

# Teacher Mental Health, School Climate, Inclusive Education and Student Learning: A Review

Christina Gray, Gabrielle Wilcox, and David Nordstokke  
University of Calgary

Teachers are in a profession with high demands as they work to meet the diverse learning needs of their students. Consequently, many teachers experience high levels of stress contributing to burnout, and unfortunately, many leave the profession. Teacher mental health may contribute to the resilience of teachers who choose to stay in the profession. Positive school climate also has the potential to contribute to teacher mental health and to provide an optimal environment to support student learning and growth. Knowledge of school climate and factors relating to teacher well-being are critical to allow for interventions to best support teachers and students in school settings. Additionally, there is a growing trend toward inclusive education practices that influences teacher well-being, student outcomes, and parent experiences. The aim of this review paper is to provide an overview of existing literature relating to teacher well-being and school climate factors in relation to student learning. Furthermore, this paper will extend findings from existing literature to provide directions for future research and applied educational practices.

*Keywords:* teacher mental health, school climate, inclusive education, student learning

Mental health plays a foundational role in daily functioning across many areas including work performance and coping with job-related stress (Maslach & Leiter, 2008). The World Health Organization (2006) defines *mental health* as a state of well-being in which individuals successfully cope with the normal stresses of life, enabling them work productively and contribute to their community. The teaching profession, including k-12 and university, is an occupation with high rates stress and burnout, interfering with mental health (Geving, 2007; Grayson & Alvarez, 2008). Teachers face considerable demands, including expectations to successfully manage classrooms and contribute to gains in student learning (Fontana & Abouserie, 1993). These tasks are made increasingly difficult with large class sizes, complex and diverse learning needs, and variability in school-wide resources and funding. Given these occupational demands, it unsurprising that teachers experience significant levels of stress.

Teacher stress is pervasive. Across countries and grade levels, teachers have universally reported high levels of job stress (Fontana & Abouserie, 1993). *Teacher stress* describes the negative emotional experiences (e.g., frustration, depression) of teachers that stem from occupational demands (e.g., adapting curriculum content to meet diverse student needs, addressing behavioral challenges with large class sizes; Kyriacou, 2001). The stress experienced by teachers contributes to experiences of burnout and lower overall job satisfaction (Hakanen, Bakker, & Schaufeli, 2006). Teacher burnout often

begins early with many teachers reporting significant stress during student-teaching (Fives, Hamman, & Olivarez, 2007).

Many factors contribute to teacher stress, and school-related factors such as negative student behavior (e.g., disrespect, inattentiveness) predict teacher burnout across grade levels (Beltman, Mansfield, & Price, 2011). Work overload and low salaries are occupational factors that also increase teacher stress (Schonfeld, 2001). Furthermore, while school climate impacts teacher stress, heightened teacher stress may also influence school climate as it often leads to high levels of staff absenteeism, early retirement, and turnover in the profession (Grayson & Alvarez, 2008). *School climate* describes the quality of school life, amalgamating interpersonal relationships, teaching practices, norms, and values that are characteristic of school life (Cohen, McCabe, Michelli, & Pickeral, 2009). In addition to the traditional tasks of teaching and assessment, teachers are also tasked with meaningfully contributing to a sustainable, positive school climate that promotes youth learning and development (Cohen et al., 2009).

Given that the aim of the teaching profession is to support the learning needs and academic development of students, understanding and addressing teacher stress and burnout is critical to cultivating healthy academic environments for all school community members. High levels of teacher stress detrimentally impacts the classroom environment both academically and behaviorally for students (Kipps-Vaughan, 2013). Teacher stress commonly results in impatient and frustrated interactions with students, rendering teachers unable to provide the emotionally supportive relationships students require to thrive (Brock & Grady, 2000). There is to better support teacher by adequately addressing teacher mental health, well-being, stress, burnout, and retention to best promote overall student and school success.

There has been a shift to move beyond only examining contributors to teacher stress to also explore characteristics of resilient teachers (Beltman et al., 2011). *Teacher resilience* refers to the

---

Christina Gray, Gabrielle Wilcox, and David Nordstokke, School & Applied Child Psychology, Werklund School of Education, University of Calgary.

Correspondence concerning this article should be addressed to Christina Gray, School & Applied Child Psychology, Werklund School of Education, University of Calgary. E-mail: [cgray@ucalgary.ca](mailto:cgray@ucalgary.ca)

capacity of teachers to thrive in and to overcome environmental stressors as well as personal difficulties (Kitching, Morgan, & O'Leary, 2009). This capacity to maintain well-being is the culmination of the dynamic interplay between risk factors that threaten teacher functioning and protective factors (Beltman et al., 2011). The recent shift in educational research to further investigate factors that contribute to the well-being of teachers facing the same challenges as those who succumb to significant stress highlights the multifaceted nature of teacher mental health well-being.

In addition to the focus on teacher burnout, there is also a trend toward *inclusive education*, which focuses on placing students with learning difficulties and other disabilities in regular education settings (Harpell & Andrews, 2010). There is, however, a question as to how well inclusive education effectively provides all students with adequate learning opportunities, resulting in academic progress (Harpell & Andrews, 2010). This growing trend toward inclusive education models require teachers to have specialized knowledge and confidence in working within this form of education system to effectively address diverse student learning needs. This knowledge and skill set is, unfortunately, often not included in Canadian teacher training programs (McCrimmon, 2015).

