



A Systematic Review of Evidence-Based Wellbeing Initiatives for Schoolteachers and Early Childhood Educators

Emily Berger^{1,2} · Andrea Reupert^{1,3} · Timothy C. H. Campbell² · Zoe Morris¹ · Marie Hammer¹ · Zane Diamond¹ · Rochelle Hine⁴ · Pamela Patrick¹ · Chantel Fathers⁵

Accepted: 14 June 2022 / Published online: 4 July 2022
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Abstract

Schoolteacher and early childhood educator wellbeing is associated with their ability to provide high-quality educational experiences to students and children in their care. Given the importance of this topic, this systematic review sought to (1) identify available evidence-based wellbeing initiatives for educators and schoolteachers, (2) appraise the quality of evidence demonstrating the efficacy of these initiatives, and (3) summarise the characteristics of these initiatives. In total, 23 studies on 19 distinct initiatives were identified. Although most initiatives improved schoolteacher wellbeing, the quality of available evidence is modest, especially for early childhood educators. Existing teacher and educator wellbeing initiatives predominantly target individual and not systematic determinants of educator wellbeing, even though wellbeing of these groups is determined by a combination of personal and education setting influences. More research is needed to improve the evidence on teacher and early childhood educator wellbeing initiatives, as well as development of initiatives that aim to change workplace demands and education setting culture.

Keywords Early childhood educators · Schoolteachers · Wellbeing · Wellbeing initiatives · Intervention review

✉ Emily Berger
emily.berger@monash.edu

¹ Faculty of Education, Monash University, Building 92 (Learning and Teaching Building) 19 Ancora Imparo Way, Clayton, VIC 3800, Australia

² Monash Rural Health Warragul, Monash University, Warragul, Australia

³ Krongold Clinic, Faculty of Education, Monash University, Clayton, Australia

⁴ School of Rural Health, Monash University, Warragul, Australia

⁵ Beyond Blue, Melbourne, Australia

Introduction

Schoolteachers' and early childhood educators' wellbeing is a fundamental contributor to their ability to support learning and care of children (Gray et al., 2017; Sisask et al., 2014). Teacher wellbeing is a multi-dimensional construct that encompasses physical, psychological, and spiritual health, as well as occupational attachment, stability, commitment, and satisfaction (Granziera et al., 2021). Cumming (2017) described early childhood educator wellbeing as entailing individual determinants, as well as contextual, relational, systemic, and discursive factors. Thus, schoolteacher and educator wellbeing is comprised of more than individual educators' psychosocial, physical, and mental wellbeing, and is determined by relationships with colleagues, the organisational policies and structure, and workplace conditions. Collie and Perry (2019) argued that a sense of wellbeing is integral to teachers' ongoing growth in their role. In this paper, we employ the term "educator" to include early childhood educators of children before they enter primary school, as well as primary and secondary school teachers. We also use this term to refer to pre-service teachers undertaking their initial teacher education to qualify as teachers.

Wellbeing of Educators

Research demonstrates that teaching is a highly complex, stressful, and demanding occupation (Smak & Walczak, 2017). Educators encounter a range of challenges and stressors in their work, including responding to the varied needs of children, navigating interpersonal relationships and expectations of students, parents, and colleagues, time pressures, and balancing the requirements of the profession with their personal life (Herman et al., 2018; Spilt et al., 2011). Additionally, an emphasis on benchmarks and accountability within education systems heightens stress for educators (McCallum and Price, 2015). McCullum and Price's observation that schools are assuming an increasingly prominent role in supporting the emotional wellbeing of school-aged children further illustrates the growing range of responsibilities placed on educators.

Compared to other professions, educators experience higher levels of stress and depression (Reupert, 2020). In particular, educators carry a high stress-load (Herman et al., 2018), and are vulnerable to experiencing emotional exhaustion and burnout (Shen et al., 2015; Skaalvik & Skaalvik, 2010). Low levels of mental health in educators have been associated with absenteeism (Gibbs & Miller, 2014; Kidger, Brockman, et al., 2016; Kidger, Stone, et al., 2016), presenteeism (in which educators are present at work but are under performing; Jain et al., 2013), ill health retirement (Kuoppala et al., 2011), and a high level of attrition in the teaching profession (Liu & Onwuegbuzie, 2012). Educators' wellbeing often affects their teaching competence, which in turn has implications for students' academic achievement and wellbeing (Carroll et al., 2021).

The Impact of Educator Wellbeing

An educator's emotional state influences how they think about and function in their teaching (Sutton & Wheatley, 2003). A recent study demonstrated that poor wellbeing reduces educators' belief that they can help students with behavioural or emotional problems (Sisask et al., 2014). Educators' ability to develop supportive relationships with students, a key factor in promoting children's engagement (Kidger et al., 2012), is negatively impacted by educator stress (Virtanen et al., 2019). Conversely, educator wellbeing is associated with educators' greater commitment to and motivation for work (Collie & Perry, 2019), and job retention (Arens & Morin, 2016). These factors in turn affect children. Harding et al. (2019) showed an association between higher teacher wellbeing and lower student psychological difficulties. Arens and Morin (2016) found educators experiencing greater wellbeing were more likely to have higher academically achieving students. Thus, educator wellbeing is essential for individual teachers, and plays an important part in fostering healthy and effective educational environments.

Theoretical Conceptualisation of Educator Wellbeing

A useful framework for understanding educator wellbeing is Bronfenbrenner's original ecological framework. This framework has been applied in educator wellbeing research and indicates that educator wellbeing is determined by six, interrelated factors, including the following: (1) the individual educator; (2) microsystem; (3) mesosystem; (4) exosystem; (5) macrosystem; and (6) chronosystem (Cumming & Wong, 2019; Price & McCallum, 2015). The individual educator includes an individuals' predisposing factors that may influence wellbeing, such as life experiences and temperament. The microsystem includes the relationships between teachers, students, and parents, and the influence of classroom and school interactions on educators' wellbeing. The mesosystem encompasses the interactions that take place between two or more people (e.g. students and colleagues) or settings (e.g. work and home) within a teacher's microsystem. The exosystem consists of structures and systemic issues that may indirectly affect educators, such as school district procedures or available social services. The macrosystem describes the board political, economic, legal, and cultural influences on educator wellbeing (e.g. school funding for wellbeing programmes, school culture that supports educator wellbeing), and the chronosystem refers to the influence of changes across time and historical factors on the wellbeing of educators (Cross & Hong, 2012).

The use of this framework is consistent with emerging research in the field of educator wellbeing (Cumming, 2017; Reupert, 2020). Specifically, prior research has shown that educators' wellbeing is determined by individual teacher factors such as coping style, personality, and confidence, alongside organisational factors including, but not limited to, education setting climate, role clarity, and leadership, as well as broad societal factors such as academic benchmarks and national testing procedures (Reupert, 2020). Applying an ecological lens to the extant research

on educator wellbeing may help to identify strengths and gaps in the evidence on initiatives to support educator wellbeing and highlight future research, policy, and practice directions. However, as Price and McCallum (2015) state, the influence of the ecological layers on educator wellbeing is not well understood and has not been extensively analysed. Similarly, it is unclear how well educator wellbeing initiatives respond to the individual, organisational, and structural factors that impact educator wellbeing, work performance, and career longevity.

Aims of the Review

To facilitate the translation of the extant body of available research, a systematic review and appraisal of available initiatives is required. The aim of this review was to (1) identify the range of educator wellbeing initiatives currently available, (2) appraise the quality of evidence demonstrating the efficacy of these initiatives for educator wellbeing, and (3) summarise the approaches, contents, and delivery formats that characterise these initiatives. Such information might be used to guide policy, and inform future educator wellbeing initiatives.

Method

A systematic review of research literature was conducted between December 2020 and January 2021 to identify, describe, and appraise evidence-based initiatives supporting educators' wellbeing. The Preferred Reporting Items of Systematic Review and Meta-Analyses (PRISMA) guidelines (Moher et al., 2009) informed the methodology for this review.

Eligibility Criteria

Inclusion Criteria

Studies that had investigated educator wellbeing outcomes associated with initiatives implemented in early learning settings, primary or secondary schools, or specialist education settings were included in the review. Early learning settings refer to childcare or kindergarten settings for children aged 0 to 5 years, primary (elementary) and secondary schools refer to educational settings for students aged five to 18 years, and specialist schools are settings that cater for students with additional learning, social, emotional, or behavioural needs. Initiatives targeting pre-service educators completing their initial teacher education training were also eligible for inclusion in the review. To ensure the review focused on contemporary educator wellbeing initiatives and outcomes, a publication date range from 1 January 2010 to 31 December 2020 was applied. Peer-reviewed quantitative and qualitative evaluation studies, published worldwide, in the English language were eligible for inclusion.

