

# TEACHER WELLBEING: FINDINGS FROM A SCOPING LITERATURE REVIEW AND CASE STUDIES IN CAMBODIA, KENYA, AND QATAR





## Teacher Wellbeing:

Findings from a Scoping Literature Review and Case Studies in Cambodia, Kenya, and Qatar



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# Foreword

This extensive Report begins by highlighting that by 2030 the world will need 163 million teachers to fulfil the critical work of preparing our children and young people for the future as literate, active citizens, able to operate in an increasingly demanding world. There is no more important work than that performed by teachers. Yet, across the globe teachers continue to experience stress in their workplace which adversely impacts their retention and effectiveness in the profession, thus impacting quality outcomes for children and young people.

Despite the study of teacher wellbeing being undertaken in the last 40 years or so, it is recent work in the last decade that has highlighted the important connection teachers have to student outcomes. Previous studies have over-emphasized the negative factors that cause ill-being for teachers with few solutions for improving conditions for wellbeing. The increasing emotional nature of teachers' work, the importance of maintaining effective relationships, the influence of school leaders, the over-emphasis on league table results in times of rapid technological development, increased social challenges that manifest themselves in schools, poverty and degradation, all result in teachers feeling stressed, overwhelmed, inadequate, and over-worked.

Significant work has been undertaken on student wellbeing, yet not as much on teachers' wellbeing. This is paradoxical because well teachers, well children go hand-in-hand. Teachers are the most significant in-school factor that influences student achievement, satisfaction and happiness and therefore need to be well themselves in order for children to also be well and to perform at their best. New issues emerging in teacher wellbeing, particularly during and post the COVID-19 pandemic, have identified that teachers are critical members of community and can provide hope and optimism to children, their families and the wider community during times of disruption. Teachers have also shown that they are generally very resilient, adaptable and innovative and can respond quickly and

positively to change. There are many reasons why governments, policy makers, employers, regulatory bodies, families, and society should value and support the work of teachers.

A thorough investigation was undertaken to compile this Report by Rae Jean Proeschold-Bell and team. This involved a literature review of predominantly contemporary works and also fieldwork research involving teachers across three countries: Cambodia, Kenya, and Qatar. Despite the different contexts and research on teacher wellbeing from these countries who are absent from prior research, the teacher wellbeing issues identified through this study demonstrate common elements from research undertaken across the globe, making this Report hugely relevant to all. However, it is of high value that this research undertook an appreciative methodology to highlight the strengths of positive wellbeing for teachers and a number of principles are shared that suggest positive ways to promote teacher wellbeing.

Chapter one sets the scene using predominantly recent literature and highlights the significance of teachers' work. The six research questions for the Teacher Wellbeing study sets the structure for the Report, identifying the need for research to be undertaken in Cambodia, Kenya and Qatar. Brief profiles of teaching in these countries situates the context for the remainder of the Report.

Chapter Two presents the methodology for the Teacher Wellbeing Project and includes an outline of how the systematic literature review was undertaken to ensure a rigorous research project ensued. Case study methodology was outlined following ethical and analytical processes to explain sampling, participant selection, methods and data coding. Chapter three sets out the results for the Teacher Wellbeing Project. Wellbeing factors have been theoretically organized to show sample size and are clearly presented as Figure one in three categories: organizational, interpersonal and individual. These results highlight the significance of wellbeing as an individual and collective responsibility.

These categories also identify teacher wellbeing intervention strategies and policy recommendations that can address the negative consequences of ill-being. The case studies' data from Cambodia, Kenya, and Qatar report on valuable areas of consideration for policymakers, administrators, and educators. The authors propose seven key components that enable teacher wellbeing which are explored in some depth, some of which resonate with current literature. It is proposed that teacher wellbeing is the responsibility of teachers, students, parents, principals and policymakers.

The final chapter pulls together the findings from both the literature review and the case studies. An extensive and impressive list of recommendations is suggested by the authors for all stakeholders - teachers, students, parents, principals and policymakers.

The research team led by Rae Jean Proeschold-Bell has provided the international community with affirmation that teachers matter and that their work is important to future generations of children and young people. This Report is critical and has been released at an important time in history as countries struggle to retain normalcy due to the COVID-19 pandemic, which highlighted the important role of teachers, as lighthouses in community. It's time for change and the learnings from the pandemic are a catalyst for teachers to be acknowledged as frontline workers – their wellbeing must be given priority. The WISE Report Teacher Wellbeing: Findings from a Scoping Literature Review and Case Studies in Cambodia, Kenya, and Qatar makes a global contribution to the overdue issue of teacher wellbeing. Congratulations to the team that worked tirelessly on this work during a difficult period.

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# Executive Summary

The future of every society in the world depends on teachers. Teachers impact children in a myriad of ways, from teaching the lifelong skill of how to learn, to the practical skills to navigate daily life and to modeling healthy, respectful interactions. With population growth, the number of teachers needed worldwide is expected to increase by 69 million between 2019 and 2030, for a total of 163 million teachers. It is essential to prevent burnout and attrition among teachers in order to sustain enough teachers and allow them time to develop expert teaching skills. It is not enough to merely prevent burnout, however. To optimally teach children, we need teachers with strong wellbeing. Wellbeing is associated with doing well for others, striving, coming up with creative solutions to problems, and socially connecting. Our children need this full effort from teachers.

This report covers two large endeavors. The first endeavor was a scoping literature review of 102 journal articles worldwide on teacher wellbeing for the five-year period of 2016 to 2020. We condensed the study findings on what fosters teacher wellbeing, as well as burnout, and separately detailed our recommendations for promoting teacher wellbeing. We also looked for gaps in the literature. The second endeavor was a set of case studies involving original, in-depth interview data collection with 90 teachers and 16 principals in high-performing schools in Cambodia, Kenya, and Qatar. We further interviewed 11 policymakers. We inferred the underlying processes that promote teacher wellbeing from participant responses about their behaviors and the conditions during their times of strongest wellbeing as teachers.

Teachers' wellbeing experiences are similar around the world. The conditions that teachers, principals, and policymakers attributed to teacher wellbeing were aligned across Cambodia, Kenya, and Qatar. The findings of the literature review highlighted overlapping recommendations across the included studies. At the same time, some differences in teacher wellbeing in the Cambodian, Kenyan, and Qatari case studies were found, such as different foci on physical health, social gatherings, and the needs of expatriate teachers.

From the case studies, seven principles underlying teacher wellbeing emerged. Teachers have strong wellbeing when they:

1. experience being valued and respected as leaders
2. are deeply engaged in their work
3. find meaning and purpose in their work
4. feel successful
5. have their personal, non-work needs met
6. manage their emotions and wellbeing
7. experience a positive, supportive work environment

The studies in the literature review affirmed many of these principles, but there were more studies on positive environments, emotion regulation, and feeling successful (teacher self-efficacy). Of the 102 articles, 55 reported findings from interventions to promote teacher wellbeing. Despite the literature's emphasis on organizational-level work conditions, the interventions tested individual practices that teachers could engage in (mindfulness-based stress reduction practices and emotion management) and interventions to strengthen relationships between teachers and students or colleagues. None of the studies reported on policy-level interventions, and there was a notable absence of studies from Latin America, Africa, and the Middle East. No teacher wellbeing studies from the five-year period were found from Cambodia, Kenya, or Qatar.

The good news is that there are many ways to promote teacher wellbeing. Numerous recommendations emerged from the literature review, with more identified in the case studies. It is important to understand that the factors that might prevent burnout can be different from those that might promote wellbeing. In the literature review, for example, burnout was related to teachers feeling marginalized or bullied by other teachers. Principals can prevent marginalization and bullying, but minimizing these problems alone will not necessarily promote wellbeing. Instead, an atmosphere of respect, inclusion, and mutual teacher support is needed to promote wellbeing.

The case studies revealed how deeply embedded teachers are in relationships --with principals, other teachers, students, and parents-- and the degree of emotional work that comes with constant interactions. The interactions between separate actors influence the upstream and downstream interactions; when principals praise teachers, teachers may be more likely to praise students. When students work hard, teachers may be more likely to work hard, as may principals. Yet challenges abound. Throughout the day teachers make countless decisions to maintain their motivation in the face of small and large frustrations. At the same time, the possibility of finding meaning during a day's work is omnipresent. The findings indicated that teachers' need for praise and recognition to maintain their sense of meaning and value in their work was strongly related to their wellbeing. Respect for teachers as leaders with the autonomy accorded to other experts supported wellbeing. Burdensome administrative work, seen as lacking meaning, displaces other work considered meaningful, and may lead to teacher burnout.

Teachers, principals, parents, and national, provincial, and local level education bodies all have important roles in promoting teacher wellbeing. These can be summarized in the following set of recommendations:

**Parents** can contribute to teacher wellbeing by communicating with their children's teachers and recognizing and praising teachers when deserved. They can prepare their children to behave well at school and respect their teachers, which will make teachers' jobs easier.

**Teachers** can improve their own wellbeing through deep and meaningful engagement in their work. For example, they can praise students and encourage them to apply for awards and participate in competitions. Teachers can take advantage of professional development opportunities and volunteer to serve in school-wide or district-wide committees. Interacting with other teachers

is important, including sharing what they know with each other and asking for help when needed. Ideally, teachers take care of themselves on a regular basis and reserve some personal or family time for themselves. A number of skills can help teacher wellbeing, including learning how to manage emotions, practicing mindfulness-based stress reduction skills, and keeping the big picture in mind when experiencing frustration or other negative emotions.

**Principals** play a significant role in promoting teacher wellbeing. They help create a positive work environment and ways for teachers to positively interact with each other. Principals can promote teacher wellbeing by clearly stating the school's goals, fostering a sense of unity, and focusing on promoting good student behavior. They can praise teachers for good work, ask about their wellbeing, and allow them flexibility when reasonable. To minimize teacher burnout, principals can give teachers a large degree of autonomy in the classroom, minimize the amount of administrative and bureaucratic work, and give them school-wide responsibilities.

**Education authorities** provide professional development for teachers, not only in teaching methods but also in emotional regulation strategies and classroom management. To promote teacher wellbeing, education authorities can create programs to publicly recognize teachers and principals. Meaningful feedback to teachers from inspectors can be helpful. Financial stability and resources to meet personal needs, as well as positive work environments, all promote teacher wellbeing. Reducing administrative work assigned to teachers and revising policies on leave-taking and working hours for more flexibility can lower the possibility of burn out.

Finally, everyone can contribute to teacher wellbeing by showing respect for teachers and letting our past teachers know they matter, especially those who made a difference in our lives. Everyone can support and advocate for incentives for teachers. This shows respect for teachers and boosts their motivation.

It is crucial that we, as a society, collectively work to support our 94 million teachers worldwide. Although there is a growing body of research on teacher wellbeing, there are still gaps, with limited studies in Africa, Asia, and the Middle East. This study's two-fold approach was innovative in design and helped surface more focused findings and recommendations for teacher wellbeing in the literature, in addition to more specific insights about promoting teacher wellbeing in three African, Asian, and Middle Eastern contexts. Further studies to address specific gaps in the literature review, as well as more studies examining cultural contexts less well-represented, are needed to gain more insight on how we can fully promote teacher wellbeing globally. The authors strongly encourage stakeholders to help promote and sustain teacher wellbeing by implementing the recommendations that fit their context.



# CHAPTER ONE

# Introduction

As humans, all of us are born with an incredible set of tools from our brains to our fingers, but we are not born knowing how to do anything that will allow us to make a livelihood or even survive. We must learn everything. In the twenty-first century that includes both the Information Age and the Anthropocene Epoch, across the world we have decided that children should start learning in formal academic settings at an early age to acquire the skills that will at minimum amount to the ability to survive, and possibly to have a rewarding career and make vital societal contributions. Teaching is a necessity and a gift for no smaller purpose than to sustain and improve the quality of life of the human race.

In 2019, there were 94 million teachers worldwide (UNESCO UIS, 2020). Despite this staggering number, to achieve the international Sustainable Development Goals and reach universal primary and secondary education in 2030, another 69 million teachers will be required. We must attend to the wellbeing of our teachers, both for the sake of the teachers themselves and for the children they teach.

There is substantial literature on teacher attrition and burnout. Some researchers have more recently turned their attention to teacher wellbeing, a broad term with multiple definitions. McCallum and Price, authors of a literature review of teacher wellbeing conceptualizations, proposed the following wellbeing definition as useful for teachers:

*Wellbeing is diverse and fluid respecting individual, family and community beliefs, values, experiences, culture, opportunities and contexts across time and change. It is something we all aim for, underpinned by positive notions, yet is unique to each of us and provides us with a sense of who we are, which needs to be respected. (McCallum and Price, 2016, p. 17).*

Thus, wellbeing matters to the individual, is something that changes and needs fostering and protecting, and is affected by the community and contexts beyond the individual.

The work of teachers is highly interactive, interpersonal work. Teachers direct, guide, and test students in the interest of having the best

student outcomes. Teachers work not only with students but with principals, other teachers, and parents generally five or more days per week. It is intense work that requires multiple skill sets, from the content taught, to the educational process, and to teaching children social skills. Further, teachers are seen as role models and mentors; students may ask them any question across the day from the very academic to the very personal. With such work, the wellbeing of teachers is always at risk, yet there are always opportunities for improvement.

The current Teacher Wellbeing Project was made possible with funding from the World Innovation Summit for Education (WISE), an initiative of Qatar Foundation for Education Science and Community Development. One of its aims was to expand the knowledge on existing teacher wellbeing in European, North American, and Australian contexts by conducting case studies of teachers in Cambodia, Kenya, and Qatar. Its second aim was to conduct a scoping literature review to identify recommendations for teacher wellbeing and gaps in the literature. Its third aim was to combine the case study and literature review information to identify innovative directions in the literature or in the case studies, and to determine where strong evidence exists for supporting recommendations on fostering teacher wellbeing.

Our research questions were:

1. What national and state policies and local educational structures are consistent with teachers with strong wellbeing?
2. Do longer serving teachers better manage wellbeing?
3. What link, if any, do teachers and education administrators see between teacher wellbeing and student wellbeing and learning outcomes?
4. What teacher characteristics and actions do teachers think motivate students to learn?
5. What processes, both inside and outside of work, do teachers attribute to their wellbeing?
6. What interventions promote teacher wellbeing?

Teacher wellbeing studies are lacking in Africa, Asia, and the Middle-East, and in low-income countries generally. We sought to learn from diverse cultural, geographical, and political contexts. We selected Battambang, Cambodia; Bungoma, Kenya; and Doha, Qatar. These choices were based on strong ties with researchers in each location who were partners throughout this project.

## Contexts of each of the three countries

Case studies are grounded in their contexts. To that end, we briefly describe here the educational contexts of each of the three case studies.

### Cambodia

The education system in Cambodia is overseen by the Ministry of Education, Youth and Sport (MOEYS). It consists of four stages: pre-primary, primary, secondary, and higher education. Students aged three and above can enroll in public pre-primary schools. The primary stage lasts for six years (grades 1-6), the secondary stage lasts three years (grades 7-9), and the high school stage lasts three years (grades 10-12). Upon completion of grade 12, students earn a secondary school diploma and can enroll in higher education institutions. The school year runs from November through July, with a break in April for Khmer New Year. There are 13,300 schools in Cambodia. Throughout the kingdom, 3.19 million students were enrolled in the 2018-19 school year and there were 93,703 teachers. The average school size in Cambodia is 240 students, with just seven teachers on average. The pupil-to-teacher ratio is 34-to-1 and the average class size is 35 students (MOEYS, 2019).

School facilities, infrastructure and resources vary throughout the country. In 2019, 7,088 schools did not have a reliable water supply, and 4,161 schools did not have latrines (MOEYS, 2019). Many schools have some variation of a playground as well as sporting facilities such as soccer fields and volleyball courts. Some schools have libraries, computer labs, and lounges. Many schools have on-campus cafeterias and food vendors. School buildings

range from bamboo structures to concrete and brick structures. Quality of chalk boards, white boards, desks, and other instructional resources ranges from poor to good condition.



Prior to 2018, the pre-primary and primary teacher training program was two years and the training for secondary teacher certification was an additional year. However, MOEYS planned to increase the minimum teacher training by 2020 to 12 years of basic education and four years of teacher training. In 2019, the educational attainment breakdown for teachers in Cambodia was as follows: 1.8 percent primary education, 18.7 percent lower secondary education, 54.2 percent upper secondary education, 24.2 percent higher education degrees and training, 1.5 percent post graduate, and 0.01 percent PhDs. Female teachers comprised 52.1 percent of the teacher workforce in 2019 (MOEYS, 2019). Teachers' salaries have substantially increased in recent years with plans for more increases; from 2014 to 2016, the average minimum wage for teachers jumped from \$80 a month to \$193, with plans to increase to \$230 a month by mid-2017 (Khmer Times, 2016).

Cambodia's spending on education was 2.2 percent of GDP in 2018 (World Bank, 2020). The gross enrollment ratio was 25.1 percent in pre-primary (2019), 106.5 percent in primary (2019), 45.1 percent in secondary (2008), and 14.7 percent in higher education (2019); note that gross enrollment can exceed 100 percent when students who are over- or under-age are enrolled, which may occur when students repeat a grade or enter school early (UNESCO, 2021). The gender parity index (GPI), a measure of relative access to education by girls and boys, indicated relative gender parity but with slightly greater access for boys, as shown by scores less than 1.0; for primary school enrollment, the GPI was 0.974 (2019), 0.855 for secondary school enrollment (2008), and 0.943 for tertiary school enrollment (2019) (World Bank, 2020). Over 5,000 schools in Cambodia obtained funding from international organizations and non-government organizations during the 2018-19 school year, and despite education being free for students, over 1,000 schools sought funds from the local community (MOEYS, 2019).



## Kenya

The national educational system is overseen by the Ministry of Education. This system consists of three levels: eight years of compulsory primary education (beginning at age six), four years of secondary level education, and four years of higher education (university). The government provides free primary education and subsidizes tuition fees for secondary education. Students are required to pay for uniforms. Kenyan schools can be either day or boarding schools. Boarding schools are paid for by parents and students. The school year is split into three separate terms. The three-term system was disrupted by COVID-19 but is expected to return to normal by the year 2023. Term 1 runs from July to October, Term 2 runs from mid-October to December, ending with a holiday break, and Term 3 runs from January to around March or April, with national exams taking place after March (Gachie, 2021). The gross enrollment rates are pre-primary 109 percent (for children aged 3-5 years), primary 100 percent, and secondary 71 percent (Republic of Kenya Ministry of Education, 2019). In 2019, according to the Kenyan Ministry of Education, there were 89,361 schools across Kenya at all levels, consisting of 46,530 early childhood development schools, 32,344 primary schools, and 10,487 secondary schools (Republic of Kenya Ministry of Education, 2019). The average public school size for early childhood development schools is 68 students, for primary schools is 363 students, and for secondary schools is 341 students (Republic of Kenya Ministry of Education, 2019).

There were an estimated 10.9 million students enrolled in primary school in 2019 and 3.26 million enrolled in secondary school (Faria, 2021). The same year there were estimated to be 218,760 teachers in public primary schools and 105,234 in public secondary schools (Republic of Kenya Ministry of Education, 2019). On average, there were 40 and 45 students per teacher at the primary and secondary school levels, respectively. However, disparities in class sizes existed across the country (Republic of Kenya Ministry of Education, 2019). Kenya has achieved gender parity in primary and secondary school levels at 0.97 and 1.00 GPI, respectively (Republic of Kenya Ministry of Education, 2019). Of all teachers in Kenya, 52.1 percent were women (Faria, 2021). Schools mostly serve both girls and boys together.