This paper reviews existing literature addressing teacher well-being and school climate in relation to student learning. Specifically, literature findings related to stressors and risk factors, protective factors, teacher resilience, and inclusive practices will be integrated with student learning. Literature addressing the impacts of school climate factors on teacher and student mental health will also be highlighted. Furthermore, this paper will provide extensions for research as well as applied teaching and educational practices that stem from the present literature. Articles for this literature review were selected through searches in PsycINFO and Google Scholar using combinations of the keywords *teacher mental health*, *teacher stress*, *teacher burnout*, *teacher resilience*, *school climate*, *mental health*, and *inclusive education*. Articles published within the previous 25 years were included in the review.

### Teacher Well-Being and Mental Health

Teachers tend to enter the field with expectations to make a long-term impact on students; however, they leave the profession early in their careers at alarming rates. In one Australian survey of teachers within their first decade of teaching, one third indicated they were planning on leaving the field, and about 25% planned to leave within the next two years (Bowles & Arnup, 2016). This results in lost investment of the employer, the teacher, and society (Gibbs & Miller, 2014). Consequently, it is imperative to support teachers' development of resilience not only to increase retention rates but also to support the quality teaching practices needed to create engaging learning environments (Day, 2008).

Teachers who are mentally healthy and maintain their positions are important. This importance is evident given that teacher well-being accounted for about 8% of the variance in student performance in both elementary and secondary schools (Briner & Dewberry, 2007). While this is not a huge amount, it is a factor that can be modified by educational systems (Briner & Dewberry, 2007) in contrast to other factors such as parental education and income level are not easily addressed by educational systems. Additionally, teachers who are burned out but continue to work

exhibit irritability, high absenteeism, and demonstrate weaker classroom management skills, which contribute to student apathy (Gibbs & Miller, 2014). Of note, existing literature related to teacher gender, grade level, experience, and inclusive practice reveal the dynamic interplay of these factors in relation to teacher well-being.

### Teacher Well-Being and Gender

Fontana and Abouserie (1993) found no differences between male and female teacher stress levels, instead finding that personality characteristics (e.g., psychoticism, neuroticism, introversion, etc.) accounted for differences in levels of stress. A study of teachers in western Canada found that gender accounted for a small amount of the variance in workload and classroom related stress (3% and 1% respectively) with women reported higher levels of stress (Klassen & Chiu, 2010).

### Teacher Well-Being and Grade Level

In one study of secondary teachers (who attended a workshop on Advanced Placement [AP] courses in the United States), 34% of the variance of job satisfaction was accounted for by stress and burnout (Fisher, 2011). In primary school teachers in Cyprus, there was a positive correlation between all job stressors and personal accomplishment (e.g., student behavior, student perceptions of teachers, etc.). Stress related to managing student behavior, personality traits (i.e., neuroticism, extraversion, and conscientiousness), role ambiguity, administrative status, and time constraints predicted emotional exhaustion. Managing student misbehavior and conscientiousness predicted depersonalization. A study of primary school teachers with more than five years of experience found that intrinsic factors (i.e., teaching efficacy, working with students, and job satisfaction) influenced both job satisfaction and retention while extrinsic factors (i.e., salary and work overload) did not (Perrachione, Petersen, & Rosser, 2008). While the focus of the studies varied, it is apparent that teachers at both levels experience stress that impacts their job performance and satisfaction.

### Teacher Well-Being and Experience

While levels of stress were not statistically different between novice and experienced teachers in the study conducted by Fisher (2011), novice teachers experienced burnout at higher levels than experienced teachers. In another study, teachers with more than 10 years of experience reported higher levels of exhaustion than those with less experience (Kokkinos, 2007). These results suggest that while stress does not decrease, teachers who successfully stay in the field learn to manage so the stress does not lead to burnout, but it does add to exhaustion.

### Inclusive Practice and Teacher Well-Being

Over the past several decades, there has been a shift toward more inclusive educational practice in many western countries. This transition, however, has not been without its challenges. Teachers report facing multiple difficulties in meeting the needs of all children in inclusive settings including less time available for the rest of the class, challenging behavior (e.g., disruptions, phys-

ical attacks), responsibility for educational outcomes of students with diverse learning needs, and increased workload (Forlin & Chambers, 2011).

The biggest challenge reported is lack of training, both in teachers' perceptions of their readiness and the content covered in training programs, according to one examination of Canadian teacher preparation programs (McCrimmon, 2015). In one study, preservice teachers' level of stress about inclusive teaching actually increased after a training covering inclusion policies, potential strategies, and the benefits and difficulties of inclusive practice due to increased understanding of their responsibilities (Forlin & Chambers, 2011). On the other hand, teachers with some special education training reported higher levels of teaching efficacy about teaching in inclusive settings (Sokal & Sharma, 2013), suggesting that type of training may be important for teachers' preparedness. The varying findings in these studies indicate that type of training is an important factor in improving teacher efficacy in inclusive practices. Simply understanding policy expectations is likely to increase stress about inclusion while specific training in understanding learning differences and how to meet those needs is more likely to improve teacher efficacy in this area.

