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COVID-19 school closures and social isolation in children and youth: prioritizing relationships in education

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Abstract

We pursue an evidence-informed argument that interpersonal relationships in childhood and adolescence are central to achieving learning outcomes and that school closures across various parts of Canada during the COVID-19 pandemic have compromised these critical relationships, jeopardizing educational attainment. We highlight how the centrality of relationships with peers and educators in achieving learning goals is well established in the literature. So too is the importance of peers in creating stable mental health and wellness for children and youth. The pandemic context has drastically interfered with ongoing wellness, exacerbating feelings of loneliness and social isolation, which takes a toll on what children and youth can achieve in the virtual classroom. In the interest of reducing harm, we call on provincial/territorial governments to move quickly to ensure schools are open in the fall and to think carefully and consult effectively before any further closure decisions are made. We understand that safety is paramount and as such offer a framework for planning a safe return where necessary. Now more than ever there is a need to prioritize social–emotional learning opportunities to protect young people from the lasting effects of social isolation and threats to the fundamental need to belong that have been induced or exacerbated by the pandemic.

Introduction

According to the United Nations Educational, Scientific, and Cultural Organization's (UNESCO) COVID-19 global monitoring of school closures, half of the world's students were still affected by partial or full school closures, impacting 198 613 483 learners as of June 2021 (UNESCO 2021). As Canada entered its third wave of the COVID-19 pandemic, children and youth were yet again faced with school closures. Specifically, 5.7 million Canadian children and youth have been impacted by school closures to date (Statistics Canada 2021). In Ontario, all schools were closed 12 April 2021 and remained closed for the rest of the academic year (see **Fig. 1**). In Alberta, a province-wide closure began 7 May 2021 and lasted until 25 May. On 27 April 2021, Nova Scotia also announced that all public schools would be closed to students at least until the end of the month. There, the government went on to say that schools would be closed until the end of the school year; however, considering decreasing daily case counts, Nova Scotia was able to reverse this decision and schools reopened 3 June 2021. Only a few days after schools closed in Nova Scotia, Manitoba announced the kindergarten to grade 12 closures in its two largest cities, Winnipeg and Brandon. With the closure of schools

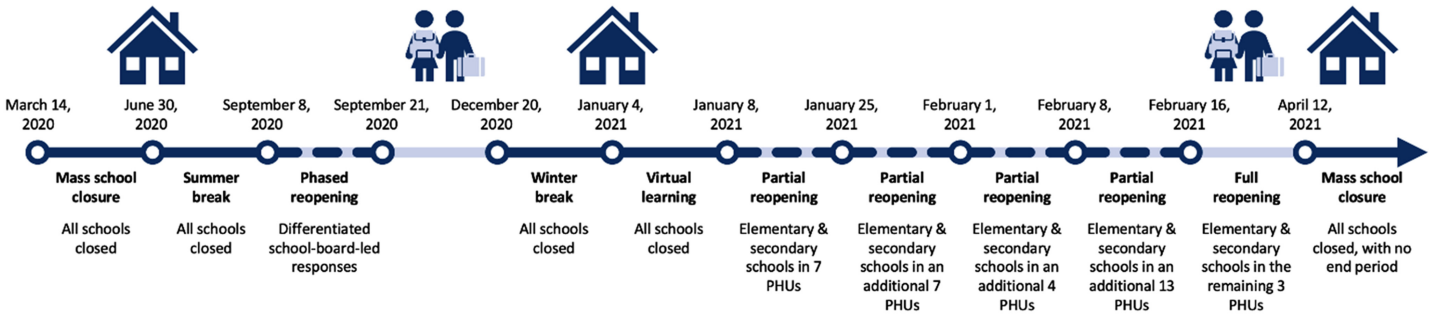

Fig. 1. Ontario-level school closures and reopening policy tracing, from March 2020 to April 2021. Source: Gallagher-Mackay et al. 2021.

across the country, educators and students moved to online learning, with each jurisdiction implementing different models of remote instruction.

