

LITERATURE REVIEW

The Case for Special Education Teacher Wellbeing: A Multidimensional Review of the Evidence and Future Directions[†]

Andrew Sawatske^{id}, Carl Leonard^{id}, Jess Harris^{id} and Kerry Dally^{id}

University of Newcastle, Australia

Corresponding author: Andrew Sawatske; Email: andrew.sawatske@newcastle.edu.au

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Abstract

Extant studies of special education teacher wellbeing often focus on negative aspects, such as stress, burnout and the consequent attrition from teaching, the latter occurring with increasing frequency in the field of special education. In this article, the authors use the OECD teacher wellbeing framework to conceptualise special education teacher wellbeing as a positive multidimensional construct, making the case for uncoupling special education teacher wellbeing from mainstream teacher wellbeing given the almost paradigmatic difference in roles, responsibilities, and educational context within Australian schools. The (limited) literature reveals numerous possibilities for supporting and promoting special education teacher wellbeing with salient wellbeing-promoting factors, such as teacher self-efficacy, connectedness, professional development, and class structure. Further empirical studies harnessing these factors will help improve working conditions and the wellbeing of special education teachers.

Keywords: special education; teacher wellbeing; Australia; school connectedness; self-efficacy; support unit

Previous research focusing on stress and subsequent burnout of special education (SE) teachers has overlooked multidimensional aspects of SE teacher wellbeing (SETWB). Of the limited research positioning SETWB as a positive state, separate from stress and burnout, few studies provide a clear definition. After consideration of existing definitions of wellbeing, this paper offers a definition of contemporary perspectives of teacher wellbeing. Furthermore, we argue SE teachers have context-specific promoters and inhibitors of occupational wellbeing that operate differentially to their mainstream colleagues. SE teacher-specific factors emerging from the literature are examined through a teacher wellbeing framework. In the Australian context, SE teachers in New South Wales (NSW) and Tasmania are discussed and compared, highlighting the diversity of roles within and between school systems. The paper intentionally focuses on the wellbeing of SE teachers, integrating literature from outside this scope to build a contextual understanding of the differences in SE and general teacher occupational wellbeing.

The purpose of this paper is not to diminish the excellent and illuminating work that has gone before, but rather to espouse the critical need to understand specific impacts on the complex SE teacher role and build upon collective wisdom to unearth factors promoting SETWB beyond absence of stress and burnout. Separating stress and burnout from wellbeing provides an avenue for understanding the

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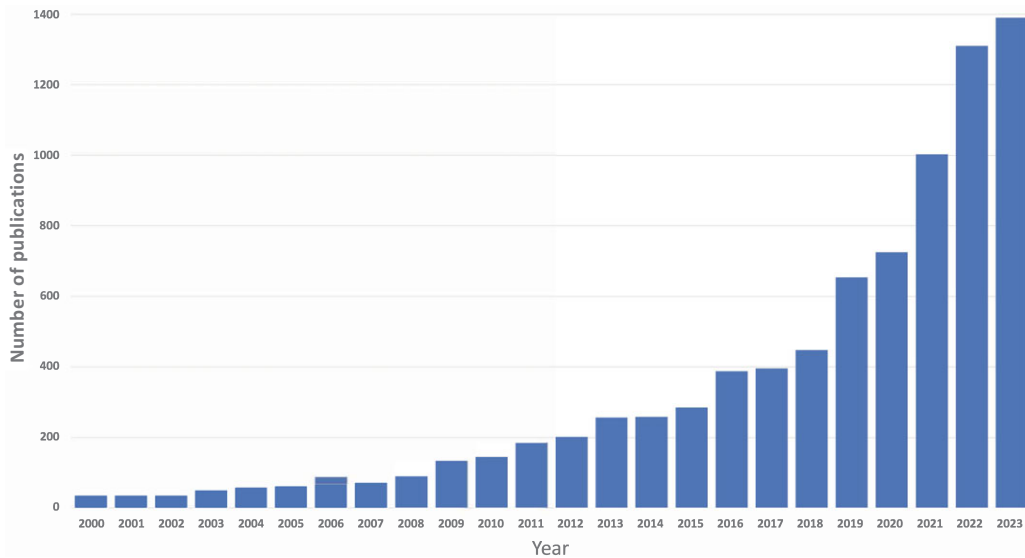


Figure 1. Published Research on Teacher Wellbeing From 2000 to 2023 — Scopus Results.

unique and complex concept beyond curing ailments (Bower & Carroll, 2017; Hascher & Waber, 2021; Kouhsari et al., 2023; Lummis et al., 2022; Sharrocks, 2014).

Stress and burnout are focused on negative human emotions, often described in terms of needing amelioration to move toward or achieve greater wellbeing (Collie et al., 2020; Ryan & Deci, 2020). This exclusive focus on teacher pathology ignores the critical role positive affect and purposeful and systematic enablers have empirically shown to have on increased human wellbeing, such as self-determination, self-efficacy and connectedness (Collie et al., 2015; Olsen & Mason, 2023; Renshaw et al., 2015; Ryan & Deci, 2020). Studies concerning teacher stress and burnout are problematic, as they imply that the absence of stress and burnout is evidence alone of wellbeing (Billingsley & Cross, 1992; Bower & Carroll, 2017; Diener et al., 1999).

Often used interchangeably, stress and burnout represent distinct experiences and implications for teacher wellbeing. Stress is a natural response to job demands such as workload and time pressures (Brunsting et al., 2014; Cancio et al., 2018; Platsidou & Agaliotis, 2008), whereas burnout has been described as the result of chronic stress, resulting in a state of physical and emotional exhaustion (Carroll et al., 2022; McDowell, 2017; Riley, 2014). There is a distinction in the literature between teacher stress, burnout and wellbeing where teacher wellbeing is conceptualised not as an absence of stress but rather the creation of an environment supportive of teachers' emotional and physical needs (Cancio et al., 2018; Hester et al., 2020; Kaynak, 2020; Kim & Lim, 2016; Platsidou & Agaliotis, 2017; Wessels & Wood, 2019). There has been much focus on SE teacher burnout and stress within educational research and how to best mitigate these factors to boost wellbeing (Brunsting et al., 2014; Cancio et al., 2018; Herman et al., 2023; Hester et al., 2020; Kiel et al., 2016), further perpetuating the myth of wellbeing as an absence of stress and burnout.

Teacher wellbeing research is not new (see Figure 1). However, there is scant robust empirical teacher wellbeing research specific to SE teachers in Australia, a sector of the education profession tasked with the responsibility to educate students who experience lower educational outcomes compared to their peers (Australian Institute of Health and Welfare, 2020, 2022; Rendoth et al., 2022). SE teachers can be subject to pressures from challenging student behaviour, complex and chronic disability caseload management, multiple role statements (applied and assumed), student achievement and lack of tenure in their current position (Cancio et al., 2018; Olagunju et al., 2021; Rae et al., 2017).