Teachers have reported strategies that help them effectively work in inclusive settings including having a sense of honor, making and continuing to follow-through with plans containing realistic expectations, and seeking the help of other professionals (Forlin, Keen, & Barrett, 2008). Teachers reported that refraining from letting other staff know they were struggling, hoping problem situations would go away on their own, and having included students work independently were identified as ineffective strategies for coping with stress related to inclusive practice (Forlin et al., 2008).

### Inclusive Practice Experiences

**Student experiences of inclusive practice.** A review paper by Ruijs and Peetsma (2009) examined the academic and social-emotional impact of inclusive practices on students who were included and typically developing students. They found several challenges with the research in this area including varied study designs, inconsistent use of a control group of students receiving special education, and differing definitions of inclusive practice. In the area of academics, the study found mostly positive or neutral impacts of inclusion for students with special needs; although, all studies included only students with mild to moderate levels of difficulty. They found inconclusive results for typically developing students including negative, neutral, and positive results. In the area of social and emotional outcomes, there were mixed results for students with special needs who were included in regular education settings including negative, neutral, and positive results. For typically developing students, they found that while there were some increases in level of acceptance, the typically developing students continued to view the included students less positively than typically developing peers, and it was unclear if their increased levels of acceptance would generalize beyond the students in their classroom.

Ruijs and Peetsma (2009) concluded that the impact of inclusive practices on academic and social outcomes for both typically developing students and those with diverse learning needs was difficult to determine as many of the studies did not have control

groups and the results were somewhat variable. The overarching conclusions of this review were that the impact of inclusive education may differ for various groups of students, which can result in the overall neutral results that were found in many studies (Ruijs & Peetsma, 2009).

**Parent experiences of inclusive practice.** A review paper by de Boer, Pijl, and Minnaert (2010) examined the literature investigating parents' perceptions of inclusive education. They found that parents of children with special needs viewed the concept of inclusive education favorably (46.6%-85%), but just over half (50%-54.1%) reported inclusive education would not be the best place for their own children. Parents of children with disabilities expressed concerns about their children's emotional development and lack of individualized instruction as potential negative consequences of inclusive education. The studies reviewed regarding the views of parents of typically developing children only related to including students with Intellectual Disabilities. Half of the reviewed studies found neutral or undecided views and half found positive views; however, one asked about willingness to invite children with special to their home or to spend the night with somewhat less positive results.

It is important to note that despite its widespread favor and implementation, there is no clear definition of what constitutes inclusive education (Limbach-Reich, 2015). As a result, there is currently little empirical support for the practice of inclusive education and more rigorous research is required before it can be deemed an evidence-based practice. In light of this, responsible inclusive practice requires that decisions are made based upon students' needs, that there are sufficient resources and sufficient administrative support, and that data on effectiveness is collected at a school and individual level to make data-informed decisions (Vaughn & Schumm, 1995).

### Teacher Resilience and Burnout

A recent research review indicated that occupations with high levels of social interaction tend to also have high levels of burnout; consequently, it is not surprising that teachers experience high levels of burnout even compared with other human services jobs, especially experiencing symptoms of cynicism and exhaustion (Mojsa-Kaja, Golonka, & Marek, 2015). In one study, however, participants with higher self-reported levels of resilience reported lower levels of intention to leave the field (Bowles & Arnup, 2016), suggesting resilience may be a protective factor. Despite the high levels of attrition and burnout among teachers, it is one of the few professions in which beginning practitioners face the same level of skill and workload expectations as more experienced professionals (Tait, 2008), which speaks to the need to consider how to better support early career teachers as they acclimate to the high demands of the profession.

**Resilience.** Teacher resilience is a multidimensional construct. Some of the aspects of resilience include emotional (recovery, self-care), professional (reflective, competent), motivational (self-confidence, persistence), and social (help seeking, strong relationships; Mansfield, Beltman, Price, & McConney, 2012). In another study, resilience was categorized as personal (life outside of school), situated (life in school), and professional (the interaction between values and policies; Gu & Day, 2007). However, both resilience models emphasize the ever-shifting and overlapping

nature of the constituent parts, and a variety of factors contribute to teachers' resilience and work engagement including opportunities to be innovative, job control, and effectiveness of supervisory support (Hakanen et al., 2006).

In a literature review of teacher resilience, Beltman and colleagues (2011) reported factors that teachers frequently cited as promoting resilience. These factors included individual factors, such as personal attributes (moral purpose, sense of vocation, tenacity), self-efficiency (sense of competence and self-efficacy), coping skills (help-seeking, learning from failure), teaching skills (knowing students and a range of instructional practices), professional reflection and growth (mentors, reflection, and a commitment to ongoing learning), and self-care (taking responsibility for well-being, supportive relationships). They also included contextual factors such as school/administrative support (meaningful feedback), mentors (positive, within same teaching field), colleagues, working with students, preservice training, and supportive family and friends.

Specific strategies that can help increase well-being and resilience include valuing and intentionally engaging in social and collaborative activities with colleagues; building positive relationships with colleagues, students, and students' parents; seeking out professional development opportunities (McCallum & Price, 2010); problem solving, avoiding bringing work home; exercising; scheduling time for enjoyable activities; and creating a support group (Castro, Kelly, & Shih, 2010). Creating a classroom environment that is healthy for both the teachers and students helps to reduce stress and improves well-being by distributing responsibility, setting behavioral guidelines for the classroom, and creating a welcoming and cheery environment (McCallum & Price, 2010).

