always', in which the mean scores increased from 20% in round 1 to 40% in rounds 2 and 3. Graph. 1 highlights the overall picture of the answer scale for this indicator.

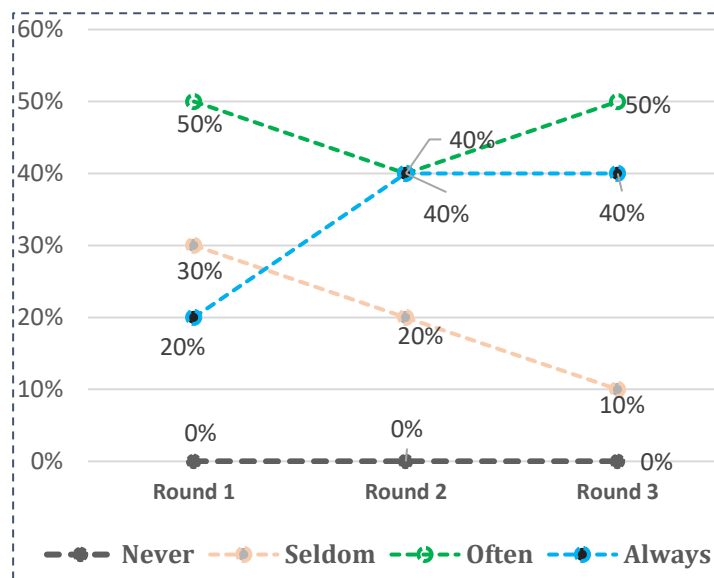


Fig. 1. Cognitive dimension of teachers' occupational well-being

In this indicator of concentration on work, responses were also collected for the four negative statements. The mean percentages for 'Never' showed a gradual increase from 5% in round 1 to 10% in round 2 and 30% in round 3. Similarly, a steady increase was observed for 'Seldom' from 35% in round 1 to 45% in round 2 and 55% in round 3. A reverse trend in the mean percentage responses was observed for 'Often' and 'Always'. A steady decline was observed for 'Often' from 45% in rounds 1 and 2 to 15% in round 3. Likewise, for 'Always', the mean scores decrease from 15% in round 1 to 0% in rounds 2 and 3. The details of the scores are portrayed in Graph 2 for more information.

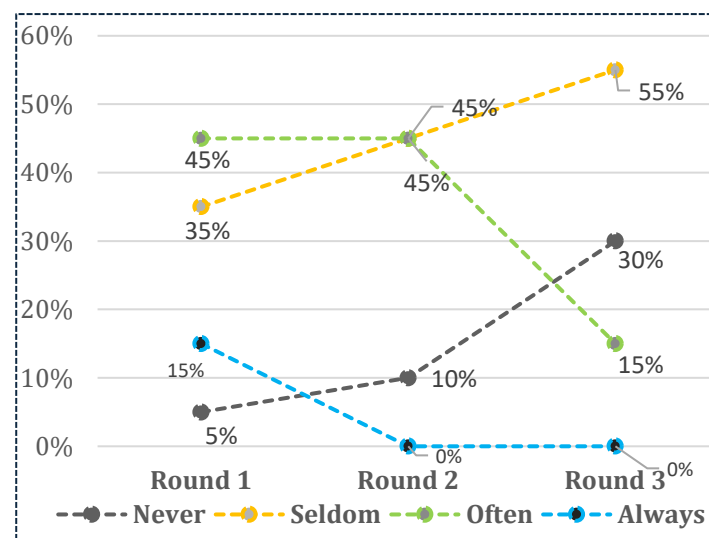


Fig. 2. Cognitive dimension of teachers' occupational well-being

The reduction of mean scores for 'Often' and 'Always' and the rise of mean scores for 'Never' and 'Seldom' for the negative statements indicate the reduction of concentration-related difficulties observed during a period of two years. This also shows an improvement in their cognitive clarity and concentration abilities at work. The overall data reflects an improvement in the ability of the participants to concentrate at work across the three rounds of data collection. The data also indicates the reduction in concentration-related difficulties observed during the two years by the participants.

The responses of the teachers against the twelve positive statements for efficacies in classroom management, instructions and student engagements were measured on a rating

scale of 'Not at all', 'To some extent', 'Quite a bit' and 'A lot'. The mean percentages for 'Not at all' were observed at 3.3% in round 1, which decreased to 1.6% in round 2 and dropped to 0 in round 3. The mean percentages for 'To some extent' were found to be 38.3% in round 1, which decreased to 31.6% in round 2 and dropped to 15% in round 3. The mean responses for 'Quite a bit' were found to be 46.6% in round 1, which remained constant in round 2 before increasing to 50% in round 3. A steady improvement was observed for 'A lot', in which the mean scores increased from 11.6% in round 1 to 20% in round 2 and 35% in round 3. In this regard, Table 1 provides an extended score sheet for this indicator.