Conversely, SE teachers have been found to experience higher levels of wellbeing due to smaller class sizes, greater student connection and ability to address skills relevant to life outside school as part of the curriculum for students with disabilities (Fox et al., 2020; Pavlidou & Alevriadou, 2022; Rae et al., 2017).

In response to the post-pandemic teacher (mainstream and SE teachers) shortage in Australia (Craig et al., 2023; Mrstik et al., 2019), the Australian Government Department of Education National Teacher Workforce Action Plan emphasised the urgent need to improve teacher supply, working conditions, and status (Australian Government Department of Education, 2022). Pre-pandemic, retention of SE teachers in NSW was highlighted in a parliamentary enquiry in 2010 (NSW Parliament, 2010) and emphasised by Dempsey and Christenson-Foggett (2011), who call for increased scholarly interest into high SE teacher turnover in Australia.

Ensuring wellbeing of SE teachers is crucial for the future of quality inclusive education as they play a vital role instructing marginalised students — those with disability. This imperative — to support legislators, administrators, school executives, teachers, and other relevant stakeholders to engage with, and be cognisant of, the impact of SETWB (Brunsting et al., 2014) — underpinned three guiding questions for this review:

1. How is teacher wellbeing defined?
2. How do SE teachers' roles differ from their mainstream colleagues?
3. What impacts and promotes SETWB?

Teacher Wellbeing: Current Definitions

Research examining teacher wellbeing as an educational and psychological phenomenon has grown over the past decade, but there is no clear consensus on a definition of teacher wellbeing (Wang et al., 2019; Willis & Grainger, 2020). Arguably, the most comprehensive conceptualisation of teacher wellbeing comes from the recent Organisation for Economic Co-operation and Development (OECD) whitepaper (Viac & Fraser, 2020). Using the suggested framework, we examine how definitions of teacher wellbeing in the SE context have been proposed and offer a definition of SETWB, using the theory of occupational wellbeing.

Drawing upon Warr's (1994) perspective, van Horn et al. (2004) formulated a comprehensive five-dimensional model encompassing affective, professional, social, cognitive, and psychosomatic dimensions of teacher occupational wellbeing. Van Horn et al. (2004) recognised the multidimensional synchronicity of teacher wellbeing to general wellbeing in that it comprises factors more than affect. This notion of wellbeing is consistent with the World Health Organization (2021) definition of wellbeing as a positively experienced state encompassing quality of life and sense of purpose.

In the OECD whitepaper on teacher wellbeing, Viac and Fraser (2020), advocate a conceptual framework with four key components of teacher wellbeing that mirror the occupational model proposed by van Horn et al. (2004):

- physical and mental wellbeing
- cognitive wellbeing
- subjective wellbeing
- social wellbeing.

Of these factors, physical and mental wellbeing are stated as being present without psychosomatic complaints and stress-related symptoms. Although mental and physical wellbeing align with van Horn et al.'s (2004) occupational wellbeing model, other more affective dimensions may have a greater impact. Positively stated affective dimensions of wellbeing appear as cognitive, subjective and social wellbeing within the OECD framework (Viac & Fraser, 2020). Subjective wellbeing encompasses the positive feelings of satisfaction and purpose teaching provides. Social wellbeing refers to positive feelings that teachers have toward their relationships and the support received. Cognitive wellbeing,

according to the OECD framework, is directly related to teacher efficacy in classroom management, instruction and engagement.

Experimental items to assess each component were included in the Programme for International Student Assessment – Teacher Questionnaire (PISA-TQ) 2021 questionnaire (postponed until 2022 due to the pandemic; Viac & Fraser, 2020). Although the nationally representative samples may provide robust empirical data, this latest dataset might maintain previous conventions, not collecting teacher demographic data based on subject or specialisation, limiting the opportunity to utilise PISA data to reliably inform direction for SETWB.

Special Education Teacher Wellbeing

The recent study by Xu et al. (2023) is most aligned with the OECD teacher wellbeing model, with wellbeing defined as a concept encompassing emotions, thoughts, intrinsic and extrinsic rewards, behaviours, and self-assessed physical and mental health. This was the only study that employed a wellbeing framework specifically addressing impacts of physical and mental health on SETWB. Van Horn et al. (2004) emphasise the challenges of using a broad model of wellbeing that includes deficit constructs such as mental health or life satisfaction, as wellbeing is not solely defined by the absence of these factors. Similarly, Olagunju et al. (2021) implied absence or reduction of psychological burden and distress as definers of SETWB. This discourse is also found in literature focused on stress and burnout (Fox et al., 2020; Hester et al., 2020; Womack & Monteiro, 2023). Cooke et al. (2016) suggested stress and burnout could be considered a construct whereby an absence of negative causal factors results in higher levels of wellbeing. Sharrocks (2014) further warned against psychopathologising teachers instead of forming systematic understanding of wellbeing and promoting wellbeing-enhancing initiatives.

In contrast, Olagunju et al. (2021) and Rae et al. (2017) did not offer explicit definitions of teacher wellbeing. A close synthesis of these articles elicited an understanding of the authors' views of teacher wellbeing. The lack of concrete definitions is the only similarity as these research groups take distinct pathways exploring components of SETWB. Rae et al. (2017) proposed emotional literacy as key to increased teacher wellbeing and circuitously described wellbeing as a subjective construct where teachers do their best in a nurturing environment, surrounded by emotionally literate colleagues with embedded opportunities to reflect upon emotions. Holzner and Gaunt's (2023) ecological model suggested that incongruence between educational systems and teachers can impact their social, cognitive, physical and spiritual wellbeing. Viac and Fraser (2020) concur and offer direction for working conditions that best support teachers' occupational wellbeing. Job demands, including learning environments, workload, roles, classroom composition, disciplinary climate, performance evaluation, and resources, including autonomy, professional development, feedback and social support, are key components of a new teacher-specific framework (Cazes et al., 2015).

Fox et al. (2020) offer a holistic description of SETWB incorporating prior conceptualisations from Aelterman et al. (2007) and Acton and Glasgow (2015) where wellbeing involves a balance of personal needs and environmental factors, resulting in purposefulness and satisfaction. Acton and Glasgow (2015) state that although there are a host of teacher wellbeing definitions in the literature, there is a lack of examining teachers' lived experiences to define wellbeing.

Although researchers differ on a concrete definition of SETWB, what is consistent is that

- wellbeing is largely a subjective construct with objective measurables;
- teachers flourish in an environment where
 - the challenges of being a teacher are understood and met with support, and
 - further learning opportunities are provided and negative factors are minimised and do not outweigh the positive factors of being an SE teacher.