Despite differences in the length of school closures, professional consensus is emerging about the impact these shutdowns have on education. The Canadian Paediatric Society has expressed its "serious concern over the extended school closures" to the provincial leadership of Ontario (Feldman et al. 2021). Their central argument was that education is a human right that "must be respected even under difficult circumstances". They further voiced worry over the "unintended consequences" these closures will have on children and youth who rely on schools for the provision of physical and mental health services, food, safety, security, and support. The Canadian Paediatric Society urged the leadership of Ontario to take "every action to ensure the safe re-opening of all schools across Ontario without delay". UNESCO (2021) has also implored governments to intervene, stating that governments must mitigate the impact of school closures and their impact on learning losses, especially for vulnerable and disadvantaged communities to "avoid a generational catastrophe". On 12 July 2021, UNICEF and UNESCO issued a joint statement on the re-opening of schools stating emphatically that it "cannot wait". They further stated that governments, in their attempt to limit the transmission of COVID-19, "have too often shut down schools and kept them closed for prolonged periods, even when the epidemiological situation didn't warrant it. These actions were frequently taken as a first recourse rather than a last measure. In many cases, schools were closed while bars and restaurants remained open" UNESCO (2021). Their central concern was that the losses that children and youth experienced because of these closures "may never be recouped". The Ontario Science Table acknowledged in their 2021–2022 school operation document that "school closures, and the various distance learning strategies deployed to ensure educational continuity, should be part of a pandemic control strategy in only the most catastrophic of circumstances" (Science et al. 2021). They also conceded that children and youth have been "deeply impacted by the COVID-19 pandemic and restrictions placed on schools". Finally, in a departure from previous recommendations, the Centers for Disease Control and Prevention (CDC 2021a) is now urging that schools be fully re-opened in the fall of 2021. This change in opinion was prompted in part by the recognition that children and youth "benefit from in-person learning".

The accumulating evidence certainly supports these concerns. School closures have resulted in a plethora of negative consequences for children and youth that extend beyond the classroom. For example, a study of 254 middle- to high-income Canadian families revealed that the pandemic has had an impact on eating and meal routines (Carroll et al. 2020). Moreover, the authors posit that the extended school closures that took place in the spring of 2020 had an even greater detrimental impact on the financial situation and availability of food resources for families whose parents experienced a reduction or loss of employment because of COVID-19. Thus, food security quickly emerged

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as a significant, albeit unintended, consequence of school closures. Such recognition prompted some governments to take action to address food insecurity and support families. For example, in spring 2020, the Quebec government established agreements with food banks across the province and instructed school districts to provide information to families about food assistance resources available in their area.

Educators (and school social workers) also play an important role in detecting and reporting child maltreatment and neglect. In the United States for example, educators are the primary reporters of child abuse and neglect (Children's Bureau 2020). With children and youth out of the purview of teachers because of school closures, this safeguard is no longer in place for many vulnerable students. This is problematic given that there has been a 10%–50% increase in domestic violence helpline calls in some countries during the pandemic (WHO 2020), coupled with an increase in child abuse-related factors and a decrease in police reports and referrals to child protective services (Cappa and Jijon 2021). A recent study examined the hospital admissions for abusive head trauma (AHT) across 49 US children's hospitals during COVID-19 and found significant decreases in AHT admissions in children <5 years of age (Maassel et al. 2021). The study period was however short (up to 30 September 2020). In a US study initiated two weeks after the World Health Organization declared the coronavirus a pandemic, Lee et al. (2021) examined perceived social isolation and recent employment loss in parents. Results indicated that, controlling for parental depressive symptoms, income, and sociodemographic factors, both social isolation and employment loss were associated with self-report of physical and emotional neglect as well as verbal aggression directed at their children. Social isolation was also associated with increased use of discipline and spanking. As the stressors of the pandemic accumulate, it will be important to re-evaluate this finding. Closer to home, the Children's Hospital of Eastern Ontario (CHEO) stated that they had seen twice as many children under one year of age for maltreatment concerns related to fractures and head trauma during the pandemic when compared to previous years. Dr. Michelle Ward, the Medical Director for Child and Youth Protection at CHEO stated that in her 16 years working at CHEO she had "never seen this many infants with serious maltreatment injuries" (CHEO 2021).