The Kenyan government allocates funds to schools through the free primary education grants (FPE), free day secondary funds (FSD), constituency development funds (CDF), and the county development funds. Kenyan spending on education was 5.3 percent of its GDP in 2018 (World Bank, 2018). In some areas, however, teachers do not earn enough to meet all their needs and find ways to earn supplemental money from parents, such as tutoring before and after school. This level of tutoring is generally considered necessary for students to achieve better test scores and succeed in higher education.

Schools vary in the resources and extracurricular programs they offer. Some schools have a working farm or garden. Many schools have playgrounds; others have playground equipment or dining halls. Some schools provide teachers with lunch. Potable water is a challenge in some parts of Kenya, and not all schools have indoor plumbing.

The educational background of teachers ranges, although most have completed at least secondary school and had teacher training on a college level. Before the year 2017, the Ministry of Education gave teachers who completed higher education a promotion with a salary increase, but that is no longer true. Now, teachers are promoted based on other factors, mostly their performance and work experience. Teachers can engage in professional development when schools are not in session or by taking a study leave and receiving

half-salary. Teachers are hired by the Teachers Service Commission and deployed to the sub-county directors. These sub-county directors consist of officers or human resource associates, who assign these teachers to schools. They are generally re-assigned to a different school every five years, and sometimes need to relocate long distances to their new schools. This delocalization is a new government initiative to expose teachers to different cultures. There is a need for meaningful change in the education system so that students will not only develop their knowledge base, but also develop skills, attitudes, and values that will help them be capable and moral people. In accordance with this, a new competency-based curriculum is being tried (Kenya Institute of Curriculum Development, 2016).

In addition to public, government-run and financed schools, there are private schools with tuition paid entirely by the students' parents. These schools are administered privately, are less crowded than the public schools, and widely considered to provide better education.

Private school is considered to be better than public school because of the enhanced opportunities and enriched educational experience that pupils obtain through smaller class sizes and more resources. Private schools are able to give students a competitive edge due to their academic foci. Before the introduction of free primary education in Kenya in 2003, public primary schools charged various levels of tuition and fees. In Kenya, a national primary school leaving examination, the Kenya Certificate for Primary Education (KCPE), determines a student's promotion to the various types of secondary schools, and there is some correlation between the amount of tuition and fees and school performance in KCPE (Lloyd, Mensch, and Clark, 2000). After the free primary education policy was implemented in 2003, the formerly high-cost primary schools generally "found ways to maintain the barriers, often through levies of various kinds for additional facilities or activities— swimming pools, school buses, computers, libraries, school visits" (Oketch and Somerset, 2010, p. 8).

Bungoma, Kenya has a total population of 1.67 million of which 48.6 percent are males and 51.4 percent are females as per the 2019 census (Bungoma County, 2021). The area of Bungoma is 2,069 kilometers, with a density of 552 persons per square kilometer. Bungoma is an urban area with schools located in the city and also in the surrounding areas. Bungoma County is one of the 47 counties in Kenya and is divided into nine sub-counties. Bungoma County is a sugar county with one of the country's largest sugar factories, as well as numerous small-holder sugar mills. Maize is also grown for subsistence, alongside pearl millet and sorghum. Dairy farming is widely practiced, as well as the raising of poultry.

## Qatar

Qatar, a peninsula on the northeast coast of the Arabian Gulf, is an Arab, Middle Eastern state that gained independence from British protection in 1971 and became a member of the Gulf Cooperation Council (GCC) upon its establishment in 1981. The land area of Qatar is 11,437 square kilometers and its population is almost 2.63 million as of May 2021 (PSA, 2021) comprised of Qatari citizens and non-Qatari residents. Qatar's economy was historically based on pearl diving, fishing, and camel breeding. Oil was discovered in Qatar in the 1940s and since then, the country has started a new era of its modern history characterized by welfare, prosperity, and social progress (Stasz, et al, 2007).

For the past five decades, Qatar has attracted expatriates from around the world to contribute to the development of the state, support the establishing of government organizations, expand the private sector, and help operate schools, hospitals, and service organizations. Large revenues from oil and gas have enabled Qatar to implement major development projects across all fields. These efforts started after Shaikh Hamad Bin Khalifa Al-Thani (now the Father Emir) became the Emir in 1995, and were more visible a few years later when several new government and semi-government organizations were established to implement

major reforms in critical sectors such as the Supreme Council for Family Affairs in 1998, the Supreme Education Council in 2002, and the Supreme Council of Health in 2005. In addition to progress in social service provision, the government also launched major infrastructure projects across the country to build roads, hospitals, schools, and a new airport. These projects required large numbers of foreign labor, both skilled and unskilled, to meet the increasing labor market needs (Tok, et al, 2016).

Qatar has made significant achievements on its development especially with the 2008 launching of the Qatar National Vision 2030 (QNV) that sets ambitious development goals for the country in four main pillars: economic, social, human, and environmental (MDPS, 2021a). The Ministry of Education and Higher Education is championing the governments' efforts in developing education with a clear strategy for both school and higher education (MOEHE, 2017).

Large revenues from oil and gas have enabled major reform and development efforts in Qatar. These revenues ensure a high standard of living for Qatar's citizens including providing generous benefits in the form of free education, health and social services in addition to attractive employment opportunities in the public sector. Some hypothesize that these generous benefits have reduced students' motivation and led to low achievement levels in schools (Stasz et al., 2007). However, the Ministry of Education and Higher Education (MOEHE) is working towards improving the quality of teaching and learning in schools, increasing attainment levels, enhancing the learning environment, and leveraging technology to improve student learning outcomes.

The public education system in Qatar is comprised of four stages: pre-school, primary, middle (also known as preparatory), and secondary. Students aged four years and above can enroll in public pre-schools which are not part of compulsory education. However, private pre-schools and kindergartens admit younger children to formal education or daycare

programs. Like many other countries in the region, the primary stage lasts for six years, the middle stage is three years, and the secondary stage is three years. Upon completion of 12 years of formal education students graduate with a high school degree that enables them to enroll in higher education institutions or join the workforce. In the 2019-20 school year, there were about 300 public schools and kindergartens serving more than 124,600 Qatari and non-Qatari students. (MOEHE, 2020). Most public schools in Qatar are gender-segregated, however, some primary schools are co-educational.

Qatar's large expatriate population has created many private schools that serve primarily the children of expatriate employees in addition to Qatari citizens who prefer to send their children to private schools and have the funds to do so. As of 2019-20, there were over 330 private schools in Qatar serving around 211,000 students. These schools are licensed to operate in Qatar by the Ministry of Education and Higher Education which approves their curricula and monitors adherence to quality standards. These schools follow various educational curricula and fall under three main categories:

1. Private Arabic schools that serve Arabic speaking expatriates and Qataris, follow the Qatari curriculum, and teach in Arabic.
2. Private community schools that serve specific expatriate communities (eg. Indian, Filipino, Egyptian, Lebanese, etc.), follow the national curricula of those countries, and teach in the native language or in English.
3. Private international schools that serve a variety of students (Qataris and expatriates) and follow international curricula such as the British curriculum, International Baccalaureate, etc. The language of instruction in most of these schools is English.

The education system in Qatar is centralized with the Ministry of Education and Higher Education providing funding, oversight, student registration, teacher recruitment and evaluation of public schools. However, school leaders are authorized to manage the affairs of their schools on a daily basis and control a

small budget for incidental expenses. Inspectors who work at the ministry visit schools regularly to observe classes and assess teacher performance.

Teaching is not regarded as a prestigious profession in Qatar, especially for male citizens who have many other less demanding and better paying job opportunities in the public sector (Gonzalez, et al., 2008). Although a number of female citizens teach in primary and secondary schools, there are not enough to meet the needs of the schools. Therefore, Qatar relies heavily on a large expatriate teaching workforce from other Arab countries. Although this has been the case for almost four decades, it poses several challenges with regards to teacher turnover and the return on investment in teacher training and long-term policy changes.

Qatar's spending on education in 2019 was 2.7 percent of GDP (World Bank, 2020). Qatar's current budget for 2021 included 8.9 percent for education (17.4QR billion or USD \$4.75 billion) (Ministry of Finance, 2021), a sign of the increased investment in the Qatari school system. In 2019, the gross enrolment ratio in primary education was 103 percent (UIS, 2020). In 2017-18 (the last year for which data are available) gender distribution of enrolled students at the primary level was 51 percent boys and 49 percent girls (MOEHE, 2018). Teacher training and development in Qatar is provided primarily by two training centers: one at the MOEHE and one at Qatar University.

Teacher salaries in Qatar follow two separate scales. Qatari teachers are paid between \$5,500 and \$9,500 monthly, whereas non-Qatari teachers are paid around \$4,000 monthly in addition to housing and transportation allowances, and airfare for the expatriate teachers and their family members to visit their home country annually (Council of Ministers, Qatar, 2019). Although these salaries might seem attractive, the cost of living in Qatar is rather high compared to expatriate teachers' home countries. A recent major policy shift occurred in 2020 when the government reduced salaries of locally hired expatriate teachers, typically sponsored by their spouses who already worked in Qatar and received expatriate benefits by their employers, by 40 percent.

## CHAPTER TWO

# Methods For Scoping Literature Review And Case Studies

## 2.1. Scoping literature review methods

Our initial search for journal articles and reports on teacher wellbeing surfaced *Teacher Wellbeing: A Review of the Literature* by McCallum, Price, Graham, and Morrison (2018, 191 international studies covering 2001 to 2017, with a focus on 2008-2017). McCallum and colleagues purposefully selected articles they considered most relevant due to a strong focus on teacher wellbeing and wellness. Rather than fully replicating their work, we conducted a literature review of the five-year period 2016 to 2020. Notably, we used a scoping review methodology, which determines the range of coverage of a body of literature, the kinds of study methodologies used, and the types of evidence available (Munn et al., 2018). Scoping reviews are particularly useful to identify gaps in knowledge and factors related to concepts, in this case, to teacher wellbeing. We used a rigorous, documented process that is replicable.

**Search terms and databases.** We selected search terms aligning with our study objectives and preliminary literature review. For wellbeing, we used the search string “school, teacher or educator, wellbeing or psychological wellbeing, intervention or service or trial or program.” For burnout, we used the search string “school, teacher or educator, burnout or occupational stress, intervention or service or trial or program.” With the advice of a librarian, we searched three databases: Psycinfo, Scopus, and Education Full Text (H.W. Wilson). For the resulting literature sample, our inclusion criteria were English-language, full-text articles published in peer review journals. We excluded systematic literature reviews, narrative reviews, and meta-analysis, as these are already collated, interpreted documents of multiple studies. To build on previous findings of a literature review by MacCallum et al. (2018), we selected a timeframe of articles published from January 1, 2016 to November 21, 2020.

**Screening process.** The initial searches resulted in 1,391 articles. We used Covidence software to remove duplicate studies and screen relevant studies, yielding 934 studies. After reading the study title, abstract, and in some cases the

full article, 102 unique articles that met study inclusion criteria were included in the final sample. We entered descriptors of the studies (eg., geographic location, kind of schools) and key study findings into a table for future analysis.

**Data Coding Procedures.** We used a content analysis approach to describe the articles in the sample and create a “key findings table.” Three researchers read the study descriptors and key findings table and proposed relevant codes. The researchers met, discussed the proposed codes, and agreed upon 12 data-driven codes that organized the content well and reflected the study goals (eg., years of teaching experience impact on wellbeing). Operational definitions of these codes were written for a consistent coding process (see Scoping literature review article codes and definitions in Table A1 in the Appendix).

**Analysis.** Researchers used two methods of content analysis: conceptual and relational content analysis (Wilson, 2016). Conceptual analysis largely emphasizes certain words, concepts, or themes where researchers make inferences based on the patterns that emerge. Relational analysis involves exploring the relationships between the concepts and themes that surface from the analyzed text. Data analysis was also guided by the flexible qualitative analysis approach developed by Deterding and Waters (2018) which suggests using index codes to code broad but related swaths of data and then refining analyses within each index code.

Initially, one team member read all the findings extracted from the sampled studies and assembled the findings which were co-occurring through five studies and wrote a summary for each set of five studies. Afterwards, these summaries were read again to identify themes. This process was repeated by a second researcher to double-check the emerging themes and ensure that no component was left out. A running list of recommendations made by study authors was developed; these recommendations were not always based on their own study’s findings but, for example, included recommendations for future research.

## 2.2. Case study methods

**Setting and sampling.** For the case studies, our goal was to collect data from multiple contexts that we believed were under-represented in the teacher wellbeing literature. We selected the countries of Cambodia, Kenya, and Qatar because they are culturally, ethnically, religiously, politically, and geographically diverse, and to take advantage of long-standing research collaborations with skilled research staff in each location. Data collection from teachers, school principals, and education policymakers was conducted between February and April, 2021 across the three sites.

For the qualitative nature of the study, we determined that an adequate sample size for teacher interviews was approximately 36 per country. Eight interviews per demographic characteristic have been found to yield a similar percentage of themes as more interviews (Namey, Guest, McKenna, and Chen, 2016). We therefore considered 36 interviews as allowing for 4 to 5 demographic variable differences within country (i.e., site), such as teacher's gender, primary vs secondary school, and teaching tenure. We targeted six schools at each of the three sites, with six teachers from each school (for a total of 36 teachers per site), one principal from each school (for a total of six principals per site), as well as two to four local, national education policymakers per site. Because of complications of the COVID-19 pandemic, the final total sample across all three sites was 90 teachers, 16 principals, and 11 policymakers.

**Ethical clearance.** Ethical approval was received by the Duke University Institutional Review Board (IRB) and IRB and regulatory agencies in all participating countries including the National Ethics Committee for Health Research (under Cambodia's Ministry of Health), Kenya Medical Research Institute (KEMRI), and the Qatar Biomedical Research Center (QBRI) of Hamad Bin Khalifa University (HBKU). Written informed consent was obtained from each participating teacher, principal, or policymaker.

**School selection.** Most of the site investigators had strong working relationships with local schools, as most of them operated with organizations that focus on children and teachers. Because of this, our local investigators were asked to recommend a list of schools to reach our target sample of six schools. The inclusion criteria included schools that were high-performing, which was defined differently depending on the cultural context (but often included elements such as having a good reputation, high test scores, and being a desirable place for employment). Of the six high-performing schools ultimately selected, three were to be high-resourced and three lower-resourced. This sample design was intentional so that the research team could consider different findings for financial and material resources of a school. For each school that was recommended, the local investigators first sought the principal or superintendent's consent for the school to participate by sending a recruitment email including a consent form and explanation of the study. If the principal or superintendent did not want their school or teachers to participate in this study, then the next school on the list was approached until the target sample was met. If the principal or superintendent agreed to participate in this study, he or she was asked to notify all the teachers about the study, and was also asked to give a list of all the teachers' names to local investigators. There were no school refusals to participate among the Kenya and Qatar study sites, and one school refusal in Cambodia.

**Teacher and principal selection.** The local investigators at each site selected five to ten teachers from each of the six schools to approach about recruitment, and then screened them for the demographic categories needed until each demographic group was full. The teachers were free to participate or decline; the principal was unaware of who did or did not participate. Three teachers declined due to health problems in Cambodia; one teacher in Kenya could not participate because of a busy schedule; and there were no teacher refusals

in Qatar (however, four teachers ultimately could not participate because at the time of the interview they were either diagnosed with COVID-19 or had to quarantine.) The teachers and principals in Qatar were a mix of Qatari citizens (7) and expatriates (18).

The team recruited teachers with the aim of a balance between men and women; teachers who taught different grades from Grades three to eight (ages eight to 14); and teachers with a mix of years of teaching experience (eg., having one to five years' experience, six to 15 years' experience, and over 15 years' experience). Teachers were selected randomly in Cambodia and Kenya and invited from school lists in Qatar. For each of the six schools at the three sites, one principal was asked to participate.

**Policymaker selection.** In Qatar, the policymakers were selected from both the public and private education systems. In the public education system, since there was no department or unit responsible for teacher wellbeing, senior officials in departments closely related to the work of teachers were approached. This included the Training and Educational Development Center, educational inspection, and research and policy. In the private sector, a senior official responsible for a number of schools operating under the umbrella of a private not-for-profit organization was approached. Ultimately, all four policymakers who are Qatari citizens were interviewed.

In Kenya, policymakers at the Bungoma County and Kenya national level were targeted. Policymakers were considered from the following national and county-level offices:

- Teachers Service Commission (TSC), sub-county director of education;
- TSC deputy director of education;
- assistant director of education in charge of national quality assurance and standards officer;
- Kenya National Union of Teachers representative (KNUT);
- county quality assurance officer;
- county director of education; and
- curriculum support officer.

Six policymakers were approached. Three policymakers were interviewed; the other three were no longer available because of mandated training followed by required oversight of national exams. The difference in the interviewed vs. not-interviewed policymakers was timing.

In Cambodia, top officials of non-governmental organizations (NGO) actively working with schools and teacher training colleges at the national provincial levels were recruited.

In addition, the officer from the provincial Department of Education Youth and Sport was contacted. Ultimately, three NGO leaders in Battambang and two at the national level were interviewed.

**Interviewer training.** Each site had a team of two or three mixed gender interviewers who were trained on study protocol and procedures. Interviewer training occurred during weekly meetings over several weeks via an online platform and consisted of best practices with qualitative interviewing as well as more in-depth review of the interview guide content.

**Procedure.** Surveys with items to collect socio-demographic information and using standardized mental health scales) and interviews were conducted by local interviewers at each of the sites through a mix of methods, including in-person, over the phone, and via an online platform. The delivery method of the interviews was often dependent on the local IRB's restrictions as well as fluctuating COVID-19 safety protocols. Ethical approval was obtained by all IRBs and local regulatory agencies to conduct interviews via all these methods, given the uncertainty of COVID-19's impact on the study.

**Interview guide development.** We sought to capture the richness of the experience that teachers had during periods of strong wellbeing. To do this, we asked them to identify one period where they felt safe, included, and successful as a teacher. This period could be the current time or a prior time. Participants were then asked a series of questions about that successful time and what they thought the conditions were that helped them feel successful. Because reflecting on the past is subject to memory bias and loss, we also asked participants the same series of questions about the current time.

We asked participants about any informal or formal programs or opportunities, relationships with students, teachers, and school leadership, school practices and policies, and other helpful or creative elements that they thought might have contributed to their wellbeing during that successful time. Additionally, we asked participants to reflect on whether they thought teacher wellbeing impacted student wellbeing, and if teaching experience affected their wellbeing. For principals and policymakers, we asked additional questions about any national or state policies they thought helped teacher wellbeing, and if they had any creative ideas or current programs that could help promote improve teacher wellbeing.

**Translations and notes.** Interview guides were translated and transcribed in each country's local language (Khmer in Cambodia and Arabic in Qatar), with the exception of Kenya, where English is an official language. Immediately following each interview, interviewers completed a summary of key interview points. To create data for analysis, in Qatar, the interviewer took detailed notes during the interviews. In Cambodia, all interview audio files were transcribed. In Kenya, due to the length and number of the interviews conducted, a two-pronged approach was used whereby half the audio files were fully transcribed and half were listened to and detailed written notes were taken. Verbatim transcription is not always necessary when appropriate cross-checking between team members occurs (Halcomb and Davidson, 2006).

**Data analysis.** We employed the flexible qualitative analysis approach proposed by Deterding and Waters (2018). Specifically, we loaded interview transcripts or detailed notes into NVivo software version 12.6.1. We created index codes aligning with the interview questions and coded all text. Seven team members read through data by code and wrote themes, which were put in a table and organized by country and levels using a socioecological framework perspective (individual level, interpersonal levels such as teacher-student, teacher-teacher, and teacher-principal, school level, Ministry of Education level, and policy level; McLeroy et al., 1988) (see Table A3 of themes by country and literature review in the Appendix). We considered the themes that were noted for all three contexts to be most important to include in the results. We considered some notable themes that surfaced for only one context for the results; it should be noted that it is possible that those findings would have emerged for the other country contexts, as well, if we had interviewed more teachers.