**Burnout.** General studies on contributors in to burnout include lack of control, insufficient reward, and absence of fairness which contribute to the three main characteristics of burnout: exhaustion, cynicism, and inefficacy (Angerer, 2003). Multiple aspects of school context, which cannot easily be collapsed into a singular whole, impact teacher burnout. These include supervisory support, time pressure, relations with parents, autonomy, and school size (Skaalvik & Skaalvik, 2009). A perceived lack of autonomy is related to all three aspects of burnout. Unfortunately, educational reforms have steadily diminished teacher autonomy (Skaalvik & Skaalvik, 2009), likely contributing to current rates of teacher burnout. Mojsa-Kaja and colleagues (2015) found that both individual factors and organizational factors contributed to the burnout symptoms of exhaustion and cynicism as they are a result of a misfit between teacher expectations and their actual situation in the areas of workload, control (exhaustion) and fairness (cynicism). Contextual risk factors that potentially decrease teacher resilience include disruptive student behaviours (especially lack of effort; Geving, 2007), overwhelming student needs, unsupportive administration, lack of resources, heavy workload (Beltman et al., 2011), large class sizes, negative work environment, increased diversity, and inconsistent implementation of policies (McCallum & Price, 2010). Additionally, challenges in balancing work and family commitments can cause additional stress (Beltman et al., 2011). While help-seeking behaviours are related to resilience and well-being, those who need help most are not likely to seek it out, often due to a belief that they should know what they are doing and/or fear that they will be judged for needing help, making them

feel even more isolated, and increasing the likelihood of burnout (Castro et al., 2010).

Preservice and early career teachers reported that the physical demands of teaching, such as inadequate time to eat or use the restroom and vocal strain, increase their physical and emotional fatigue (McCallum & Price, 2010). Additionally, personal expectations to be a good teacher without needing help from others, contributed to unhealthy choices such as not exercising, eating poorly, obtaining inadequate sleep, and consuming excessive amounts of coffee or alcohol (McCallum & Price, 2010). Further, teachers may experience differing threats to their resilience during different stages of their careers. School context exerts the strongest influence on early career teachers and external policies and work-life balance threats tend to impact more experienced teachers (Gu & Day, 2007).

### What Is School Climate?

School climate reflects aspects of a school system related to the sense of safety and belonging that its members experience, and it is comprised of the organizational structure of the school, staff, students, families, and community (Thapa, Cohen, Guffey, & Higgens-D'Alessandro, 2013). Various studies have shown that several characteristics are related to a positive school climate. These characteristics include an emphasis on academic achievement, positive relationships among students and teachers, respect for all members of the school community, fair and consistent discipline policies, attention to safety issues, and family and community involvement (Wilson, 2004).

In conceptualizing of the construct of school climate, Cohen and colleagues (2009) suggest that school climate refers to the quality and character of school life based on patterns of individuals' experiences. Overall, school climate reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures. The climate of a school is also greatly influenced by the leadership practices of school administrators, especially principals. Principals shape the climate of the school through discipline policies and their interactions with students and staff. In a study investigating the relationship between school climate and communication effectiveness between principals and teachers, Halawah (2005) demonstrated that positive and effective communication styles led to improved perceptions of school climate by teachers and students. Littrell, Billingsley, and Cross (1994) found that principal support positively influences the feelings that teachers have about themselves and their work. Moreover, teachers who described their principals as supportive found their work to be more rewarding, were more productive, and experienced less job-related stress. Principals are pivotal in terms of developing and maintaining relationships within the school that impact the overall climate and in turn, the well-being of their teachers and students (Day, 2008).

### School Climate and Mental Health

Research studies have found that positive school climate impacts the mental and physical health of students and teachers (Thapa et al., 2013). Positive school climate impacts and influences students' motivation to learn, has the capacity to mitigate the negative effects of the socioeconomic context on academic suc-



cess, lower levels of peer aggression and violence, and decrease sexual harassment (Thapa et al., 2013). Factors inherent to school climate impact students and teachers as well as perceptions of school climate (Grayson & Alvarez, 2008).

Perceptions of school climate have been associated with teacher burnout (Grayson & Alvarez, 2008) and levels of work commitment (Collie, Shapka, & Perry, 2012). Collie and colleagues (2012) demonstrated that school climate predicted teacher job satisfaction using a structural modelling approach. Specifically, they found that when teachers have a positive view of their school, it leads to better engagement and commitment (Collie et al., 2012). In a Canadian study, Collie and colleagues (2011) demonstrated that positive school climate predicts three forms of teacher commitment: professional, future, and organizational.

Type of school environment (e.g., primary vs. secondary) also influences perceptions of school climate. Schools serving different grade levels possess their own organizational characteristics. For example, Huang (2001) found that high schools have their own set of characteristics in terms of their educational mission related to preparing students for entry into the workforce or institutes of higher education. This highlights that the distinctions between type of school environment needs to be addressed by educational researchers and policymakers.