In a similar vein, school closures have contributed to widened inequalities and achievement gaps. Using data collected before the pandemic from 14 cohorts of Ontario primary-grade students to model plausible pandemic-related learning loss scenarios, Davies and Aurini (2021) argued that in the worst-case scenario, average students were expected to experience a 3-month learning shortfall due to COVID-19 school closures when compared to a regular school year, with gaps between the quartiles growing up to 1.5 years. Unfortunately, this worst-case projection is one that is emerging from the data coming from the United States and the Netherlands (Engzell et al. 2021; Kuhfeld et al. 2020), leading researchers to conclude that students have "made little or no progress while learning from home" (Engzell et al. 2021). In these studies, learning loss was most evident for children and youth from disadvantaged homes, as is typically the case, highlighting that the impact of the pandemic is far from random or equitable. The quality of education delivered virtually may be contributing to educational gaps. In a study of 6720 parents recruited from seven European countries (United Kingdom, Sweden, Spain, Belgium, Netherlands, Germany, and Italy), many parents reported that their homeschooling was of poor quality and that they lacked necessary support from schools (Thorell et al. 2021). They also reported that homeschooling their children had a negative effect on them and their children.

School closures have also affected the mental health of children and youth (Vaillancourt et al. 2021a). As one example, 67%–70% of Canadian children and youth "experienced deterioration in at least one mental health domain" because of the pandemic (Cost et al. 2021). Consistent with the notion of multiple risk factors converging, the levels of decline were greatest for those with a pre-existing

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psychiatric diagnosis and among children who perceived greater stress because of being socially isolated. Toronto Hospital for Sick Children (2021) and Holland Bloorview Kids Rehabilitation Hospital released preliminary data on the loss of in-person schooling and the mental health of children during the pandemic. Using data collected from over 1500 participants over four timepoints from wave 1 (April–June 2020) through to wave 2 (December 2020–March 2021), most children and youth were found to experience sustained mental health difficulties during the lockdowns. Moreover, the more time children and youth spent online learning, the more they experienced symptoms of depression and anxiety. In another recent study Duckworth et al. (2021) compared the social, emotional, and academic well-being of 6576 high school students who attended school remotely or in-person. Controlling for baseline measures of well-being assessed a month before the pandemic and demographics (gender, race/ethnicity, and socioeconomic status), results indicated that students who attended school remotely reported lower levels of social, emotional, and academic well-being than students who attended school in person. In a comprehensive review of the literature on children's mental health during the pandemic, Vaillancourt et al. (2021a) concluded that "studies suggest a worsening of mental health in relation to the pandemic".

While we concern ourselves with the implications of learning loss and the waning of children's mental health in the context of school closures, it is equally important that we concern ourselves with the impact that these closures have on students' sense of belonging and connection with others. It is important to emphasize that children and youth not only attend school to learn, but they also attend school to form and maintain interpersonal relationships and to learn valuable skills on how to sustain these relationships. Relationships with teachers and peers help children and youth meet their fundamental, biologically based drive to form emotional bonds and attachments with others (Baumeister and Leary 1995). Thus, school closures, along with stay-at-home orders, quarantines, and social distancing recommendations intended to reduce COVID-19 cases are in fact thwarting this basic need to belong, resulting in greater social isolation and loneliness (Okruszek et al. 2020), with added implications for academic achievement and well-being. These detrimental outcomes were preventable and foreseen by child and youth advocates, who repeatedly warned that school closures and other public health restrictions "would be devastating for kids, and that maintaining in-person school was critical to the health and development of an entire generation" (Korczak and Feldman 2021). These predictions could be made with such precision because there is a well-established literature demonstrating how social isolation impacts all aspects of functioning, both in the immediate and in the long-term (McDougall and Vaillancourt 2015). Indeed, this literature clearly demonstrates that social ties are not just a luxury but are essential for optimal development.

Social isolation and loneliness pre-COVID-19

Much has been written in the popular press about the impact of COVID-19 on rates of loneliness, the psychological embodiment of social isolation (Steptoe et al. 2013). For example, the Wall Street Journal ran a story titled "Loneliness, Anxiety and Loss: The Covid Pandemic's Terrible Toll on Kids" (Peterson 2021). The central thesis of this piece was on how school shutdowns and family trauma have led to social isolation, stress, and mental health problems in youth. But even before the pandemic, loneliness was a growing concern. In fact, it was so worrisome that the United Kingdom established a Ministry of Loneliness based on the recognition that loneliness was one of the "greatest public health challenges of our time" (Prime Minister's Office 2018). Even the Surgeon General of the United States opined about loneliness, stating that it was a "growing health epidemic" and that reducing isolation was "good for business" (Murthy 2017). Reducing loneliness is good for business because in adults, loneliness reliably increases the risk for developing mental health problems (da Rocha et al. 2018; Erzen and Çikrikci 2018), cardiovascular disease (Barth et al. 2010; Valtorta et al. 2016), infectious illness (Cohen et al. 1997), cognitive decline (Bassuk et al. 1999), and increased mortality