Exclusion Criteria

To establish a minimum standard for an initiative to be considered evidence-based, articles that were not peer-reviewed (e.g. book chapters, grey literature), did not report primary data, were study protocols, or were opinion pieces were excluded. Dissertations were also excluded because they are less likely than published journal articles to undergo rigorous peer review. Wellbeing initiatives and outcomes in the context of tertiary and adult education (excluding pre-service educator wellbeing initiatives) were also outside the scope of this review.

Literature Search

Five journal databases were searched: PsycINFO; Scopus; A + Education; ProQuest Education Journals; and ERIC for relevant studies. Table 1 presents the structure of search terms used in the literature search, which was formatted to the conventions of each database. Search limits were utilised according to the options available within each database, including the application of parameters for English language, peer-reviewed journal, and publication date.

Appraisal of Evidence Quality

The Australian National Health and Medical Research Council guidelines, which establishes different levels of evidence based on the robustness of research methodology (NHMRC, 2009), was employed to appraise the level of evidence for each identified initiative (Table 2). These guidelines were selected to classify the review results according to research design, from randomised controlled trials (RCTs) which is the highest standard for studies using original data, to pseudorandomised controlled trials, comparative studies with concurrent controls, comparative studies without concurrent controls, and case series measuring pre-post intervention outcomes (NHRMC, 2009). This evidence hierarchy can be used to assess the likelihood of bias in therapeutic intervention studies (Merlin et al., 2009). However, the NHMRC evidence guidelines are only applicable to quantitative research methodologies. Thus, qualitative studies were assessed using the Critical Appraisal Skills Programme checklist for qualitative research (CASP, 2018). Further, to explore the quality of evidence from the RCTs, the US Department of Education’s What Works Clearinghouse (WWC, 2020) guidelines were used.

Table 1 Structure of search terms for the literature review

Search 1	(teacher* OR educator* OR early childhood educator* OR principal*) ADJACENT (wellbeing OR mental wellbeing OR mental health)
Search 2	initiative* OR intervention* OR resource* OR program* OR systems approach*
Search 3	COMBINE Search 1 AND Search 2

Table 2 NHMRC levels of evidence

Level of evidence	Study design
I	A systematic review of level II studies
II	A randomised controlled trial
III-1	A pseudo-randomised controlled trial (i.e. alternate allocation or some other method)
III-2	A comparative study with concurrent controls (i.e. non-randomised experimental trials, cohort studies, case–control studies, interrupted time series studies with a control group)
III-3	A comparative study without concurrent controls (i.e. historical control study, two or more single arm studies, interrupted time series studies without a parallel control group)
IV	Case series with either post-test or pre-test/post-test outcomes

The table presented here is replicated from the National Health Medical Research Council levels of evidence and grades for recommendations for guideline developers (p. 15, 2009)

Procedure

Figure 1 charts the systematic review process, including database search results and eligibility decisions. The title and abstract of each record returned in the database search were independently screened by two reviewers to ensure the process for establishing the eligibility of studies was robust. In cases where the two reviewers' decisions conflicted (33 of 245 records), a third reviewer assessed the paper and a decision was made through deliberation within the research team. The 51 studies accepted through this initial screening stage of the title and abstract were subjected to a full-text review. In the full-text review, the eligibility of each study was assessed by one researcher according to the inclusion and exclusion criteria, and a second author verified inclusions. Thus, two to three authors (EB, AR, and TC) were involved across title, abstract, and full-text screening, with the other authors providing support to develop the methodology and review the results. The reference lists of these eligible studies were manually checked for additional relevant records, which were then subjected to the full-text review process. From the 23 included studies, data were extracted pertaining to the research methodology implemented, educational setting and sampling, content of the wellbeing initiative (i.e. theoretical framework employed, format, duration, facilitator), reported outcomes for educator wellbeing, and other reported outcomes. The review team determined an NHMRC evidence level, Clearinghouse, or CASP rating as applicable for the methodology in each eligible study. The educator wellbeing initiatives identified across the studies were then grouped according to their underpinning therapeutic approach.

Results

In summary, 23 studies were identified that reported on educator outcomes across 19 different educator wellbeing initiatives. One initiative (Mindfulness-Based Stress Reduction; MBSR) had been the subject of four separate studies, and one

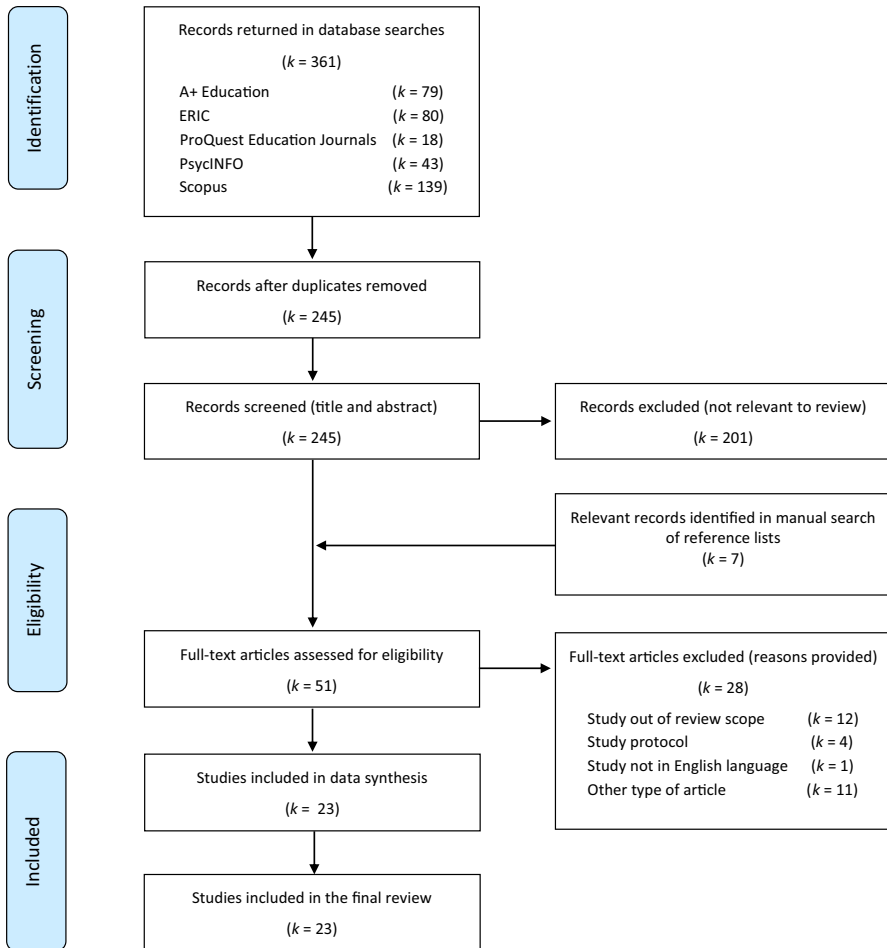


Fig. 1 Flowchart of the literature review process and articles included and excluded at each stage. Note. This chart is adapted from the Preferred Reporting Items of Systematic Review and Meta-Analyses (PRISMA) guidelines (Moher et al., 2009)

initiative (Reconnected) had been the subject of two studies that had made use of the same dataset. Table 3 presents the 19 initiatives grouped by therapeutic approach and appraisal of evidence quality for each study. Table 4 summarises the sampling, educational context, and educator wellbeing findings reported. Table 5 summarises key characteristics of the 19 educator wellbeing initiatives. The six therapeutic categories of “mindfulness”, “social-emotional”, “mental health literacy”, “cognitive behavioural”, “positive psychology”, and “integrative” were used to organise the results. A final category, which was not a therapeutic approach, was also included, called “school leadership and policy change”.