As such, the authors propose the following definition of SETWB: SE teacher occupational wellbeing is best described as a positive affect state where teachers feel supported individually and structurally to meet the contextual demands of special education.

The Work of Special Education Teachers

In Australia, there is a distinct difference between the wellbeing of teachers working in remote and metropolitan schools (Willis & Grainger, 2020). The geographical separation mirrors the separation of SE teachers from their mainstream colleagues, even within the same school. The job of an SE teacher has different roles and requirements (Billingsley & Cross, 1992; Kauffman et al., 2018; Nilsen, 2017), yet the implications of these differences remain underresearched in relation to SETWB.

Research-identified challenges of an SE teacher include managing complex student disability (often with poor prognosis), dealing with paraprofessionals and specialists, creating and implementing individual education programs, adaptation of (often unsuitable) curriculum and teaching materials, and an emotional expenditure that is not commensurate with teaching experience or initial teacher education (Acton & Glasgow, 2015; Billingsley & Cross, 1992; Brunsting et al., 2014). Preston and Spooner-Lane (2019) suggest that SE teachers are impacted by an absence of contextually appropriate professional development, lack of organisational support, and excessive expectation for students with complex medical, behavioural and mental health challenges to meet scholastic milestones.

In NSW, SE teachers may work in a variety of educational settings, such as Schools for Specific Purposes (SSPs), support classes in mainstream primary and high schools, itinerant support teachers (ISTs) or as mainstream teachers. SSPs offer specialised, intensive support in a dedicated setting for students with diverse needs and include hospital schools, tutorial centres and suspension centres (NSW Department of Education [DoE], 2023c). Support classes are limited in availability and can be found in select primary schools, high schools, and central schools throughout NSW. They offer specialised supports for students who are eligible and have been diagnosed with intellectual or physical disabilities, autism spectrum disorder, mental health conditions, sensory processing disorders, or behaviour disorders (NSW DoE, 2023b). ISTs are non-classroom teaching positions. ISTs collaborate with students, parents, classroom teachers, the school's learning and support team, and other support agencies to create personalised plans for students with disability or experiencing difficulty at school and include trained teachers with specialisations in hearing and vision (NSW DoE, 2023a).

Supporting the call for further understanding of contextual roles of SE teachers and occupational wellbeing impacting and enabling factors is the contrast in roles of SE teachers between Australian states. Tasmanian SE teacher roles are more closely aligned with NSW non-classroom-based ISTs (Holzner & Gaunt, 2023), suggesting that, although the conceptualisation of SETWB may be similar, contextually specific needs would differ.

A direct connection exists between SE teaching and other caring professions, such as nursing, psychology, and social work, which are all subject to compassion fatigue (Gupta, 2020; Hoffman et al., 2007; Koenig et al., 2018). The work of SE teachers requires intensive face-to-face interactions, use of evidence-based remedial learning approaches and managing complex disability (Holzner & Gaunt, 2023; Olagunju et al., 2021). Unparalleled pressure applied to teachers in Australia, and globally, during the pandemic has exacerbated these issues (Ryan et al., 2023). Fray et al. (2023) highlight the emotional toll this disruption had on NSW teachers' wellbeing, reporting teachers felt replaceable and unappreciated while workload increased and isolation persisted.

The 'emotional labour' (Rae et al., 2017) of educating students, who often have comorbid mental health issues, is far greater for SE teachers whose responsibility it is to teach these students, often after they have experienced challenges in regular educational settings (Rae et al., 2017). SE teachers are expected to take responsibility for individual management of students with complex medical, behavioural and disability-specific needs, and often lack specific medical or psychological training themselves, resulting in compassion fatigue and low self-efficacy (Hoffman et al., 2007; Holzner & Gaunt, 2023; Xu et al., 2023). Their role is complex, multifaceted and requires specific skills and training. Further

empirical research to elucidate the differences between contextual variables impacting SE and mainstream teacher wellbeing — given their unique contexts — is warranted and currently being undertaken by the authors.

Factors That Promote and Impact Special Education Teacher Wellbeing

A search of empirical literature from 2010 to present, including both wellbeing (or well-being) and special education teacher in the title or abstract, identified (just) five articles, with only one on Australian SE teachers. The search strategy used A+ Education, Sage, EBSCO, ProQuest databases and Google Scholar. Results defining wellbeing as a separate and distinct phenomenon or comparing teacher wellbeing were included.

Table 1 summarises negatively impacting and positively promoting factors identified through the literature search. It should be noted that several negatively impacting factors have corresponding positively promoting factors.

We suggest these factors can be grouped into four categories that SE teachers perceive as beneficial to their wellbeing, which then align with aspects of the OECD teacher wellbeing framework (see Table 2).

These promoters of SETWB are arguably more important than negatively stated impacting factors such as workload burden (Rae et al., 2017), teaching students with disability or students with complex and challenging behaviour (Olagunju et al., 2021; Rae et al., 2017) and balancing multiple roles (Fox et al., 2020). Using this framework allows for a conceptual model of relationships (Figure 2) to be drawn between positive enabling factors that have emerged through the literature and the identified categories.

School connectedness

School connectedness, sometimes referred to in the literature as belonging, refers to feelings of being supported and having positive relationships at school (Mankin et al., 2018; Renshaw et al., 2015). This psychosocial phenomenon has been positively correlated with higher levels of teacher wellbeing and negatively correlated with decreased motivation and teacher retention in the teacher wellbeing literature (Collie & Carroll, 2023; Dreer, 2023; Fox et al., 2023).

McCallum et al. (2017) espouse that student interactions, support from leadership, and collaborations with parents are a correlational link between teacher occupational wellbeing and school connectedness. The importance of connectedness was previously elucidated by Acton and Glasgow (2015), who listed collegiality, trust, and values as predominant factors promoting wellbeing. They elaborated their view that current school operational systems in Australia silence teacher voice and undervalue horizontal leadership styles they describe as essential building blocks to teacher wellbeing. Viac and Fraser (2020) offer a different understanding of school connectedness focusing on student–teacher relationships, supportive school culture and positive organisational climate, with specific mention of trust between school leaders and teachers.

Fox et al. (2020) used the Teacher Subjective Wellbeing Questionnaire to measure school connectedness. Although school connectedness levels remained constant over a school year, interviews with SE teachers revealed being trusted by senior leaders and administrators, and not having excessive input from parents, were important for increased wellbeing. Supporting the professional and emotional needs of teachers, Grant (2017) advocates positive leadership practices, such as teacher autonomy and constructive feedback, as critical in retaining teachers in complex schools.