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(Eng et al. 2002; Heffner et al. 2011; Steptoe et al. 2013; Alcaraz et al. 2019). A meta-analysis of adults found that social isolation, loneliness, and living alone were associated with a 29%, 26%, and 32% increased likelihood of mortality, respectively (Holt-Lunstad et al. 2015). Reducing loneliness is also good for children, families, and society at large. Socially isolated children and youth also suffer considerably; they too have poorer physical (Gini and Pozzoli 2013) and mental health (Moore et al. 2017; Mulvey et al. 2018). They also tend to have lower academic achievement (Samara et al. 2021; Wentzel et al. 2021) than children and youth who are more socially integrated. Thus, because relationships matter for health and learning, the COVID-19 school closures undertaken in certain provinces, are untenable, and are, in fact, causing harm (Science et al. 2021).

Social isolation and loneliness during COVID-19

Loneliness, a distressing feeling that results from a discrepancy between actual and desired social connection (Perlman and Peplau 1981), was a problem before the pandemic, and since disease containment measures have been implemented, the problem has only worsened. Indeed, the pandemic has turned loneliness into a reality lived by millions of children and youth worldwide. For example, a UK survey of adolescents with a history of mental health needs, conducted when schools were closed to most children, reported that the top coping concern for teens was "isolation/loneliness" (Youngminds 2020). This is consistent with the worries of Canadian adolescents. Specifically, Ellis et al. (2020) found that while teens were very concerned about the COVID-19 crisis, they were particularly worried about their peer relationships. When asked the question "To what extent are you worried about how COVID-19 will impact you feeling connected to your friends?" only 3.5% of adolescents responded, "not at all". In this study, loneliness was correlated with depression, which is in keeping with meta-analytic findings (Erzen and Çikrikci 2018). In a study of Belgian adolescents during COVID-19 lockdown, loneliness was found to have a greater negative impact on adolescents' happiness than feelings of anxiety (Cauberghe et al. 2021). Results from a national poll found that 3 in 4 American parents said that the pandemic had affected their teens' social interactions (C.S. Mott Children's Hospital 2021). A study of British adolescents found that loneliness was associated with symptoms of mental health difficulties during lockdown and that this link was more pronounced in teens who had a poor relationship with their parents (Cooper et al. 2021). In this study, texting with others did not improve mental health symptoms; rather adolescents who spent more time texting others were the most impaired. Ellis et al. (2020) also found that adolescents who spent more time connecting to friends virtually during the pandemic were the most depressed and lonely. These findings suggest that virtual contact is not a good substitute for in-person contact for adolescents during the pandemic. A longitudinal study conducted in Germany found decreased well-being in children and youth age 9–18 years; specifically, the perception of social support was lower during the beginning of the pandemic than before the pandemic (Vogel et al. 2021). Finally, a rapid review of 63 studies examining the impact of social isolation and loneliness on the mental health of children and adolescents who were previously healthy ($N = 51\ 576$; mean age 15.3 years) indicated that social isolation and loneliness did increase the risk of depression (Loades et al. 2020). The duration of loneliness was also found to be more strongly correlated with mental health symptoms than the intensity of loneliness. These results are expected. Childhood, and in particular, adolescence, is a time of heightened motivation to affiliate with peers (Harris 1995; Brown and Larson 2009). Thus, when this need to affiliate is unmet, positive development often gets derailed.

The links between social isolation, loneliness, and mental health difficulties are concerning given the length (and number) of school closures Canadian children and youth have faced, along with all the other public health measures that have limited their social contact. Compounding the issue is that children and youth are not only isolated from their school peers, they are also experiencing lengthy isolation from their teachers, extended family, and community networks (Loades et al. 2020).