Table 3 Initiatives to enhance educator wellbeing: overview of the current evidence base

Therapeutic approach	NHMRC levels of evidence					WWC Clearinghouse Guidelines (RCT studies only)	Qualitative evidence	CASP checklist
	IV	III-3	III-2	III-1	II			
Mindfulness			Beshai et al. (2016)					
. b Foundations Course				Harris et al. (2016)				
CALM							Graham & Truscott (2020)	5
Christian Meditation								
MBSR		Gold et al. (2010)	Gouda et al. (2016) Rupprecht et al. (2017)	Frank et al. (2015)				
MT					Roeser et al. (2013)	Eligible to meet WWC standards with reservations		
Reconnected					Hwang, Goldstein, et al. (2019) Hwang, Jae-Eun, et al. (2019)	Eligible to meet WWC standards with reservations		

Table 3 (continued)

Therapeutic approach	NHMRC levels of evidence					WWC Clearinghouse Guidelines (RCT studies only)	Qualitative evidence	CASP checklist
	IV	III-3	III-2	III-1	II			
SMART					Taylor et al. (2016)	Eligible to meet WWC standards with reservations		Number of criteria met (qualitative studies only; range: 0–9)
Social-emotional					Jennings et al. (2013)	Eligible to meet WWC standards without reservations		
EI in the Classroom IY-TCM				Vesely et al. (2014)				
Lange Lehren project					Hayes et al. (2020)	Eligible to meet WWC standards without reservations		
Arts-based reflection					Unterbrink et al. (2010)	Does not meet WWC group design standards		
								McKay and Barton (2018)
								2

Table 3 (continued)

Therapeutic approach	NHMRC levels of evidence					WWC Clearinghouse Guidelines (RCT studies only)	Qualitative evidence	CASP checklist
	IV	III-3	III-2	III-1	II			
Mental health literacy	MHFA		Kidger et al. (2016b)					Number of criteria met (qualitative studies only; range: 0–9)
School leadership and policy change	The African Guide PAR	Kutcher et al., (2016a, 2016b) Morris et al. (2020)						
Cognitive behavioural	DBT-ST	Justo et al. (2018)						
Positive psychology	PERMA Model						Turner and Theilking (2019)	8
Integrative	ARC		Cook et al. (2017)					
	CALMERSS	Taylor (2018)						

Community Approach to Learning Mindfully (CALM); Mindfulness-Based Stress Reduction (MBSR); Mindfulness Training (MT); Stress Management and Resiliency Techniques for Educators (SMART); Cultivating Awareness and Resilience in Education (CARE for Teachers); Emotional Intelligence in the Classroom (EI in the Classroom); Incredible Years Teacher Classroom Management (IY-TCM); Mental Health First Aid (MHFA); Participatory Action Research (PAR); Dialectical Behaviour Therapy—Skills Training (DBT-ST); ACHIEVER Resilience Curriculum (ARC)

Table 4 Initiatives to enhance educator wellbeing: overview of study findings

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
Mindfulness	Beshai et al. (2016)	7 secondary schools located in five regions across England	89 teachers and staff who had direct contact with the students in an educational / pastoral / support role	.b Foundations Course	Large reductions in stress Large improvements in well-being 95% of teachers who attended the course found it to be acceptable	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Harris et al. (2016)	2 middle schools in the same district of the USA	64 educators (42 teachers, 22 paraprofessionals or learning support)	Community Approach to Learning Mindfully (CALM). CALM informed by MBSR	Moderate benefits for educators' mindfulness, positive affect, classroom management, distress tolerance, physical symptoms, blood pressure, and cortisol awakening response No improvements in relational trust, perceived stress, or sleep 90% of teachers indicated they would continue participating if the initiative was offered again; 94% indicated they would recommend the initiative to other school personnel	Wellbeing initiative outcomes: student wellbeing and other outcomes

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Graham and Truscott (2020)	Australian Catholic primary schools	50 teachers 114 Year 5 students involved in focus groups	Christian Meditation	Teachers described the effects of practicing the meditation as relaxing and calming. Facilitating the meditation process and observing students benefit from the process contributed to a sense of professional fulfilment. Facilitating the practice had personal benefits for emotional wellbeing	Students described the effects of practicing the meditation as calming, relaxing, and refreshing Both students and teachers stated that the meditation offered flow-on benefits for social interactions in the classroom
	Gold et al. (2010)	6 suburban primary schools in the UK	9 teachers and 2 teaching assistants	Mindfulness-Based Stress Reduction (MBSR)	Significant improvements in depression. Significant improvements in stress No significant improvement in anxiety. Significant improvement in Acceptance without Judgement (a mindfulness factor)	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Gouda et al. (2016)	A Catholic secondary (Gymnasium) school for girls in Freiburg, Germany	44 teachers 43 female Year 11 students	Mindfulness-Based Stress Reduction (MBSR)	Significantly higher mindfulness levels Reduced interpersonal problems Moderate improvements in anxiety and emotion regulation. Outcomes were largely stable at 4-month follow-up	Students reported moderate improvements in stress levels, self-regulation, school-specific self-efficacy, and interpersonal problems

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Rupperecht et al. (2017)	Public primary and secondary schools in Hamburg, Germany	32 teachers	Mindfulness-Based Stress Reduction (MBSR)	Moderate to large improvements in stress and health, coping abilities, emotion regulation, and self-efficacy. Initiative effects stabilised or improved at the 3-months follow up	Wellbeing initiative outcomes: student wellbeing and other outcomes
					Teachers explained that they became more aware of stressors and in turn, engaged more wisely with work demands	
					Satisfaction with the MBSR initiative was high; 82% of the teachers would recommend it to colleagues	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Frank et al. (2015)	2 secondary schools in Pennsylvania, USA	36 full-time educators	Mindfulness-Based Stress Reduction (MBSR) (adapted)	Large gains in self-regulation, self-compassion, and mindfulness-related skills (observation, nonjudgment, and non-reacting) Large improvements in sleep quality No significant improvements in teacher burnout, or mental health symptoms	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Roeser et al. (2013)	Suburban public primary and secondary schools in western Canada and western USA	113 teachers	Mindfulness Training (MT)	Moderate to large reductions in occupational stress, depression, anxiety, and burnout Small improvements in mindfulness, focused attention and working memory capacity, and occupational self-compassion No effect on physiological measures of stress	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Hwang, Goldstein, et al. (2019) Hwang, Jae-Eun, et al. (2019)	20 Australian schools (11 primary; 4 secondary; 1 primary and secondary; 4 specialist)	185 educators 87% teaching role; 12.9% non-teaching roles requiring interaction with students, e.g. principals and deputy principals)	Reconnected	Decreases in perceived stress and sleep difficulties Increases in mindfulness and self-compassion Initiative effects were evident at a 5-month follow-up Findings did not support that the enhancement of educator wellbeing would improve teaching efficacy	Improvements were observed in teacher and student verbal interactions in the classroom

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes:	Wellbeing initiative outcomes:
	Taylor et al. (2016)	Primary and secondary schools in a single Canadian district	59 teachers	Stress Management and Relaxation Training (SMART). SMART was developed based on MBSR	Moderate to large improvements in efficacy beliefs and the tendency to forgive. These improvements partially mediated reductions in stress from baseline to 4-month follow-up. Interview results showed a trend for teachers in SMART to report more adaptive strategies for coping with job stress, and a tendency to evaluate challenging students in a more positive affective light	Wellbeing initiative outcomes: student wellbeing and other outcomes

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
Social-emotional	Jennings et al. (2013)	Primary and secondary schools from two educational districts in north-east USA	50 teachers	Cultivating Awareness and Resilience in Education (CARE for Teachers)	Improvement in self-reported wellbeing, efficacy, burnout, time-related stress, and mindfulness. Teachers viewed CARE as a feasible, acceptable, and effective initiative	Wellbeing initiative outcomes: student wellbeing and other outcomes
	*Vesely et al. (2014)	University school teaching course in Canada	49 undergraduate teacher candidate students	Emotional Intelligence (EI) in the Classroom (adapted)	The initiative did not have an effect on stress, anxiety, teacher efficacy, satisfaction with life, or resiliency	
	*Hayes et al. (2020)	80 schools (Reception to Year 4) across the South West of England	80 teachers	Incredible Years Teacher Classroom Management (IY-TCM)	No effect for burnout reported by teachers No effect for teacher efficacy or wellbeing. Teachers reported that the initiative helped them relate with their students and respond more positively to them	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Unterbrink et al. (2010)	89 secondary schools (“Hauptschule”; $n = 70$; “Gymnasium”; $n = 19$) in south-west Germany	337 teachers	“A psychological group initiative” (Lange Lehren project)	Small to moderate improvement in general mental health	
	McKay and Barton (2018)	An Australian secondary school	3 teachers from Year 7 and Year 8 classrooms	“Arts-based reflection”	A range of arts-based reflective practices helped to elicit participants’ awareness of the personal and contextual resources that supported their resilience and wellbeing	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
Mental health literacy	Kidger et al. (2016b)	6 secondary schools in the UK	438 staff surveyed 13 observations 14 staff focus groups 6 staff interviewed 1862 students (Years 8–9) surveyed	Mental Health First Aid (MHFA)	Better knowledge about mental health Less stigmatising attitudes towards mental health difficulties Greater confidence in helping a colleague The training was reported to be useful for conferring new knowledge and skills, giving reassurance about current practice, providing opportunity to discuss difficulties in supporting students with colleagues and developing awareness of one's own mental health	Wellbeing initiative outcomes: student wellbeing and other outcomes

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Kutcher et al., (2016a, 2016b)	35 secondary schools in Tanzania	61 teachers	The African Guide (adapted from the original “The Guide” in Canada)	More than 75% of teachers reported high rates of positive help-seeking efficacy, for themselves as well as for their students, friends, family members and peers, after the initiative. Improvements in teacher’s mental health knowledge	Decreases in teacher’s stigma in relation to mental health