According to Wessels and Wood (2019), schools should prioritise physical spaces that promote teacher connectedness. Page et al. (2021) highlighted the importance of spaces in SE, identifying a link between dedicated spaces for collegiality and a stronger sense of belonging.

Holzner and Gaunt (2023) found Tasmanian SE teachers would like wellbeing-specific initiatives to be systematically supported, suggesting professional learning communities as a connection-building

Table 1. Negative and Positive Factors Affecting Special Education Teacher Wellbeing (SETWB)

Negatively impact	Positively promote
Interpersonal environmental interactions (Fox et al., 2020)	Interpersonal environmental interactions (Fox et al., 2020)
New to teaching (Olagunju et al., 2021)	Longer teaching experience (Olagunju et al., 2021; Xu et al., 2023)
Longer working hours (Olagunju et al., 2021)	Better salary (Olagunju et al., 2021)
Teaching students with disability and/or complex and challenging behaviour (Holzner & Gaunt, 2023; Olagunju et al., 2021; Xu et al., 2023)	Limited class size (Olagunju et al., 2021)
Unpredictable environment (Rae et al., 2017)	More adults in the room (Rae et al., 2017)
Administration burden due to filling out of incident reports (Rae et al., 2017)	Structured support from senior leaders (Rae et al., 2017)
Modifying teaching and learning cycle in ever-changing environment (Rae et al., 2017)	Physical cover for classes when needed (Rae et al., 2017)
Lack of support from colleagues and senior school leaders (Holzner & Gaunt, 2023; Rae et al., 2017)	Continued professional development (Holzner & Gaunt, 2023; Rae et al., 2017; Xu et al., 2023)
External constraints such as standardised testing and objective measures of academic success (Rae et al., 2017)	Physical resources provided for (Rae et al., 2017)
Lack of competence in teaching students with disability (Xu et al., 2023)	Understanding what enables SETWB (Rae et al., 2017)
Lack of resilience (Xu et al., 2023)	Explicit teaching of emotional literacy to staff (Rae et al., 2017)
Balancing multiple roles (Fox et al., 2020; Holzner & Gaunt, 2023; Xu et al., 2023)	Educational psychologist in a supervisory role (Rae et al., 2017)
	Competence in teaching students with disability (Xu et al., 2023)
	Interventions that promote teacher resilience (Xu et al., 2023)
	Relationships/connections at school/sense of community (Fox et al., 2020; Holzner & Gaunt, 2023)
	Understanding wellbeing fluctuations at different times of year (Fox et al., 2020)
	Trust (Fox et al., 2020; Holzner & Gaunt, 2023)
	Shared values (Fox et al., 2020)
	Teacher leadership opportunities (Fox et al., 2020; Holzner & Gaunt, 2023)
	Autonomy (Fox et al., 2020)
	Limited class size (Rae et al., 2017)
	Wellbeing initiatives promotion (Holzner & Gaunt, 2023)
	Teacher mentors (Holzner & Gaunt, 2023)

space. There is an ongoing debate about why SE teachers in Australia are still physically and pedagogically separated from their mainstream colleagues (Passeka & Somerton, 2022; Thorius, 2016). This presents an opportunity to explore initiatives and factors that can promote school connectedness for SE teachers.

Table 2. Special Education Teacher Wellbeing (SETWB) Factors Aligned to OECD Wellbeing Framework

Positive promoting SETWB factors	School connectedness	Teacher self-efficacy	Professional development	Class structure
OECD teacher wellbeing framework	Social wellbeing	Cognitive and subjective wellbeing	Job resources	Job demands

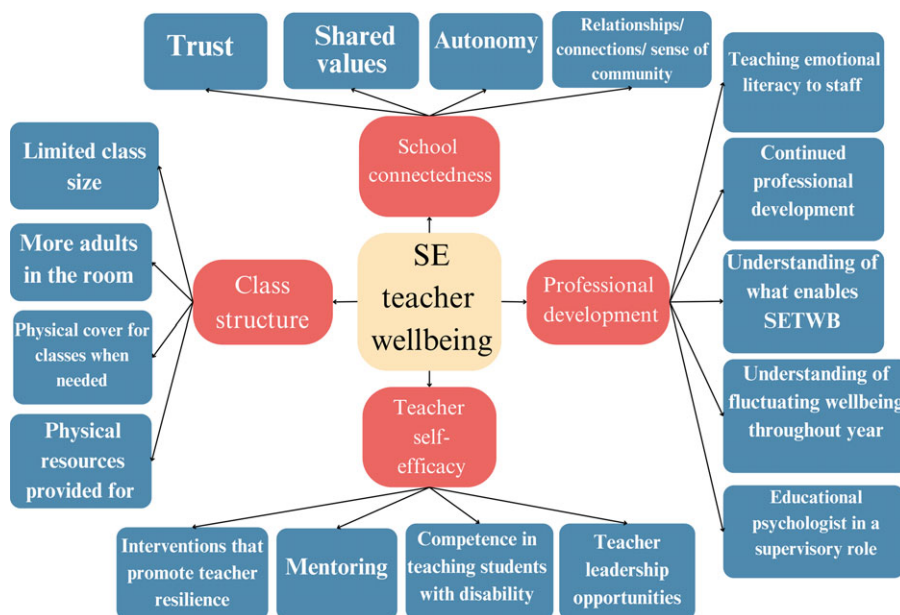


Figure 2. A Conceptual Model of Positive Special Education Teacher Wellbeing (SETWB) Factors.

Teacher self-efficacy

Using Bandura’s cognitive theory model, Viac and Fraser (2020) suggest teacher self-efficacy is a subjective measure of one’s belief in their ability to succeed and perform particular behaviours; thus, teacher self-efficacy could be conceptualised as self-belief regarding capacity to perform in adversity. If teachers have high self-belief about mastering the multidimensional components of teaching, it is possible to increase wellbeing (Kouhsari et al., 2023; Skaalvik & Skaalvik, 2007; Zee & Koomen, 2016).

Being able to shape student learning and behaviour has been positively associated with SE teacher levels of job satisfaction and inversely correlated with burnout and stress (Turner et al., 2022; Viel-Ruma et al., 2010; Womack & Monteiro, 2023). Teachers with high self-efficacy are able to meet challenges within the school context, including catering for students with disability (Collie et al., 2020; Kingsford-Smith et al., 2023). It has also been argued that autonomy is an element of teacher capacity to reflexively carry out their role to the best of their ability (Collie & Carroll, 2023; Kaynak, 2020; Olsen & Mason, 2023; Ryan & Deci, 2020).