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Regarding community networks, in many provinces extracurricular activities like organized sports have been drastically curtailed, if not outright cancelled (Vaillancourt 2021). Predictably, this loss has also negatively influenced children and youth. For example, in a survey of 18 soccer organizations in Ontario involving 3582 respondents, 2 in 5 parents stated that their child was experiencing anxiety, stress, or worry because of the pandemic (Ontario Soccer 2021). Moreover, 86% of parents indicated that their child was lacking social connection in their lives due to the pandemic and when asked what their child missed most about participating with their club/academy team, the number one response was socializing. With this backdrop in mind, it is important to refocus our efforts at getting children and youth back to school (and back to the activities they enjoy). However, in transitioning children and youth back to face-to-face learning, it is important to be mindful that the status quo was never perfect. Specifically, the priority of relationships has not always been central in education even though learning is socially mediated—that is, all learning happens in relationships.

The first R of education—relationships

As the societal institution responsible for child and youth development, schools are mandated to focus on educating the whole child, which includes the capacities for healthy relationships (Vaillancourt et al. 2021b). Indeed, the primary tasks of childhood are (*i*) skill development related to physical, cognitive, and social–emotional domains and (*ii*) social integration. Canadian educators have done an excellent job with respect to cognition. In fact, Canada's prepandemic academic performance levels have long been the exemplar of the world (OECD 2016). However, when it comes to social–emotional learning and development, Canada's performance has been far from excellent. In the latest UNICEF (2020) report card on the state of children and youth from 38 rich countries, Canada's overall ranking was 30th, a low ranking driven in large part by our poor performance on indicators of child well-being, mental and physical health, and happiness. Regarding nonacademic school-related factors, Canada ranked 15th on our youth's sense of belonging at school and 28th on bullying. UNICEF has been monitoring children's outcomes in rich countries for two decades and, during this time, the "relationships" indicators for Canada have never been in the top third (UNICEF 2019, 2020).

Because children and youth are facing so many unprecedented and prolonged stressors, it is now more important than ever for them to feel that they matter and for them to have positive relationships with their teachers and their peers (Rucinski et al. 2018; Hargreaves 2021; National Academies of Sciences, Engineering, and Medicine [NASEM] 2021). This has always been true, but it is particularly important right now and when children and youth return to prepandemic learning environments feeling stressed about school because of the pandemic (Challenge Success 2021). Clues from research on previous disasters, childhood trauma (Palamarchuk and Vaillancourt 2021), and the emerging research on the pandemic (Vaillancourt et al. 2021a; Whitley et al. 2021) point to the fact that for many children and youth, their ability to learn and relate positively to others is, or will be, negatively affected. One way to bolster their resilience is to ameliorate their interpersonal relationships at school and to invest in their social–emotional development (Cahill and Dadvand 2020; Reyes et al. 2013) through school-based social–emotional learning programs (Taylor et al. 2017), as advocated by the NASEM (2021) in their new report on school-based strategies for addressing the mental health and well-being of children and youth in the wake of COVID-19. This is also true for educators who have been shown to benefit from such programs (Schonert-Reichl 2017; NASEM 2021). When children and youth face challenges, a caring and supportive classroom community that includes positive teacher–student relationships and healthy peer relationships consistently promotes resilience. These types of classrooms also encourage school enjoyment, a motivation to learn, better conflict resolution skills, and a more developed ethic of care (Ellerbrock 2015).

Beyond caring classrooms, the quality and character of the entire school, which involves the social, emotional, and academic experiences of all children, their family, and school personnel

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(Cohen et al. 2009), is important for academic success, mental health, and positive relationships, especially in the context of the pandemic (NASEM 2021). A positive school climate is consistently associated with better academic achievement (Catalano et al. 2004; Osher and Kendziora 2010; Bryan et al. 2012; Niehaus et al. 2012; Wang et al. 2014; Konold et al. 2018; Daily et al. 2019), better mental health (Somersalo et al. 2002; Shochet et al. 2006; Suldo et al. 2012; Aldridge and McChesney 2018), and better peer relationships (Low and Van Ryzin 2014; Konishi et al. 2017). These associations are interconnected—poor school climate is related to higher rates of bullying victimization (Wang et al. 2014), which is associated with lower academic achievement (Samara et al. 2021), and is causally linked to poor mental health (Moore et al. 2017). Bullying is a notable problem for children and youth worldwide. According to population-based studies, 10% of children and youth are bullied on a regular basis and another 30% are bullied occasionally (Vaillancourt et al. 2010; NASEM 2016; Turner et al. 2018; UNICEF 2019). Canadian prevalence rates are similarly high, and for close to three decades, Canada has had some of the highest rates of bullying within economically advanced countries (Molcho et al. 2009; UNICEF 2019, 2020). These rates are worrisome because bullying victimization challenges children and youth in unhealthy ways, across all domains of functioning (McDougall and Vaillancourt 2015; Vaillancourt and Palamarchuk 2021).