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
School leadership and policy change	Morris et al. (2020)	An Australian metropolitan secondary school	28 teachers surveyed 15 teachers involved in focus groups 30 teachers interviewed	Participatory Action Research (PAR)	Strategies focusing on appraisal and recognition, participative decision-making, professional growth, and supportive leadership (areas identified by school staff in the PAR for specific attention) were employed to increase morale and improve staff wellbeing Change in leadership style was a key factor that promoted perceived cultural change in the school	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
Cognitive behavioural	*Justo et al. (2018)	Public primary schools in a south Brazilian city	27 teachers	Dialectical Behavioural Therapy—Skills Training (DBT-ST)	The initiative appeared to have a negative effect on teachers' wellbeing. Difficulty in "behaving in accordance with goals while experiencing a negative emotion" increased during the initiative period; and an increase in "lack of emotional awareness" was observed 2 months after the initiative. Teachers showed improvements in their ability to explain and evaluate everyday interaction situations.	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
Positive psychology	Turner and Theilking (2019)	5 government primary schools in Australia (VIC)	5 teachers	PERMA Wellbeing Model	Teachers reported feeling less stressed, more relaxed, more positive and calmer in the in the classroom. Teachers reported feeling more engaged with teaching which they perceived improved the quality of their lessons	Teachers reported spending more one-on-one time with their students and developed better relationships and understanding of their students. Teachers also noticed improvements in their student's work and confidence
Integrative	Cook et al. (2017)	Middle and secondary schools in educational district in mid-west USA	44 teachers	ACHIEVER Resilience Curriculum (ARC)	Moderate reductions in perceived stress. Moderate improvements in self-efficacy. Moderate increases in job satisfaction. Moderate stronger intentions to implement Educational Planning Books (EBPs),	

Table 4 (continued)

Therapeutic approach	Study (publication year)	Location and educational setting	Study participants	Wellbeing initiative name	Wellbeing initiative outcomes: educator wellbeing	Wellbeing initiative outcomes: student wellbeing and other outcomes
	Taylor (2018)	Australia (educational setting unclear)	5 teachers	CALMERSS	Reductions in psychological, physical, and personal strain, and in depressive symptoms Improvement in self-care	

Records marked with an asterisk were found not to have an effect on educator wellbeing or had a negative effect on educator wellbeing. The studies by Hwang, Goldstein, et al. (2019) and Hwang, Jae-Eun, et al. (2019) have been included together as these studies drew on the same dataset to evaluate initiative outcomes

Table 5 Initiatives to enhance educator wellbeing: summary of initiative characteristics

Therapeutic approach	Wellbeing initiative	Target group(s)	Underpinning theory/ rationale	Key content	Format of delivery	Facilitator
Mindfulness	.b Foundations Course	General educator population	The initiative is based on the core mindfulness principles of mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MBCT)	Modules focus on <i>attention to body, attention to thoughts, and cultivation of self-compassion</i>	9 weekly face-to-face sessions of 75-min duration. Participants of the initiative are expected to conduct a 10–40-min home practice session 6 days a week	Trained mindfulness practitioner external to schools
	CALM	General educator population	The initiative is based on gentle yoga and mindfulness practices	A typical session includes: centering and setting an intention for the practice; breathing practices; movement/posture practice; revisiting the breathing practice; relaxation/meditation practice (varied focus on relaxation, mindfulness, self-care, compassion, loving-kindness, and gratitude); and closing practice involving setting an intention for the workday	64 face-to-face sessions, of approximately 20-min duration, offered 4 days per week for 16 weeks. Participants were encouraged to attend at least twice a week and to use practices outside of the sessions. Sessions operated before the school day commenced	A certified yoga instructor with experience in meditation practices. The facilitator was a practitioner external to schools
	Christian Meditation	Educators and students in the Catholic education system	Classroom-based contemplative education initiatives may be a valuable approach for schools seeking to promote the wellbeing of both students and teachers	The meditation is primarily conceptualised as a form of prayer. Participants focus their mind through using the ancient Christian prayer word, <i>Maranatha</i> , which is silently repeated as a mantra during the meditation	Typically a whole class activity practiced at least several times per week, either in the morning or after class breaks. The target length of the meditation is associated with students' age, (e.g. target of 8 min for students who are 8 years of age)	Classroom teacher who has attended a 1-day face-to-face workshop conducted by the World Community for Christian Meditation

Table 5 (continued)

Therapeutic approach	Wellbeing initiative	Target group(s)	Underpinning theory/ rationale	Key content	Format of delivery	Facilitator
MBSR		General educator population	Mindfulness, originally a Buddhist concept, is the ability to purposefully pay attention to the present moment non-judgmentally. Mindfulness might reduce reactivity to negative emotions, which is pertinent to the way teachers interact especially with challenging pupils	The MBSR curriculum is comprised of mindfulness meditation practices and mindfulness in daily life. Every course session focuses on a topic such as coping with stress or working with difficult emotions	MBSR is a structured 8-week course with weekly face-to-face group meetings that range 2.5–3 h in length. The initiative structure has been adapted to the school year schedule	MBSR instructor external to schools
MT		General educator population	Mindful self-regulation skills and self-compassionate mind-sets are theorised to assist in recognising, acknowledging, and coping with stress	The initiative uses five main teaching activities to teach mindfulness and self-compassion to teachers: guided mindfulness and yoga practices, group discussions of mindfulness practice, small-group activities to practice skills in real-life scenarios, lecture and guided home practices, and homework assignments	11 face-to-face sessions over 8 weeks (36 contact hours). The initiative operated after school hours	Trained facilitator external to schools
Reconnected		General educator population	The aim of the initiative is to provide educators with support for self-management of stress as well as foster increases in mindfulness, self-awareness and emotional regulation	The initiative involves a range of experiential, physical and everyday exercises, such as mindful yoga, walking, eating and breathing, along with empathetic listening.	8 weekly face-to-face training sessions (after school hours) of 90-min duration. During the initiative period, participants are also provided online resources for guided meditation and theory	Delivered by Mind with Heart, an international charity organisation external to schools

Table 5 (continued)

Therapeutic approach	Wellbeing initiative	Target group(s)	Underpinning theory/ rationale	Key content	Format of delivery	Facilitator
	SMART	General educator population	The initiative is based on Jon Kabat-Zinn's Mindfulness-Based Stress Reduction (MBSR) initiative (approximately 50% of the same mindfulness meditation and movement practices)	50% of the initiative is mindfulness-based stress reduction; 30% is mindfulness-based emotion skills; 20% is mindfulness-based compassion and forgiveness	11 face-to-face sessions over 8 weeks (36 contact hours). The initiative operated after hours in the school	Mindfulness trainer external to schools
Social-emotional	CARE for Teachers	General educator population	CARE is aimed at providing teachers with skills to reduce emotional stress and improve social and emotional skills required to build supportive relationships with students, manage challenging student behaviours, and provide modelling and direct instruction for effective social and emotional learning	CARE includes emotion skills instruction, mindful awareness practices, and compassion building activities. It also includes a coaching component that typically takes place between initiative sessions	CARE is an intensive 30-h initiative presented in 4 day-long face-to-face sessions over 4–6 weeks, with intercession phone coaching and a booster held approximately 2 months later	Trained facilitator external to schools
	#EI in the Classroom	The initiative was targeted at pre-service educators	The skill development initiative was based on the Swinburne EI model	The initiative consisted of modules on emotional self-awareness and expression, emotions attached to awareness of others, reasoning, self-management, management of others, and self-control	5 weekly face-to-face group sessions of 90-min duration	University course co-ordinator

Table 5 (continued)

Therapeutic approach	Wellbeing initiative	Target group(s)	Underpinning theory/ rationale	Key content	Format of delivery	Facilitator
	*TY-TCM	General educator population	An initiative that supports teachers to manage disruptive behaviour and promote socio-emotional competence may benefit not only pupils, but also teachers themselves. TCM draws on cognitive social learning theory	The training is focused on collaborative learning, reflections about teachers' own experiences, and group work to find solutions to problems encountered in the classroom	6 whole-day face-to-face workshops delivered once per month	Trained facilitator external to schools
	Lange Lehren project	General educator population	Teachers' health prevention must aim at improving social and emotional competences (coping)	The initiative includes 5 modules: (1) basic knowledge of stress physiology and effects of interpersonal relationships; (2) mental attitudes; (3) handling relationships with pupils; (4) handling relationships with parents; (5) strengthening collegiality and social support amongst staff	10 monthly face-to-face sessions of 90-min duration	Trained facilitator external to schools
	Arts-based reflection	General educator population	Supporting teachers to be reflective practitioners as a means of coping allows them to recognise and respond to the contextual and personal factors influencing their experience as teachers	Various tools for reflection were employed: time-lining; rip and paste collaging; metaphor writing; and adapted photo-elicitation techniques. These practices were undertaken to supplement the written reflections undertaken by teachers during school-based visits and the full-day workshops	1 full-day face-to-face workshops per term, delivered over 2 years	Trained facilitator external to schools