School climate can increase student achievement (MacNeil, Prater, & Busch, 2009) as well as school connectedness (Loukas, Suzuki, & Horton, 2006), indicating a connection between school climate and positive student outcomes. Increased student self-esteem, and self-concept are associated with positive school climate (Way, Reddy, & Rhodes, 2007). Research has also shown that a positive school climate is associated with lower levels of drug use and psychiatric problems among high school students (LaRusso, Romer, & Selman, 2008). Positive school climate predicts better overall mental health well-being (Virtanen et al., 2009). Thus, existing research on school climate highlights the importance of factors linked to the construct with promoting positive outcomes for students and teachers within their school settings.

## Conclusion

Teacher well-being, school climate, and inclusive education all impact student learning. Although there was limited Canadian research addressing the relationships between the factors of teacher mental health, school climate, inclusive education, and student learning, there was research in diverse contexts. Through this review, it is evident that fostering teacher well-being and a positive school climate are necessary requirements for students to have their learning needs met. Both constructs have the potential to significantly impact student learning; therefore, consideration must be given to the areas of teacher well-being and school climate within educational settings, such as inclusive education settings.

Teachers have a formative role in student development across multiple areas of functioning (e.g., social, behavioral, academic) through daily classroom tasks and interactions. These tasks are complicated by the diverse learning needs of students, the number of students in the classroom, as well as challenges relating to the social-emotional, behavioral, and academic functioning of each student. Teachers also must navigate the complexities involved with navigating ever-changing policies including inclusive educa-

tion practices. Thus, it is critical for teachers to effectively deal with the occupational stressors of their profession using coping strategies, work-life balance, meaningful collaboration and support from coworkers and teaching staff.

School administrators control many variables that influence teacher stress including autonomy over classrooms and work load. School administrators, as school leaders, have the potential to impact teacher motivation by creating a supportive atmosphere in the school (Leithwood, 2006). School administration may also reduce teacher stress in several ways. For example, hosting workshops relating to stress management supports teachers in choosing stress reduction methods that work best for them (Kyriacou, 2001). School principals in particular are central agents of change and contribute to teacher well-being by recognizing staff and by modelling work-related stress management techniques (Kyriacou, 2001). When school administrators create an organized, supportive, and collaborative environment, it supports teacher well-being.

School psychologists, as mental health professionals, are in an ideal position support teacher and student well-being. School psychologists can support teachers in dealing with the diverse learning needs of their students as well as behavioral challenges. By supporting teachers to deal with some of demanding aspects of their jobs, school psychologists can help to increase teacher efficacy. Taking steps to support teacher well-being and mental health can increase teacher resilience when faced with the challenges inevitable in the teaching profession.

A positive school climate is critical for teacher well-being as well as student learning. Factors including student academic achievement, interpersonal relationships and connectedness between students and teachers, and an atmosphere of caring and safety within the school environment are essential for instilling a positive school climate. When teachers and students experience challenges across school climate factors (e.g., a school atmosphere involving bullying/discrimination against differences, low student achievement), student learning may suffer and teacher stress levels may increase. A negative cycle may begin to develop where teacher stress impacts how teachers respond to their students, and students react to these negative relational tendencies.

## Implications for Research

Research in the areas of teacher mental health well-being and school climate are expanding within the school psychology and education literature. The significant deleterious impact of teacher burnout highlights a need for further research in this area. Specifically, research is necessary to inform interventions that support growth in teacher resilience and as well as continued positive school climate development through evidence-based approaches. Additionally, there are significant research to practice gaps in the areas of mental health practices and school interventions (Reinke, Stormont, Herman, Puri, & Goel, 2011). Research that focuses on investigating teacher experiences and perspectives in relation to school climate can provide understanding of contextual factors that connects research to practice in school-based mental health. Further investigation of teacher well-being and school climate factors within inclusive education practice is an area requiring subsequent research, particularly given the expanding trend toward inclusive education practices in schools despite the methodological challenges and inconsistent findings regarding inclusive education

research. Further research that works toward a unifying operational definition of inclusive education coupled with research that seeks to evaluate outcomes of inclusive education may increase the present evidence-base for this form of education system.

While there is a growing trend focusing on school climate, the limited research is interesting given the applicability of school climate factors to education. Inconsistent operationalization of the construct of school climate and multiple tools used to measure its related factors. For example, Ramelow, Currie, and Felder-Puig (2015) identified 12 instruments used to measure the construct, and across most studies, school climate has been operationally emphasized as consisting of different features. Further research should focus on moving toward a unifying theoretical foundation of the construct of school climate. Theoretical foundations and an operationalization of the construct of school climate will better allow for comparisons across research studies. A direction for further research may involve an extensive thematic and critical analysis of school climate literature that links research to theory (e.g., the domain areas of school climate).

Given the limited Canadian research, there is a notable need for studies addressing the topics of teacher mental health and school climate within inclusive education contexts in Canada. Greater breadth and number of Canadian research studies addressing these topics will contribute to enhancing understandings of teacher mental health factors within a Canadian context which may contribute to an evidence-based inclusive education practice, which, in turn, could foster positive student outcomes, support teacher well-being, and promote positive systemic and school climate growth.