Although the pandemic has been a notable threat to the well-being of children and youth worldwide, when it comes to bullying victimization rates, improvements have occurred (UNICEF 2020; Yang et al. 2021; Yourtown 2021). In the UNICEF Canadian Companion (2020), a 17% reduction in cyberbullying was noted during the pandemic for youth and young adults. Vaillancourt et al. (2021c) also found significant reductions in bullying in a sample of 6578 Canadian students in grades 4–12. To account for school changes associated with the pandemic, Vaillancourt et al. (2021c) randomized children and youth at the school level into two conditions: (*i*) the pre-COVID-19 condition, assessing bullying prevalence rates before the pandemic, and (*ii*) the current condition, assessing rates during the pandemic. Results indicated striking differences with children and youth reporting far higher rates of bullying involvement before the pandemic than during the pandemic (35.3% prepandemic vs. 16.9% during the pandemic). These researchers suggested that the pandemic may have "mitigated bullying rates" and encouraged educators to consider retaining some of the educational reforms used to reduce the spread of the virus. Specifically, they argue that reducing class sizes and increasing supervision in the future could help foster more caring relationships and thus help maintain this impressive reduction. Because peers can be pivotal in destabilizing others' mental health, the role of adults in promoting healthy relationships is critical. Moreover, for optimal learning and development to occur, schools need to be safe (McNamara 2021). Toward this aim, bullying problems must be addressed "through systemic changes at all levels within the education system and with proactive efforts to ensure that all students are safe and able to learn" (Vaillancourt et al. 2021c). Safe learning environments are ones in which children and youth feel valued, respected, and connected (Konishi and Wong 2018). Safe learning environments also attend to the needs of the adults; after all, the working conditions of educators are the learning conditions of children and youth (NASEM 2021; Westheimer and Schira Hagerman 2021). This is particularly important in light of the findings from the Canadian Teachers' Federation (2020) teacher mental health check-in survey, which found that the "mental health of teachers was "severely endangered" by stressors such as: excessive workload, lack of clear directions and planning, increased screen time, and social isolation".

According to Canada's Promoting Relationships and Eliminating Violence Network (PREVNet 2021), "focusing on healthy relationships is one of the best ways to promote healthy development for youth". The pandemic has highlighted that relationships are an essential part of high-quality education. Our worry, however, is that given the current learning gaps, schools may feel pressure to catch-up academically, at the expense of social–emotional learning. This is a central concern of the NASEM (2021), who recommend in their recent school-based strategies document that in the context

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of the pandemic, academic learning must be balanced with "social, emotional, and behavioural support". Indeed, social–emotional learning cannot be divorced from the core curriculum because social–emotional learning helps children and youth develop the knowledge, attitudes, and skills needed to manage their emotions, build healthy relationships, set goals, and make decisions (Weissberg et al. 2015; Alberta Ministry of Education 2021). These skills translate into better social adjustment, reduced levels of problem behaviour, including bullying and risk behaviour, and reduced levels of emotional distress (Hawkins et al. 2008; Durlak et al. 2011, 2015; Sklad et al. 2012; Jones et al. 2015). In sum, these skills are the very foundation of learning. This point is well illustrated in a meta-analysis involving 947 406 children and youth enrolled in kindergarten to grade 12. Specifically, social–emotional learning interventions were associated with an 11-percentile point gain in academic achievement (Taylor et al. 2017). In another meta-analysis spanning 50 years of research, social–emotional learning programs consistently produced positive effects on reading, mathematics, and science (Corcoran et al. 2018).