Table 5 (continued)

Therapeutic approach	Wellbeing initiative	Target group(s)	Underpinning theory/ rationale	Key content	Format of delivery	Facilitator
Mental health literacy	MHFA	General educator and student populations	Training and support for staff in working with students experiencing mental and emotional difficulties is likely to lead to improved staff-student relationships, with flow-on academic and health benefits for students, and improvements in staff mental health	The course covers key facts, recognition and understanding of the most common mental disorders—depression, anxiety and psychosis—and provides attendees with a strategy for providing initial help to anyone appearing distressed or at risk of developing a mental health problem	There were two strands to the initiative: the MHFA training package (2 all-day face-to-face sessions) and the setting up of a peer support service for staff	MHFA instructor external to schools
	The African Guide	General educator and student populations The initiative was culturally adapted	Teachers not only benefit from developing their own personal mental health literacy competency, but are then also in a position to enhance the mental health literacy of their students	The AG consists of a teachers' mental health knowledge self-study guide, a self-evaluation test, and 6 modules: (1) the stigma of mental illness; (2) understanding mental health and wellness; (3) information about specific mental illnesses; (4) experiences of mental illness; (5) seeking help and finding support; and (6) the importance of positive mental health	The initiative involved a 2-day face-to-face training course and a 3-day refresher training approximately 6 months later	A team of psychologists/psychiatrists working external to schools

Table 5 (continued)

Therapeutic approach	Wellbeing initiative	Target group(s)	Underpinning theory/ rationale	Key content	Format of delivery	Facilitator
School leadership and policy change	PAR	General educator population	School leadership behaviours are a core factor influencing school improvement and have been linked to teachers' emotions and wellbeing	<p>PAR process: The school developed their own initiatives. Key initiatives included prioritising formal recognition of inspirational staff and seeking opportunities to bring staff together socially in order to build morale. Participative decision-making approaches were applied through a new development process for the school business plan, and professional growth was enhanced through a restructure of budget allocation as well as increased professional learning occurring on school grounds. Leadership sought to be more visible and consultative in order to be viewed as more supportive</p>	The initiative development phase of the project was a workshop. The PAR process was completed by the school within a 12-month period	An academic researcher facilitated the PAR process. The workshop was conducted by a well-respected retired secondary school principal to support the development of the initiative
Cognitive behavioural	*DBT-ST	General educator population	The initiative is based on the DBT- ST therapy developed by Marsha Linehan, and is aimed at developing skills needed for new behavioural, emotional, and thinking patterns		4 weekly face-to-face meetings of 3-h duration and a follow-up session 2 months afterwards	Clinical psychologist trained in DBT who worked external to schools

Table 5 (continued)

Therapeutic approach	Wellbeing initiative	Target group(s)	Underpinning theory/ rationale	Key content	Format of delivery	Facilitator
Positive psychology	PERMA Model	General educator population	Seligman's PERMA model, based in positive psychology, proposes that <i>positive emotion</i> is the subjective measure of happiness and life satisfaction, and <i>engagement</i> is the subjective measure of being absorbed in a task	4 strategies that align with the PERMA model are taught: (1) the use of character strengths in the workplace; (2) utilising social support; (3) fostering work-related attitude; (4) focusing on the positive aspects of one's work	An interview is conducted to explain the 4 PERMA strategies and to ask teachers to report on how they are already using them. Teachers are asked to write daily reflections for 15 working days based on their observations of how they were using these strategies already and any new opportunities they found to use the strategies	Trained facilitator external to schools
Integrative	ARC	General educator population	ARC practice areas are predicted on 3 main theories of change: (1) positive psychology, (2) cognitive behaviour therapy, and (3) Acceptance and Commitment Therapy (ACT)	ARC includes eight standalone practice areas that focus on helping teachers learn skills and routines they can integrate within their professional and private lives to enhance their resilience	5 weekly online sessions of 2.5-h duration	Trained facilitator external to schools
	CALMERSS	General educator population	The initiative adopts a multi-modal approach incorporating a number of initiatives	Content is focused on the following topics: cognition and automatic thoughts; learning to relax; mindfulness; exercise; resolving conflict; strengths and positive psychology; sleep	4 weekly face-to-face group meetings of 2-h duration (after school hours)	Trained facilitator external to schools

Records marked with an asterisk were found not to have an effect on educator wellbeing or had a negative effect on educator wellbeing. The studies by Hwang, Goldstein, et al. (2019) and Hwang, Jae-Eun, et al. (2019) have been included together as these studies drew on the same dataset to evaluate initiative outcomes. Community Approach to Learning Mindfully (CALM); Mindfulness-Based Stress Reduction (MBSR); Mindfulness Training (MT); Stress Management and Resiliency Techniques for Educators (SMART); Cultivating Awareness and Resilience in Education (CARE for Teachers); Emotional Intelligence in the Classroom (EI in the Classroom); Incredible Years Teacher Classroom Management (IY-TCM); Mental Health First Aid (MHFA); Participatory Action Research (PAR); Dialectical Behaviour Therapy—Skills Training (DBT-ST); ACHIEVER Resilience Curriculum (ARC)

Geographical and Educational Contexts of Studies

Seven of the 23 studies included in the review were conducted in Australia and another seven were conducted in North America (USA: $k=4$; Canada: $k=2$; both USA and Canada: $k=1$), and seven in Europe (UK: $k=4$ and Germany: $k=3$). A single study was conducted in South America (Brazil) and one in Africa (Tanzania). Studies involved educators in secondary schools ($k=11$), primary schools ($k=4$), or across multiple school levels ($k=4$). Of the studies that sampled educators across multiple school levels, one was conducted with educators teaching in primary, secondary, and specialist schools, one was conducted with pre-service educators completing school placements as part of their university training, one was conducted with primary school and early childhood educators, and one study did not provide sufficient detail to identify the school or year level(s) participating educators were teaching in.

Quality of Evidence across Educator Wellbeing Initiatives

Fourteen studies employed quantitative methodologies, three employed qualitative methodologies, and six employed a mixed-methods approach. According to the NHMRC evidence level guidelines, level I evidence is a systematic review of RCT studies (i.e. a meta-analysis of efficacy findings across multiple RCT studies of an initiative). The review revealed that no educator wellbeing initiative has been the subject of this level of research to date. Furthermore, the review showed that no educator wellbeing initiatives have been the subject of multiple RCTs, which precludes the possibility of conducting a systematic review to establish Level I evidence. Seven of the included studies involved a RCT which classify as level II evidence, three employed pseudo-randomised controlled trials which classify as level III-1 evidence, five studies involved a non-randomised selection of control participants recruited from the same population as the initiative group and classify as level III-2 evidence, and four studies involved non-randomised recruitment of control participants selected from a different population to the initiative group and classify as level III-3 evidence (see Table 3). One study met criteria for classification as level IV evidence (case studies with pre-test and post-test comparison) in the review. Finally, the three studies that reported qualitative evidence are also presented in Table 3 along with details of how many CASP qualitative study checklist criteria were met and where the higher the score the higher the quality of evidence. The same was done for the seven RCTs assessed using the WWC (2020) guidelines (see Table 3).

The RCTs by Roeser et al. (2013) and Taylor et al. (2016) were determined to be eligible to meet WWC group design standards with reservations because of baseline differences between the control and intervention groups that were not adjusted for in the analysis. The RCTs by Hwang, Goldstein, et al. (2019), Hwang, Jae-Eun, et al. (2019) also meet WWC standards with reservations due to high sample attrition but with baseline equivalence between the intervention and control groups. The RCTs by Jennings et al. (2013) and Hayes et al., 2020 were eligible to meet WWC group design standards without reservations due to random assignment of participants,

limited sample attrition, and equivalent or adjusted differences between the control and intervention groups. Unterbrink et al.'s (2010) RCT was considered not eligible to meet WWC group design standards due to high sample attrition and because the study did not adjust for baseline differences between the intervention and control groups.

A Summary of Evidence-Based Educator Wellbeing Initiatives

Seven of the educator wellbeing initiatives were mindfulness-based initiatives, five were social-emotional initiatives, two focused on educators' mental health literacy, one was a positive psychology initiative, one focused on school leadership and policy change, one cognitive behavioural-based initiative, and two integrated therapeutic interventions.