### Implications for Teaching and Educational Practices

Teacher-wellbeing is influenced by personal teacher factors, school climate factors, and the nature of the education approach adopted (e.g., inclusive education). Promoting self-care practices for teachers within school settings is critical to provide an atmosphere that fosters teacher well-being. Teacher self-care can be encouraged through promoting physical exercise activities, mindfulness, and encouraging work-life balance staff-wide within schools. Teacher self-care practices may be incorporated into school climate by encouraging routine staff self-care group activities (e.g., offering morning or afternoon teacher and staff yoga classes, organizing staff healthy lunch days, etc.). These staff-wide and teacher focused self-care activities can be organized at the administration level of the school and create a school atmosphere that values teacher well-being.

School climate is influenced by administrative leaders within school settings, particularly school principals. Principal involvement in professional development activities that focus on school climate factors and ways to shift these factors to best support teacher well-being and student learning is necessary for change. Teachers who experience well-being positively impact student learning and broad student well-being (e.g., student stress levels, quality of teacher and student interpersonal relationships). Furthermore, Principals often develop much of the culture surrounding discipline in school settings (e.g., treatment of bullying behaviors), which is an integral component of school climate. A school climate that fosters community support and involvement through valuing mental health and well-being will benefit both teachers and students over the long term, and school-based professionals (i.e.,

school psychologists) may be particularly involved with providing support for instilling these supportive practices.

Reinke and colleagues (2011) found that teachers viewed school psychologists as having a primary role in mental health service delivery in schools and perceived themselves as needing help in supporting the mental health needs of their students. School psychologists are in a unique position to provide support to enhance teacher well-being and promote growth toward a positive school climate (Kipps-Vaughan, Ponsart, & Gilligan, 2012).

Fostering teacher wellness and a positive school climate supports student wellness. School psychologists have training and expertise with developing and implementing school-wide initiatives to target factors related to school climate as well as areas related to student success. Through creating a system of behavioral and social/emotional supports to complement effective teaching, a comprehensive environment for student learning is developed. A positive school climate and teacher well-being are essential for student learning and success, and attention to factors related to each area will benefit teachers and students. By empowering teachers and strengthening school climate, students are in an empowered position to learn.

---

### Résumé

Les enseignants pratiquent un métier fort exigeant où ils doivent répondre aux divers besoins d'apprentissage de leurs élèves. Par conséquent, bon nombre d'enseignants subissent beaucoup de stress, ce qui peut mener à l'épuisement professionnel et faire en sorte qu'un grand nombre d'entre eux décident de renoncer à leur métier. Une bonne santé mentale peut contribuer à la résilience des enseignants qui décident de rester dans la profession. Un climat scolaire sain peut aussi favoriser la santé mentale des enseignants et fournir un environnement optimal qui appuie l'apprentissage et la croissance des élèves. La connaissance du climat scolaire et des facteurs en lien avec le bien-être des enseignants est essentielle à la mise en œuvre d'interventions qui soutiennent le mieux les enseignants et les élèves dans le contexte scolaire. De plus, on observe une tendance croissante aux pratiques inclusives en éducation qui influent sur le bien-être des enseignants, les résultats des élèves, et l'expérience des parents. Le présent article de synthèse vise à fournir un aperçu de la documentation existante sur le bien-être des enseignants et les facteurs du climat scolaire en lien avec l'apprentissage des élèves. De plus, le présent article intégrera les conclusions de la documentation existante afin d'orienter la recherche ultérieure et les pratiques éducatives appliquées.

*Mots-clés* : santé mentale des enseignants, climat scolaire, éducation intégrée, apprentissage des élèves.

---

### References

- Angerer, J. M. (2003). Job burnout. *Journal of Employment Counseling, 40*, 98–107. <http://dx.doi.org/10.1002/j.2161-1920.2003.tb00860.x>
- Beltman, S., Mansfield, C., & Price, A. (2011). Thriving not just surviving: A review of research on teacher resilience. *Educational Research Review, 6*, 185–207. <http://dx.doi.org/10.1016/j.edurev.2011.09.001>
- Bowles, T., & Arnup, J. (2016). Should I stay or should I go? Resilience as a protective factor for teachers' intention to leave the teaching profession. *Australian Journal of Education, 60*, 229–244. <http://dx.doi.org/10.1177/0004944116667620>