# CHAPTER THREE

# Results

### 3.1. Scoping literature review results

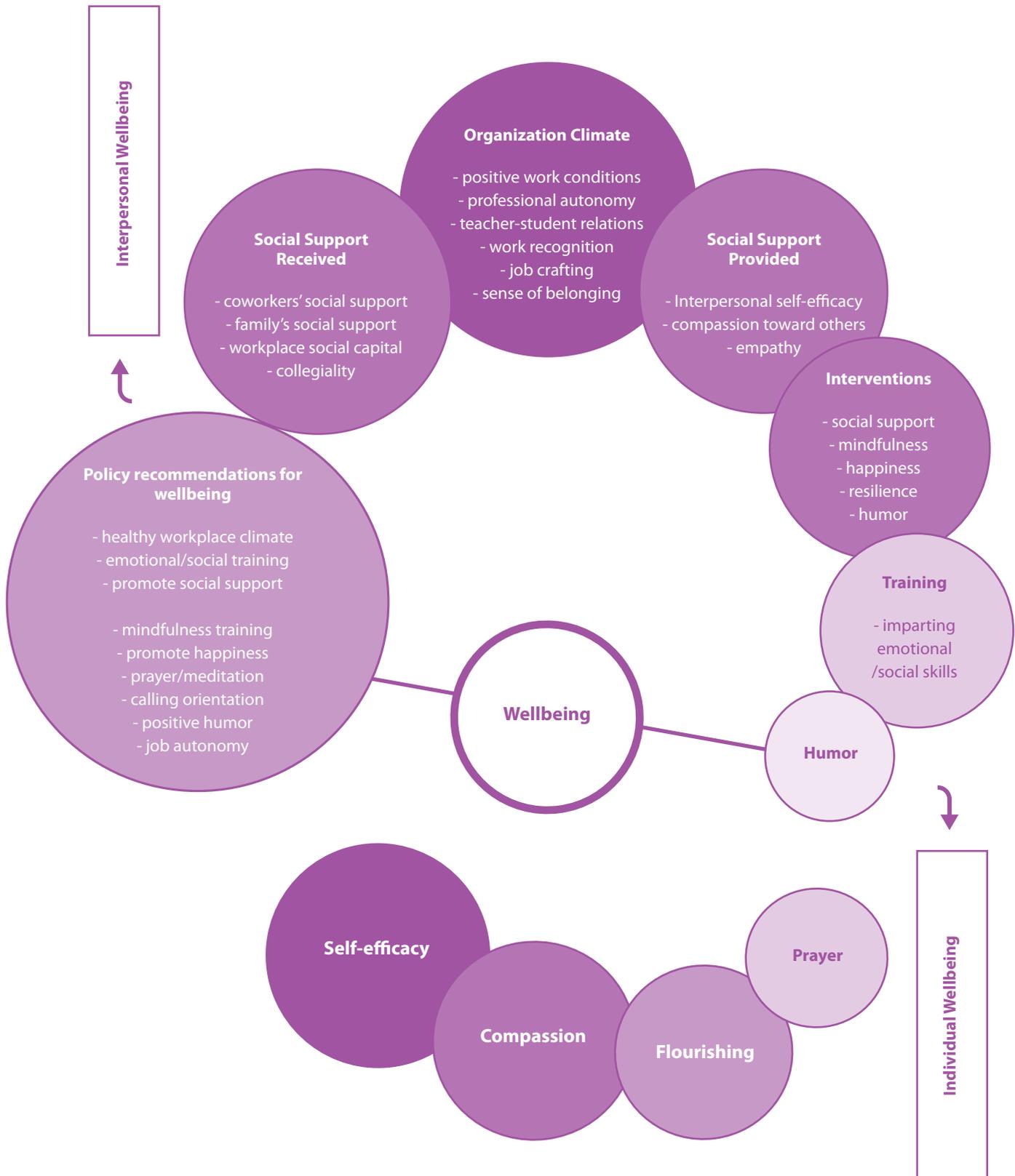
Of the 102 articles on teacher wellbeing that met our study inclusion criteria, and included their location, 41 were conducted in Europe, 29 in North America, 14 in Asia, ten in Africa, six in Australia, and one in South America (see Table A5 in the Appendix for full article references by continent). Keeping in view our basic research questions, we divided our findings into two major sections: 1) factors behind teachers' wellbeing, and 2) factors behind teachers' work-related burnout. The findings of this review are presented below in the form of key thematic areas which emerged during the conceptual and relational content analysis.

#### 3.1.1 Wellbeing

The following factors were reported in the scholarly literature as contributing to teachers' wellbeing: organization climate, social support received, social support provided, interventions (individual-level and interpersonal-level), and work-related engagement (see Figure 1).

**Figure 1**

Wellbeing factors: Circle size indicator of number of relevant articles in the scoping review



**Organization climate.** A plethora of studies established a link between a positive organizational climate and teacher wellbeing. Studies have reported that positive workplace conditions help workers improve their wellbeing (Barbieri et al., 2019; Ouellette et al., 2018; Schoeps et al., 2019). Positive workplace events can help teachers feel as if they matter more (Richards et al., 2018). Teachers working in a positive work climate reported higher satisfaction (Framke et al., 2019). Another important predictor of workers' wellbeing was professional autonomy (Simões and Calheiros, 2019). The results of our thematic analysis revealed the importance of the teacher–student relationship for the wellbeing of teachers (Hoogendijk et al., 2018). A few studies found the ability to engage in job crafting (reorganizing work to maximize meaning and enjoyment) as a factor behind the wellbeing of teachers (Fouché et al., 2017; Peral and Geldenhuys, 2016). Sense of belonging in the workplace was another factor conducive to wellbeing (Benita et al., 2019; Johnsen et al., 2018).

**Social support received.** This review found several studies suggesting the importance of social support for teachers' wellbeing. Social support in the workplace was found to be associated with wellbeing, job satisfaction, and engagement (Johnsen et al., 2018; Hoefsmit and Cleef, 2018; Wu et al., 2020). Teachers with higher social support from coworkers were more likely to present higher positive emotions and feelings of wellbeing (Wu et al., 2020). Teachers' perceived collegiality had positive associations with higher job-related satisfaction and lower levels of stress, and better relations with co-workers were associated with meaningful work (Fouché et al., 2017; Hur et al., 2016). For some teachers, the family emerged as the most significant source of social support (Fiorilli et al., 2019; Wu et al., 2020). Teachers turned to their families when they felt professionally exhausted and needed emotional support (Fiorilli et al., 2019).

Additionally, a few studies found the association between workplace social capital, ie., resources accessed through social networks and social ties among coworkers, and positive mental health outcomes among teachers (Framke et al., 2019). Professional and social–emotional support that teachers received was associated with a greater prevalence of productive thoughts (Camacho et al., 2018). Dialogue on work stress between employees and management showed a small decrease in job demands (Bakhuys Roozeboom et al., 2020).

**Social support provided.** Our search of the literature revealed that self-compassion may offer various mental health benefits including subjective wellbeing (Bradley et al., 2018; Dave et al., 2020). Compassion and subjective happiness have a direct positive total effect on work engagement (De Stasio et al., 2020; Sharp and Jennings, 2016). Studies suggested that compassion and subjective happiness at work can promote feelings which generate positive teachers' attitudes and better work outcomes. Some studies reported that self-compassion was positively correlated with mindfulness-based intervention practices (Beshai et al., 2016). In other studies, teacher-student closeness predicted teachers' sense of self-efficacy, and that self-efficacy was significantly correlated with satisfaction among teachers (Hoogendijk et al., 2018; Simões and Calheiros, 2019). Furthermore, teachers with high self-efficacy were less likely to experience the intensity of and variability in negative emotions (Koenen et al., 2019).

**Work-related engagement.** Leadership roles given to teachers increased their sense of wellbeing (Hollweck, 2019). Being acknowledged, teachers found their work to be an enjoyable and rewarding experience (Barbieri et al., 2019). A “calling” orientation --that is, when one experiences his or her work as highly meaningful or sacred-- and co-worker relationships were associated with meaningful work (Fouché et al., 2017). In addition, “job crafting” was found to be associated with meaningful work (Peral and Geldenhuys, 2016). Job crafting occurs when one reorganizes work activities, collegial relationships, and perceptions of work tasks to optimize personal meaning (Berg et al., 2013).

**Interventions**

Importantly, 55 intervention studies were included in the literature sample covering 37 distinct intervention names (see Table A6 in the Appendix). Most of the interventions demonstrated a positive impact on participants. Two kinds of wellbeing strategies were found: 1) individual wellbeing strategies, and 2) interpersonal wellbeing strategies. No policy intervention studies were found. (See Figure 2.)

**Figure 2**

*Level of intervention from the literature review, 2015 to 2020*



### **Individual-level teacher wellbeing strategies.**

At the individual level of the socioecological framework, mindfulness-based stress reduction interventions and resilience interventions surfaced from the literature. Mindfulness-based interventions effectively reduced levels of stress and compassion fatigue, and improved teachers' wellbeing (Jennings et al., 2017; Jennings et al., 2019; Preston et al., 2019; Sharp Donahoo et al., 2018; Telles et al., 2019). In addition, mindfulness was significantly associated with lower levels of job stress, occupational burnout, and depressive and anxiety symptoms (Beshai et al., 2019; Braun et al., 2019; Harris et al., 2016). Mindfulness was negatively associated with workload stress (Guidetti et al., 2019; Johnson and Naidoo, 2017). Studies also demonstrated that increased practice of mindfulness resulted in lower perceived stress levels (Fabbro et al., 2020; Ruijgrok-Lupton et al., 2018; Taylor et al., 2016). Results of our review indicated a possible connection between mindfulness and the ability to regulate emotions (de Carvalho et al., 2016; Guidetti et al., 2019; Preston et al., 2019; Schussler et al., 2019). Similarly, there was some evidence that mindfulness training of teachers may be effective for the prevention and management of stress and burnout through the cultivation of emotion regulation (DiCarlo et al., 2019). The remaining studies reported that subjective happiness had a positive effect on work engagement (De Stasio et al., 2020). Subjective happiness was significantly correlated with teachers' self-regulated and co-regulation strategies, work engagement, compassion, and working environment. Interventions also increased the resilience of teachers. Teachers' resilience correlated positively with their occupational wellbeing. Of the 55 studies that focused on interventions, only two investigated humor in the context of teachers' wellbeing. Teachers with a higher sense of humor reported significantly lower levels of emotional exhaustion and depersonalization and higher levels of personal accomplishment (Ho, 2015; Ho et al., 2015). A few studies suggested that imparting emotional and social skills to students and teachers fosters teachers' wellbeing (Ravalier and Walsh, 2018; Simões and Calheiros, 2019; Koenen et al., 2019).

### **Interpersonal-level teacher wellbeing strategies.**

At the interpersonal level of the socioecological framework, relationships between teachers and colleagues emerged as important in intervention studies (Framke et al., 2019; Rodríguez et al., 2019; Şahin et al., 2019; Wu et al., 2020). Several studies suggested that good behavior with peer teachers promoted teachers' learning and a better work environment (Hollweck, 2019). Teachers' professional development was found to help them deal with job-related distress (Barbieri et al., 2019; Jennings et al., 2019; Sandilos et al., 2018). In addition, eight studies reported on the importance of teaching self-efficacy in fostering wellbeing for teachers (Capone and Petrillo, 2018; Cook et al., 2018; Fernandes et al., 2019; Hoogendijk et al., 2018; Jeon et al., 2018; Koenen et al., 2019; Karjalainen et al., 2020; Ouellette et al., 2018). Two studies reported on the effect of flourishing, defined as employees' emotional, psychological and social wellbeing, on wellbeing among teachers. Flourishing teachers had low intentions to leave their job as compared to non-flourishing teachers (Redelinguys et al., 2020). In one study, the flourishing group reported higher levels of job satisfaction and efficacy beliefs and a lower prevalence of depression and burnout (Capone and Petrillo, 2018). Prayer surfaced in one study as a possible intervention (Chirico et al., 2020); a study of fifty teachers in a Catholic school found that those teachers who used prayer as an intervention during their workday had higher job satisfaction. Prayer and mindfulness may effectively reduce levels of stress and compassion fatigue (Sharp Donahoo et al., 2018). The study's findings suggested that prayer could be as effective as meditation and other mind-body techniques, to decrease the negative effects of stress-strain and burnout at workplace among teachers.

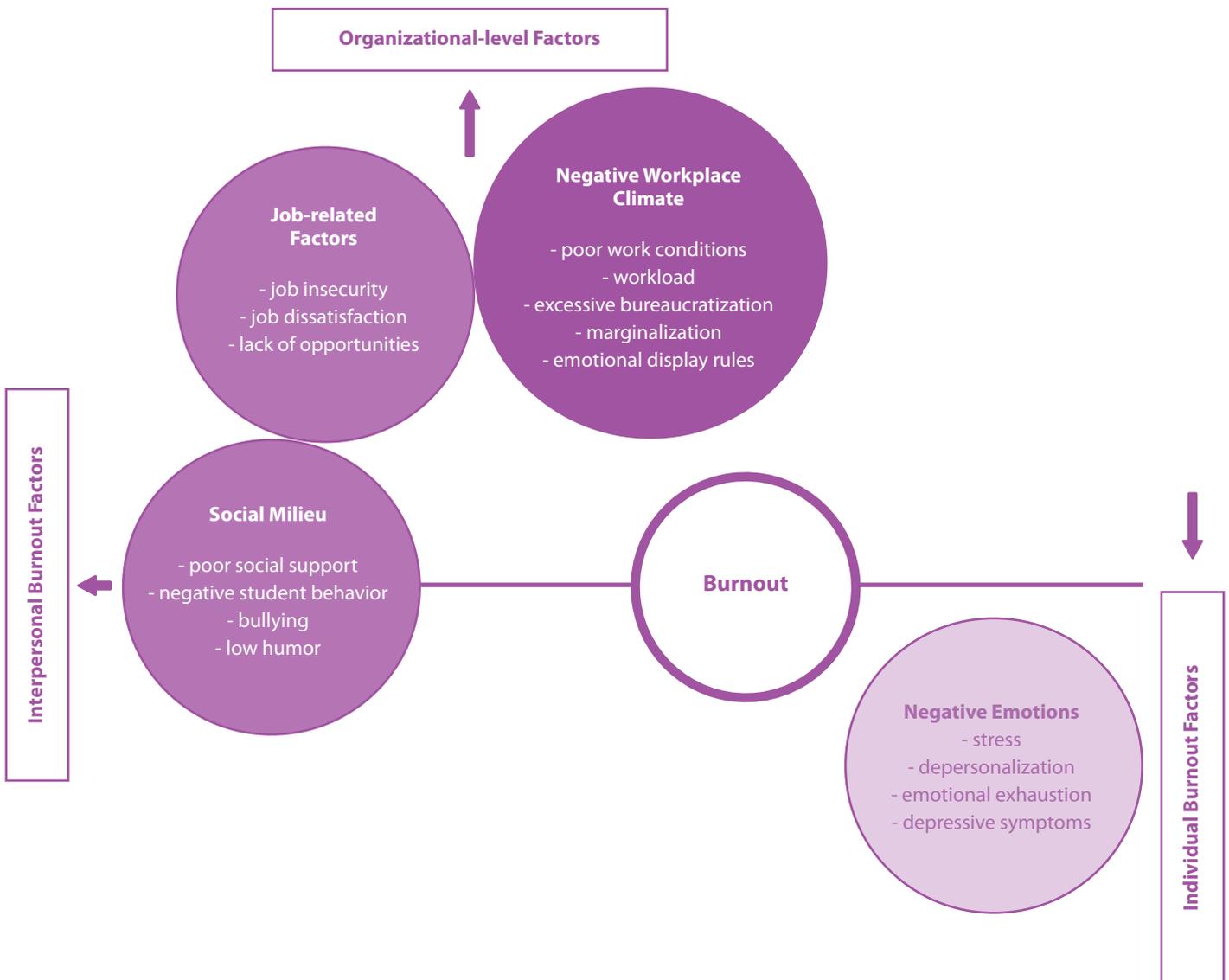
### 3.1.2. Burnout

Overall, the literature identified four factors predicting teacher burnout in the content analysis: negative workplace climate, school milieu, job-related factors, and negative emotions (see Figure 3). Sleep also emerged to a less extent. Of note, a popular conceptualization of burnout is the three-component model

by Maslach (Maslach, Schaufeli, and Leiter, 2001). This model suggests that three factors comprise burnout: 1) emotional exhaustion; 2) depersonalization, which is cynicism or emotional distancing of oneself from the people one serves; and 3) lack of feelings of personal accomplishment at work. A number of the studies reviewed referred to these factors.

**Figure 3**

*Burnout factors: Circle size indicative of number of relevant articles in the scoping review*



**Negative workplace climate.** Our sampled studies surfaced diverse factors behind burnout, including poor work conditions, workload, excessive bureaucracy, marginalization and display rules, which are unspoken rules to hide one's emotions. Studies about job burnout generally included unfavorable workplace conditions contributing to job burnout. Stressful environments and poor school conditions can lead to teacher burnout and stress. Studies have demonstrated that workload demands cause stress among teachers (Ravalier and Walsh 2018; Guidetti et al., 2009; Harmsen et al., 2019; Hoefsmit and Cleef, 2018). Workload reduction decreases perceived high psychological task demands (Harmsen et al., 2019). Teachers feel greater pressure at work because they are continually required to adopt new learning methods (Alvarado and Bretones, 2018). Some teachers found ways to successfully manage wellness in the face of a high workload by getting enough sleep, having a hobby, being involved in activities unrelated to school work, not feeling guilty about taking time for themselves, and pursuing counseling (Kutsyuruba et al., 2019). Excessive bureaucracy and lack of autonomy contributed to emotional exhaustion and burnout (Alvarado and Bretones, 2018; Hoefsmit and Cleef, 2018). Studies also reported on the effect of marginalization on teacher burnout. Perceived marginalization and, conversely, feeling that one matters to the principal, other teachers, and staff, affected teachers (Richards et al., 2018). Positive workplace events helped teachers feel they matter (Richards et al., 2018). One study reported on how conflict with the students' families triggered feelings of desperation, powerlessness, and fear of verbal or physical aggression among teachers (Alvarado and Bretones, 2018). Two studies mentioned that display rules, meaning one cannot openly display certain emotions, facial expressions, and gestures at work, increased emotional labor among teachers and negatively affected their wellbeing (Horner et al., 2020; Huang et al., 2019).

**School milieu.** There is conclusive evidence that the school's social environment strongly influences teachers' wellbeing. The school milieu includes the level of social support from coworkers, institutional support, student behavior, and the level of informal communication among teachers. Studies

suggest that poor social support can compromise the social and emotional wellbeing of teachers (Fiorilli et al., 2019). Poor co-worker relationships in the school workplace represented an important source of workplace stress and led to burnout (Fouché et al., 2017). Perceived lack of community and institutional support deteriorated teacher wellbeing (Acheson et al., 2016). Coworkers' informal relationships were found to be important for several reasons, including that casual interaction in the workplace helped teachers gain social support (Kutsyuruba et al., 2019; Meredith et al., 2020). Empirical evidence suggested that low humor among teachers was related to more depersonalization and cynicism, which is one component of burnout (Ho, 2015). Findings of a few studies highlighted the importance of teacher-student relationships for the wellbeing of teachers. The problematic behavior of students in the classroom can adversely affect teachers' wellbeing and performance (Horner et al., 2019). Greater student misbehavior was linked to lower teacher self-efficacy (Simões and Calheiros, 2019). Consequently, greater reported attunement between teachers and students was connected with a strong decrease in emotional exhaustion, another burnout component, among teachers (Hoogendijk et al., 2018).