Initiatives Adopting a Mindfulness-Based Therapeutic Approach

Initiative Structure Eight of the 10 studies on mindfulness investigated mindfulness-based stress reduction (MBSR) or initiatives based on MBSR, which involves a series of sessions that include activities such as sitting meditation, body scan, yoga, and group work to enhance mental and physical wellbeing (Hofmann & Gómez, 2017). Six of the seven mindfulness initiatives (.b Foundations Course; CALM; MBSR; MT; Reconnected; SMART) were conducted face-to-face by trained facilitators external to the schools, and three of the initiatives (.b Foundations Course; CALM; Reconnected) encouraged educators to continue mindfulness training at home. The one mindfulness initiative not delivered by a facilitator external to schools, Christian Meditation, was a classroom activity engaged in by both teacher and students within a religious-affiliated school; in this initiative the teacher had previously attended a one-day workshop in preparation for leading the classroom meditation. One of the mindfulness initiatives, Reconnected, provided online resources with educators, after their participation in face-to-face workshops. All initiatives were delivered for eight or more weeks and included several sessions per week and/or encouraged educators to practice at home on a daily basis.

Reported Outcomes for Educator Wellbeing The mindfulness initiatives were found to have a positive effect on the wellbeing of primary and secondary educators. The majority of the mindfulness initiatives improved educators' control of emotions (Frank et al., 2015; Gouda et al., 2016; Rupperecht et al., 2017), subjective wellbeing (Beshai et al., 2016; Graham & Truscott, 2020), stress reduction (Beshai et al., 2016; Gold et al., 2010; Hwang, Goldstein, et al., 2019; Hwang, Jae-Eun, et al., 2019; Roeser et al., 2013; Rupperecht et al., 2017), improved distress tolerance (Harris et al., 2016), improved educators' sleep (Frank et al., 2015; Hwang et al., 2019a; Hwang, Jae-Eun, et al., 2019), increased educators' positive affect (Harris et al., 2016), reduced their anxiety (Gouda et al., 2016; Roeser et al., 2013) and depression (Gold et al., 2010; Roeser et al., 2013), reduced levels of burnout (Roeser et al., 2013), and improved educators' classroom management (Harris et al., 2016)

and relationships with others (Gouda et al., 2016). Mindfulness-based interventions were also found to increase mindfulness practices, such as acceptance of experiences (Frank et al., 2015; Gold et al., 2010), focused attention and observation (Frank et al., 2015; Roeser et al., 2013), forgiveness (Taylor et al., 2016), self-efficacy (Rupprecht et al., 2017; Taylor et al., 2016), self-compassion (Hwang et al., 2019a, 2019b; Roeser et al., 2013), and awareness and healthier engagement with workplace stressors (Rupprecht et al., 2017).

For three of these initiatives, it was found that educators were satisfied and/or that they would recommend the initiative to others (Bechai et al., 2016; Harris et al., 2016; Rupprecht et al., 2017). Despite these positive findings, one of the MBSR initiatives did not reduce educators' anxiety (Gold et al., 2010) and one did not reduce educators' stress (MT; Roeser et al., 2013). The CALM initiative, based on MBSR, did not improve educators' sleep, stress, or educator-educator relational trust (Harris et al., 2016), and another MBSR initiative did not reduce educator burnout and mental distress (Frank et al., 2015). Three of the studies demonstrated sustained improvements in educator wellbeing and stress reduction as an outcome of MBSR-based mindfulness initiatives, at 3 months (Rupprecht et al., 2017) or at four months (Gouda et al., 2016; Taylor et al., 2016), post-delivery. The Reconnected initiative demonstrated sustained improvements in stress, sleep, and mindfulness of educators five months after delivery of the initiative (Hwang, Goldstein, et al., 2019; Hwang, Jae-Eun, et al., 2019).

Quality of Supporting Evidence The NHMRC levels of evidence ratings for the mindfulness initiatives identified here varied from RCTs ($k=4$; all rated using WWC guidelines as RCTs with reservations), to pseudo-randomised controlled trials ($k=2$), and non-randomised or qualitative research designs ($k=5$). Of all identified initiatives that aim to enhance educator wellbeing identified in this review, mindfulness-based initiatives have the most extensive underlying evidence-base.

Initiatives Adopting a Social-Emotional Therapeutic Approach

Initiative Structure One of the social-emotional initiatives (CARE for Teachers) was delivered to primary and secondary school teachers using face-to-face workshops and coaching, three were delivered using face-to-face workshops alone (EI in the Classroom; IY-TCM; Lange Lehren project), and one was delivered using face-to-face workshops and written reflections from educators (Arts-based reflection). EI in the Classroom was the only initiative to be delivered to pre-service educators, IY-TCM was delivered to early childhood and primary educators, and the Lange Lehren project was delivered to secondary school teachers. A trained facilitator or university course leader working externally to schools (in the case of the EI in the Classroom initiative delivered to pre-service teachers), delivered each of the social-emotional initiatives. Initiatives were delivered over a variety of timelines, ranging from programmes involving weekly sessions for 4- to 6-week (CARE for Teachers; EI in the Classroom), to 6-month (IY-TCM), one-year (Lange Lehren project), and 2-year

programmes (Arts-based reflection) involving session spread out over longer intervals. Session lengths ranged from 90 min (CARE for Teachers; EI in the Classroom; Lange Lehren project) to whole-day programmes (Arts-based reflection; IY-TCM).

Reported Outcomes for Educator Wellbeing The CARE for Teachers initiative was reported to improve educator wellbeing and mindfulness, and reduced stress and burnout (Jennings et al., 2013). Jennings and colleagues also reported that educators had a positive opinion regarding the merits of the initiative. The Lange Lehren project demonstrated a moderate effect on educator mental health (Unterbrink et al., 2010). The Arts-based reflection initiative increased participants' awareness of their character strengths and workplace relationships, to support their resilience and wellbeing (McKay & Barton, 2018). EI in the Classroom and IY-TCM were found not to have an effect on educator wellbeing (Hayes et al., 2020; Vesely et al., 2014); however, Hayes et al. (2020) reported that IY-TCM improved educators' relationships with students.

Two of the social-emotional initiatives did not show an effect on educator wellbeing (EI in the Classroom with pre-service educators; IY-TCM with early childhood and primary educators). Regarding the non-efficacious finding for EI in the Classrooms, the researchers argued that their small sample size might have reduced their chances of detecting a significant result (Vesely et al., 2014). For IY-TCM, Hayes et al. (2020) explained that one reason why this initiative did not improve educator wellbeing was possibly because the initiative focused on classroom behaviour management and relationships, and did not address other aspects of a teacher's role and workplace that might be relevant to their wellbeing.

Quality of Supporting Evidence The social-emotional therapeutic approaches identified here include three RCTs constituting level II NHMRC evidence (Hayes et al., 2020 rated using WWC standards as an RCT without reservations; Jennings et al. (2013) rated as meeting WWC RCT standards with reservations; Unterbrink et al. (2010) rated as not meeting WWC group design standards for RCTs), one pseudo-randomised controlled trial, and one qualitative research design. The RCT studies identified in this review (Hayes et al., 2020; Jennings et al., 2013; Unterbrink et al., 2010) suggest that social-emotional therapeutic approaches may deliver limited impact on educator wellbeing.

Initiatives Adopting a Mental Health Literacy Approach

Initiative Structure Two initiatives in this review, MHFA and The African Guide, utilised a mental health literacy approach in secondary school settings. The MHFA initiative, was a 2-day training course to prepare selected teachers to assume a peer supporter role. The African Guide, was a culturally adapted version of the "The Guide" (Kutcher et al., 2015) originally developed as a curriculum to promote mental health literacy amongst students in Canada; educators engaged in the training programme in preparation to deliver the course to students. Both of these initiatives

were 2-day, face-to-face programmes delivered by trained instructors/mental health professionals. The African Guide initiative also involved a refresher course delivered approximately 6 months after the initial training was completed.

Reported Outcomes for Educator Wellbeing Kidger and colleagues (2016) reported that the MHFA improved educators' knowledge about mental health and reduced mental illness stigma amongst educators. Participation in the initiative also increased educators' sense of confidence in helping a colleague in need of mental health support. Educators reported that participation in MHFA reassured them about their current practices in response to mental health issues led to greater consultation with colleagues about challenges encountered with students, and increased awareness of their own mental health. Kutcher et al., (2016a, 2016b) found that The African Guide initiative improved educators' confidence to seek help for themselves, colleagues, students, friends, and family. Furthermore, the initiative enhanced mental health knowledge and reduced stigmatising attitudes towards mental illness amongst participating educators.

Quality of Supporting Evidence Neither of the mental health literacy initiatives were supported by a high NHMRC level of evidence, with Kidger, Brockman, et al. (2016), Kidger, Stone, et al. (2016)) and Kutcher et al.'s (2015) studies meeting criteria for being considered level II-2 and level III-3 evidence respectively. Nonetheless, both initiatives were perceived by educators to be effective in improving their wellbeing and mental health literacy.