Table 1. Cognitive dimension of teachers' wellbeing

Indicators Positive statements (12 items)	Round wise answer scale for Round 1 (R1) Round 2 (R2) and Round 3 (R3)											
	Not at all			To some extent			Quite a bit			A lot		
	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
Efficacy in classroom management (4 items)	0%	5%	0%	30%	25%	15%	55%	50%	55%	15%	20%	30%
Efficacy in instructions (4 items)	5%	0%	0%	35%	40%	15%	45%	45%	50%	15%	15%	35%
Efficacy in student engagements (4 items)	5%	0%	0%	50%	30%	15%	40%	45%	45%	5%	25%	40%
Mean	3.3%	1.6%	0%	38.3%	31.6%	15%	46.6%	46.6%	50%	11.6%	20%	35%

Despite the inconsistent scores across the three rounds for individual items, the overall mean scores reflect a steady improvement in their efficacy in classroom management, efficacy in instruction, and efficacy in student engagement.

3.2 The subjective dimension of teachers' occupational well-being

The subjective dimension consisted of the indicators of job satisfaction with the profession, job satisfaction with the current working environment, and purposefulness. The responses of the teachers against the nine positive statements were measured on a rating scale of 'Strongly disagree', 'Disagree', 'Strongly disagree', 'Agree' and 'Strongly Agree'. The mean percentage scores for 'Strongly Disagree' were observed at 11.6% in round 1, which decreased to 5% in round 2 and dropped to 1.6% in round 3. The category of 'Disagree' showed a similar pattern for the mean scores, starting at 31.6% in round 1, which decreased to 18.8% in round 2 and dipped to 3.3% in round 3. A notable progression was observed in the mean scores for 'Strongly agree', and 'Agree'. In the category of 'Strongly Agree', the mean scores increased from 16.1% in round 1 to 27.2% in round 2 and significantly improved to 46.6% in round 3. Similarly, in 'Agree', the mean scores started at 40.5% in round 1, which increased to 48.3% in round 2 which remained constant in round 3. The details of the score sheet is portrayed below in table 2.

Table 2. Subjective dimension of teachers' well-being

Indicators Positive statements (9 items)	Round wise answer scale for Round 1 (R1) Round 2 (R2) and Round 3 (R3)											
	Strongly disagree			Disagree			Agree			Strongly agree		
	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
Job satisfaction	0%	0%	0%	20%	6.6%	0%	46.6%	46.6%	40%	33.30%	46.6%	60%

with the current working environment (3 items)												
Job satisfaction with the profession (4 items)	35%	15%	5%	25%	20%	10%	35%	50%	55%	5%	15%	30%
Purposefulness (2 items)	0%	0%	0%	50%	30%	0%	40%	50%	50%	10%	20%	50%
Mean	11.6%	5%	1.6%	31.6%	18.8%	3.3%	40.5%	48.3%	48.3%	16.1%	27.2%	46.6%

Similarly, the changes in the responses of the teachers for the negative statements were also analyzed. The mean percentages for 'Strongly disagree' showed a gradual increase from 8.8% in round 1 to 23.3% in round 2 and 34.4% in round 3. An inconsistent trend was observed for the response category of 'Disagree', in which the mean scores increased from 35.5% in round 1 to 48.8% in round 2, which regressed back to 43.3% in round 3. A reverse trend in the mean percentage responses was observed for 'Agree' and 'Strongly agree'. A decline was observed for 'Agree' from 34.4% in round 1 to 25.5% in round 2 and a further dip to 18.8% in round 3. Likewise, for 'Strongly agree', the mean scores decreased from 21.1% in round 1 to 2.2% in round 2 and slightly increased to 3.3% in round 3. Table 3 below shows the details of the scores for each round for this indicator.

Table 3. Subjective dimension of teachers' well-being

Indicators	Round wise answer scale for Round 1 (R1) Round 2 (R2) and Round 3 (R3)											
Negative statements 6 items	Strongly disagree			Disagree			Agree			Strongly agree		
	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
Job satisfaction with the current working environment (1 item)	0%	20%	40%	40%	60%	40%	40%	20%	20%	20%	0%	0%
Job satisfaction with the profession (2 items)	20%	30%	30%	40%	40%	50%	30%	30%	10%	10%	0%	10%
Purposefulness (3 items)	6.6%	20%	33.3%	26.6%	46.6%	40%	33.3%	26.6%	26.6%	33.3%	6.6%	0%
Mean	8.8	23.3	34.4	35.5	48.8	43.3	34.4	25.5	18.8	21.1	2.2	3.3

The overall result reflects a gradual improvement in positivity in the workplace and performance and improvement in the sense of direction and purposefulness in the work by the participants. However, in the indicator of satisfaction with the profession, a stable level of dissatisfaction about their career choice across the three rounds of data collection is evident. This data suggests that there is a certain level of regret for career choice over a period of time, but this dissatisfaction and regret is not increasing.