At the beginning of the pandemic, several educational leadership groups in the US outlined how schools should restart and recover from COVID-19 (American Enterprise Institute 2020; American Federation of Teachers 2020; Aspen Institute 2020; Chiefs for Change 2020; Council of Chief State School Officers 2020; Centers for Disease Control and Prevention 2021b). Although approaches and goals varied, "student and adult social and emotional well-being and relationships [were] central to each decision point" (CASEL 2020). The Canadian Teachers' Federation also recognized early that "the mental health and well-being of many students and teachers" would need to be prioritized (Morse 2020). A postpandemic recovery must therefore include a commitment to social–emotional learning (NASEM 2021). Children and youth learn best when healthy relationships are prioritized and when social–emotional development is considered a core learning objective. The two are intricately connected. Because social–emotional learning forms "the basis of human interaction" (Elias 2019) it will be central to helping children and youth recover academically as the pandemic subsides (Greenberg et al. 2003; Zins et al. 2004; Schonert-Reichl 2019).

Part of this recovery effort must also involve the adults in schools who care for students (NASEM 2021; Westheimer and Schira Hagerman 2021). Children and youth are nested within classrooms and, thus, the well-being of teachers and other educators impacts students' academic performance and well-being. The pandemic has been challenging for children and youth, but it has also been challenging for everyone in education who has been faced with quickly adapting their learning environments to be online, being vigilant around ever-changing public health directives, and worrying about their own health and safety, all while trying to keep children and youth engaged and motivated. For the most part, Canadian teachers showed growth in terms of their efficacy in classroom management and their sense of accomplishment during the pandemic. However, they have also experienced increases in exhaustion and cynicism (Sokal et al. 2020). Across Canada, teachers reported feeling that they did not matter to governments, which is illustrated by the fact that they were not a priority group for the first vaccination phase despite calls for their recognition as essential workers (CBC News 2021). If we are to prioritize the centrality of relationships within the learning process, it will be important to also attend to the needs of the adults who work in schools with children and youth and serve as role models, mentors, and caregivers (Hargreaves 2021; NASEM 2021; Westheimer and Schira Hagerman 2021; see **Fig. 2** as one example).

We have outlined how and why relationships matter for students' success in school and beyond. At the heart of all healthy relationships are feelings of trust, security, and safety. However, to get children and youth back to school full-time, a careful consideration of transmission patterns and their mitigation is needed. Infection prevention and control measures, adapted from the health care setting and devised in working with public health, should be employed in the setting of a global pandemic, such