Initiatives promoting school leadership and policy change

Initiative Structure The study by Morris et al. (2020) described an initiative designed to facilitate school structural change and thereby enhance educator wellbeing. Specifically, Morris et al. (2020) adopted a Participatory Action Research (PAR) process in a secondary school that targeted leadership and policy to improve the wellbeing of school staff. PAR, in general, is an initiative in which the people who are affected by a particular issue or problem are actively engaged in a research process implemented to generate solutions (Kindon et al., 2009). In Morris et al.'s (2020) study, the PAR initiative was led by the researchers and a retired secondary school principal who facilitated a series of workshops with school staff over a period of 12 months. Educators and school leaders were encouraged to work together to share and develop ideas to improve educators' wellbeing.

Reported Outcomes for Educator Wellbeing At the beginning of the PAR process, the participating school found that staff morale was low. They believed that the solution resided in promoting changes to leadership style and introducing shared decision making. Positive outcomes reported by Morris et al. (2020) included the professional growth of educators, greater recognition of educators' contributions, improved school-wide decision-making, more supportive leadership, and positive changes to school culture.

Quality of Supporting Evidence The PAR initiative was demonstrated to have positive outcomes. However, the evaluation involved a comparative study without concurrent controls, and did not evaluate longer-term educator wellbeing outcomes.

Initiatives Adopting a Cognitive Behavioural Approach

Initiative Structure The study by Justo et al. (2018) investigated an initiative grounded in cognitive behavioural theory (Dialectical Behavioural Therapy; DBT). Cognitive behavioural approaches aim to address habitual negative thought patterns and to instil positive thought patterns, improve personal functioning, mental health, and wellbeing (Trower et al., 2015). DBT was originally developed for treating clinically diagnosed borderline personality disorder, and has since been adapted to treat a range of mental health concerns such as mood disorders and suicidal ideation (Chapman & Dixon-Gordon, 2020).

An adaption of the Dialectical Behaviour Therapy Skills Training (DBT-ST; Linehan, 2010) manual was implemented (Justo et al., 2018) to investigate initiative impacts on educator wellbeing. The DBT-ST manual is comprised of four modules which aim to promote educators' (1) mindfulness, (2) distress tolerance, (3) emotional control, and (4) interpersonal functioning (Linehan, 2010). The DBT-ST initiative was delivered by a psychologist who had completed accredited training. The DBT-ST initiative comprised four weekly sessions of approximately 3 h length, and a final follow-up session conducted two months afterward (Justo et al., 2018).

Reported Outcomes for Educator Wellbeing Justo et al. (2018) found that educators' wellbeing deteriorated, reporting an increase in negative emotions and a reduction in emotional awareness, after participating in the DBT-ST initiative. These negative outcomes were observed two months after delivery of the initiative. Teachers' ability to explain and evaluate everyday social interactions had improved; however, the researchers argued that teachers' lack of emotional awareness two months after the initiative may have prevented teachers from changing their behaviour.

Quality of Supporting Evidence Justo et al.'s (2018) study met criteria for being a comparative study without concurrent controls. At present, there is little evidence available in relation to DBT as an initiative to support educator wellbeing and Justo's study suggests that participating in a DBT-based initiative may be counter-productive to supporting educators' wellbeing.

Initiatives Adopting a Positive Psychology Approach

Initiative Structure Positive psychology has been defined as “the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups and institutions” (Gable & Haidt, 2005, p. 103). The one positive psychology initiative identified in this review was the PERMA model. The PERMA model was developed by Martin Seligman, the founder of positive psychology, and

includes five domains of positive psychology: positive emotion, engagement, relationships, meaning, and accomplishment (Seligman, 2018).

Delivery of the PERMA initiative involved primary school educators participating in a one-to-one interview with a trained facilitator, followed by educators engaging in personal reflection over 15 days about how they used four PERMA strategies in their work, including the following: (1) the use of personal strengths in the workplace; (2) identifying and drawing on social support; (3) fostering a positive work-related attitude; and (4) focusing on the positive aspects of one's work as an educator (Turner & Theilking, 2019).

Reported Outcomes for Educator Wellbeing Turner and Thielking's (2019) study concluded that the PERMA initiative was well-received by participating educators. Interviews indicated that as a result of participating, educators perceived a reduction in their stress, an increase in their positivity, and felt that their participation in the initiative had also led to better interactions with students. Educators reported that relationships with their students had improved and as a result, students' confidence and learning had improved.

Quality of Supporting Evidence Turner and Thielking's (2019) qualitative findings are based on educators' self-perceptions with no further triangulation of data. Nonetheless, the findings indicate that the PERMA initiative may be acceptable to educators and the study received the highest CASP rating of 8 out of 9.

Initiatives Adopting an Integrative Approach

Initiative Structure Integrative initiatives are those which combine several different types of therapies into the one initiative. Integrative therapy can assume various forms, including an eclectic approach involving the assimilation of selected components from across a variety of therapies, augmenting a particular therapeutic approach with the addition of complimentary components associated with other therapeutic approaches, or focusing on practices that are common to all or most therapeutic approaches (Zarbo et al., 2016).

The two integrative approaches included in the review had some overlap in relation to content: the ARC initiative combined cognitive-behavioural therapy (CBT), acceptance and commitment therapy (ACT), and positive psychology (Cook et al., 2017); the CALMERSS initiative adopted CBT, mindfulness, positive psychology, conflict resolution, and sleep hygiene practices (Taylor, 2018). The ARC initiative was delivered online over five weeks, by a trained facilitator; however, Cook and colleagues did not specify whether the initiative was delivered in a primary or secondary, or another school type. The CALMERSS initiative was delivered face-to-face to middle and secondary school educators over a 4-week period by a trained facilitator.

Reported Outcomes for Educator Wellbeing Cook et al. (2017) found that the ARC initiative reduced educator stress, improved confidence, and improved job satisfaction. Taylor (2018) reported that educators perceived that the CALMERSS initiative had a positive impact on psychological, physical and personal distress, and improved self-care practices.

Quality of Supporting Evidence Cook et al.'s (2017) study of the ARC initiative employed a non-randomised experimental trial research methodology (level III-2 evidence), while Taylor (2018) employed a pre/post-test case research methodology (level IV evidence) to evaluate CALMERSS. A key issue for understanding the results reported in the ARC and CALMERSS initiatives is that because both initiatives included multiple initiatives such as CBT, ACT, and positive psychology, it is not possible to determine which specific element(s), or combination of elements, might account for their effectiveness. In addition, long-term outcomes following delivery of the ARC and CALMERSS initiatives have not yet been investigated.

Discussion

Overall, this review found that educators generally report positive outcomes from engaging in wellbeing initiatives. Three of the 19 initiatives that have been evaluated, namely DBT-ST, EI in the Classroom, and IY-TCM, were reported to have had no positive effect on the wellbeing of educators. Nonetheless, although the evaluation data are generally favourable across the various initiatives that aim to promote educator wellbeing, evaluation data is at best emerging and has some serious limitations. Moreover, considering the results within Bronfenbrenner's ecological model indicates that most initiatives target change at the individual educator and microsystem levels, and do not consider the other layers of Bronfenbrenner's ecological framework, including workplace demands and school/education setting culture.

Gaps and Opportunities in Initiatives from an Ecological Perspective

Educator wellbeing is impacted not only by individual factors but also by contextual, relational, and systemic influences (Acton & Glasgow, 2015; Cumming, 2017; Gray et al., 2017). Likewise, it has been suggested that the most effective initiatives to promote wellbeing in the workplace (outside of education) are those that seek to influence at both an individual level and a wider social or organisational level (Smedley & Syme, 2001; Smith et al., 2011; Tetrick & Quick, 2011). In comparison, this review found that most initiatives in the field of educator wellbeing attend to wellbeing as an individual issue, rather than as an organisation-wide consideration. In other words, most initiatives prompt individual educators to initiate changes that aim to mitigate the impact of stress and/or enhance their wellbeing. For example, mindfulness-based initiatives, the approach employed most commonly, aim to encourage individuals to assume a positive mind set, rather than challenging or changing school structure, work demands,

and educational policy which decrease educators' positive affect. Similarly, many of the educator wellbeing initiatives promoted strategies for managing stress or learning adaptive coping skills. Collectively, such strategies may be useful to assist educators to manage work-related challenges, but do not address the structures of the workplace from which these challenges emerge (Hone et al., 2015).

Some initiatives were successful in promoting positive collegial or student relationships (Gouda et al., 2016; Graham & Truscott, 2020; Hwang, Goldstein, et al., 2019; Hwang, Jae-Eun, et al., 2019; Turner & Theilking, 2019), which relate to the microsystem in Bronfenbrenner's model. However, the programme by Harris et al. (2016) did not improve collegial relationships. This is likely because the study by Harris et al. defined school relationships as "relational trust" or trust between colleagues, while other studies defined relational wellbeing as reduced interpersonal problems (Gouda et al., 2016), improved communication, warmth, and caring for others (Graham & Truscott, 2020; Hwang et al., 2019a; Hwang, Jae-Eun, et al., 2019), and greater individualised support for students (Turner & Theilking, 2019). One initiative that demonstrated benefits for educator wellbeing, The Lange Lehren programme, included attending to educators' competency in handling educator-parent relationships (Unterbrink et al., 2010).