Feelings of confidence are gained via teaching experience and willingness to try new teaching methods, gain feedback and consolidate knowledge. Post hoc comparison showed SE teachers with more than 15 years of experience scored significantly higher in teacher self-efficacy than those with 1–5 years of experience (Xu et al., 2023). SE teachers with less experience are at greater risk of leaving the profession than those with more experience (Billingsley & Bettini, 2019). In contrast, Xu et al. (2023) found occupational wellbeing was not significantly correlated to years of teaching, $F(2, 223) = 1.855, p = 0.159$.

Self-efficacy is pivotal for SETWB yet underrepresented within the research. Viac and Fraser (2020) define measurement of teacher self-efficacy on three separate scales: classroom management efficacy, instructional efficacy, and student interaction efficacy. Operationalising these measures of teacher self-efficacy should be considered for further empirical study of SETWB.

Professional development

Teacher professional development is critical to transforming classroom practice, strengthening schools, and increasing student learning outcomes (Australian Institute for Teaching and School Leadership, 2018; OECD, 2019). Professional development with an emphasis on curriculum, school administration or human resources has long been the focus of attention within education (Wessels & Wood, 2019). Prominent within existing literature is the significance of deliberately fostering and enhancing the capacity of SE teachers and accompanying systems to effectively identify and acknowledge distinct emotional intricacies inherent in their profession (Olagunju et al., 2021; Platsidou & Agaliotis, 2017; Rae et al., 2017; Womack & Monteiro, 2023; Xu et al., 2023).

Rae et al. (2017) proposed educating SE teachers on emotional literacy, with the goal of fostering successful teacher–pupil relationships in all areas of learning. The study was inspired by a supervision model commonly observed in health professions where practitioners have regular individual or small group meetings to discuss complex or challenging situations. Rae et al. (2017) found teachers expressed a desire for regular opportunities to participate in objective, solutions-focused sessions with an educational psychologist, and establishment of effective whole-school systems was crucial for this to happen.

Thematic analysis highlighted the need for ongoing professional development in emotional self-management for staff, surpassing limited impact of one-time learning sessions. Spence (2015) concurs, starting with a rather catchy title: ‘If You Build It They May NOT Come . . . Because It’s Not What They Really Need!’. Spence suggests wellbeing programs in Australian private and government sectors are missing the mark due to a lack of understanding of contextual needs. Holzner and Gaunt (2023) suggest SE teachers’ needs should be driving professional development, highlighting the crucial voice of educators.

Class structure

The literature concerning SETWB has provided findings on how SE class structures promote wellbeing (Jennings & Greenberg, 2009; Mankin et al., 2018; Sorensen & Ladd, 2020). One study found the limited size of SE classes promoted wellbeing as it allowed greater individualised instruction and moments to build meaningful rapport with students (Rae et al., 2017). Having fewer pupils in class, having another adult in the room, and being able to provide necessary educational attention to students all promoted increased levels of SETWB (Rae et al., 2017). This premise could also be linked to teacher self-efficacy, as teachers felt they were best able to meet outcomes plus work in the best interests of students (Yang et al., 2021). The purported impact of smaller class sizes is mirrored in the broader literature, where limited class sizes increased teacher effectiveness via greater instructional individualisation while decreasing adverse student behaviour impacts (Fray et al., 2023; Garrick et al., 2017). Olagunju et al. (2021) briefly touch on this supposition, suggesting it may be a contributing factor in lower levels of reported psychological burden for SE teachers in Nigeria, who have mainstream classes of up to 51 students, with an average of 40. A positive contributor to wellbeing was when a school was able to relieve the classroom teacher from class if they were experiencing heightened emotions or needed to complete incident paperwork after a physical altercation between students or a student needed to be physically restrained (Rae et al., 2017).

These synthesised emergent factors provide a collective from which further empirical research can build. Through empirical research and scientific measurement, we can track SETWB changes and enact informed policies that support suggested differential needs of SE teachers.

Conclusion

The wellbeing of SE teachers is a decisive factor in the retention, and mental health, of quality educators in this high-growth and specialised discipline. When teachers have strong school connection and self-efficacy, are provided meaningful professional development, and work in an environment with leaders who understand their specialised work, wellbeing thrives.

In Australia, the number of students with identified disability continues to rise, with recent data suggesting most students with disability attend mainstream schools, and 12% attend an SSP (Australian Institute of Health and Welfare, 2022). Students attending mainstream support units in NSW DoE schools have increased 36% between 2011 and 2020, compared to 1.6% for mainstream students (NSW Department of Education and Communities, 2013; NSW DoE, 2021). A 2023 Teacher Education Expert Panel report commissioned by the Australian Government recognised the increased need for teachers with specialised knowledge in educating students with disability. The report suggested initial teacher education programs include specific SE courses and access for beginning teachers to higher education providers, plus ongoing mentoring — all only possible if quality SE teachers are retained.

This article highlights the paucity of research concerning SETWB globally. As discussed, the work of an SE teacher is different from that of a mainstream teacher, and existing research suggests there are factors requiring further empirical exploration of conceptions of wellbeing beyond the absence of stress and burnout. The OECD teacher wellbeing framework offers opportunity for conceptual consistency in addressing this gap through localised research, acknowledging contextual diversity of SE teaching. Our findings point to more relevant professional development, ensuring systems promote teacher self-efficacy and autonomy through meaningful connection and ratifying the diversity and differences of SE teachers' work.

Our call is for a greater emphasis on research to deepen our understanding of the key factors influencing SETWB and of SE teachers' unique lived experience perspectives.

References

- Acton, R., & Glasgow, P. (2015). Teacher wellbeing in neoliberal contexts: A review of the literature. *Australian Journal of Teacher Education*, 40(8), 99–114. <https://doi.org/10.14221/ajte.2015v40n8.6>
- Aelterman, A., Engels, N., Van Petegem, K., & Pierre Verhaeghe, J. (2007). The well-being of teachers in Flanders: The importance of a supportive school culture. *Educational Studies*, 33(3), 285–297. <https://doi.org/10.1080/03055690701423085>
- Australian Government Department of Education. (2022). *The National Teacher Workforce Action Plan*. <https://www.education.gov.au/teaching-and-school-leadership/resources/national-teacher-workforce-action-plan>
- Australian Institute for Teaching and School Leadership. (2018). *Australian charter for the professional learning of teachers and school leaders*. <https://www.aitsl.edu.au/docs/default-source/national-policy-framework/australian-charter-for-the-professional-learning-of-teachers-and-school-leaders.pdf>
- Australian Institute of Health and Welfare. (2020). *People with disability in Australia 2020: In brief* (Cat. No. DIS 77). <https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia-2020-in-brief/contents/about-people-with-disability-in-australia-in-brief>
- Australian Institute of Health and Welfare. (2022). *People with disability in Australia 2022* (Cat. No. DIS 72). <https://www.aihw.gov.au/getmedia/3bf8f692-dbe7-4c98-94e0-03c6ada72749/aihw-dis-72-people-with-disability-in-australia-2022.pdf.aspx?inline=true>
- Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 89(5), 697–744. <https://doi.org/10.3102/0034654319862495>
- Billingsley, B. S., & Cross, L. H. (1992). Predictors of commitment, job satisfaction, and intent to stay in teaching: A comparison of general and special educators. *The Journal of Special Education*, 25(4), 453–471. <https://doi.org/10.1177/002246699202500404>
- Bower, J. M., & Carroll, A. (2017). Capturing real-time emotional states and triggers for teachers through the teacher wellbeing web-based application t*: A pilot study. *Teaching and Teacher Education*, 65, 183–191. <https://doi.org/10.1016/j.tate.2017.03.015>
- Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 37(4), 681–711. <https://doi.org/10.1353/etc.2014.0032>