3.3 The physical and mental dimension of teachers' occupational well-being

Under the physical and mental dimension, ten psychosomatic symptoms and their frequency are analyzed on a rating scale of 'Never', 'Once or twice a year', 'Once or twice a month', 'Once or twice a week' and 'Almost every day'. The mean percentage scores for 'Never' were found to be 16%, which increased to 18% in round 2 and slightly increased again to 20% in round 3. The category of 'Once or twice a year' reflected a gradual progression across the three rounds. In this category, the mean percentage scores were observed to be 26% in round 1, which was raised to 44% in round 2 and further increased to 48% in round 3. The category of 'Once or twice a month' showed an inconsistent pattern for the mean scores, starting at 38% in round 1, which decreased to 24% in round 2 and slightly increased again to 26% in round 3. The category of 'Once or twice a week' showed a consistent trend, in which the mean scores decreased from 20% in round 1 to 14% in round 2 and dropped to 6% in round 3. The mean scores for 'Almost every day' remained constant at 0% across the three rounds of data collection. Graph 3 provides percentage scores for the 10 psychosomatic symptoms highlighted by the participants.

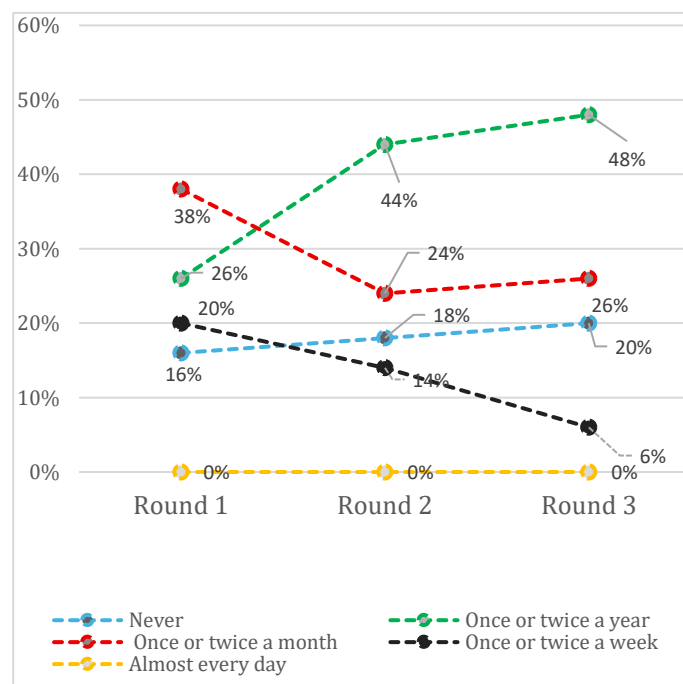


Fig. 3. Physical and mental dimension of teachers' occupational well-being

The overall data suggests that participants are facing a variety of physical and emotional symptoms like headache, back pain, stomach pain, feeling nervous, irritability, and sleep deprivation across the period of two years. The data also suggest that none of the symptoms completely vanish from the school environment among the teachers. However, the frequency of these symptoms shows a positive trend for improvement.

3.4 The social dimension of teachers' occupational well-being

The social dimension includes the four indicators of social function in relationships (colleagues), social function in relationships (principal), teacher-student relations, and feelings of trust. The changes in the responses of the teachers for the positive statements were analyzed under the response categories of 'Strongly disagree', 'Disagree', 'Agree', and 'Strongly agree'.