**Job-related factors.** A number of studies highlighted job-related factors. One study reported that job insecurity caused stress among teachers (Hoefsmit and Cleef, 2018). Another study demonstrated that dissatisfaction with work was strongly associated with both poor wellbeing and depressive symptoms (Kidger et al., 2016). Lack of opportunities for professional development was also a significant factor behind burnout (Helms-Lorenz and Maulana, 2016). Teachers' feelings of stress related to professional investment included frustrations with lack of control over job-related decisions and limited access to professional growth opportunities (Sandilos et al., 2018; Simões and Calheiros, 2019).

**Negative emotions.** One study acknowledged that workplace stress can lead to burnout (Fiorilli et al., 2019). Other studies noted above also focused on the role of negative emotions, such as dissatisfaction, frustration, powerlessness, and lack of control, and burnout (Alvarado and Bretones, 2018; Horner et al., 2020; Kidger et al., 2016; Koenen et al., 2019; Sandilos et al., 2018).

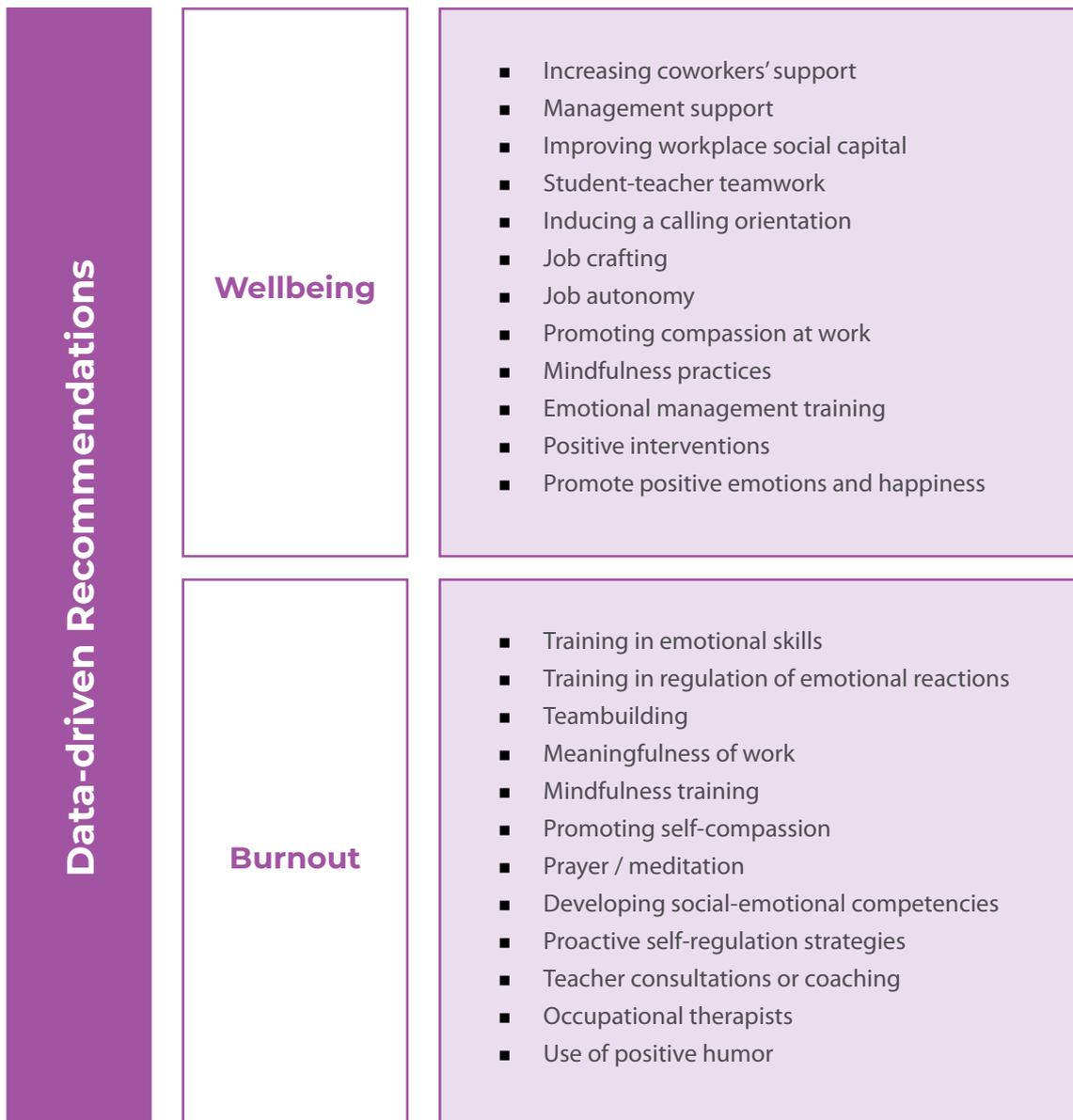
**Sleep.** Four studies of note mentioned sleep problems as part of burnout (Dave et al., 2020; Hwang et al., 2019; Framke et al., 2019; Johnsen et al., 2018), while two others discussed improvements in sleep after interventions (Dave et al., 2020; Hwang et al., 2019). No study discussed sleep difficulties as a causal factor behind burnout.

### 3.1.3 Policy recommendations for wellbeing

Twenty-nine studies included practical recommendations to induce teachers' wellbeing. The strategies recommended range from individual-level interventions to policy changes in the school work climate (see Figure 4).

**Figure 4**

*Recommendations from the scoping literature review*



## Researcher Recommendations

### Things to Do

- Interventions for motivation, resilience, compassion and happiness
- Promote self-efficacy among teachers
- Arrange positive workplace events
- Student-teachers' social-emotional learning
- Mindfulness practices
- Social and emotional support
- Management support
- Professional autonomy
- Promote student-teacher interaction
- Teambuilding among coworkers
- Job crafting and work engagement
- Prayer / meditation
- Promote flourishing
- Affiliative and self-enhancing humor
- Positive work climate
- Meaningful work

### Things to Avoid

- Perceived marginalization of teachers
- Conflict with the students and/or their families
- Powerlessness
- Excessive bureaucratization
- Job insecurity
- Emotional demands relating to students
- Poor working conditions
- Workplace bullying
- Student misbehavior
- Low calling orientation
- Excessive emotional display rules
- Lack of learning opportunities
- Excessive workload

Studies demonstrated that teachers who get training on rational, emotional, and social skills may be less likely to experience burnout (Onuigbo et al., 2018; Ugwoke et al., 2018). One recommendation is for these skills to be provided to teachers to achieve better perceptions, understanding, and regulation of their own emotional reactions and those of others (Schoeps et al., 2019). Researchers stressed developing environments that promote satisfaction, which in turn, leads to stronger feelings of personal accomplishment among teachers (Maior et al., 2020). Additionally, interventions should focus on teacher self-efficacy and collective efficacy, as well as perceptions of job satisfaction (Capone and Petrillo, 2018). Researchers indicated there is urgent need for school health counselors, behavioral specialists, and occupational therapists to help the students; doing so would help prevent job distress and burnout among teachers (Ugwoke et al., 2018). Studies recommended professional development and training for teachers to sustain their happiness and promote positive attitudes and better work outcomes (Camacho et al., 2018; Şahin et al., 2019). Happy teachers feel more involved in their work and show more supportive behaviors among their coworkers and school community (Şahin et al., 2019). The subjective happiness of teachers was found to generate attitudes that help in better decision-making, problem-solving, and planning educational tasks (De Stasio et al., 2020).

Numerous studies proposed mindfulness-based strategies as a cost-effective way to promote both teachers' and students' social-emotional wellbeing, compassion, and empathy (Dave et al., 2020; De Stasio et al., 2020; Luthar and Mendes, 2020; Matsuba and Williams, 2020; Sharp and Jennings, 2016; Zinsser et al., 2016). One suggestion was for school psychologists to get training on mindfulness and yoga and for them to train teachers to improve their wellbeing and reduce stress (Beshai et al., 2016; Huang et al., 2019; Matsuba and Williams, 2020; Preston et al., 2019).

A couple of studies found that prayer, like meditation and other mind-body techniques, could be an effective way to address teaching-related stress and strain (Chirico et al., 2020). Schools have been advised to design their education programs based on the use of positive humor to help teachers enhance their wellbeing and cope with burnout and job distress (Ho et al., 2015). School management can develop mechanisms, such as during professional development training, for employing humor as a coping skill (Ho, 2015).

Several studies advocated a multilevel approach to promote social support by management and coworkers for decreasing teacher stress and increasing job satisfaction (Fiorilli et al., 2019; Wu et al., 2020). Schools may arrange seminars and workshops on theoretical and practical aspects of emotional and informational support for teachers. Social support provided to teachers could strengthen positive relations in the workplace (Şahin et al., 2019). Workplace social capital, ie., reliable social networks among colleagues that allow one to access resources, has also been approved as an important feature for improving teachers' wellbeing (Framke et al., 2019). Researchers recommended improving the workplace environment in favor of teachers. A healthy school climate can be achieved through modifying the teachers' job responsibilities and raising levels of teacher efficacy (Beausaert et al., 2016; Brouskeli et al., 2018; Maior et al., 2020). Teachers should be provided more support from management to improve collegiality (Hur et al., 2016). Other important factors influencing teacher wellbeing include availability of resources and policies of schools (Barbieri et al., 2019). Increasing programs based in positive psychology can produce happy school environments (Şahin et al., 2019).

Improving the workplace includes refining the nature of work that teachers do. Studies proposed offering teachers options for job crafting, collegiality, and autonomy to teaching in order to promote perceptions of meaningful work (Fouché et al., 2017). Job autonomy and flexibility in teaching may facilitate teachers' wellbeing (Huang et al., 2019).

Professional training comprised of self-regulation strategies among teachers can reduce burnout (Tikkanen et al., 2017). Schools should design policies to increase support and resources for teachers to equip them with knowledge and skills to effectively resolve wellbeing issues (Camacho et al., 2018).

Higher workload was associated with work-related stress and job burnout, and therefore school administrators should be cautious in increasing teacher workloads (Ravalier and Walsh, 2018). We failed to find any study reporting reductions in workload or administrative burdens.

As shown in Table 1, often factors in the positive direction are related to teacher wellbeing (eg., professional autonomy) and in the negative direction are related to burnout (eg., lack of professional autonomy). However, caution should be used before assuming this is always the case. First, it is possible that studies have not been done in both directions of a factor. For example, job insecurity was found to be related to burnout, but that does not necessarily mean that job security is related to wellbeing.

While intuitively job security might relate to wellbeing, studies in social psychology have found that once people grow accustomed to a positive life aspect, they come to expect it and it may not continue to convey benefits; this is called hedonic adaptation (Lyubomirsky, 2010). In our literature review, we found studies about job insecurity but not job security. Interestingly, in our case study findings below, teachers in the low-income countries named job security as being important to their wellbeing. Second, the factor's degree of strength with wellbeing might not be the same for burnout. For instance, in our literature review studies indicated strong associations between negative student behavior and teacher burnout, but there may be a much weaker association between positive student behavior and teacher wellbeing. Third, it is possible that a factor does not relate to both wellbeing and, in its inverse, burnout. For example, removing excessive work demands may prevent burnout, but it may not on its own create wellbeing. In other occupational studies of ours (see for example, Proeschold-Bell et al., 2015), the presence of a positive factor has often been required for wellbeing, and not just the absence of a negative factor.

**Table 1***Scoping literature review findings: associations with wellbeing vs burnout*

Wellbeing	Burnout
Social support from coworkers for work-related tasks and personal relationships	Lack of support from coworkers for work-related tasks and lack of personal relationships with coworkers
Sense of belonging; feeling one matters to the principal and coworkers	Marginalization and bullying
Positive work climate	Stressful environments and poor school conditions
Professional autonomy	Lack of professional autonomy
Subjective happiness and positive emotions	Stress, depressive symptoms, emotional exhaustion, frustration
A calling orientation (finding work meaningful)	Excessive bureaucratization
Humor	Low humor
Professional development opportunities	Lack of opportunities
Increased self-efficacy as a teacher	Decreased self-efficacy as a teacher (can be related to poor student behavior)
Support from family members	
Resources accessed through social ties with coworkers	
Work-related engagement (eg., leadership roles)	
Mindfulness-based stress reduction practices	
Prayer	
Teacher emotional regulation	
Teaching emotional and social skills to students	
Job crafting	
	High workload, excessive demands
	Negative student behavior
	Continually being required to adopt new learning methods
	Emotional display rules / can't show emotions
	Job insecurity
	Conflict with students' families
	Lack of sleep / poor sleep quality

### 3.2. Case study results

In total, we interviewed 90 teachers (21 in Qatar including five Qatari teachers; 33 in Cambodia; 36 in Kenya). Fifty percent identified as men. The mean age for the teachers was 42 years old, with an average of 17 years of teaching experience. For information on the demographic characteristics of the teachers, as well as their positive mental health, burnout, and financial stress scores, see Table A2 in the Appendix.

To guide the case study, we posed several a priori research questions. We organized the case study results below by research questions. Several questions had fairly succinct responses, and there was a substantially longer response pertaining to the processes that teachers attributed to their wellbeing.

#### 1. What national and state policies, and local educational structures, are consistent with teachers with strong wellbeing?

Policymakers reported having designed and implemented numerous policies in an attempt to improve teacher wellbeing. For example, they indicated that providing advanced school equipment and technology, as well as providing technology training, improved teacher wellbeing. Some policymakers suggested offering teachers better leave policies and providing recreational activities to encourage teacher commitment and motivation. They also suggested creating spaces and opportunities for teachers to gather, voice concerns, and discuss issues pertaining to teacher welfare through teacher unions, boards, and organizations. Some policymakers called for more flexibility in codes of conduct to create a less punitive environment for teachers. Compared to principals and teachers, policymakers discussed monitoring and evaluation processes to a greater degree.

As heavy workloads negatively impact teacher wellbeing, some policymakers recommended creating an internship system to train new teachers and provide interns to assist teachers with their workload. Several policy ideas also involved financially supporting teachers, for example by increasing their salary or offering loans to teachers for personal emergencies. Additionally, policymakers reported that

sometimes ideas they favored faced poor implementation. For example, although teacher trainings were observed to improve teacher wellbeing, several participants noted that they often come at the expense of teaching hours, requiring teachers to leave during their valuable classroom time for trainings. As a result, policymakers suggested providing leave time for teachers to attend professional development training without having to sacrifice their teaching duties. As a Cambodian participant commented, "I just see the implementation doesn't reach all elements in the policy. All are good, but if we don't implement [policy ideas] well, it affects the teacher's wellbeing, too."

Most principals mentioned that they prioritize flexibility with teachers in the case of any emergencies in acknowledgement of the heavy load teachers often bear. They prioritized financially supporting teachers based on the situation, whether with salary, bonuses, loans, paid leave, or personal emergency funds. Some principals reported that some schools utilized an entrepreneurial school fund, a central fund that all teachers contribute to from which teachers could borrow money to be repaid within 12 months.

Additionally, principals discussed the importance of cultivating a close-knit environment through bonding activities for teachers such as holiday celebrations, shared meals, and other recreational activities. Many principals also mentioned the power of food in bringing teachers together and the importance of recognizing teachers for a job well done. Lastly, the majority of principals emphasized the importance of prioritizing constant improvement through continued learning, up-to-date learning materials, and maintaining a positive physical environment for teachers.

#### 2. Do longer serving teachers better manage wellbeing?

Teachers in Qatar, Kenya, and Cambodia were split in their beliefs about the relationship between years of experience and teacher wellbeing. In Qatar, a majority of teachers thought that length of experience affects teacher wellbeing in a positive way; more effective time management lowers stress and supports wellbeing. However, a few teachers thought that experience does not affect teacher wellbeing in any way. In Kenya, many

participants expressed that experience fosters wellbeing. Kenyan participants noted improved student management, more wisdom, greater capability of executing their job, and increased confidence with more years of experience. In Cambodia, many participants did not feel that there was a connection between years of experience and wellbeing. But various Cambodian participants mentioned that more years of experience negatively impacted teachers' physical health. Participants referenced inhalation of chalk dust and marker fumes as well as speaking or shouting in a raised voice as causes for headaches, sore throats, and lung damage. All told, our study design did not allow us to definitively answer this question and more studies with teachers of different ages using longitudinal designs are needed.

### **3. What link, if any, do teachers and education administrators see between teacher wellbeing and student wellbeing and learning outcomes?**

In both Cambodia and Kenya, teachers said that teacher absenteeism caused by poor wellbeing negatively impacted student learning outcomes because students miss content and fall behind. Kenyan teachers mentioned that poor wellbeing among teachers negatively impacted their ability to properly deliver content and maintain healthy, positive relationships with students. Numerous participants mentioned that when their mood or wellbeing is poor, students notice and become distracted during class or show concern for their teachers. In Qatar, a majority of teachers thought that their wellbeing does affect their students' wellbeing and their academic performance. Teachers expressed that when they are happy, their students are happy, but when they are unhappy this may cause students to feel disconnected or distressed, thus affecting their academic performance.

In both Cambodia and Qatar, a few teachers did not feel that their wellbeing affects their students. These participants believed that teachers are expected to separate their personal lives from their professional lives, and that

therefore when they are at work, regardless of the state of their wellbeing, their mood and interactions with students should not change in a way that affects students.

### **4. What teacher characteristics and actions do teachers think motivate students to learn?**

There was significant overlap in what teacher characteristics and behaviors the participants from Qatar, Cambodia, and Kenya believed to be motivational to students. Participants from all three countries expressed that verbal praise and recognition, as well as prizes and rewards for exceptional effort or outcomes, motivated students to work hard. Kenyan and Cambodian teachers also expressed that explaining the benefits of education can motivate students. Teachers from both Cambodia and Kenya mentioned that teachers who are close with their students and act as positive role models are more capable of motivating students. Participants from all three countries stated that passionate teachers, as well as teachers who take creative and innovative approaches to teaching content, can successfully motivate students.

### **5. What processes, both inside and outside of work, do teachers attribute to their wellbeing?**

Our interviews with teachers, principals, and policymakers focused on the processes and conditions that promote teacher wellbeing. To surface wellbeing experiences within individual teachers, we asked teachers to choose a time to reflect on when they felt their wellbeing was particularly strong; most participants chose a time in the past; some chose the present day. For those who chose a past time, we repeated the questions for the present day, because the present-day would be clearest in memory. We identified themes separately from the teacher interviews first, followed by the principal and policymaker interviews.

Many of the findings were remarkably similar across the three contexts of Cambodia, Kenya, and Qatar. We found a few differences that may be worthy of future follow-up, and we report them below. First, we focus on the findings that converged across the three contexts. We organized the findings in two ways: 1) identifying seven domains --or key components-- that were seen as promoting teacher wellbeing and 2) listing practices and conditions related to teacher wellbeing, depicted with an adaptation of the socioecological framework, which is a model of the interplay of the policy, societal, community, and interpersonal factors that affect individuals.