- Cancio, E. J., Larsen, R., Mathur, S. R., Estes, M. B., Johns, B., & Chang, M. (2018). Special education teacher stress: Coping strategies. *Education and Treatment of Children, 41*(4), 457–481. <https://doi.org/10.1353/etc.2018.0025>
- Carroll, A., Forrest, K., Sanders-O'Connor, E., Flynn, L., Bower, J. M., Fynes-Clinton, S., York, A., & Ziaei, M. (2022). Teacher stress and burnout in Australia: Examining the role of intrapersonal and environmental factors. *Social Psychology of Education, 25*(2–3), 441–469. <https://doi.org/10.1007/s11218-022-09686-7>
- Cazes, S., Hijzen, A., & Saint-Martin, A. (2015). *Measuring and assessing job quality: The OECD job quality framework* (OECD Social, Employment and Migration Working Papers No. 174). OECD Publishing. <https://doi.org/10.1787/5jrp02kqw1mr-en>
- Collie, R. J., & Carroll, A. (2023). Autonomy-pressure profiles among teachers: Changes over a school term, leadership predictors, and workplace outcomes. *Teaching and Teacher Education, 124*, Article 103998. <https://doi.org/10.1016/j.tate.2022.103998>
- Collie, R. J., Malmberg, L.-E., Martin, A. J., Sammons, P., & Morin, A. J. S. (2020). A multilevel person-centered examination of teachers' workplace demands and resources: Links with work-related well-being. *Frontiers in Psychology, 11*, Article 626. <https://doi.org/10.3389/fpsyg.2020.00626>
- Collie, R. J., Shapka, J. D., Perry, N. E., & Martin, A. J. (2015). Teacher well-being: Exploring its components and a practice-oriented scale. *Journal of Psychoeducational Assessment, 33*(8), 744–756. <https://doi.org/10.1177/0734282915587990>
- Cooke, P. J., Melchert, T. P., & Connor, K. (2016). Measuring well-being. *The Counseling Psychologist, 44*(5), 730–757. <https://doi.org/10.1177/0011000016633507>
- Craig, C. J., Hill-Jackson, V., & Kwok, A. (2023). Teacher shortages: What are we short of? [Editorial]. *Journal of Teacher Education, 74*(3), 209–213. <https://doi.org/10.1177/00224871231166244>
- Dempsey, I., & Christenson-Foggett, J. (2011). External mentoring support for early career special education teachers. *Australasian Journal of Special Education, 35*(1), 61–71. <https://doi.org/10.1375/ajse.35.1.61>
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*(2), 276–302. <https://doi.org/10.1037/0033-2909.125.2.276>
- Dreer, B. (2023). On the outcomes of teacher wellbeing: A systematic review of research. *Frontiers in Psychology, 14*, Article 1205179. <https://doi.org/10.3389/fpsyg.2023.1205179>
- Fox, H. B., Tuckwiller, E. D., Kutscher, E. L., & Walter, H. L. (2020). What makes teachers well? A mixed-methods study of special education teacher well-being. *Journal of Interdisciplinary Studies in Education, 9*(2), 223–248. <https://doi.org/10.32674/jise.v9i2.2170>
- Fox, H. B., Walter, H. L., & Ball, K. B. (2023). Methods used to evaluate teacher well-being: A systematic review. *Psychology in the Schools, 60*(10), 4177–4198. <https://doi.org/https://doi.org/10.1002/pits.22996>
- Fray, L., Jaremus, F., Gore, J., Miller, A., & Harris, J. (2023). Under pressure and overlooked: The impact of COVID-19 on teachers in NSW public schools. *The Australian Educational Researcher, 50*(3), 701–727. <https://doi.org/10.1007/s13384-022-00518-3>
- Garrick, A., Mak, A. S., Cathcart, S., Winwood, P. C., Bakker, A. B., & Lushington, K. (2017). Teachers' priorities for change in Australian schools to support staff well-being. *The Asia-Pacific Education Researcher, 26*(3–4), 117–126. <https://doi.org/10.1007/s40299-017-0332-7>
- Grant, M. C. (2017, Winter). A case study of factors that influenced the attrition or retention of two first-year special education teachers. *Journal of the American Academy of Special Education Professionals, 77*–84. <https://files.eric.ed.gov/fulltext/EJ1129641.pdf>
- Gupta, S. S. (2020). Voices from the field: Why aren't we talking about teacher well-being with inclusion? *Young Exceptional Children, 23*(2), 59–62. <https://doi.org/10.1177/1096250619846581>
- Hascher, T., & Waber, J. (2021). Teacher well-being: A systematic review of the research literature from the year 2000–2019. *Educational Research Review, 34*, Article 100411. <https://doi.org/10.1016/j.edurev.2021.100411>
- Herman, K. C., Sebastian, J., Eddy, C. L., & Reinke, W. M. (2023). School leadership, climate, and professional isolation as predictors of special education teachers' stress and coping profiles. *Journal of Emotional and Behavioral Disorders, 31*(2), 120–131. <https://doi.org/10.1177/10634266221148974>
- Hester, O. R., Bridges, S. A., & Rollins, L. H. (2020). 'Overworked and underappreciated': Special education teachers describe stress and attrition. *Teacher Development, 24*(3), 348–365. <https://doi.org/10.1080/13664530.2020.1767189>
- Hoffman, S., Palladino, J. M., & Barnett, J. (2007). Compassion fatigue as a theoretical framework to help understand burnout among special education teachers. *Journal of Ethnographic & Qualitative Research, 2*(1), 15–22. <https://files.eric.ed.gov/fulltext/ED558015.pdf>
- Holzner, K.-L., & Gaunt, L. (2023). Wellbeing promotion in Tasmanian schools: Have we forgotten support teachers? *Australasian Journal of Special and Inclusive Education, 47*(2), 96–109. <https://doi.org/10.1017/jsi.2023.10>
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491–525. <https://doi.org/10.3102/0034654308325693>
- Kauffman, J. M., Felder, M., Ahrbeck, B., Badar, J., & Schneiders, K. (2018). Inclusion of all students in general education? International appeal for a more temperate approach to inclusion. *Journal of International Special Needs Education, 21*(2), 1–10. <https://doi.org/10.9782/17-00009>