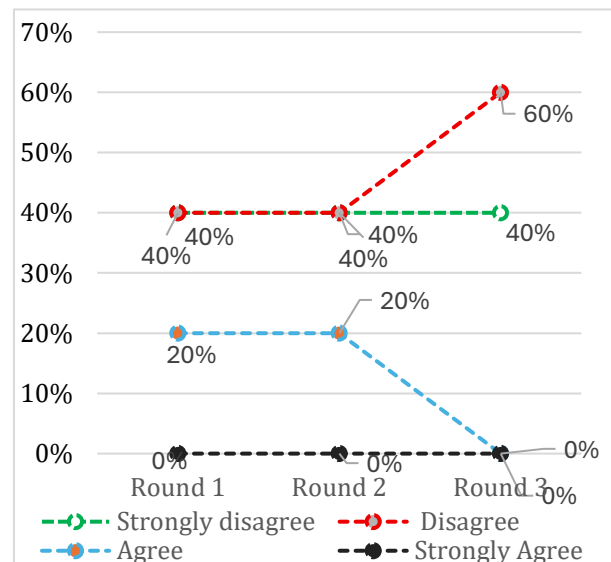


Fig. 4. The social dimension of teachers' occupational well-being

The negative statements were analyzed to explore the changes in the views of the teachers about their relationships with their colleagues across the three rounds of data collection. The mean percentages for 'Strongly disagree' showed a constant score of 40% in rounds 1, 2, and 3. However, a consistent trend of progression was observed for the response category of 'Disagree', in which the mean scores increased from 40% in rounds 1 and 2 to 60% in round 3. In the category of 'Agree', the mean scores were observed at 20% in round 1, which remained constant in round 2 before dropping to 0% in round 3. The mean percentage scores remained 0% for 'Strongly agree' across the three rounds of data collection. The details of the score sheet are portrayed in Fig. 4.

Table 4. Social dimension of teachers' well-being

Indicators	Round wise answer scale for Round 1 (R1) Round 2 (R2) and Round 3 (R3)											
Positive statements (18 items)	Strongly disagree			Disagree			Agree			Strongly agree		
	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
Social function in relationships (colleagues) (3 items)	6.6 %	0%	0%	20 %	6.6 %	6.6 %	60 %	66.6 %	66.6 %	13.3 %	26.6 %	26.6 %
Social function in relationships (principal) (5 items)	0%	0%	0%	24 %	8%	0%	68 %	76 %	76 %	8%	16 %	24%
Teacher-student relations (5 items)	0%	0%	0%	8%	0%	0%	52 %	48 %	40 %	40 %	52 %	60%
Feeling of trust (5 items)	0%	0%	0%	20 %	16 %	4%	56 %	52 %	52 %	24 %	32 %	44%
Mean	1.6	0	0	18	7.6	2.6	59	60.6	58.6	21.3	31.6	38.6

The positive statements in this category were also analyzed. The mean percentage scores for 'Strongly disagree' were found to be 1.6% in round 1, which dropped to 0% in rounds 2 and 3. The category of 'Disagree' reflected a regression from round 1 to rounds 2 and 3. In this category, the mean percentage scores were observed to be 18% in round 1, which decreased to 7.6% in round 2 and 2.6% in round 3. Conversely, the category of 'Agree'

showed a progression in the mean scores, starting at 59% in round1, which increased to 60.6% in round 2 and slightly dropped to 58.6% in round 3. Similarly, in the category of 'Strongly agree', the mean scores increased from 21.3% in round 1 to 31.6% in round 2, which further increased to 38.6% in round 3. The details of the percentage scores are shown table 4 for further information.

The overall data indicates the prevalence of a general positivity within the school environment in terms of professional support from management and the principal, confidence, and a sense of trust among the teachers. The increased shifting of responses from 'Disagree' to 'Agree' and from 'Agree' to 'Strongly agree' indicates the growing positivity among the self-reported perceptions of teachers about their feeling of trust in their school environment.

The self-reported data about cognitive well-being reflects a gradual improvement in the ability of the teachers to concentrate on work and their efficacy of classroom management, instructional strategies, and student engagement. Teachers have reported a gradual improvement in their ability to concentrate on work and gradually minimize their concentration-related difficulties. The finding also suggests that teachers are gradually gaining confidence in managing the classroom and student behavior, improving their instructional skills in terms of motivating the students, crafting good questions, good assessment techniques, improved instructional strategies, and addressing the confusions of the students. It is pertinent to note that, throughout the intervention period, this project was focused on the professional development of teachers not only in the pure academic domain but also on the well-being of teachers to improve their life world through life skills training and art-based activities. In other words, these results validate the effectiveness of the intervention activities that were implemented to improve the capacity and life of the teachers in these difficult circumstances. These findings support Abubakar & Jaafar (2020), who discovered that "there is a significant positive relationship between teacher professional development, well-being and teacher effectiveness... Teachers' professional development and their wellbeing are important factors which are closely related to being more effective in their job" (pp. 6053). The slogan of the intervention part of this study was to spread hope and happiness among the teachers in this disaster-affected context, indirectly emphasizing improving their level of engagement and energies through positive activities in the classrooms and school-level programs (Fredrickson, 2009; Seligman, 2012; Ofsted, 2019; Education Support, 2023). Hence, it can be argued that this study supports the findings of the meta-analysis of Lyubomirsky et al. (2005) who explored a link between happiness and success and positively impacting overall well-being.