**Key components of teacher wellbeing.** The wellbeing conditions that emerged from the interview data from teachers, principals, and policymakers could be sorted into the following components:

1. teachers are valued and respected leaders
2. teachers are deeply engaged in their work
3. teachers get meaning and purpose from their work
4. teachers feel successful
5. teachers' personal needs are met
6. teachers manage their emotions and wellbeing
7. teachers experience a positive, supportive work environment

Participants did not necessarily state, "During my time of greatest wellbeing, I felt valued." Rather, they named some of the processes and conditions present during their time of wellbeing. As researchers who collected the data consistently, and as qualitative analysts who reviewed the data systematically, we inferred components, such as the larger state of feeling valued. Even if some of these key components make common sense, the value of research is that they are grounded in a systematic and replicable process and are less likely to be the result of a few people's good ideas and thus either be biased or untrue.

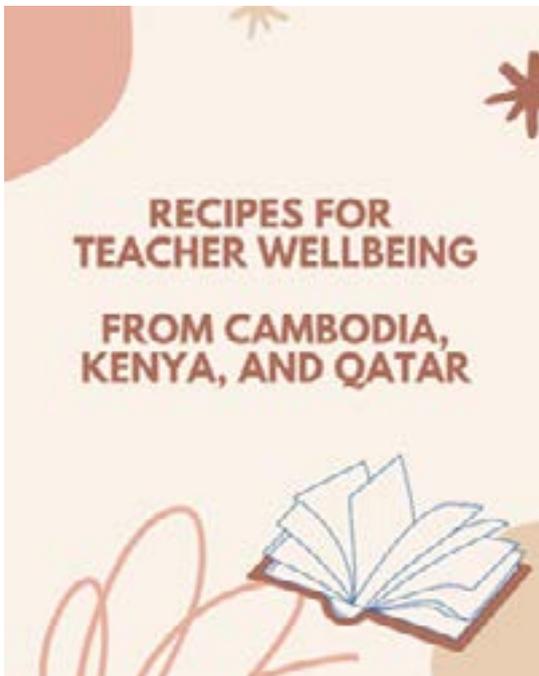
Participants indicated a wide variety of ways to achieve each of the seven key components. In the figures, we present these ways as "recipes" that are likely to result in a component (eg., teachers feeling successful is one of the seven teacher wellbeing components that emerged from the data, and principals' recognizing teachers is one "recipe ingredient" likely to make them feel successful). We encourage readers to consider other ways not included here that may achieve the component. For example, while it is not listed, teachers may feel successful if parents tell them stories about how their children have grown and improved. By thinking beyond the ingredients listed on each recipe, readers can tailor these findings to their own positions as policymakers, principals, teachers, and education leaders, and to their own cultural contexts.

Most of the practices helpful to teacher wellbeing written in the figures are self-explanatory. We include here a couple additional points:

**Teachers as valued leaders.** Conceptually, it is important to recognize that teachers are embedded in numerous interpersonal relationships at multiple levels: district staff, principals, parents, and students. Thus, teachers affect many people and are affected by the decisions and support, or lack thereof, of many people. Teachers have a great number of responsibilities, skills, and knowledge. They are experts and want to be respected and consulted.

**Meaning and purpose.** Teachers are motivated by the success of their students and take pride in a range of aspects of student success, including test scores, recognition, raising good citizens, and future career and personal success. It came across in the data that the meaning that teachers see in their work keeps them engaged even when conditions are less than ideal.

**Are all seven needed for wellbeing?** The interview participants did not necessarily say that all seven components were present at their time of greatest wellbeing. Thus, while it would be desirable to have all seven components in place, we do not know that that is required for teacher wellbeing. We assume that more components in place would result in greater or more stable teacher wellbeing.



**Figure 5**

*Wellbeing component: Teachers are valued and respected leaders*



**TEACHERS ARE VALUED AND RESPECTED LEADERS**

- Praise from principals
- Praise from parents
- Parents ask teachers about best ways to educate children
- Students show respect and appreciation for teachers
- Students work hard and pay attention
- Community members respect teachers
- Non-governmental organizations support teachers

*Illustration: A female teacher in a white lab coat holding a red folder and pointing upwards.*

**Figure 6**

*Wellbeing component: Teachers are deeply engaged in their work*



**TEACHERS ARE DEEPLY ENGAGED IN THEIR WORK**

- Professional development
- Classroom autonomy, included in decision making
- Involved in substantive school decisions
- Opportunities for new learning challenges
- Given school-wide and district-wide responsibilities

*Illustration: A female teacher in a blue shirt standing next to a chalkboard with the words 'cat', 'hat', and 'bat' written on it.*

**Figure 7**

*Wellbeing component: Teachers get meaning and purpose from their work*



**Figure 8**

*Wellbeing component: Teachers feel successful*



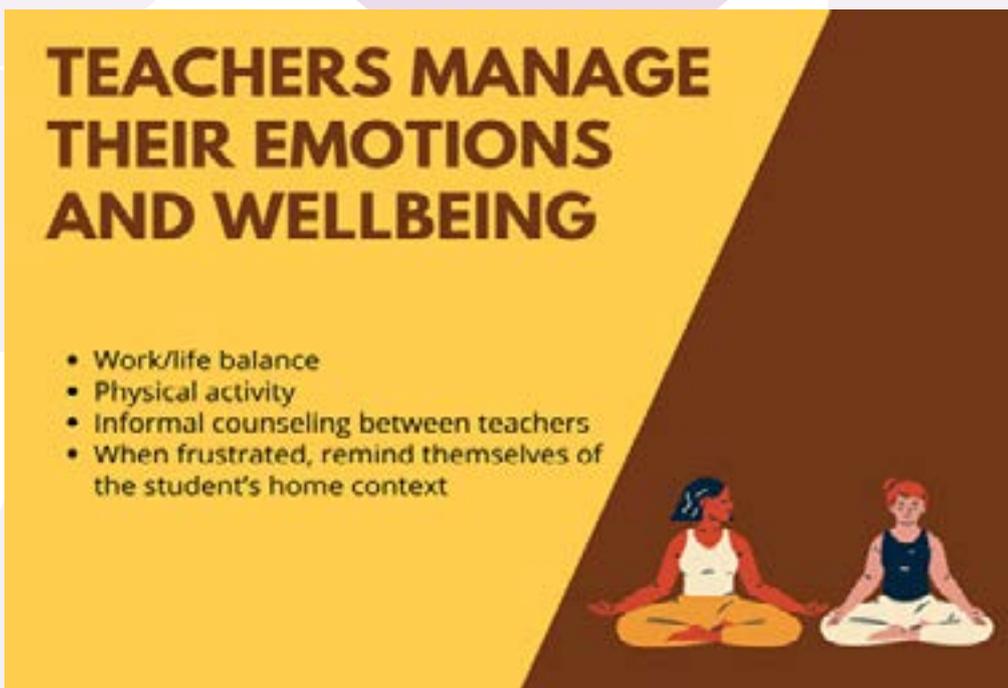
**Figure 9**

*Wellbeing component: Teachers' personal needs are met*



**Figure 10**

*Wellbeing component: Teachers manage their emotions and wellbeing*



**Figure 11**

*Wellbeing component: Teachers experience a positive, supportive work environment*

## TEACHERS EXPERIENCE A POSITIVE, SUPPORTIVE WORK ENVIRONMENT

- Principals support teachers when there is a problem with parents
- Teaching resources are available; needed facilities exist
- Everyone in the school is united toward a common goal
- Teachers eat together
- Teachers socialize together
- The amount of work is not overloading
- There is not too much administrative work
- Up-to-date learning materials are present
- Student behavior is acceptable
- Students feel warmly toward each other
- Attractive school environment
- Fun schoolwide events are held



**Teacher practices and conditions by socioecological framework level.** We find the socioecological framework (McLeroy et al., 1988) useful because it can be tailored to particular socio-cultural contexts and situations, in the current case, to teachers. It also provides helpful organization for considering interventions. The socioecological framework posits that individual behavior and social influences are inter-related (Stokols, 2000), and that each level of the socioecological framework can impact the other levels.

Based on the interview data, we adapted the socioecological framework and organized findings by the following five levels, which include four kinds of interpersonal interactions:

### Individual teacher level

Interpersonal levels:

- principal-teacher
- teacher-teacher
- parent-teacher
- student-teacher

### School level

- ministry level
- societal level

Figure 12 displays the conditions that relate to teacher wellbeing by socioecological level. At the top of the figure are the interpersonal relationships that are critical to teacher wellbeing: principals, other teachers, students, and parents. At the bottom of the figure are the community and systems levels that affect teacher wellbeing: the school, national, provincial, or local education authorities, and society and the larger community. We hope that organizing the findings by actor will make it easier for readers to find the recommendations most applicable to them.

## Individual level

**Teacher practices.** Although this figure does not depict individual teacher-level practices, the data suggested numerous actions that teachers can take to promote their own wellbeing. Some of the practices named included a wide range of physical activities, from biking to sports to gardening. Teachers reported that having some personal time, often voiced in terms of having work-life balance, was important to their wellbeing. Interestingly, some teachers voiced that they coped with frustrations with students by understanding the student's home context and acknowledging the difficulties that students might be facing.

## Interpersonal level

**Principal-teacher practices.** Teachers frequently commented that principals' recognizing them in front of their peers or publicly for their good work improved their wellbeing. In addition, teachers and principals both talked about how deeper engagement in the school contributed to teacher wellbeing. Teachers might be engaged by being given a school-wide responsibility, or being included in substantive decisions about school operations. In one case, a teacher in Kenya commented on how being given responsibilities on the school-wide information, communication, and technology committee made the teacher feel more involved. This finding is somewhat counter-intuitive because such involvement makes more work for teachers, but the engagement was important to them.

Teachers remembered when principals allowed them flexibility due to personal circumstances, and when they were helped by the principal or other teachers during their times of need. Teachers indicated that feeling so acknowledged and accommodated directly contributed to their wellbeing and made them feel valued. "Now, he [principal] has also talked to our parents, the parents support us financially. Now, the way we come early in the morning, we are paid transport, we are given lunch, then transport back home." - Kenyan teacher

Teachers valued being encouraged by principals. A teacher in Cambodia said, "When there are any problems, [the principal] tells us the solution. When we make a mistake, he just talks to us and makes us confident to do it again without making mistakes. He helps and values us. He never gives us punishment, but he motivates."

**Teacher-teacher practices.** As found in the literature review, both enacting and receiving teaching-related support were considered beneficial for teacher wellbeing. Teachers also named a variety of kinds of informal social and emotional support, including teachers socializing outside of work and counseling each other.

**Parent-teacher practices.** One teacher in Kenya mentioned that when parents visited the teachers, it boosted their morale. When asked what they thought in their current school that made their wellbeing better, another teacher mentioned positive interactions with the students' parents. "Our interaction with parents; parents are helping us to perform well." - Kenyan teacher

**Student-teacher practices.** During their times of wellbeing, teachers reported trying hard to do well by their students and feeling successful in student learning. Teachers indicated that it was good for their wellbeing not only when they personally were recognized and won awards, but also when their students were recognized, or simply did well in their lessons. Teachers reported feeling emotionally close to their students, often to the point of invoking the language of family. For example, a teacher from Cambodia said, "I felt like I was at my own home [at school] and all my students were like relatives and we enjoyed class together."

In addition, the issue of student behavior came up repeatedly. Good behavior was seen as vital to teacher wellbeing, and poor student discipline as potentially unseating teachers and promoting burnout. Teachers indicated that when students worked hard and paid attention, it was good for teacher wellbeing. Teacher wellbeing seemed to flourish in situations where students listened, engaged and asked questions during class, and were committed to learning.

As one Cambodian teacher said, “The kids who came from the rural area were poor, so they focused on study... That’s why my teaching was going well. The results of the studying were good because they tried hard both at school and home.”

Teachers described student misconduct, such as unruly behavior, laziness, and disrespect as being harmful elements to their wellbeing. “... Undisciplin[ed], unruly behaviors of students, eg., rudeness, drunkards, absenteeism and some parents are not cooperative when it comes to handling pupils’ issues.” - Kenyan participant. A Cambodian teacher remarked, “...as a teacher, we never meet only good students, some students are very annoying and we need to use our voice to control them, so it gives me a headache.”

**Parent-student practices.** In particular, teachers mentioned how being praised by parents encouraged them and how meaningful they found it when parents would engage with them around the student’s learning. In a few examples, teachers indicated that they felt afraid when criticized by a parent, and then felt protected and valued when the principal supported them in the face of parental criticism.

### ***Community and societal levels***

**School level.** Desiring an attractive school environment was frequently mentioned, as was having needed teaching resources and facilities. Having a positive work environment was seen as critically important. Just as a sense of belonging arose in the literature review, having school-wide events that were fun was seen as important to teacher wellbeing, as was a comfortable, optimistic, positive environment.

Some school policies were held up as important to teacher wellbeing. Policies named by teachers were good leave policies, career progression opportunities, less administrative work, and when teachers and everyone at the school feel united in working toward a common goal.

(“... when my student performed well in this school so I felt happy. The school appreciated my efforts so I felt secure because the parents did not demonstrate that the teacher has not worked or the teacher is not doing good work in this school.” - Kenyan participant).

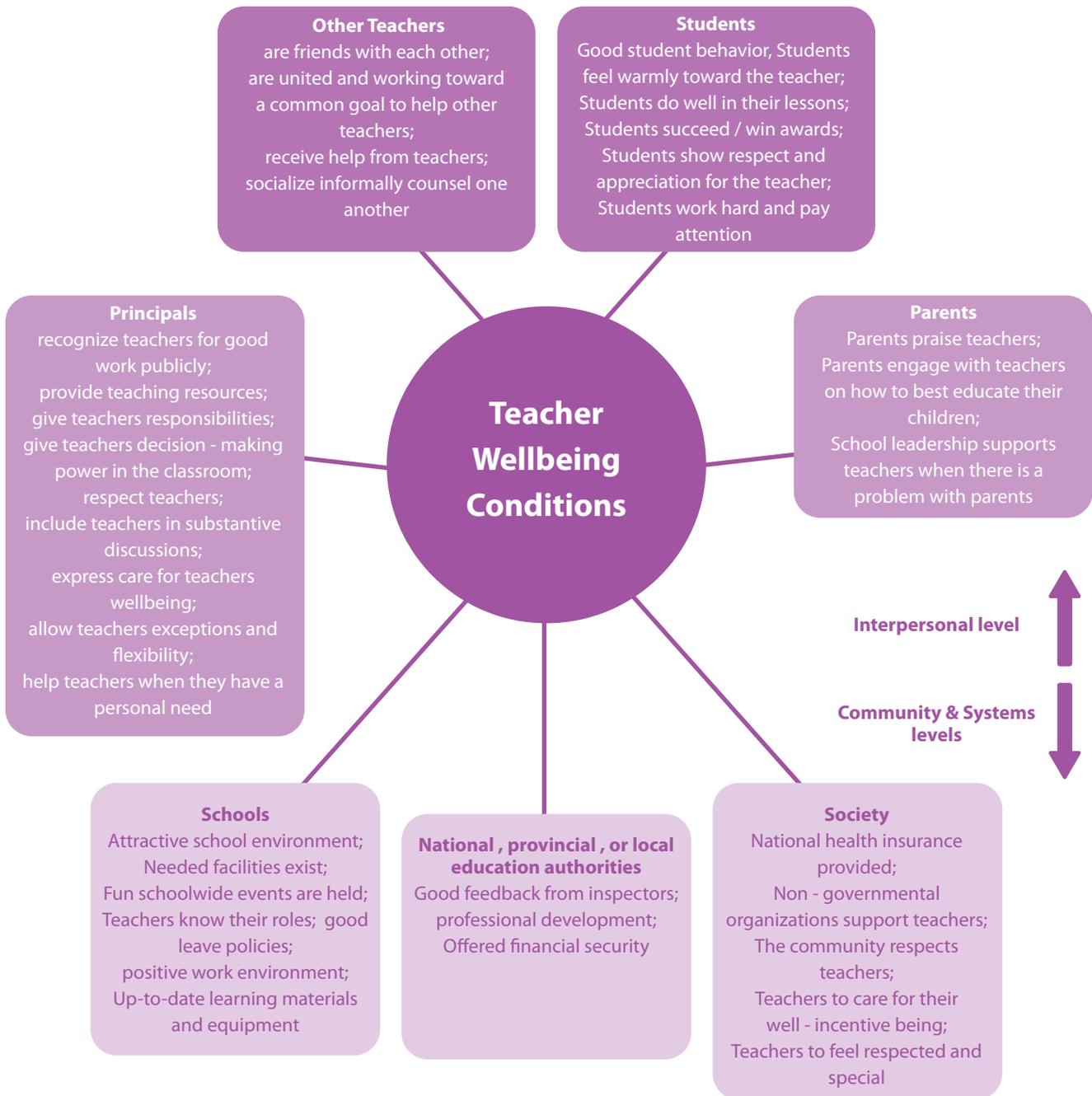
### **National level and Ministry of Education.**

Multiple teachers mentioned an assessor from the district or county level who observed their teaching and gave them praise, which they received as especially meaningful and encouraging. Teachers attributed being offered professional development opportunities to their wellbeing, and it seemed that professional development could be positive for multiple reasons, including improving teaching skills, having a break from ordinary teaching work, reaffirming one’s desire to be a good teacher, and being recognized in front of one’s teaching peers if provided the chance to share what one learned.

**Societal level.** We did not hear a lot about the role of society on teacher wellbeing, although some teachers acknowledged that respect for teachers from the public related positively to their wellbeing.

**Figure 12**

*Teacher wellbeing conditions present in teacher and principal interview data in all three contexts (Cambodia, Kenya, and Qatar) by socioecological framework level*



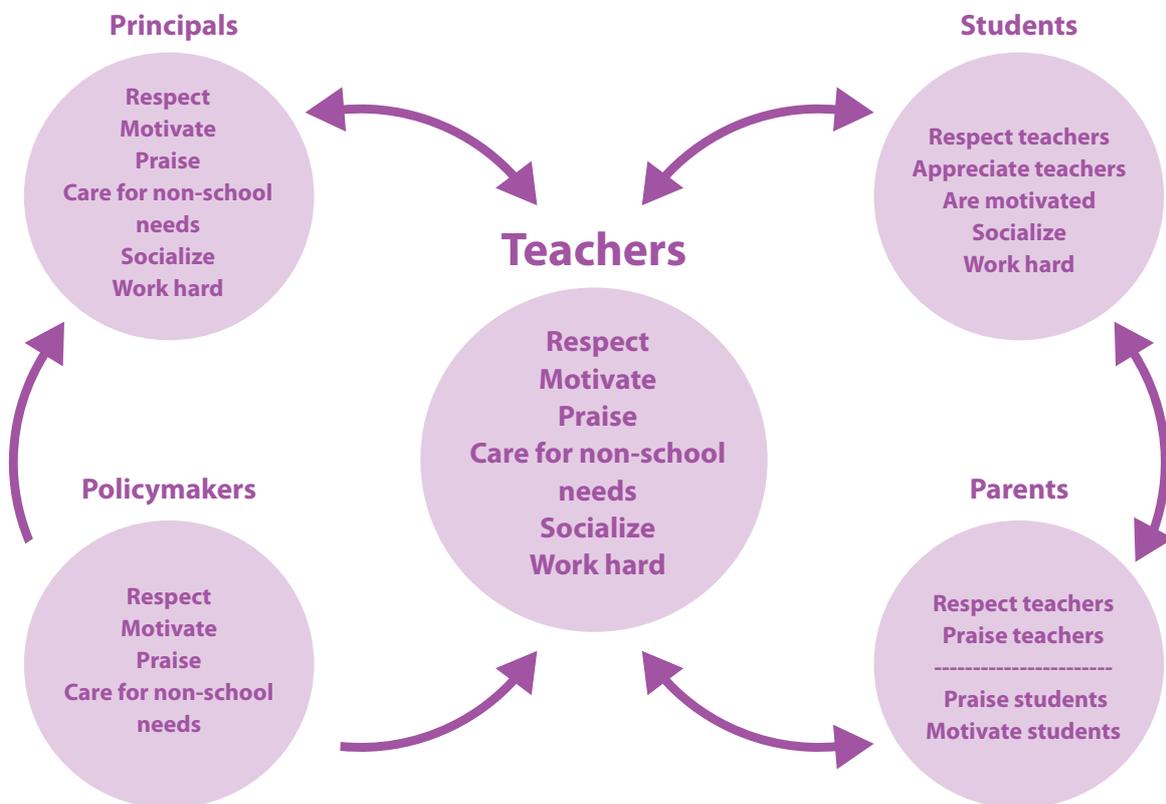
## Parallel process

Psychotherapists use the concept of “parallel process” to refer to situations in which the therapist starts feeling toward the client (eg., frustration) what the client feels toward another person. The parallel process concept occurred to us in analyzing the interview data from teachers, principals, and policymakers. Participants across these three groups used similar language and discussed the same important features of wellbeing. Teachers used similar language for the features that contributed to their wellbeing as they did for their relationships with principals, students, and parents during the times when they felt a strong sense of wellbeing. For example, teachers talked about the importance of feeling respected not only by their students, but also by the students’ parents and their principal. During their times of strong wellbeing,

teachers felt motivated by their principals and also felt they were successfully motivating their students and noted that the parents were working to motivate the students, as well. Teachers reported that praise and recognition from principals, parents, and even policymakers (for example, when being observed by district-level staff) contributed to their wellbeing, and also that they as teachers conscientiously praised and recognized their students, and wanted parents to do the same for the students. Thus, as depicted in Figure 13, processes that are in place for any dyad (eg., principal-teacher) were noted by participants as important in other dyads (eg., student-teacher; parent-teacher). We cannot tease apart from our data whether these processes create a good working climate or constitute one. It is possible that the more dyads that possess the desired quality, the better a teacher’s wellbeing will be.