- Kaynak, N. E. (2020). A close look at teachers' lives: Caring for the well-being of elementary teachers in the US. *International Journal of Emotional Education*, 12(1), 19–34. <https://www.um.edu.mt/library/oar/handle/123456789/55036>
- Kiel, E., Heimlich, U., Markowetz, R., Braun, A., & Weiß, S. (2016). How to cope with stress in special needs education? Stress-inducing dysfunctional cognitions of teacher students: The perspective of professionalisation. *European Journal of Special Needs Education*, 31(2), 202–219. <https://doi.org/10.1080/08856257.2015.1125693>
- Kim, S.-Y., & Lim, Y.-J. (2016). Virtues and well-being of Korean special education teachers. *International Journal of Special Education*, 31(1), 114–118.
- Kingsford-Smith, A. A., Collie, R. J., Loughland, T., & Nguyen, H. T. M. (2023). Teacher wellbeing in rural, regional, and metropolitan schools: Examining resources and demands across locations. *Teaching and Teacher Education*, 132, Article 104229. <https://doi.org/10.1016/j.tate.2023.104229>
- Koenig, A., Rodger, S., & Specht, J. (2018). Educator burnout and compassion fatigue: A pilot study. *Canadian Journal of School Psychology*, 33(4), 259–278. <https://doi.org/10.1177/0829573516685017>
- Kouhsari, M., Chen, J., & Baniasad, S. (2023). Multilevel analysis of teacher professional well-being and its influential factors based on TALIS data. *Research in Comparative and International Education*, 18(3), 395–418. <https://doi.org/10.1177/17454999221143847>
- Lummis, G. W., Morris, J. E., Ferguson, C., Hill, S., & Lock, G. (2022). Leadership teams supporting teacher wellbeing by improving the culture of an Australian secondary school. *Issues in Educational Research*, 32(1), 205–224. <http://www.iier.org.au/iier32/lummis-abs.html>
- Mankin, A., von der Embse, N., Renshaw, T. L., & Ryan, S. (2018). Assessing teacher wellness: Confirmatory factor analysis and measurement invariance of the Teacher Subjective Wellbeing Questionnaire. *Journal of Psychoeducational Assessment*, 36(3), 219–232. <https://doi.org/10.1177/0734282917707142>
- McCallum, F., Price, D., Graham, A., & Morrison, A. (2017). *Teacher wellbeing: A review of the literature*. Association of Independent Schools of NSW. <https://apo.org.au/node/201816>
- McDowell, J. R. (2017). Burning out: The effect of burnout of special education. *Brigham Young University Education and Law Journal*, 2017(1), 99–123.
- Mrstik, S., Pearl, C., Hopkins, R., Vasquez, E., III, & Marino, M. T. (2019). Combating special educator attrition: Mentor teachers' perceptions of job satisfaction, resiliency, and retention. *Australasian Journal of Special and Inclusive Education*, 43(1), 27–40. <https://doi.org/10.1017/jsi.2018.20>
- Nilsen, S. (2017). Special education and general education – coordinated or separated? A study of curriculum planning for pupils with special educational needs. *International Journal of Inclusive Education*, 21(2), 205–217. <https://doi.org/10.1080/13603116.2016.1193564>
- NSW Department of Education. (2021). *Schools and students: 2020 statistical bulletin*. Centre for Education Statistics and Evaluation. <https://education.nsw.gov.au/about-us/educational-data/cese/publications/statistics/annual-statistical-bulletin/schools-and-students-2020-statistical-bulletin>
- NSW Department of Education. (2023a). *Itinerant support teachers*. <https://education.nsw.gov.au/parents-and-carers/inclusive-learning-support/primary-school/how-your-child-can-be-supported-in-primary-school/itinerant-support-teachers>
- NSW Department of Education. (2023b). *Support classes*. <https://education.nsw.gov.au/parents-and-carers/inclusive-learning-support/support-and-adjustments/available-support/specialist-support-classes>
- NSW Department of Education. (2023c). *Schools for specific purposes (SSPs)*. <https://education.nsw.gov.au/teaching-and-learning/disability-learning-and-support/programs-and-services/special-schools-ssps>
- NSW Department of Education and Communities. (2013). *2011 statistical bulletin: Schools and students in New South Wales*. Centre for Education Statistics and Evaluation. <https://education.nsw.gov.au/about-us/educational-data/cese/publications/statistics/annual-statistical-bulletin/schools-and-students-2011-statistical-bulletin>
- NSW Parliament. (2010). *The provision of education to students with a disability or special needs* (General Purpose Standing Committee No. 2 Report No. 34). NSW Government. <https://www.parliament.nsw.gov.au/lcdocs/inquiries/1837/100716%20The%20provision%20of%20education%20to%20students%20with%20pdf>
- Olagunju, A. T., Akinola, M. A., Fadipe, B., Jagun, O. O., Olagunju, T. O., Akinola, O. O., Ogunnubi, O. P., Olusile, O. J., Oluyemi, O. Y., & Chaimowitz, G. A. (2021). Psychosocial wellbeing of Nigerian teachers in special education schools. *Journal of Autism and Developmental Disorders*, 51(4), 1131–1141. <https://doi.org/10.1007/s10803-020-04606-0>
- Olsen, A. A., & Mason, E. N. (2023). Perceptions of autonomy: Differential job satisfaction for general and special educators using a nationally representative dataset. *Teaching and Teacher Education*, 123, Article 103999. <https://doi.org/10.1016/j.tate.2022.103999>
- Organisation for Economic Co-operation and Development. (2019). *Working and learning together: Rethinking human resource policies for schools* (OECD Reviews of School Resources). OECD Publishing. https://www.oecd-ilibrary.org/education/working-and-learning-together_b7aaf050-en
- Page, A., Anderson, J., & Charteris, J. (2021). Innovative learning environments and spaces of belonging for special education teachers. *International Journal of Inclusive Education*. Advance online publication. <https://doi.org/10.1080/13603116.2021.1968518>