The study reports a positive trend of the teachers about their subjective well-being in terms of the satisfaction with their current working environment and the sense of purposefulness in the profession. The data reflects a significant improvement in the positive emotional state of the participants gaining confidence in their professional environment. In addition, participants are gradually finding a meaning and value in their work and a positive shift in purposefulness over the period of two years. These self-reported improvements are closely related to the interventions made in the organizational factors, such as school climate, relationships, and teaching practices, through professional development programs in this context. In addition, arranging school based events for celebrating the small successes of the school in the intervention part and appreciating the teachers and the headteacher in public also played a significant role in improving the well-being of the teachers. In mountain cultures there are small villages in valleys; hence, the news of the appreciation of the teachers does not confine itself to the village; rather, it quickly spreads in the valley, which has a huge positive impact on the well-being of the teachers. These results endorse the views of Yildirim (2014) and Nwoko et al. (2023), who reported that a conscious and planned professional development campaign, focusing on the above-mentioned areas in a school, has the potential to contribute to the professional well-being of the teachers. Hence, the school climate has a profound effect on the well-being of teachers. However, Ofsted (2019) reported that teachers "overwhelmingly enjoy teaching and are generally very positive about their workplace and colleagues and enjoy building

relationships with pupils and seeing them flourish, but these positive elements of well-being at work are counterbalanced by negative elements that lead to poor occupational well-being for many teachers". Obviously, there are many counterbalancing forces in school, such as high stress, high workload, and the status of teachers in society, which reduce the well-being of teachers.

In this study, satisfaction with profession reflected a stable level of discontent about their career choice across the three rounds of data collection. This data suggests that there is a certain level of regret for career choice over a period, but this dissatisfaction and regret is not increasing. This finding is one of the negative counterbalancing forces for teachers' well-being mentioned by Ofsted (2019). The finding of regret for career choice and dissatisfaction is aligned with the studies that have reported that the undervaluing of the profession and lower social prestige in society negatively contribute to the well-being of teachers (Fedorov et al., 2020; Ofsted, 2019).

In the dimension of physical and mental well-being, the data suggests that participants are facing a variety of physical and emotional symptoms like headache, back pain, stomach pain, feeling nervous, irritability, and sleep deprivation across the period of two years. The data also suggests that none of the symptoms completely vanished from the school environment among the teachers. However, the gradual reduction in the frequency of these symptoms shows a positive trend for improvement. The finding highlights the mounting teachers' health-related issues, stress, and burnout reported by various studies in different parts of the world (Education Support, 2023; Taylor et al., 2024; Howard et al., 2021). The prevalence of the symptoms over a period of two years in this study also endorses the growing concerns for teachers' stress and burnout, posing severe challenges for school performance and teachers' health (Martinsone & Vanaga, 2024). This study has been carried out in a disaster-affected context in which the teachers themselves have experienced the trauma of the destruction; therefore, keeping the context upfront (Zydzianaite & Rutkiene, 2024), the prevalence of stress-related symptoms is natural, and it may take some more time to get minimized if meaningful interventions are continued.

In the dimension of social well-being, a gradual positive improvement in teachers' perceptions about their caring relationships with their headteacher, colleagues, and the students in schools. The excitement and commitment of the teachers for the better performance and well-being of the students and their loving and affectionate relationship with students were evident across the three rounds. The data also indicates the prevalence of positivity in terms of professional support from management and principal, confidence, and a sense of trust among the teachers. These findings highlight the criticality of relationships for improving the well-being of the teachers in a school environment, which ultimately influences teacher performance (Hascher & Waber, 2021). Relationships in a school environment are extremely important for ensuring high performance, job satisfaction, happiness at work, and reducing stress and other related mental health issues among the teachers. These conditions are vital for teacher well-being in the school (Zakaria et al., 2021).

Therefore, in the intervention part, special attention was paid to the school climate in terms of improving relationships through teambuilding, harnessing a sense of trust, and developing a collective decision-making culture and the professional development of the headteacher through training courses and ongoing mentorship for a period of two years. The cultivation of a respectful, trusted, and affectionate relationship among school stakeholders plays a vital role in embracing diversity and building resilience in the disaster-affected school climate (Reis-Jorge et al., 2024; Montebello, 2022). The role and the capacity of headteacher are extremely important in developing respectful, trusted, and inclusive relationships in a school environment, which can contribute to the improved well-being of the teachers. Because of "the skills school leaders possess, the strategies they use, and the environment they create, can either make or break a school" (Montebello, 2022). Despite the many positive developments reported by the teachers in social dimensions of well-being, a variability was also observed for the item of personal conversations, in which most of the participants feel hesitant to share their personal issues with their colleagues.