**Figure 13**

*Parallel process: The process between any two sets of people affects their process with other people*



**Distinctive findings.** Although some findings were distinctive to the three contexts, caution is advised to avoid the imperfect conclusion that these findings are all unique to context. Just because it did not arise in one of the other countries does not mean it is absent; we may have heard a similar finding had we interviewed more people.

*Qatar.* In Qatar, teachers discussed issues uniquely relevant to expatriate teachers. Many expatriate teachers in Qatar are separated from their families. Housing allowances for expatriate teachers hired from overseas are sometimes insufficient to secure proper housing for teachers with large families. In their efforts to support students and improve their learning outcomes, teachers' personal and family lives are affected. This sometimes requires additional benefits such as flexible working hours or additional leave days for wellbeing.

*Cambodia.* In Cambodia only, teachers raised physical health issues. One teacher talked about how it was important to focus on hygiene and cleanliness in the classroom to maintain a good school environment. Additionally, many teachers expressed concern regarding inhalation of chalk dust and marker fumes. Additionally, various participants mentioned that speaking and shouting loudly everyday was harmful to their lungs and throats, and also caused headaches.

*Kenya.* In Kenya, teachers discussed sharing meals and tea as providing important social bonding time and making preparation for the day easier. In low-income settings, the provision of lunch was also seen as a benefit.

## 6. What interventions promote teacher wellbeing?

Overall, teachers, principals, and policymakers in Kenya and Cambodia pointed to very few interventions or programs that they thought promoted their wellbeing. This differed from the literature review, in which 55 of 943 studies reported on intervention findings (see above). In Kenya and Cambodia, professional development

for teachers was frequently indicated as a wellbeing intervention, as were informal social gatherings such as gatherings at principals' homes and attending school sports events, festivals and celebrations together. In one of the few innovative interventions reported, teachers in Kenya discussed a program called "merry-go-round." In this program, all teachers contributed money to a fund which could benefit a teacher in need. In addition, they gave advice about how to use the money and met regularly to discuss how they were doing outside of the school setting. One teacher reported using the money to "improve my living situation."

In Cambodia, one school's leadership raised funds from teachers and other staff, as well as through entrepreneurial ways, such as renting out parking spaces and school spaces to vendors to sell food, drinks, and school supplies. With this "school fund," they were able to help teachers with unexpected expenses, such as hospital bills. If teachers needed financial support for any reason, they could borrow from the school fund and pay it back over time through their monthly paycheck. One can see how programs like these would make teachers feel supported, united, and less financially vulnerable.

In Qatar, more creative programs were described by policymakers. A variety of programs offered by the Qatar Foundation Schools Crisis and Well-being Team in response to COVID were mentioned, as follows:

- Brief videos on a range of topics including self-care, establishing healthy boundaries, mindfulness techniques, impact and management of chronic stress, building resilience, basic cognitive-behavioral techniques to manage anxiety, neurological impact of chronic stress;
- Virtual forums for school-based mental health professionals that focused on supports for schools during COVID, trauma-informed schools, and compassion fatigue;

- Virtual trainings for school-based staff at a number of schools related to burnout prevention;
- One-on-one virtual or face-to-face supports for struggling staff;
- Small group support, virtual or face-to-face;
- Small group face-to-face breakfasts to offer support; and
- Resources related to stress management and self-care shared throughout the schools.

In addition, policymakers reported that schools engaged in a variety of activities to support wellbeing, including one-on-one check-ins with direct supervisors, offering simple notes of thanks either to individual staff or to staff teams, social activities (pre-COVID), yoga classes on campus, providing a “leave early day” on occasion, and providing breakfasts and lunches for staff (pre-COVID). Thus, more creative programs emerged from the data in Qatar than in Kenya and Cambodia.



# Chapter Four

# Conclusions And

# Recommendations

## 4.1. Conclusions

This report covers two large endeavors. We discuss conclusions from the literature review first, followed by conclusions for the case studies, and finally we comment on what is learned by bringing the two endeavors together.

### 4.1.1. Literature review

The studies from 2016 to 2020 indicate that improved teacher wellbeing is needed for better teacher performance and student outcomes. Of the 102 included studies, 22 examined wellbeing-related concepts, 22 studies explored burnout-related concepts and 54 studies examined both wellbeing- and burnout-related concepts. Most of the studies were conducted in the United States (25 studies), Italy (10 studies), the Netherlands (7 studies), Great Britain (7 studies), and Australia (6 studies). Overall, most of the studies were conducted in high-income countries, with 42 conducted in Europe and 31 conducted in North America. Only 14 studies were found from Asia, the biggest continent; 11 of them were conducted in Hong Kong, India, and Israel. From low-income countries, one study each was conducted in Ghana and Uganda. Three studies were conducted in the lower middle-income country of Nigeria. (Of note, in terms of our case study countries, Kenya and Cambodia are considered by the World Bank to be lower middle-income countries.) (See tables A4 and A5.)

A review of methodologies suggests that the studies used rigorous designs. The study designs were qualitative studies, and included cross-sectional surveys, longitudinal studies, randomized controlled trials, and a few quasi-experimental studies. Most of the quantitative studies had large sample sizes. A few of the qualitative studies included had small sample sizes. The participants of a majority of studies were of similar socioeconomic status and ethnicity; more studies are needed on teachers from diverse cultures and countries.

Overall, the studies indicated that teachers who are likely to have good wellbeing are those who have strong self-regulation skills, social support, teaching self-efficacy, and compassion. The studies also found that school settings that are conducive to teacher wellbeing are those that provide social support and a sense of collegiality to teachers.

The studies indicated that job burnout was positively related to stress, depression, and job dissatisfaction. Job burnout was negatively correlated with wellbeing. Our literature review intentionally built upon the teacher wellbeing review of McCallum and colleagues (2008). Their report mainly emphasized findings on resilience and self-efficacy, social-emotional competence and emotional intelligence, personal responses to teachers' work (burnout, fatigue, exhaustion, stress), and relational factors. In contrast, our review, which targeted the most recent research, identified more diverse factors contributing to wellbeing including organizational climate, social support, and individual and interpersonal teacher wellbeing strategies. Additionally, a few studies considered the role of prayer, having an orientation to work as a calling, and job crafting as contributing to wellbeing. Our findings report that mindfulness-based practices consistently produced beneficial effects for teacher wellbeing. This review also identified a lack of research on policy level issues of schools, organizational level interventions, and links between teacher and student wellbeing.

**Strengths and limitations of the literature review.** This review provides a descriptive account of most relevant studies published recently. We simultaneously analyzed teachers' wellbeing and burnout. We analyzed the content of the sampled studies and their recommendations. We further documented the details of all the interventions reported in the sampled studies. Additionally, we reported on the geographic distribution of studies by continent, surfacing substantial research gaps. Generally, scoping reviews provide a descriptive account of information which often leads to broad, less focused findings. However, the combination of steps we took in the scoping review yielded focused findings and recommendations for teacher wellbeing.

A limitation of the scoping review is that we did not formally evaluate the quality of evidence by setting parameters for a critical methodological review of sampled studies. Also, the initial screening of studies was accomplished by one researcher, posing a potential risk of bias in the selection of articles included. In addition, the scoping review covered only a five-year period; this was an intentional choice to augment the substantial teacher wellbeing literature review by McCallum et al. (2018), which covered the literature from 2001 to 2017. The methodology of the McCallum report was more flexible and less systematic than ours. McCallum et al. did not report tracking of funneling and screening of articles, and they did not state inclusion and exclusion criteria for the final sample of articles in their methods section. In this way, our study advances the identification of knowledge and gaps in the teacher wellbeing literature, in addition to covering the years 2016 to 2020.

#### 4.1.2. Case studies

One of the most notable findings from the case studies was that there were more similarities than differences in perceived wellbeing factors for teachers across the Cambodian, Kenyan, and Qatari contexts studied. The wellbeing factors that emerged from all three study contexts include praise and recognition, informal social time including time inside and outside of school and festivals and celebrations, understanding the family contexts, including teachers in substantive decisions, helping teachers when they have a personal need, and having everyone in the school united toward the same goals.

Several aspects of teacher wellbeing that emerged connect with the positive psychology literature. Living a meaningful life has long been found to promote wellbeing, and wellbeing for teachers was related to making a difference in students' lives in the short and the long-term. Teachers are able to make their job more meaningful through the concept of job crafting, which is reorganizing work activities to spend more time on the ones that give an individual more meaning or pleasure, as well as imbuing certain work activities with their larger meaning. The case study data found that giving teachers school-wide responsibilities added to their job crafting and helped them feel deeply connected and involved.

Teachers could engage in job crafting based on the seven components found in the case study. For example, they might organize and prioritize their work to spend the most time possible on the tasks they find meaningful, to engage in some work that is school-wide or district-wide or keeps them engaged in the profession more broadly, and to seek out time at work with supportive colleagues who can help them manage the many emotions of any school day. We encourage teachers to engage in job crafting, and principals to support those efforts and suggest opportunities for deeper engagement and seeing the bigger picture of one's work. Job crafting and deeper involvement align with the concept of 'engagement,' which is related to positive mental health in the literature. Professional development that arose from principal, teacher, and policy maker interviews is another form of engagement.

Philosophers have written about goal attainment (in desire theory) as a contributor to wellbeing (Crisp, 2017). Teachers in all three countries noted how student achievement benefited their own wellbeing, and highlighted the roles of recognition and career progression in their wellbeing.

In addition to wellbeing, the case studies revealed related perspectives on teacher burnout. The primary factor leading to teacher burnout was administrative burden. Policymakers should carefully consider which administrative reporting and testing tasks are essential and limit administrative burdens to prevent teacher burnout. Other factors across the three study contexts associated with burnout were: 1) poor student discipline; 2) high workload burden related to lack of work-life balance; and 3) job insecurity or low pay. Additional factors surfaced in the literature review included negative emotions (stress, emotional exhaustion), poor social support, and a workplace climate that marginalized some teachers or did not allow teachers to show emotions.

Not all factors that relate to burnout also relate to wellbeing. Efforts against burnout should not always be considered efforts to support wellbeing. Policymakers must attend to both burnout and wellbeing to foster ideal teaching situations; the efforts they make to reduce burnout often differ from those to promote wellbeing. For example, to prevent burnout, reducing administrative burdens on teachers is critical. However, the absence of administrative burdens will not alone promote wellbeing.

Another finding from the case studies is that teachers are embedded in many layers of relationships, including with principals, other teachers, parents, students, and to some extent policymakers. The same factors arose across each of these relationships, and these factors appeared to be mutually reinforcing in a parallel process. The factors were, in no particular order: respect, motivation, praise, care for non-school needs, socializing, and working hard. Possibly the more of the relationships that include those factors, the better teacher wellbeing will be. Additional research is warranted in this area.

Although there were many similarities in findings among the three study contexts, some specific differences emerged. In Qatar, the interviews indicated that despite a housing allowance for expatriate teachers, it is sometimes insufficient to secure proper housing for teachers with large families. Many expatriate teachers left their families behind in the home countries. In their attempts to support students and improve their learning outcomes, teachers' personal and family lives are affected. To promote teacher wellbeing, additional benefits such as flexible working hours or additional leave days would be beneficial. As noted previously, in Cambodia, teachers uniquely mentioned physical health concerns, and in Kenya, teachers reported valuing hot meals provided and eaten together as important informal social time and one way to meet some of teachers' time and financial needs. With our case study methodology, it is only possible to say that we heard these issues in a particular region; we are not able to definitively say that they were absent from the other two regions.

Overall, in all three of the study contexts, policymakers, principals, and teachers had a hard time identifying any wellbeing programs for teachers, naming primarily professional

development opportunities and holiday celebrations with informal social time. A potentially innovative program that was in operation in Kenya involved a group of teachers pooling money, distributing it to individuals in need in their group at the precise time, and meeting regularly to advise and discuss how those teachers should use the money. Similarly, but with less peer involvement, in Cambodia one school had a pool of money to deploy when teachers were in need. In both Kenya and Cambodia, teachers indicated that when their colleagues recognized their needs outside of work, that their wellbeing was better. In Qatar, policymakers in the public education system were unable to name any wellbeing programs, and in the private sector there were some efforts to help teachers, but not many, indicating that there is still room to grow in making wellbeing programs for teachers widely available.

#### **Strengths and limitations of the case studies.**

Strengths of the case studies is that they were conducted in three countries with varying income levels and different cultures, and schools that were both public and private and of higher and lower resources (with the exception of Qatar). Little published research on teacher wellbeing from these three countries exists. Researchers from each context conducted data analysis. Combined, the case studies provide rich insight into the sociocultural background of teaching and teacher wellbeing. Conducting this research on three sites provided an opportunity to compare and contrast findings. The similarities that emerged across these diverse contexts supported a general consensus around teacher wellbeing. A limitation of the case studies is that a convenient sample of schools was chosen; the findings may not be representative of the school region, or the whole country.

### **4.1.3. Conclusions from the combined literature review and case study findings**

The scoping literature review and case studies together produced substantial information, sometimes in distinct areas, on teacher wellbeing. There were factors identified in the case studies that were missing from the literature; we recommend these factors for future study and for consideration for interventions in the three case study countries.

The findings that aligned in both the literature review and case studies offer a high degree of confidence. (See Table A3 in the Appendix for a comparison.)

The case studies reported that teachers engaged in a wide range of personal practices to maintain their wellbeing such as sports, exercise, gardening, helping family, friends, and colleagues and maintaining a work-life balance. In contrast, the scoping review did not surface any of these personal practices, nor did it explore the role of financial support of teachers, which was important in the case studies. Furthermore, the case study participants mentioned having a good income, meaningful work, praise by students, colleagues, and principals and understanding the student's home context as helpful things for wellbeing. The case studies, but not the literature review, found that teachers eating together, school lunch programs, and having social time with colleagues played important roles in teacher wellbeing. Several other aspects of the role of administrators were absent in the literature, for instance, neutral mediation of conflicts between teachers, decision-making power, recognizing teachers' material needs, care about teacher's tiredness, and flexible leadership. The literature review did not include relevant studies in these areas, indicating that these are ideas for further research and for policymakers to consider. In addition, the literature review did not identify any studies on the parents' role in teacher wellbeing. In the case studies, the attitude of students' parents and collaboration with parents were found to be important for teacher wellbeing, as was teachers' being supported by school leadership when there was a problem with parents.

Conversely, we found wellbeing factors in the literature review that were not found in the case studies. The literature but not the case studies highlighted the benefits to teacher wellbeing of inducing a calling orientation, job crafting, promoting compassion at work, emotional management training and implementing positive emotions and happiness at work. In addition, promising interventions promoting teacher wellbeing in the literature included mindfulness-based stress reduction and teacher resilience (i.e., Cultivating Awareness and Resilience in Education (CARE), Positive Education, etc.). These were the two kinds of

interventions most-studied. However, we did not find their use in the schools included in the current study; they likely need testing in non-western contexts and more active promotion worldwide. Also, there is a gap between what is happening in the schools and what is being tested by researchers. Researchers might consider studying practices in schools and testing them rigorously.

Nevertheless, the case study and literature review findings aligned in several areas. A few participants in the case studies stated that religious practices and prayer were important for their spiritual nourishment; this approach was corroborated by a few studies in the literature review. Similarly, the case studies indicated having a positive attitude and professional development opportunities helped teacher wellbeing; those findings are consistent with those of the literature review. Many teachers in the case studies mentioned the negative impact of workload and work pressure on their wellbeing, and likewise, several studies in the literature review demonstrated that workload stress reduces wellbeing.

The literature review and case studies also aligned in teacher wellbeing related to getting support from teachers, having an enjoyable work environment, receiving practical feedback from administrators on work, and the importance of job autonomy. Further, several studies in the literature review were consistent with the case study findings on teacher wellbeing and mentoring students, the importance of good student behavior, teaching self-efficacy, getting help from colleagues, and having good relationships between teachers.

The literature review provided ample evidence that the school environment impacts teacher wellbeing, and this was consistent with the case study results. However, the physical aspects of the school environment (cleanliness, greenery, low noise) were scarce in the literature, suggesting a need for more research on them.

From our literature review, we conclude that there is a substantial and growing body of research on teacher wellbeing, but the studies are not evenly distributed across the world. More research is needed in Africa, Asia, the Middle East, and Latin America. There is a glaring gap in the study of policy-level

interventions in teacher wellbeing; the majority of interventions target the individual teacher, despite the fact that the largest numbers of teacher wellbeing studies reviewed mentioned the need for a positive work environment with professional autonomy and good relationships with colleagues and parents. Given the strength of the current study's findings on praise and recognition (eg., principals publicly recognizing teachers, etc., as described previously), recognition techniques and structured job crafting opportunities might be studied and formalized at the policy level.

Ultimately, across diverse societies globally, the need for teachers is great and the skill development of teachers takes years. Both preventing burnout and promoting teacher wellbeing helps retain valuable teachers. Yet, wellbeing goes beyond burnout to foster other benefits, including problem-solving, caring for and doing well for others, and connecting with others socially.

The findings from the two studies covered in this report indicate that burnout prevention measures can be different from those that promote wellbeing. For example, a reasonable and not excessive workload may prevent burnout but will not necessarily be enough to create wellbeing. Instead, atmospheres of respect, inclusion, and mutual teacher support are needed to promote wellbeing. In addition, the benefits of finding meaning in one's day to teacher wellbeing cannot be overstated.

We also found some factors that relate to both teacher burnout and wellbeing, in opposite directions. For example, student misbehavior and high administrative burdens were associated with teacher burnout, whereas students working hard and teachers having more autonomy and fewer administrative burdens were associated with teacher wellbeing. While these findings are intuitive, systematic research such as ours provides reassurance that counter-intuitive processes are not at play and systematic processes give the opportunity to identify unexpected findings.