- Briner, R., & Dewberry, C. (2007). *Staff wellbeing is key to school success: A research study into the links between staff wellbeing and school performance*. London, England: Worklife Support.
- Brock, B. L., & Grady, M. L. (2000). *Rekindling the flame: Principals combating teacher burnout*. Thousand Oaks, CA: Corwin Press.
- Castro, A. J., Kelly, J., & Shih, M. (2010). Resilience strategies for new teachers in high-needs areas. *Teaching and Teacher Education*, 26, 622–629. <http://dx.doi.org/10.1016/j.tate.2009.09.010>
- Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111, 180–213. Retrieved from <https://schoolclimate.org/climate/documents/policy/School-Climate-Paper-TC-Record.pdf>
- Collie, R., Shapka, J., & Perry, N. (2011). Predicting Teacher Commitment: The impact of school climate and social-emotional learning. *Psychology in the Schools*, 48, 1034–1048. <http://dx.doi.org/10.1002/pits.20611>
- Collie, R., Shapka, J., & Perry, N. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, 104, 1189–1204. <http://dx.doi.org/10.1037/a0029356>
- Day, C. (2008). Committed for life? Variations in teachers' work, lives and effectiveness. *Journal of Educational Change*, 9, 243–260. <http://dx.doi.org/10.1007/s10833-007-9054-6>
- de Boer, A., Pijl, S. J., & Minnaert, A. (2010). Attitudes of parents towards inclusive education: A review of the literature. *European Journal of Special Needs Education*, 25, 165–181. <http://dx.doi.org/10.1080/08856251003658694>
- Fisher, M. H. (2011). Factors influencing stress burnout, and retention of secondary teachers. *Current Issues in Education*, 14. Retrieved from <http://cie.asu.edu/>
- Fives, H., Hamman, D., & Olivarez, A. (2007). Does burnout begin with student-teaching? Analyzing efficacy, burnout, and support during the student-teaching semester. *Teaching and Teacher Education*, 23, 916–934. <http://dx.doi.org/10.1016/j.tate.2006.03.013>
- Fontana, D., & Abouserie, R. (1993). Stress levels, gender and personality factors in teachers. *British Journal of Educational Psychology*, 63, 261–270. <http://dx.doi.org/10.1111/j.2044-8279.1993.tb01056.x>
- Forlin, C., & Chambers, D. (2011). Teacher preparation for inclusive education: Increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education*, 39, 17–32. <http://dx.doi.org/10.1080/1359866X.2010.540850>
- Forlin, C., Keen, M., & Barrett, E. (2008). The concerns of mainstream teachers: Coping with inclusivity in an Australian context. *International Journal of Disability Development and Education*, 55, 251–264. <http://dx.doi.org/10.1080/10349120802268396>
- Geving, A. M. (2007). Identifying the types of student and teacher behaviours associated with teacher stress. *Teaching and Teacher Education*, 23, 624–640. <http://dx.doi.org/10.1016/j.tate.2007.02.006>
- Gibbs, S., & Miller, A. (2014). Teachers' resilience and well-being: A role for educational psychology. *Teachers and Teaching*, 20, 609–621. <http://dx.doi.org/10.1080/13540602.2013.844408>
- Grayson, J. L., & Alvarez, H. K. (2008). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education*, 24, 1349–1363. <http://dx.doi.org/10.1016/j.tate.2007.06.005>
- Gu, Q., & Day, C. (2007). Teacher resilience: A necessary condition for effectiveness. *Teaching and Teacher Education*, 23, 1302–1316. <http://dx.doi.org/10.1016/j.tate.2006.06.006>
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43, 495–513. <http://dx.doi.org/10.1016/j.jsp.2005.11.001>
- Halawah, I. (2005). The relationship between effective communication and school climate. *Education*, 126, 334–345.
- Harpell, J. V., & Andrews, J. J. (2010). Administrative leadership in the age of inclusion: Promoting best practices and teacher empowerment. *The Journal of Educational Thought*, 44, 189–210. Retrieved from <http://www.jstor.org/stable/23767214>
- Huang, S. Y. (2001). Teachers' Perceptions of High School Environments. *Learning Environments Research*, 4, 159–173. <http://dx.doi.org/10.1023/A:1012415400807>
- Kipps-Vaughan, D. (2013). Supporting teachers through stress management. *Education Digest*, 79, 43–46. Retrieved from <http://search.proquest.com/openview/52907725fb0631935aa4497996cad9c9/1?pq-origsite=gscholar&cbl=25066>
- Kipps-Vaughan, D., Ponsart, T., & Gilligan, T. (2012). Teacher Wellness: Too Stressed for Stress Management? *Communique*, 41, 1–26. Retrieved from <https://eric.ed.gov/?id=EJ991767>
- Kitching, K., Morgan, M., & O'Leary, M. (2009). It's the little things: Exploring the importance of commonplace events for early-career teachers' motivation. *Teachers and Teaching: Theory and Practice*, 15, 43–58. <http://dx.doi.org/10.1080/13540600802661311>
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102, 741–756. <http://dx.doi.org/10.1037/a0019237>
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77, 229–243. <http://dx.doi.org/10.1348/000709905X90344>
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53, 27–35. <http://dx.doi.org/10.1080/00131910120033628>
- LaRusso, M., Romer, D., & Selman, R. (2008). Teachers as builders of respectful school climates: Implications for adolescent drug use norms and depressive symptoms in high school. *Journal of Youth and Adolescence*, 37, 386–398. <http://dx.doi.org/10.1007/s10964-007-9212-4>
- Leithwood, K. (2006). *Teacher working conditions that matter: Evidence for change*. Toronto, Ontario, Canada: Elementary Teachers Federation of Ontario.
- Limbach-Reich, A. (2015). Reviewing the evidence on educational inclusion of students with disabilities: Differentiating ideology from evidence. *International Journal of Child, Youth, and Family Studies*, 6, 358–378. <http://hdl.handle.net/10993/18744>. <http://dx.doi.org/10.18357/ijcyfs.63201513560>
- Littrell, P. C., Billingsley, B. S., & Cross, L. H. (1994). The effects of principal support on special and general educators' stress, job satisfaction, school commitment, health, and intent to stay in teaching. *Remedial and Special Education*, 15, 297–310. <http://dx.doi.org/10.1177/074193259401500505>
- Loukas, A., Suzuki, R., & Horton, K. D. (2006). Examining school connectedness as a mediator of school climate effects. *Journal of Research on Adolescence*, 16, 491–502. <http://dx.doi.org/10.1111/j.1532-7795.2006.00504.x>
- MacNeil, A. J., Prater, D. L., & Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of Leadership in Education*, 12, 73–84. <http://dx.doi.org/10.1080/13603120701576241>
- Mansfield, C. F., Beltman, S., Price, A., & McConney, A. (2012). Don't sweat the small stuff: Understanding teacher resilience at the chalkface. *Teaching and Teacher Education*, 28, 357–367. <http://dx.doi.org/10.1016/j.tate.2011.11.001>
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93, 498–512. <http://dx.doi.org/10.1037/0021-9010.93.3.498>
- McCallum, F., & Price, D. (2010). Well teacher, well students. *Journal of Student Wellbeing*, 4, 19–34. Retrieved from <http://www.ojs.unisa.edu.au/index.php/JSW/article/view/599>
- McCrimmon, A. W. (2015). Inclusive education in Canada: Issues in teacher preparation. *Intervention in School and Clinic*, 50, 234–237. <http://dx.doi.org/10.1177/1053451214546402>