At the overall level, working to improve the well-being of the teachers in this disaster-affected mountain society was a complex endeavor. The socio-cultural environment is a combination of material and non-material elements that are forming a complex traditional society that is currently struggling to align with the external world that is approaching them for relief and rehabilitation. This traditional society tends to demonstrate a strong belief in its socio-cultural system amid this natural disaster that is creating a new reality, which is demanding adjustments. In this connection, the teachers were part of this culture and had been deeply involved in the social dynamics of the village, leading their community on various socio-economic fronts as the most educated people of their village. Therefore, at times their occupational well-being was complexly rooted in their personal and community well-being.

4. Conclusions

This part of the world is home to the mighty Himalayas, Karakorum, and Hindukush mountain ranges with the world's highest peaks and gigantic glaciers, which make the region more vulnerable to climate change-induced natural disasters. In emerging situations, the role of teacher is changing in these remote mountains. In a disaster situation, the role of teachers is not only to continue the educational processes in a safe and secure environment for students but also to lead the communities to remain connected with each other, build resilience, and show commitment to face harsh realities. Teachers in these remote villages are the most informed and educated people, and the external help in the event of a disaster is bound to be late due to the weak infrastructural facilities. Hence, the teachers must be trained and prepared for an expanded role of leadership in the villages not only for education in emergencies but also for community cohesion and well-being in these disaster-prone contexts. However, the well-being of the teachers is a prerequisite for preparing them for this leadership role.

In the recent past, government and non-governmental organizations have played a vital role and have made significant contributions in providing relief support to the schools and the students to continue their education. However, the least attention has been paid to the well-being of teachers in disaster situations, who are the engine of school and community life in remote, difficult circumstances. Therefore, this study has implications for the aid organizations to prioritize the well-being of the teachers in post-disaster situations.

While evaluating the findings of this study, it is important to consider that the feeling of the disaster by the community may have gradually reduced over the study period of two years. This natural process of healing may have also contributed to the results of this study in the subsequent rounds of data collection. The study has explored a consistent improvement in teachers' occupational well-being, which is partially endorsing the effectiveness of the intervention model used in this marginalized mountain society. However, it has been carried out within the geoFig.ic setting of a small remote village where there was only one primary school with five teachers. Therefore, the results of this study are confined to the reality of the remote village, the school, and the five teachers and may not be used for generalization purposes. However, readers may find similarities and links between these results and any other context elsewhere.

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Author Contribution

Conceptualization, Dr. Mola Dad Shafa, Sharifullah Baig and Abida Begum.; Methodology, Dr. Mola Dad Shafa, Sharifullah Baig and Abida Begum; Validation, Dr. Mola Dad Shafa.; Formal Analysis, Sharifullah Baig and Abida Begum.; Investigation, Sharifullah Baig and Abida Begum.; Resources, Dr. Mola Dad Shafa.; Data Curation, Sharifullah Baig and Abida Begum.;

Writing – Original Draft Preparation, Sharifullah Baig .; Writing – Review & Editing, Mola Dad Shafa.; Visualization, Sharifullah Baig and Abida Begum.; Supervision, Dr. Mola Dad Shafa.; Project Administration, Abida Begum.; and Funding Acquisition, Mola Dad Shafa.

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Ethical Review Board Statement

This study has been formally approved by the Ethical Review Committee of Aga Khan University. The approval No of this study is, Appl. No: 058-ERC-SSHA-23.

Informed Consent Statement

As per the research protocol of Aga Khan University, this study has shared an extended information letter to the participating teachers before seeking their consent. After a few days of this sharing of information, a written consent was taken from each teacher participating in this study.

Data Availability Statement

Most of the data has been presented in the form of tables in the analysis portion of this article. The entire set of rough data collected from the participants is available with the authors and can be shared if required. However, the data will be shared with code numbers rather than names to ensure the privacy and secrecy of the participants promised with them at the time of seeking informed consent.

Conflicts of Interest

The authors declare no conflict of interest.

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References

- Abubakar, A., & Jaafar, T. F. T. A. F. M. (2020). Connecting teacher professional development, wellbeing and effectiveness. *European Academic Research*, 7(12), 6053-6063. <https://euacademic.org/PastIssueList.aspx?artid=86>
- Atkinson, J. D. (2017). *Journey into Social Activism: Qualitative Approaches*. Fordham University Press.
- Bakker, A. B., & Oerlemans, W. (2011). Subjective well-being in organizations. In K. S. Cameron, & G. M. Spreitzer (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 178–189). Oxford University Press.
- Brocque, R. L., Young, A. D., Montague, G., Pocock, S., March, S., Triggell, N., Rabaa, C. & Kenardy, J. (2017). Schools and natural disaster recovery: The unique and vital role that teachers and education professionals play in ensuring the mental health of students