At the heart of the case study analysis we found a parallel process in which each group of people that teachers interact with affects teachers, and in which teachers affect those groups of people in concordant ways. Principals praise teachers,

who then, in turn, praise students. Students work hard and that helps teachers to work hard. Parents and principals respect teachers which makes it easier to respect students, parents, and principals. It is possible that improving any interactions of any two sets of people will have beneficial effects to others.

## 4.2. Recommendations

Teachers enact complex work that has the potential to bring them great joy and meaning, but also carries with it the risk of burnout which can negatively impact students. Consider this subset of skills and tasks from the angles of complexity and relational work:

- Teachers must not only know how to teach, but also the subject they are teaching.
- They must know how to motivate and inspire children of specific ages, how to teach children with learning difficulties, and how to reach children who are experiencing emotional issues.
- Teachers are mentors and role models for young people around how to interact with other children and adults, and can be sought out for counseling and advice.
- Teachers must do the work of teaching in a group setting, and ensure a degree of good student behavior and facilitate conflict resolution between students.
- Add to the work itself the backdrop of non-stop, loud days in which the teacher is constantly interacting and accessible, and in which it seems there is never enough time.

Now, go back to this list and consider the daily possibilities of joy and meaning for teachers, and also the possibilities for frustration and emotional exhaustion. Each day, teachers must motivate themselves to engage to their fullest and to resist being worn down by frustrations and difficult emotions. They must attend to their emotions on a daily basis. Teachers must be proactive in caring for their wellbeing. However, they cannot do it alone, because their work is so intertwined and dependent upon the students, parents, and principals with whom they work, and affected by education policies, resources, and systems.

The good news is that there are many ways to promote and support teacher wellbeing. We make numerous recommendations below, divided by actor. Some of these recommendations are more feasible than others, and they may need to be adapted to one's culture and systems. There may be actions better suited to setting. Broadly, we recommend actions that result in the following (in no particular order):

- Teachers being valued as respected leaders
- Teachers being deeply engaged in their work
- Teachers getting meaning and purpose from their work
- Teachers feeling successful
- Teachers having their personal needs met
- Teachers managing their emotions and wellbeing
- Teachers experiencing a positive, supportive work environment
- Teachers working within a system characterized by flexible and supportive policies

The potential impact of promoting wellbeing is great; when people feel well, they are inspired to do well by others. When people experience positive emotions, they are more creative and engage in better problem-solving. We need teachers to be at their best so our children will not only learn but will also grow into thoughtful, mature citizens of the world.

## Recommendations to promote teacher wellbeing

### 1. Recommendations for parents

- 1.1. Communicate with your child's teachers;** approach them as an expert in educating your child and ask for advice.
- 1.2. Recognize and praise your child's teachers,** when deserved. Don't assume that others are doing this. It can make a big difference in motivating teachers.

- 1.3. Prepare your child as much as possible to be well-behaved at school.**

Teachers who have to spend a lot of time managing the class have less energy and time for teaching.

- 1.4. Teach your children to respect teachers.** Express to them that you appreciate teachers. Arrive to school on time. Encourage your children to study hard and pay attention in class.

- 1.5. When you have a concern, talk to your child's teacher first.** Assume that the teacher had good intentions. Work toward problem-solving, not blaming.

### 2. Recommendations for teachers

- 2.1. Praise students,** when deserved.

- 2.2. Encourage students to apply for awards and recognition and participate in competitions.**

- 2.3. Take advantage of professional development opportunities on classroom management** and talk to experienced teachers about how they handle student behavior. Poor student discipline can quickly undermine teacher wellbeing.

- 2.4. Volunteer to serve on school-wide and district-wide committees.** Engaging deeply promotes wellbeing.

- 2.5. Get to know your colleagues.** Find informal ways to spend time together, even if it is a quick coffee. Having a good sense of community at work will lead to a positive work climate, which is the backdrop of your daily wellbeing.

- 2.6. Share with teachers what you know;** spread your skills and offer support, including emotional support.

- 2.7. Ask other teachers for help** when facing a challenge at school. Feeling supported strongly promotes one's wellbeing.

**2.8. Take care of yourself on a regular basis.** During their times of wellbeing, teachers talked about engaging in all kinds of physical activity that they liked (gardening, biking, other sports). Sleep is essential to emotional coping. Good nutrition will also make you feel better on a daily basis.

**2.9. Protect some personal or family time for yourself.** Teaching often involves bringing work home, but having some time set aside that is “off-limits” for work is good for wellbeing. If living away from one’s family or home country, prioritize opportunities to visit.

**2.10. Learn how to manage your emotions.** Each emotion gives you information (eg., if you are angry, that is a signal that you need to right a wrong). Learn to identify your emotions and what they are telling you, and to then let go of negative emotions. Learn how to extend positive emotions (eg., by reminding yourself at the end of each day what went well that day). Teaching is emotional work and emotion management is a key skill for wellbeing.

**2.11. Consider practicing mindfulness-based stress reduction skills,** which have been shown to be effective for teachers in managing stress and their emotions.

**2.12. Keep the big picture in mind.** When you experience frustration and other negative emotions around students, remember that their home lives may be affecting their behavior; remember your larger goals as a teacher. One frustrating hour is just that, and figuring out how to strive for your larger goals is more important.

### 3. Recommendations for principals

**3.1. Create a positive work environment.**

Promote fairness when making decisions. Act immediately to stop any bullying or other negative behavior between teachers.

**3.2. Create ways for teachers to interact socially with each other and with you.**

Invite them to special events, teacher outings, or a meal at your home. Celebrate festivals and holidays with them. Use the occasion to say a few words about the larger mission of the school.

**3.3. Create routines and structures that allow teachers to positively interact with each other on a daily basis.**

For example, provide coffee or a break room, schedule time so that teachers have a few minutes to share with others.

**3.4. Clearly state the school’s goals and foster a sense of unity**

across the principal, teachers, parents, and students in working towards those goals.

**3.5. Focus on promoting good student behavior,**

because poor behavior undermines teacher wellbeing on a daily basis. Adopt strategies to reinforce good behavior. Recognize students for behaving well. Provide learning opportunities for teachers to learn classroom management strategies and encourage teachers to talk to each other about effective practices.

**3.6. Notice when individual teachers are doing well and praise them.**

Your attention and words matter and are helpful to teachers who need to stay motivated in the face of difficult and often emotional work. Find ways to recognize teachers for doing well in the presence of other teachers or the school community, including the parents.

**3.7. Give teachers a large degree of autonomy in the classroom.** Treat them as experts in education and classroom management. Respect is essential to wellbeing and autonomy reflects respect and offers the option of being creative at work, which is good for wellbeing.

**3.8. Minimize the amount of administrative and bureaucratic work** that teachers must do; such work can tip an otherwise happy and well teacher into burnout. Teachers choose their profession because of the meaning in helping students, and administrative work lacks meaning.

**3.9. Give teachers school-wide or district-wide responsibilities.** These responsibilities help teachers engage in their work more deeply, continue learning, and interact with a broader range of education professionals, all of which is good for wellbeing.

**3.10. Ask teachers about their wellbeing.** No one wants to be just a worker or a cog in a wheel. Seeing teachers as unique individuals and expressing that you care about them as a whole person is good for wellbeing. Because teachers need to be concerned about their individual students' wellbeing, it may be particularly important for them to get similar consideration from principals.

**3.11. Allow teachers exceptions and flexibility at work, when reasonable.** Teachers work long hours and conduct a lot of emotional labor by attending to students' emotional needs and regrouping after numerous frustrations throughout the day. Allowing flexibility to the extent possible can offset this draining labor, and affords them the respect as professionals.

**3.12. Create a 'teacher care' fund.** Having some funds to help teachers during times of need (eg., a death in the family, transportation difficulties) goes a long way in helping teachers feel valued by the school, supported, and respected. Teacher care funds were discussed by teachers in some contexts with great positivity.

## 4. Recommendations for national, provincial, or local education authorities

**4.1. Provide professional development opportunities for teachers.** These opportunities foster teacher wellbeing in multiple ways, including encouraging teachers to engage more deeply in their work, increasing their teaching abilities and therefore self-efficacy, connecting teachers and providing opportunities for social support, and showing how teachers are valued and reminding them that they are part of a larger mission. Include in the professional development emotional regulation strategies and classroom management training.

**4.2. Create teacher and principal recognition programs,** and be sure that the recognition is public and known to teachers' colleagues. Teachers must motivate themselves on a daily basis to work through frustration and difficult emotions, and to try creative ways to reach students with difficulties. Being valued and recognized shows respect for the hard work of teachers, and can provide some external motivation.

**4.3. Create meaningful teacher feedback from inspectors from outside of the school** who observe teachers. Teachers reported that it was especially meaningful to them to receive praise from external observers. Much of teaching is done alone and requires daily striving without others truly knowing the details of what occurs in one's classroom; being praised when appropriate can motivate teachers and provide reassurance.

**4.4. Provide the resources for teachers to have their personal needs met.**

Meeting teacher's financial and health insurance needs is a priority. Financial stress is powerful and can cause burnout and attrition. Teachers need a dependable salary that can cover their financial needs, including the cost of transportation to and from school. They also need health coverage.

**4.5. Provide financial stability for teachers;** worries about job loss cause stress and can lead to attrition.

**4.6. Provide the resources for teachers to work in a positive environment.**

Such resources include a pleasant space to interact with other teachers, funds to celebrate holidays or for teachers to get together informally and socially, and, as much as possible, a clean and attractive work setting.

**4.7. Minimize the amount of administrative and bureaucratic work that teachers must do;** such work can tip an otherwise happy and well teacher into burnout. Teachers choose their profession because of the meaning behind helping students, and administrative work lacks meaning. Whenever possible, find ways for others to help teachers with administrative work; this may come in the form of teacher assistants, interns, or administrative staff workers.

**5. Recommendations for everyone –for all of us in the general public**

**5.1. Show respect for teachers.** When you meet a teacher, express interest and thank them for their important work. Encourage children to consider careers in teaching.

**5.2. Let your past teachers know they matter.** Write a letter to a teacher who made a difference in your life. That will give them tangible evidence of the impact they have made and will motivate them to continue their good work. Studies have found that it will be good for you, too; thanking someone years later in a personal way can benefit your emotions for up to six months.

**5.3. Support incentives for teachers.** Advocate for a variety of financial incentives for teachers, such as discounts for gym memberships, restaurants, travel, and local transportation. Such incentives show respect for teachers and may motivate them in small ways to stay in the profession, while also encouraging self-care.

# About The Authors

## ABOUT THE AUTHORS



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# About WISE

The World Innovation Summit for Education was established by Qatar Foundation in 2009 under the leadership of its Chairperson, Her Highness Sheikha Moza bint Nasser. WISE is an international, multi-sectoral platform for creative, evidence-based thinking, debate, and purposeful action toward building the future of education. Through the biennial summit, collaborative research and a range of on-going programs, WISE is a global reference in new approaches to education.

The WISE Research series, produced in collaboration with experts from around the world, addresses key education issues that are globally relevant and reflect the priorities of the Qatar National Research Strategy. Presenting the latest knowledge, these comprehensive reports examine a range of education challenges faced in diverse contexts around the globe, offering action-oriented recommendations and policy guidance for all education stakeholders. Past WISE Research publications have addressed a wide range of issues including access, quality, financing, teacher training and motivation, school systems leadership, education in conflict areas, entrepreneurship, early-childhood education, twenty first century skills, design thinking, and apprenticeship, among others.

# **About The Center For Health Policy & Inequalities Research (Chpir) At Duke University**



The Center for Health Policy & Inequalities Research (CHPIR) at Duke University (part of the Duke Global Health Institute (DGHI)) is an instigator and facilitator of a broad range of health policy and health disparities research that address policy relevant issues. The mission of the center is to improve the health of individuals and communities, locally, nationally, and internationally, by addressing health inequities through interdisciplinary policy-relevant research. Activities focus on population-based health research, health systems research, and intervention and evaluation research, and CHPIR's research is often conducted with and within community in collaboration with local and international community partner organizations. CHPIR also recognizes the interaction of individual, environmental, and social determinants that affect health, and thus focuses on health inequities of overlooked populations as well as stigmatized health conditions. The Center was first founded in 1981 as the Center for Health Policy Research and Education and is the longest-standing Center within Duke University.

# About The Wellbeing Project



The Wellbeing Project is a global initiative co-created with Ashoka, Esalen, Impact Hub, Porticus, the Skoll Foundation and Synergos. Our work catalyzes a culture of inner wellbeing for all changemakers. We do this through model individual and organizational programs, credible research, global and regional learning communities, and storytelling. We are enabling a more human-centered social change culture to unlock the extraordinary collaboration and innovation needed to address the pressing social and environmental challenges we face, and to build a better world for us all.

# About Ace Africa Kenya



Ace Africa Kenya is a community-based non-governmental organization dedicated to providing support for vulnerable groups in rural and often resource-poor communities throughout Kenya. The organization supports communities that provide care for orphans, vulnerable children, and their families through sustainable, cost-effective and community-led solutions. Their efforts to strengthen community members' skills, existing structures, civil society partners and administration to increase their ability and commitment to take responsibility for the care and support of people living with HIV/AIDS, their children and families, and orphans and vulnerable children have been recognized with awards locally and internationally.

# **About Development For Cambodian Children (Dcc)**



Development for Cambodian Children (DCC) is a community-based non-governmental organization based in Battambang, Cambodia. DCC works with marginalized children, their families and the local community to enable them to become active and responsible members of their community and country. The main mission of the organization is to provide capacity-building assistance to marginalized children on an individual and societal level, so as to create an environment where children and community members work in the spirit of partnership to improve their livelihoods.

# Acknowledgments

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The authors would like to thank Her Highness Sheikha Moza bint Nasser, Chairperson of Qatar Foundation, and Her Excellency Sheikha Hind bint Hamad Al-Thani, Vice Chairperson and Chief Executive Officer of Qatar Foundation, whose vision and guidance have supported WISE. They continue to believe in the power of education to create better lives for people around the world.

The authors would also like to acknowledge all of our collaborators at each of the sites, including Augustine Wasonga, Micah Nalianya, Sylvia Wafula (ACE Africa, Kenya); Dara Suon, Pisey Loem (DCC, Cambodia); Alexa Namestnik, Gracie Hae Joo, Andrew Weinhold, Madeline Wilkerson, and Bentley Choi (Duke University, USA).

Additionally, the authors would like to thank the Ministry of Education and Higher Education in Qatar for their cooperation and support. We would also like to acknowledge members of the WISE team for their invaluable assistance in the various stages of producing this report, and the members of the Caregivers and Teachers Wellbeing group for their helpful and substantive comments. Thanks to the Frazil House Advertising team for design and layout formatting of the report.

# Disclaimer

The views and opinions in this publication are solely those of the authors. Errors and omissions remain the responsibility of the authors.

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# Appendix

**Table A1.**

*Scoping literature review article codes and definitions*

<b>Codes</b>	<b>Operational Definitions</b>
<b>Policy</b>	A course of action adopted by schools to manage conduct of teachers and students (conducive to wellbeing)
<b>Strategies/ processes</b>	Mechanisms teachers adopt for their wellbeing at work
<b>Mindfulness</b>	Practicing mindfulness
<b>Workplace milieu</b>	It refers to a person's social environment; their social relations/ support system at the workplace (conducive to wellbeing)
<b>Experience</b>	Number of years spent in teaching
<b>Link between teacher and student wellbeing</b>	Any effect of teacher's wellbeing on students' wellbeing
<b>Burnout factors</b>	Factors causing burnout among teachers
<b>Intervention</b>	Interventions intending a better outcome in teacher's wellbeing.
<b>Prayer</b>	Any religious/spiritual act seeking worship/connection to a higher power
<b>Support</b>	Availability of emotional, instrumental or moral assistance
<b>Self-efficacy</b>	Individual's belief in his/her capacity to handle situations
<b>Stress</b>	Feeling of emotional/physical tension in reaction to some situation

**Table A2.***Demographic and social characteristics of interviewed teachers*

Country (n)	Kenya (36)	Cambodia (33)	Qatar (21)	Overall (90)
<b>Gender, n (%)</b>				
Man	18 (50%)	12 (36%)	15 (71%)	45 (50%)
Woman	18 (50%)	20 (61%)	6 (29%)	44 (49%)
Other	0 (%)	1 (3%)	0 (0%)	1 (1%)
<b>Age</b>				
Mean (SD)	41.7 (7.9)	41.3 (11.6)	42.1 (6.6)	41.6 (9.1)
Minimum	27	21	25	21
Maximum	58	66	56	66
<b>Years of Teaching Experience</b>				
Mean (SD)	13.7 (10.1)	20.01 (11.8)	17.36 (6.5)	16.9 (10.4)
Minimum	2	1.2	1.5	1.2
Maximum	36	42	27	42
<b>Years at Current School</b>				
Mean (SD)	8.0 (6.8)	12.6 (9.2)	5.1 (3.9)	9.0 (7.8)
Minimum	1	1	1	1
Maximum	27	33	13	33
<b>Highest Level of Education Completed, n (%)</b>				
Some of grade 1-12	0 (0%)	1 (3%)	0 (0%)	1 (1%)
Completed grade 12	0 (0%)	3 (9%)	0 (0%)	3 (3%)
Some university	9 (25%)	5 (15%)	0 (0%)	14 (16%)
Graduated university	3 (8%)	20 (61%)	11 (52%)	34 (38%)
Beyond university	1 (3%)	1(3%)	10 (48%)	12 (13%)
Vocational or technical training	0 (0%)	3 (9%)	0 (0%)	3 (3%)
College teaching certificate (Kenya only)	10 (28%)			
Other	13 (36%)	0 (0%)	0 (0%)	23 (26%)

<b>Current Financial Stress, n (%)</b>				
Extremely stressful	1 (3%)	2 (6%)	0 (0%)	3 (3%)
Very stressful	14 (39%)	3 (9%)	5 (24%)	22 (24%)
Moderately stressful	13 (36%)	9 (27%)	6 (29%)	28 (31%)
Slightly stressful	8 (22%)	6 (18%)	2 (10%)	16 (18%)
Not at all stressful	0 (0%)	13 (39%)	8 (38%)	21 (23%)
<b>Citizenship (Qatar Only), n (%)</b>				
Citizen			5 (24%)	
Expatriate			16 (76%)	
<b>School Type, n (%)</b>				
Public	36 (100%)	18 (55%)	18 (86%)	72 (80%)
Private	0 (0%)	15 (45%)	3 (14%)	18 (20%)
<b>Current School Level Taught, n (%)</b>				
Primary	36 (100%)	0 (0%)	6 (29%)	42 (47%)
Secondary	0 (0%)	18 (55%)	15 (71%)	33 (37%)
Both	0 (0%)	15 (45%)	0 (0%)	15 (17%)
<b>Resource Setting, n (%)</b>				
Low resource	18 (50%)	18 (55%)	0 (0%)	36 (40%)
High resource	18 (50%)	15 (45%)	21 (100%)	54 (60%)
<b>Largest Class Size</b>				
Mean (SD)	86.9 (15.3)	48.9 (14.0)	24.0 (8.0)	58.5 (28.8)
<b>Mental Health Continuum – Short Form (possible range 70-0; higher scores indicate better positive mental health)</b>				
Mean Score (SD)	52.8 (8.5)	49.1 (8.69)	55.9 (8.1)	52.1 (8.8)
Flourishing, n (%)	30 (83.3%)	22 (66.7%)	16 (76.2%)	68 (76%)
Not Flourishing, n (%)	6 (16.7%)	11 (33.3%)	5 (23.8%)	22 (24%)
<b>Oldenburg Burnout Inventory Score (possible range 4-1; higher scores indicate more burnout)</b>				
Mean (SD)	2.7 (0.4)	2.8 (0.2)	2.8 (0.3)	2.8 (0.2)