- Passeka, Y., & Somerton, M. (2022). Bridging the gap: Special educators' perceptions of their professional roles in supporting inclusive education in Kazakhstan. *Disability & Society*. Advance online publication. <https://doi.org/10.1080/09687599.2022.2160925>
- Pavidou, K., & Alevriadou, A. (2022). An assessment of general and special education teachers' and students' interpersonal competences and its relationship to burnout. *International Journal of Disability, Development and Education*, 69(3), 1080–1094. <https://doi.org/10.1080/1034912x.2020.1755425>
- Platsidou, M., & Agaliotis, I. (2008). Burnout, job satisfaction and instructional assignment-related sources of stress in Greek special education teachers. *International Journal of Disability, Development and Education*, 55(1), 61–76. <https://doi.org/10.1080/10349120701654613>
- Platsidou, M., & Agaliotis, I. (2017). Does empathy predict instructional assignment-related stress? A study in special and general education teachers. *International Journal of Disability, Development and Education*, 64(1), 57–75. <https://doi.org/10.1080/1034912x.2016.1174191>
- Preston, K., & Spooner-Lane, R. (2019). 'Making space': A study into the use of mindfulness for alternative school teachers. *Journal of Psychologists and Counsellors in Schools*, 29(2), 108–129. <https://doi.org/10.1017/jgc.2019.4>
- Rae, T., Cowell, N., & Field, L. (2017). Supporting teachers' well-being in the context of schools for children with social, emotional and behavioural difficulties. *Emotional and Behavioural Difficulties*, 22(3), 200–218. <https://doi.org/10.1080/13632752.2017.1331969>
- Rendoth, T., Duncan, J., & Foggett, J. (2022). Inclusive curricula for students with severe intellectual disabilities or profound and multiple learning difficulties: A scoping review. *Journal of Research in Special Educational Needs*, 22(1), 76–88. <https://doi.org/10.1111/1471-3802.12544>
- Renshaw, T. L., Long, A. C. J., & Cook, C. R. (2015). Assessing teachers' positive psychological functioning at work: Development and validation of the Teacher Subjective Wellbeing Questionnaire. *School Psychology Quarterly*, 30(2), 289–306. <https://doi.org/10.1037/spq0000112>
- Riley, P. (2014). *Australian Principal Occupational Health, Safety & Wellbeing Survey: 2011–2014 data*. Australian Catholic University. https://www.principalhealth.org/reports/2011-14%20Report_FINAL.pdf
- Ryan, J., Koehler, N., Cruickshank, T., Rogers, S. L., & Stanley, M. (2023). 'Teachers are the guinea pigs': Teacher perspectives on a sudden reopening of schools during the COVID-19 pandemic. *Australian Educational Researcher*. Advance online publication. <https://doi.org/10.1007/s13384-022-00577-6>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, Article 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sharrocks, L. (2014). School staff perceptions of well-being and experience of an intervention to promote well-being. *Educational Psychology in Practice*, 30(1), 19–36. <https://doi.org/10.1080/02667363.2013.868787>
- Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology*, 99(3), 611–625. <https://doi.org/10.1037/0022-0663.99.3.611>
- Sorensen, L. C., & Ladd, H. F. (2020). The hidden costs of teacher turnover. *AERA Open*, 6(1), 1–24. <https://doi.org/10.1177/2332858420905812>
- Spence, G. B. (2015). Workplace wellbeing programs: If you build it they may NOT come . . . because it's not what they really need! *International Journal of Wellbeing*, 5(2), 109–124. <https://doi.org/10.5502/ijw.v5i2.7>
- Teacher Education Expert Panel. (2023). *Strong beginnings: Report of the Teacher Education Expert Panel 2023*. Australian Government Department of Education.
- Thorius, K. A. K. (2016). Stimulating tensions in special education teachers' figured world: An approach toward inclusive education. *International Journal of Inclusive Education*, 20(12), 1326–1343. <https://doi.org/10.1080/13603116.2016.1168877>
- Turner, K., Thielking, M., & Prochazka, N. (2022). Teacher wellbeing and social support: A phenomenological study. *Educational Research*, 64(1), 77–94. <https://doi.org/10.1080/00131881.2021.2013126>
- van Horn, J. E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. G. (2004). The structure of occupational well-being: A study among Dutch teachers. *Journal of Occupational and Organizational Psychology*, 77(3), 365–375. <https://doi.org/10.1348/0963179041752718>
- Viac, C., & Fraser, P. (2020). *Teachers' well-being: A framework for data collection and analysis* (OECD Education Working Papers No. 213). OECD Publishing. <https://doi.org/10.1787/c36fc9d3-en>
- Viel-Ruma, K., Houchins, D., Jolivet, K., & Benson, G. (2010). Efficacy beliefs of special educators: The relationships among collective efficacy, teacher self-efficacy, and job satisfaction. *Teacher Education and Special Education*, 33(3), 225–233. <https://doi.org/10.1177/0888406409360129>
- Wang, H., Hall, N. C., & Taxer, J. L. (2019). Antecedents and consequences of teachers' emotional labor: A systematic review and meta-analytic investigation. *Educational Psychology Review*, 31(3), 663–698. <https://doi.org/10.1007/s10648-019-09475-3>

- Warr, P. (1994). A conceptual framework for the study of work and mental health. *Work & Stress*, 8(2), 84–97. <https://doi.org/10.1080/02678379408259982>
- Wessels, E., & Wood, L. (2019). Fostering teachers' experiences of well-being: A participatory action learning and action research approach. *South African Journal of Education*, 39(1), 1–10. <https://doi.org/10.15700/saje.v39n1a1619>
- Willis, A. S., & Grainger, P. R. (2020). Teacher wellbeing in remote Australian communities. *Australian Journal of Teacher Education*, 45(5), 18–37. <https://doi.org/10.14221/ajte.2020v45n5.2>
- Womack, T. A., & Monteiro, E. M. (2023). Special education staff well-being and the effectiveness of remote services during the COVID-19 pandemic. *Psychology in the Schools*, 60(5), 1374–1393. <https://doi.org/10.1002/pits.22702>
- World Health Organization. (2021). *Health promotion glossary of terms 2021*. <https://www.who.int/publications/i/item/9789240038349>
- Xu, N., Chen, P., Lang, R., Kong, L.-L., & Qu, H. (2023). The effect of Chinese special education teachers' competence on their occupational well-being: The mediating effect of resilience. *International Journal of Disability, Development and Education*, 70(6), 1206–1221. <https://doi.org/10.1080/1034912x.2021.1975263>
- Yang, C., Manchanda, S., & Greenstein, J. (2021). Educators' online teaching self-efficacy and compassion fatigue during the COVID-19 pandemic: The dual roles of "connect". *School Psychology*, 36(6), 504–515. <https://doi.org/10.1037/spq0000475>
- Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research*, 86(4), 981–1015. <https://doi.org/10.3102/0034654315626801>