- following natural disasters. *Journal of Psychologists and Counsellors in Schools*, 27(1), 1–23. <https://doi.org/10.1017/jgc.2016.17>
- Cahill, H., Shlezinger, K., Romei, K., & Dadvand, B. (2020). *Research-informed approaches to supporting student wellbeing post-disaster*. Youth Research Centre, University of Melbourne. <https://education.unimelb.edu.au/industry-reports/report-3-natural-disasters-and-pandemics>
- Chondekar, N. R. (2019). Role of teachers in disaster management. *International Journal of Science and Research (IJSR)*, 8(8), 2294–2296. <https://doi.org/10.21275/18012002>
- Education Support. (2022). *Teacher wellbeing index 2022: Key findings*. Education Support. <https://www.educationsupport.org.uk>
- Education Support. (2023). *Teacher wellbeing index 2023*. Education Support. <https://www.educationsupport.org.uk>
- Falk, D., Varni, E., Johna, J. F., & Frisoli, P. S. J. (2019). *Landscape review: Teacher well-being in low resource, crisis, and conflict-affected settings*. Education Equity Research Initiative in partnership with the Inter-agency Network for Education in Emergencies (INEE) and USAID. <https://inee.org/resources/landscape-review-teacher-well-being-low-resource-crisis-and-conflict-affected-settings>
- Fedorov, A., Ilaltdinova, E., & Frolova, S. (2020). Teachers' professional well-being: State and factors. *Universal Journal of Educational Research*, 8(5), 1698–1710. <https://doi.org/10.13189/ujer.2020.080506>
- Fredrickson, B. (2009). *Positivity*. Oneworld Publications.
- Fu, Q., & Zhang, X. (2024). Promoting community resilience through disaster education: Review of community-based interventions with a focus on teacher resilience and well-being. *PLOS ONE*, 19(1), Article e0296393. <https://doi.org/10.1371/journal.pone.0296393>
- García-Álvarez, D., Soler, M. J., Cobo-Rendón, R., & Hernández-Lalinde, J. (2023). Teacher professional development, character education, and well-being: Multicomponent intervention based on positive psychology. *Sustainability*, 15(13), 9852. <https://doi.org/10.3390/su15139852>
- Gokmenoglu, T., Sonmez, E. D., & Yavuz, I. (2021). A cascade teacher training model in disaster education: A case of Turkey. *International Journal of Curriculum and Instructional Studies*, 11(1), 23–42. Retrieved from <http://www.ijocis.com>
- 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>
- Henderson, C. (2023). Bangkit semangat—Raise the spirits: Teachers' vulnerability, resilience, and voice in post-disaster Indonesia. *Journal on Education in Emergencies*, 9(1), 157–182. <https://doi.org/10.33682/kgxe-8w4w>
- Howard, M. C., Follmer, K. B., Smith, M. B., Tucker, R. P., & Van Zandt, E. C. (2021). Work and suicide: An interdisciplinary systematic literature review. *Journal of Organizational Behavior*, 10. <https://doi.org/10.1002/job.2519>
- INEE. (2021). *Teacher wellbeing in emergency settings: Findings from a resource mapping and gap analysis*. Inter-agency Network for Education in Emergencies c/o International Rescue Committee, New York, NY 10168, USA. <https://inee.org/resources/teacher-wellbeing-emergency-settings>
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803–855. <https://doi.org/10.1037/0033-2909.131.6.803>
- Martinsone, B., & Vanaga, A. (2024). Approaching teachers' professional wellbeing from different angles: Teachers' self-efficacy, burnout and resilience through participation in the Online Wellbeing course. In B. Martinsone, M. T. Jensen, C. Wiesner, & K. A. Zechner (Eds.), *Teachers' professional wellbeing. A digital game based social-emotional learning intervention* (pp. 55–80). Verlag Julius Klinkhardt.
- Montebello, D. A. (2022). The role of the senior leadership team in promoting class teachers' wellbeing in primary schools. *Malta Journal of Education*, 3(2), 129–153.