Only one initiative, the PAR process, sought to collaborate with educators to improve school leadership and policy (Morris et al., 2020). This programme could be viewed as related to a teacher's mesosystem because it evaluated school-level processes and policies impacting educator wellbeing. The two mental health literacy initiatives (Mental Health First Aid; The African Guide) addressed factors related to the exosystem by virtue of increasing educators' awareness of mental health services (Kidger, Brockman, et al., 2016; Kidger, Stone, et al., 2016; Kutcher et al., 2016a, 2016b). The results of studies by Kidger et al. (2016), Kidger, Stone, et al. (2016) and Kutcher et al., (2016a, 2016b) were consistent in reducing mental illness stigma and increasing educator confidence to seek mental health support. However, these initiatives only increased educators' knowledge about mental health services and did not influence the availability of community health services for educators (nor was this the intention of those initiatives).

Taken together, although educator wellbeing has been defined as comprising individual and school-related factors (e.g. relationships with parents, students and colleagues, school policies, and school structures), the focus of wellbeing programmes for educators is mainly on the individual educator. However, a common criticism of approaches to improve educator wellbeing is the view that educator wellbeing is an individual issue, and schools and governing education authorities ignore systemic, home, and community influences that may also be having an impact on teacher wellbeing (Hine et al., 2022). It is challenging to identify why existing evidence considers educator wellbeing as an individual rather than a systematic issue, but this could be partially explained by the challenge of evaluating the effects of systems-level interventions on outcomes for individual educators (see suggestions for this type of evaluation later in the discussion). It would also be reasonable to assume that the ecological lens has only recently been applied to teacher wellbeing, relative to use of this framework when discussing child development and wellbeing.

Gaps in the Current Knowledge Base and Opportunities for Further Research

Evidence of the longer-term efficacy of educator wellbeing initiatives is integral for understanding the sustainability of initiatives. The economic cost of initiative delivery, including the infrastructure required to deliver the initiatives and educator time to attend professional learning, are factors that are not discussed in the literature. Further, no evaluations were found that ascertained the effectiveness of an initiative beyond six months post-delivery. Only five evaluations (Gouda et al., 2016; Hwang, Goldstein, et al., 2019; Hwang, Jae-Eun, et al., 2019; Rupprecht et al., 2017; Taylor et al., 2016), each in relation to mindfulness-based approaches, reported sustained changes in educator wellbeing between three and five months after delivery. Given educator stress and wellbeing fluctuate throughout the academic year (von der Embse & Mankin, 2020), when to deliver an educator wellbeing initiative is an additional under-researched issue that warrants investigation.

A lack of high-quality evaluation evidence is not an indication that an initiative is unacceptable or does not result in sustained and positive changes for educators. Instead, this review highlights the limited empirical evidence for educator wellbeing initiatives. The absence of RCTs and high-quality RCTs supporting the efficacy of any educator wellbeing initiative emphasises the need for high-level research to be conducted in this area. Though the complexity of ecological models of wellbeing makes such high-quality evaluations challenging, it is incumbent on researchers to employ rigorous evaluation models that identify effective wellbeing initiatives for different educational settings and educator groups. All educator wellbeing outcomes observed in this review were based on educator self-report. Future studies might employ observational research methodologies or draw on administrative records indicative of educator wellbeing, such as staff retention rates, performance metrics, and absences. It is also important to evaluate outcomes of system-wide initiatives (such as workload variations) on educator outcomes. Participatory research design and qualitative methods could be used (similar to the study by Morris et al., 2020) to explore how national or state-level initiatives to enhance educator wellbeing are being interpreted, implemented, and considered at the school- and individual-level.

The lack of differentiation in wellbeing outcomes according to gender, ethnicity, sexuality, and cultural background is another gap. For example, only one of the efficacious initiatives, The African Guide adapted from the Canadian initiative The Guide (Kutcher et al., 2016a, 2016b), had been delivered in a non-Western context; the only other study conducted outside of Western nations was Justo et al.'s (2018) investigation of the non-efficacious DBT-ST initiative delivered in Brazil. Relatedly, only one initiative targeted early childhood educators (IY-TCM; Hayes et al., 2020), and only one initiative targeted pre-service educators (IE in the classroom; Vesely et al., 2014); all other initiatives were delivered to primary, secondary, and specialist school teachers. A clear gap in the literature is the lacking evidence-based wellbeing initiatives for early childhood educators, which is in stark contrast to research addressing the significant wellbeing, workplace, and relational stressors faced by these educators (Cumming, 2017). Arguably, there is also much more literature addressing wellbeing programmes for culturally and linguistically diverse students than for educators from

similar backgrounds. Research with LGBTQIA+ teachers has found these educators experience marginalisation, repressive, and heteronormative attitudes, which warrant addressing in educator preparation and wellbeing programmes (Dykes & Delport, 2018).

Researchers should seek to apply Bronfenbrenner's model in future to promote a more holistic understanding of educator wellbeing, and to guide development and evaluation of educator wellbeing programmes. Using Bronfenbrenner's model, researchers have argued that ecological factors influence educators' interactions with others, their experiences, and their sense of wellbeing as educators (Price & McCallum, 2015). Bronfenbrenner expanded his framework to suggest that interactions (proximal processes) between individuals (e.g. teachers) and their environment (e.g. schools) operate over time to build an individual's capabilities and skills (Bronfenbrenner & Morris, 2006). While this review was unable to determine how a teacher's interactions over time increase their wellbeing and fitness as educators, there is clear evidence that early career teachers are at higher risk of impaired wellbeing and skills when navigating the challenges of teaching compared to more experienced educators (Berger et al., 2020, 2021). Based on the results of this review, research with pre-service, early career teachers, and longitudinal research may be able to monitor individual and school factors that influence these educators' wellbeing across time and how these change as a result of wellbeing initiatives.

Limitations of the Review

Given that wellbeing is a broad and loosely defined concept (Dodge et al., 2012), the parameters of the literature search, including the requirement that studies had been subject to peer-review, published no earlier than 2010, and had been published in English language, may have excluded other initiatives. Because the aim of this review was to identify the range of educator wellbeing initiatives currently available, we deliberately did not explore through our search terms a specific type of wellbeing programme or provide a definition of wellbeing for this review. More targeted reviews may be possible when there is more research and evidence-based programmes addressing educator wellbeing. For example, further research and reviews of early childhood educator wellbeing programmes are required to address the individual and contextual factors distinct to early childhood educators' wellbeing compared to schoolteachers. It may also be appropriate to extend searches to earlier than 2010, and to include grey literature/dissertations, especially when reviewing evidence on populations, such as early childhood educators, typically excluded from the published wellbeing literature.

Regarding the need for future reviews and research to explore specific populations and educational settings, the study by Beshai et al. (2016) included a sample of secondary school teachers as well as staff who had direct contact with students in educational, pastoral, or supporting roles, and thus, all results from this review may not be reflective of classroom teachers. There is also a need for evaluation studies in this field to specify the recruitment process and retention rate of participants involved in the evaluation. For example, it was not possible to determine, but highly possible, that only teachers with adequate time or established self-care skills

participated in the interventions. Some studies (see for example Cook et al., 2017) indicated that there were several unaccounted factors that either enhanced or limited educator wellbeing after programme delivery. The study by Vesely et al. (2014) found no improvements on educator satisfaction with life, while Cook et al. (2017) identified increased job satisfaction amongst participants. The way these studies conceptualised satisfaction (i.e. life versus job satisfaction) impacted outcomes of the review. Further work to centralise a definition and constructs of educator wellbeing is required. Finally, meta-analysis of future reviews using a more stringent criteria for study selection, such as based on study design, population, or educational setting type, is recommended. Although some educator wellbeing programmes resulted in positive outcomes for teachers, the evidence for these programmes is limited at best.

Concluding Comments

A variety of initiative approaches were identified to promote educator wellbeing. Evidence to date is at best emerging that available initiatives are effective in promoting educator wellbeing. Further longitudinal and triangulated evaluation designs are needed. Although educator wellbeing is shaped by many individual and ecological factors, most available wellbeing initiatives focus at the individual-level of change. More attention is needed to the development and evaluation of initiatives targeting workplace, policy, and relationship changes that will lead to sustainable positive change in relation to educators' wellbeing within educational settings.

Funding Open Access funding enabled and organized by CAUL and its Member Institutions This work was supported by the Commonwealth of Australia represented by Department of Health, Mental Health in Education initiative known as Be You.

Declarations

Competing Interests None.

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