- Mojša-Kaja, J., Golonka, K., & Marek, T. (2015). Job burnout and engagement among teachers - Worklife areas and personality traits as predictors of relationships with work. *International Journal of Occupational Medicine and Environmental Health*, 28, 102–119. <http://dx.doi.org/10.13075/ijomeh.1896.00238>
- Perrachione, B. A., Petersen, G. J., & Rosser, V. J. (2008). Why do they stay? Elementary teachers' perceptions of job satisfaction and retention. *Professional Educator*, 32, 1.
- Ramelow, D., Currie, D., & Felder-Puig, R. (2015). The assessment of school climate: Review and appraisal of published student report measures. *Journal of Psychoeducational Assessment*, 33, 731–743. <http://dx.doi.org/10.1177/0734282915584852>
- Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly*, 26, 1–13. <http://dx.doi.org/10.1037/a0022714>
- Ruijs, N. M., & Peetsma, T. T. D. (2009). Effects of inclusion on students with and without special education needs reviewed. *Educational Research Review*, 4, 67–79. <http://dx.doi.org/10.1016/j.edurev.2009.02.002>
- Schonfeld, I. S. (2001). Stress in 1st-year women teachers: The context of social support and coping. *Genetic, Social, and General Psychology Monographs*, 127, 133–168. Retrieved from [http://search.proquest.com/openview/5c2125969f2340c1e37076ee7e739fc9/1?pq-origsite=gsc\\_holar&cbl=36144](http://search.proquest.com/openview/5c2125969f2340c1e37076ee7e739fc9/1?pq-origsite=gsc_holar&cbl=36144)
- Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and Teacher Education*, 25, 518–524. <http://dx.doi.org/10.1016/j.tate.2008.12.006>
- Sokal, L., & Sharma, U. (2013). Canadian in-service teachers' concerns, efficacy, and attitudes about inclusive teaching. *Exceptionality Education International*, 23, 59–71. Retrieved from [http://ir.lib.uwo.ca/eei/vol23/iss1/5/?utm\\_source=ir.lib.uwo.ca%2Fdoi%2Fvol23%2Fiss1%2F5&utm\\_medium=PDF&utm\\_campaign=PDFCoverPages](http://ir.lib.uwo.ca/eei/vol23/iss1/5/?utm_source=ir.lib.uwo.ca%2Fdoi%2Fvol23%2Fiss1%2F5&utm_medium=PDF&utm_campaign=PDFCoverPages)
- Tait, M. (2008). Resilience as a contributor to novice teacher success, commitment, and retention. *Teacher Education Quarterly*, 35, 57–75. Retrieved from <http://www.jstor.org/stable/23479174>
- Thapa, A., Cohen, D., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83, 357–385. <http://dx.doi.org/10.3102/0034654313483907>
- Vaughn, S., & Schumm, J. S. (1995). Responsible inclusion for students with learning disabilities. *Journal of Learning Disabilities*, 28, 264–270, 290. <http://dx.doi.org/10.1177/002221949502800502>
- Virtanen, M., Kivimäki, M., Luopa, P., Vahtera, J., Elovainio, M., Jokela, J., & Pietikäinen, M. (2009). Staff reports of psychosocial climate at school and adolescents' health, truancy and health education in Finland. *European Journal of Public Health*, 19, 554–560. <http://dx.doi.org/10.1093/eurpub/ckp032>
- World Health Organization. (2006). Constitution of the world health organization. *Basic Documents*, 45. Retrieved from [http://www.who.int/governance/eb/who\\_constitution\\_en.pdf](http://www.who.int/governance/eb/who_constitution_en.pdf)
- Way, N., Reddy, R., & Rhodes, J. (2007). Students' perceptions of school climate during the middle school years: Associations with trajectories of psychological and behavioral adjustment. *American Journal of Community Psychology*, 40, 194–213. <http://dx.doi.org/10.1007/s10464-007-9143-y>
- Wilson, D. (2004). The interface of school climate and school connectedness and relationships with aggression and victimization. *The Journal of School Health*, 74, 293–299. <http://dx.doi.org/10.1111/j.1746-1561.2004.tb08286.x>

Received February 28, 2017

Revision received May 9, 2017

Accepted May 15, 2017 ■