- <https://doi.org/10.62695/PZGJ2440>
- Nwoko, J. I., Anderson, A., Adegboye, A., Malau-Aduli, B., & Malau-Aduli, A. E. O. (2023). Navigating teachers' occupational well-being in the tides of classroom processes and school structures. *Education Sciences*, 14(11), Article 1225. <https://doi.org/10.3390/educsci14111225>
- OECD. (2020). *Teachers' well-being: A framework for data collection and analysis* (OECD Education Working Papers No. 213). OECD Publishing. <https://doi.org/10.1787/c36fc9d3-en>
- OECD. (2024). *Education in the face of natural disasters: Understanding and fostering teacher resilience*. A meeting document prepared for the 6th Global Forum on the Future of Education and Skills 2030, 10-13 October 2024, Japan. OECD. <https://www.oecd.org/about/projects/education-2040/global-forum/6th-global-forum/>
- Ofsted. (2019). *Teacher well-being at work in schools and further education providers* (Report No. 190034). <https://www.gov.uk/government/publications/teacher-well-being-at-work-in-schools-and-further-education-providers>
- Ozturk, M., Wigelsworth, M., & Squires, G. (2024). A conceptual model for teacher wellbeing: Towards a holistic understanding. *Cogent Education*, 11(1), 1–14. <https://doi.org/10.1080/2331186X.2024.XXXXX>
- Parrott, E., Lomeli-Rodriguez, M., Burgess, R., Rahman, A., Direzkia, Y., & Jofe, H. (2024). The role of teachers in fostering resilience after a disaster in Indonesia. *School Mental Health*, 1–19. <https://doi.org/10.1007/s12310-024-09709-y>
- Reis-Jorge, J., Pacheco, P., Ferreira, M., Barqueira, A., & Baltazar, I. (2024). School climate and teachers' professional wellbeing in Portugal: A School Climate Analytical Framework (SCAF). In B. Martinsone, M. T. Jensen, C. Wiesner, & K. A. Zechner (Eds.), *Teachers' professional wellbeing: A digital game-based social-emotional learning intervention* (pp. 81–104). Verlag Julius Klinkhardt.
- Samosa, R., Jezreel, M. P., Blanquisco, M., & Mangansat, N. J. (2023). Professional well-being of public school teachers and their school organizational health: Input for mindfulness-based interventions program. *International Journal of Academic Pedagogical Research*, 7(5), 1–17. <https://ijeais.org/ijapr>
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716. <https://www.wilmarschaufeli.nl/publications/Schaufeli/251>
- Seligman, M. E. P. (2012). *Flourish: A visionary new understanding of happiness and well-being*. Simon & Schuster.
- Silverman, D. (2013). *Doing qualitative research* (4th ed.). SAGE Publications Ltd.
- Sonmeza, E. D., & Gokmenoglu, T. (2023). Understanding the teachers' disaster preparedness beliefs. *International Journal of Disaster Risk Reduction*, 85, Article 103621. <https://www.elsevier.com/locate/ijdr>
- Taylor, L., Zhou, W., Boyle, L., Funk, S., & De Neve, J.-E. (2024). *Wellbeing for schoolteachers* (Report No. 2). International Baccalaureate Organization. <https://wellbeing.hmc.ox.ac.uk>
- UNESCO. (2014). *EFA global monitoring report 2013/2014: Teaching and learning – Achieving quality for all*. UNESCO Publishing. <https://www.unesco.org/gem-report/en/teaching-and-learning-achieving-quality-all>
- Van Horn, J. E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. G. (2004). The structure of occupational well-being: A study among Dutch teachers. *Journal of Occupational and Organizational Psychology*, 77(3), 365–375. <https://doi.org/10.1348/0963179041752718>
- Van Katwyk, P. T., Fox, S., Spector, P. E., & Kelloway, E. K. (2000). Using the Job-Related Affective Well-Being Scale (JAWS) to investigate affective responses to work stressors. *Journal of Occupational Health Psychology*, 5(2), 219–230. <https://doi.org/10.1037/1076-8998.5.2.219>

- Wolf, S., Torrente, C., McCoy, M., Rasheed, D., & Aber, J. L. (2015). Cumulative risk and teacher well-being in the Democratic Republic of Congo. *Comparative Education Review*, 59(4), 717–742. <https://www.journals.uchicago.edu/doi/10.1086/682902>
- Yildirim, K. (2014). Main factors of teachers' professional well-being. *Educational Research and Reviews*, 9(6), 153-163. <http://dx.doi.org/10.5897/ERR2013.1691>
- Zakaria, Z., Don, Y., Faiz, M., & Yaakob, M. (2021). Teachers' well-being from the social psychological perspective. *International Journal of Evaluation and Research in Education (IJERE)*, 10(2), 641–647. <https://ijere.iaescore.com/index.php/IJERE/article/view/21115>
- Zydziumaite, V., & Rutkiene, A. (2024). Professional burnout and its relation to self-efficacy and perceived stress: The case of Lithuanian teachers. In B. Martinsone, M. T. Jensen, C. Wiesner, & K. A. Zechner. (Eds.). *Teachers' professional wellbeing: A digital game-based social-emotional learning intervention* (pp. 127–155). Verlag Julius Klinkhardt.

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