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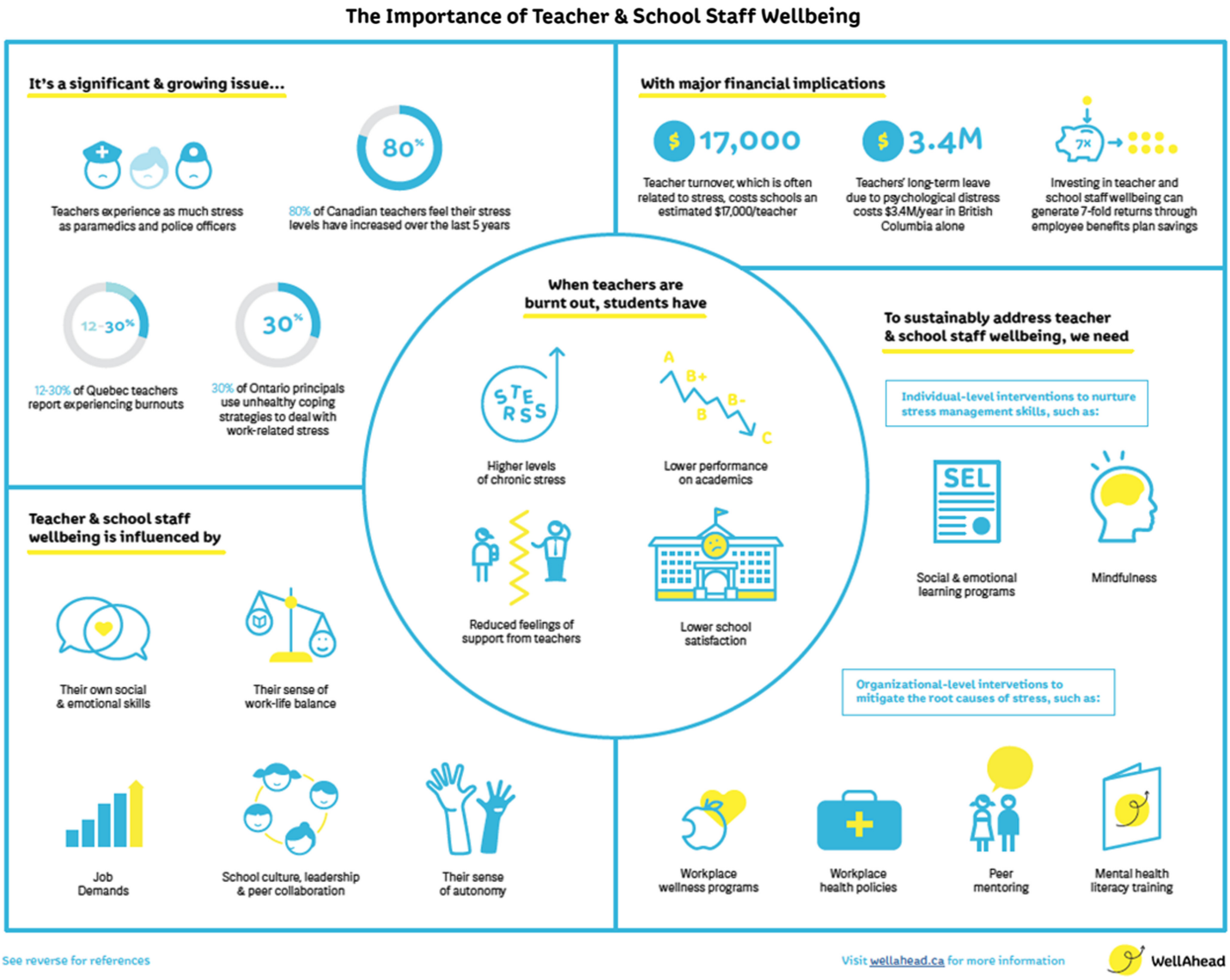

Fig. 2. The importance of teacher and school staff well-being. Source: WellAhead (2018), a McConnell Foundation; mcconnellfoundation.ca/report/teacher-school-staff-wellbeing/.

as COVID-19. **Supplementary Material 1** offers an approach and framework to follow in considering these important measures to keep both learners and staff safe. Ultimately, though, the most important measure will be ensuring that the community in general follows public health guidance thereby minimizing case numbers in all jurisdictions.

Conclusion and recommendations

According to the Canadian Paediatric Society, "school doors should be the first to open and the last to close" (Feldman et al. 2021). We agree. Toward this goal, we echo their recommendations to help re-open schools and keep them open. Specifically, provincial and territorial governments must: (*i.i*) prioritize the safe re-opening of all schools and work toward ensuring schools stay open and

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(*i.ii*) prioritize the safe resumption of all extra-curricular activities like sports and work toward ensuring these activities remain available; (*ii*) commit to "greater transparency in decision-making criteria used to justify school closures and ensuring appropriate consultation with child health and mental health experts" (Feldman et al. 2021); (*iii*) prioritize educators, school staff, and support workers within the vaccine rollout plans; and (*iv*) support and provide new funding to schools so they can effectively implement infection prevention measures. Moreover, because learning happens in relationships, and healthy relationships promote optimal development, COVID-19 education recovery should also include (*v*) a focus on healthy relationships, which includes prioritizing the reduction of bullying and investing in social–emotional learning programs for children and youth and (*vi*) prioritizing and investing in the wellness and well-being of school and jurisdiction staff; our aforementioned goals cannot be achieved without also focusing on the healthy relationships of adults in schools.

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Author contributions

TV, PM, JC, and CF conceived and designed the study. TV, PM, JC, and CF performed the experiments/collected the data. TV, PM, JC, and CF analyzed and interpreted the data. TV, PM, JC, and CF contributed resources. TV, PM, JC, and CF drafted or revised the manuscript.

Competing interests

The authors declare no known conflicts of interest.

Data availability statement

All relevant data are within the paper.

Supplementary material

The following Supplementary Material is available with the article through the journal website at doi:10.1139/facets-2021-0080.

Supplementary Material 1

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