**Table A3.**

*Themes by country and literature review*

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
<b>Individual level (meditation, walks, self-acceptance)</b>				
Teachers have a wide range of personal practices, including playing sports, exercising, biking, walking, participating in exhibitions, community and social gatherings, going out for walks, and going out with the family or with colleagues, that contribute to their wellbeing.	X	X	X	Mindfulness based stress reduction found in the literature but not specifically in the case studies
Going to church for prayer is important for the spiritual nourishment of teachers			X	Sharp Donahoo et al. 2018, USA
Teachers having a positive attitude (being confident, helpful, hopeful, happy and inspiring students to be good people) helps their own wellbeing		X		Capone and Petrillo 2018, Italy; Cook et al. 2018, USA
Professional development opportunities energize teachers, which is good for their wellbeing, and help them in their teaching	X	X	X	Jennings et al. 2019 USA; Barbieri et al. 2019 Italy
Career progression positively impacts teacher satisfaction	X			Barbieri et al. 2019 Italy
Many teachers mentioned that they feel pressured from the overload of work and the admin work that they have to do along with teaching and correcting exams (low teacher-student ratios are more helpful than high ratios)	X	X	X	Ravalier and Walsh 2018, England; Guidetti et al. 2009, Italy; Harmsen et al. 2019, Hoefsmit and Cleef, 2018, Netherlands
Some teachers find teaching more enjoyable once they have more experience, confidence, and skills than before			X	Barbieri et al. 2019 Italy
Spending time in the garden		X		

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
Physical activities (sports, walking, exercising, gardening, running, washing clothes, dancing) were personal practices attributed to wellbeing		X	X	
Having a good and balanced diet contributes to teacher wellbeing			X	
Masses (prayers) for meditation and religious meetings help teachers grow spiritually			X	
Helping family, friends and other teachers in their work is a personal practice that is good for teacher wellbeing			X	
Setting aside non-work time to maintain work-life balance is good for teacher wellbeing (eg., weekends or evenings not working)	X		X	
Financial support for teachers in need is helpful for teacher wellbeing			X	
Taking on new learning or a new challenge helps teacher wellbeing (i.e., growing as a teacher)		X	X	
When things go right, teachers can feel deeply loved at school			X	
It is important for teachers' wellbeing (less frustration) to understand the student's home context	X	X		
Teachers find meaning in educating students on values		X		
Teachers' successful time for some was when they first started their careers but for others was later in their careers	X	X		
Teachers feel happy, motivated, included, and engaged during their successful time	X	X	X	
Good pay / income helps wellbeing	X		X	
Some teachers feel bored by the daily routine	X			
Some teachers were concerned that breathing in too much chalk dust, standing for extended hours, and having to shout across loud students would bring upon physical harm to their body		X		

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
Some teachers, after a lot of teaching experience, feel attached to their duty as a teacher and feel proud to be a teacher		X		
<b>Interpersonal levels</b>				
<b>Teachers and students</b>				
It is very helpful to teacher wellbeing and teachers feeling successful for students to be well-behaved	X	X	X	Zinsser et al. 2016, USA
Mentoring students is important to teacher wellbeing			X	Hollweck 2019, Canada
Successful times are when students feel warmly toward their teachers (and also appreciate them)	X	X		Hoogendijk et al. 2018, Netherlands
Teachers feel successful when they feel like they have taught their students well	X	X	X	Luthar and Mendes 2020, USA
Successful times are when teachers manage students with behavioral or learning issues and help them improve and succeed	X			Simões and Calheiros 2019, Portugal
Teacher Appreciation Days/ Education Days and formal celebrations where students can show their appreciation for their teachers help teacher wellbeing		X		Richards et al. 2018, location not mentioned
Students appreciating teachers was important for teachers		X		
Teachers tried to get students to be kind to each other and respect one another		X		
When students do well in their lessons or are better positioned for life, that encourages teachers/ makes them proud	X	X	X	
Teachers felt happy when they help students succeed; for some, teachers felt happy when they realized the students couldn't go forward and succeed without the teachers (or when students find jobs or enter good colleges)	X	X	X	
It helps when students have confidence in their teachers	X			

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
There is not a lot of informal teacher-student interaction built into the school day, although sports halls sometimes make information interaction possible	X			
It helps when students show respect and appreciation for teachers	X	X		
It is very helpful for teacher wellbeing to see students also thrive in extracurriculars such as debate/drama clubs			X	
When students receive awards or win competitions, that makes teachers feel successful	X	X	X	
Big success stories, like getting a student who dropped out to return to school, make teachers happy		X		
Some teachers feel very close to their students	X	X		
Teachers feel happy when students are paying attention, working hard, and learning	X	X	X	
Teachers feel happy when they try hard and the students also try hard	X	X	X	
Teachers find it helpful to use Buddhism / Buddhist philosophies to teach children about mental and emotional health, how to respect teachers, parents, and friends, and how to respect themselves.		X		
Requiring students to speak only English on certain days makes teachers feel as though students are more prepared for exams (which are all given in English), which helps their wellbeing			X	
Relaxing, playing, having a good time in sports with students motivated teachers			X	
Joining students in songs, dances and even poems, going to fields with students for Agricultural Training, celebrating cultural day, and listening to the traditional folk songs and dances from different communities were described as successful school culture			X	

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
<b>Teachers and teachers</b>				
Getting help from other teachers (to improve their teaching) is good for teacher wellbeing	X	X	X	Johnsen et al. 2018, Norway;
Being able to help other teachers is also good for teacher wellbeing	X	X	X	Hollweck 2019, Canada
Teachers being friends is good for teacher wellbeing	X	X	X	Framke et al. 2019, Denmark
Excellent relationships between teachers helps thriving	X			Rodríguez et al. 2019, Spain; Şahin et al. 2019, Turkey
Sharing info from professional development with other teachers and being held up as an example energizes teachers			X	
Guidance and counselling by other teachers is important for teacher wellbeing			X	
Talking about their work and getting help is important for teachers' wellbeing and organizing themselves			X	
Initiating a program that becomes successful and which other teachers support can lead to teacher wellbeing			X	
Teachers being united (working as a team toward a goal, including being united with students and principals) in their work for students is good for teacher wellbeing	X	X	X	
Teachers counseling each other informally is good for teacher wellbeing	X	X	X	
Teachers eating and socializing together is good for their wellbeing (and promoted a family spirit in Qatar, although also a note in Qatar that there was no official time for informal gatherings)	X	X	X	
Using lunch programs and tea breaks/break times to encourage teachers' informal interactions is good for teacher wellbeing		X	X	

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
Lack of informal interactions with other teachers is bad for teacher wellbeing			X	
Informal social time such as games encourages teachers to interact more socially, including discussing family matters and teaching challenges, and is good for wellbeing			X	
School meetings provide the opportunity to exchange ideas and share experience			X	
Having party during vacation times fosters informal social interactions		X		
Teacher wellbeing is promoted through playing football, Celebrating New Year's Eve, eating together, celebrating blessings ceremony in school		X		
It helps teacher wellbeing when other teachers manage classes when a teacher is absent			X	
<b>Teachers and principals or administrators</b>				
Having the head teacher listen to teachers and gather the teachers for substantive discussions (or seek teacher consultation on important matters-Qatar) leads to teacher wellbeing	X		X	Bakhuys Roozeboom et al. 2020, Netherlands
Teachers and principals helping teachers when they have a family need or personal issue is considered very supportive	X	X	X	Wu et al. 2020, China
Cooperation between everyone makes for an enjoyable work environment	X			Framke et al. 2019, Denmark
Teacher wellbeing can be enhanced by receiving practical feedback from administrators on their teaching			X	
Guiding and counseling programs where teachers can speak to someone about any issue can help teacher wellbeing			X	Sottimano et al. 2018, Italy

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
It helps teacher wellbeing when school leaders do not interfere in the work of teachers and give them freedom and flexibility to manage their classes and organize activities and competitions	X			Simões and Calheiros 2019, Portugal
Teachers have better wellbeing when they receive valued support from administrators and principals in the form of resources	X		X	
Being given more responsibility helps teachers develop a positive attitude toward the school and feel engaged (and also grow)	X		X	
It is good for teacher wellbeing for administrators to mediate conflicts between teachers and not take sides			X	
It is helpful to teacher wellbeing to be able to come up with teaching ideas and receive leadership support			X	
Teachers appreciate having decision-making power / freedom in the classroom and this is good for their wellbeing	X		X	
It is seen as supportive to teachers when school leadership requires parents to contribute to their children's education			X	
Hearing encouraging words from principals is helpful to teacher mental health and wellbeing (whether it be promoting or motivating staff during meetings or ensuring teachers' job security)	X	X	X	
Feeling guided and not scolded when things don't go well is helpful for teacher wellbeing		X	X	
Earning new certificates and getting promotions, or being encouraged to do so, is good for teacher wellbeing (Qatar: career progression)	X		X	

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
Recognizing teachers (material rewards, praise, fun experiences) for a good job is helpful for teacher wellbeing	X	X	X	
Principals showing care about the teacher's tiredness and wellbeing is helpful for teacher wellbeing	X	X		
Principals allowing teachers exceptions and flexibility to meet their personal needs (transportation, arrival time) is helpful for teacher wellbeing	X	X	X	
When the teachers and principal get along and don't argue, that helps teachers be more successful		X	X	
When principals care and try to make things less biased for teachers (eg., spreading out the challenging vs easy-to-teach students), that is meaningful and helpful to the teacher's success		X		
Principals being respectful of teachers is helpful	X	X	X	
Flexibility of leadership positively impacts teachers' feelings and wellbeing	X			
Support of the school leadership helps teachers thrive	X			
Principals inviting teachers to gatherings in their homes or farms helps teacher wellbeing	X			
Teachers feel happy when their head teachers protect and support them when there are parent-teacher conflicts				
Shared activities like tree planting day were described as helpful to a good school culture for teacher wellbeing			X	
It helps teacher wellbeing when head teachers support and help teachers who need medical or any other kind of leave			X	
Teachers feel safe when their work is going well			X	

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
It helps teacher wellbeing when principals encourage students		X		
Prompt responses and follow-ups from school leadership on administrative tasks (for example, signing documents) helped teacher wellbeing.		X		
<b>Teachers/principals and parents</b>				
Teachers deeply appreciate being supported by school leadership when there is a problem with parents			X	
Principals talking to parents about how they can help their students behave, study, and be on time is good for teacher wellbeing			X	
Parent support (eg., money, teaching aids, praise) relates to better teacher wellbeing		X	X	
Parents speaking up in support of teachers when there is a problem is very encouraging			X	
It helps teachers' wellbeing when parents provide gifts and small tokens of money to teachers, which allows them money for gas to travel to teach extra days of the week and for meals/breakfast/tea to arrive early or stay late to tutor			X	
Teachers feel happy when their students' parents engage and talk to them about how to improve their child's education	X	X		
Teachers feel happy when parents seem to listen to them and follow their guidance on how to encourage children to do well in their education			X	
When parents are understanding, it helps teacher wellbeing			X	

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
<b>School level (across 1 or more schools; recognizing teachers in front of other teachers)</b>				
An attractive school environment matters, and a well-equipped school matters (one with necessary facilities such as a proper number of latrines, fans, sturdy buildings, etc.)	X	X	X	Barbieri et al. 2019, Italy
A good school environment (no harassment, no pressure, being internally self-driven, a positive attitude by many, trust from the head teacher, like you belong/ friendly) helps teacher wellbeing	X		X	Ouellette et al. 2018, USA
Psychological education and discussing mental health is considered important for teacher wellbeing		X		Schoeps et al. 2019, Spain
Perceived support from the Board of Management and not just head teachers is important to teacher wellbeing			X	
School environment (cleanliness, greenery, no noise of vehicles or animals, big schoolyard, garden, decorated classrooms, appropriate light, windows, calm environment) is important for learning and teacher wellbeing		X	X	
School leaders holding fun events for teachers, such as during Khmer New Year, helps teacher wellbeing		X	X	
When teachers know their roles and have data like test scores to inform how to help students, that helps their work		X	X	
Excellent working conditions helps teacher wellbeing (flexibility with schedule, increased salaries, good leave policy)	X		X	
A family-friendly school atmosphere helps teacher wellbeing	X			
School programs for teacher wellbeing (other than good school atmosphere) were absent from mention in teacher interviews	X			

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
Same salary for all teachers regardless of experience helps teacher wellbeing	X			
Adequate leave / time off (including annual, sick and emergency leave for expatriate teachers, maternity leave) is seen as important to teacher wellbeing	X	X	X	
Schools helping to pay for funeral support to bereaved teachers and families helps teacher wellbeing			X	
A sense of teachers belonging at the school is important	X			
Welfare programs for teachers through the school are helpful for teacher wellbeing: called “merry-go-round» in Kenya, where teachers collect money and give money to a teacher in need if they experience a financial crisis—meant to repay later			X	
Built in breaks in the school day schedule other than lunch are helpful for teacher wellbeing. These breaks/free time can be used to prepare for the next class, informally interact with other teachers, grade work, etc.		X	X	
Helping teachers incorporate more technology into their instruction methods improves teacher wellbeing		X	X	
School gardening helps teachers teach students a valuable life skill and practically provide for the school’s lunch programs			X	
When the school provides basic needs such as food, clean water, and shelter for the students and teachers (transportation, accommodation), it improves teacher wellbeing		X	X	
Some teachers mentioned school lunch programs as helpful to their wellbeing, because instead of worrying about preparing lunch they could just focus on socializing with other teachers or preparing lessons			X	

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
Having school-wide field trips for both students and teachers helps with teacher wellbeing. These trips are funded by the school, occur mostly once a year		X		
When a school implements a new school discipline team, teachers think school discipline is improving which they think is helping their wellbeing		X		
Tougher discipline policies that give teachers the right to punish misbehaved students are helpful to teacher mental health and make teachers feel like the school is on the teacher's side		X		
Flexible sick leave policies are helpful for teacher wellbeing, as is knowing that other teachers can substitute for class; policies that encourage other teachers to visit sick teachers is good for teacher morale		X	X	
Mandatory assemblies and inviting motivational speakers is helpful to some teachers			X	
Some teachers think having well-organized schedules and administration (having strict rules and procedures in place for teachers) make them feel secure			X	
Informal time for teachers sponsored by the school is good for teacher wellbeing (eg., having a party, going on a trip, singing together, going to the gym, going to the field to have fresh air or having a picnic together)		X		
Teachers' training programs give teachers opportunities to bond, believe in themselves and enjoy their time		X	X	
Teachers mentioned benchmarking other schools and learning from other teachers (how they normally apply skills) as successful learning opportunities			X	

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
Rewarding the outstanding teachers is motivating for teachers		X		
Religious preaching at schools is a source of wellbeing and helps teachers deal with stress			X	
Availability of space for teachers to rest, talk, or discuss is important		X		
'Half term' (when teachers are given a work break for a day or two and go to a hotel or some place to feel relaxed and energized) is a successful school policy			X	
It helps teacher wellbeing and encourages teachers when they receive certificates of honor or higher salary levels		X		
<b>Ministry of Education/regional/provincial (in case this applies to Kenya and Cambodia) level</b>				
Being assessed and told you do good work leads to teacher wellbeing; this can be from a central office or from student test scores			X	
When there are government curriculum requirements, it makes it hard to have time to do anything except the curriculum and this is bad for teacher wellbeing			X	
Getting good feedback from inspectors creates successful feelings for teachers	X		X	
Professional development is offered by the Ministry of Education for teachers in all public schools to improve their skills and familiarize them with technologies introduced in the schools	X		X	
Several unnecessary admin requests of teachers mandated by the Ministry negatively affect teachers' wellbeing	X			
Teacher Unions (KNUT/TSC for Kenya): community bodies that advocate for teachers on issues such as pay salaries, delocalization, and disciplinary issues, are good for teacher wellbeing			X	

Themes	Qatar	Cambodia	Kenya	Teacher wellbeing literature
Lack of job stability can hurt teacher wellbeing	X			
<b>National level</b>				
National health insurance for teachers helps teachers improve their wellbeing		X	X	
Having NGO assistance when it comes to funds and supplying resources is good for teacher wellbeing		X	X	
Feeling respected by the community for teaching is good for teacher wellbeing	X	X	X	
<b>Multiple levels</b>				
Teachers have a lot of different stakeholders to keep happy and this is hard	X		X	
<b>Proposed policies</b>				
Some participants mentioned that the ministry of education must have a dedicated social advisor for teachers, especially the expatriate teachers, to help them with when they have some issues regarding the visas for their families or any other issues that they come across	X			
Many participants mentioned that the ministry should allow flexible hours for teachers as the current working hours are very long and strict, so teachers cannot have flexibility and cannot leave early at any time even when they have an emergency or an issue	X			
Leave policy should be revisited as teachers do not have flexible leave policy and they can only take the summer break and the public holidays and they only have 7 days of emergency leave. Therefore, they need more flexible leaves if they have to take them	X			
The compensation policy should be revisited so that more experienced/ higher performing teachers are paid more				

**Table A4.**

*Articles included in the scoping literature review by continent of study location*

Continents	Frequency
Asia	14
Europe	41
Africa	10
North America	29
South America	01
Australia	06
Antarctica	0
Location not available	01

**Table A5.**

List of references included in the scoping literature review by continent

Continents	Studies
<b>Asia</b>	Alfuqaha, O., and Alsharah, H. (2018). Burnout among Nurses and Teachers in Jordan: a comparative study. <i>Archives of Psychiatry and Psychotherapy</i> , 20(2), 55-65.
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<b>Europe</b>	<p>Bakhuys Roozeboom, M. C., Schelvis, R. M., Houtman, I. L., Wiezer, N. M., and Bongers, P. M. (2020). Decreasing employees' work stress by a participatory, organizational level work stress prevention approach: a multiple-case study in primary education. <i>BMC Public Health</i>, 20, 1-16.</p>
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**Table A6.**

*Interventions uncovered in the scoping literature review*

Intervention Name (n=37)	Frequency (n=55)
Good Behavior Game and Peer Assisted Learning	
The ability model of emotional intelligence	
Discrete trial training	
Pivotal response training (PRT)	
Cultivating Awareness and Resilience in Education (CARE)	
14-week professional development course on teacher-child interactions	
Four Pillars of Wellbeing curriculum	
Psychological counseling on redefinition of life	
Gymnastics and vocal hygiene	
Key2Teach intervention	
Good News Notes	
Daily Report Card	
Prayer	
Mindfulness based interventions	

Social support groups	I
Yoga training	IIII
Participatory organization-activities (seminars and workshops) in the workplace problem analysis and solution finding	I
Professional learning program "Positive Education"	I
participatory action approach, Heuristic Method	I
The work stress prevention approach	I
Voice technique, Voice Ergonomics, Room acoustics, Language interaction, Body communication	I
Rational Emotive Occupational Health Coaching (REOHC)	I
Autogenic relaxation	I
Brief work-related self-affirming implementation intention	I
Implementation of an induction arrangement	I
Social and emotional learning (SEL)	II
Training workshops and in-classroom coaching	I
Mental Health First Aid (MHFA)	I
Rational Emotive Behavior Therapy (REBT)	II
Inquiry-based stress reduction (IBSR) intervention	I
Cognitive behavioral intervention (CB)	I

Complementary and alternative medicine (CAM)	
Trauma release exercises	
Transpersonal-orientated stress intervention,	
ACHIEVER Resilience Curriculum (ARC)	
Mindfulness-Based Emotional Balance (MBEB)	
Drama therapy, Developmental Transformations (DvT)	

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