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This study expands on our previous research focusing on provincial educational policies to support students' academic resilience during the pandemic, with the current focus being on the "recovery phase" of the pandemic (January 2022 to December 2023). Our analysis identified 46 provincial documents that addressed one or more of the three dimensions of academic resilience during this recovery period. Similar to our previous findings, a greater emphasis was placed on academic outcomes. There was an increased focus on mental health, while much less attention was paid to physical health and well-being. While we identified examples of provinces that dedicated resources and funding to support these dimensions, we argue the policies implemented during the recovery phase will require more conviction to address the negative long-term impacts of the pandemic, particularly for disadvantaged students, and that such efforts will likely need to continue beyond public schooling.

Educational Recovery in the Aftermath of the Pandemic: A Critical Analysis of Recovery Policies across Canada

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Abstract

This study expands on our previous research focusing on provincial educational policies to support students' academic resilience during the pandemic, with the current focus being on the "recovery phase" of the pandemic (January 2022 to December 2023). Our analysis identified 46 provincial documents that addressed one or more of the three dimensions of academic resilience during this recovery period. Similar to our previous findings, a greater emphasis was placed on academic outcomes. There was an increased focus on mental health, while much less attention was paid to physical health and well-

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Keywords: pandemic, educational policies, academic resilience, recovery

Résumé

Cette recherche s'inscrit dans le prolongement de nos recherches antérieures sur les politiques éducatives provinciales visant à soutenir la résilience scolaire des élèves pendant la pandémie, en se focalisant cette fois sur la « phase de rétablissement » de la pandémie (de janvier 2022 à décembre 2023). Notre analyse a permis d'identifier 46 documents provinciaux qui abordent une ou plusieurs des trois dimensions de la résilience scolaire pendant cette période de rétablissement. Conformément à nos constats précédents, l'accent a davantage été mis sur les résultats scolaires. La santé mentale a fait l'objet d'une attention accrue, tandis que la santé physique et le bienêtre ont reçu beaucoup moins d'attention. Bien que nous ayons identifié des exemples de provinces qui ont consacré des ressources et des fonds pour soutenir ces dimensions, cette étude soutient que les politiques mises en place pendant la phase de rétablissement demanderont plus de rigueur pour remédier aux effets négatifs à long terme de la pandémie, en particulier pour les élèves vulnérables, et que ces efforts devront vraisemblablement se poursuivre bien au-delà de l'école publique.

Mots clés : pandémie, politiques éducatives, résilience scolaire, rétablissement

Introduction

Few would dispute the COVID-19 pandemic as one of the most (if not the most) significant disruptions to in-person learning that contemporary children have experienced or will experience during their lifetimes. Although the impact of pandemic disruptions remains an open question, research continues to document the deleterious effects on learning outcomes, including lower student achievement and higher dropout rates (Moscoviz & Evans, 2022; Skar et al., 2022; Volante, et al., 2021). Indeed, adverse effects on cognitive outcomes have been noted across jurisdictions; for example, the United States (Bailey et al., 2021; Dorn et al., 2020), Germany (Depping et al., 2021), Belgium (Maldonado & De Witte, 2021), the Netherlands (Engzell et al., 2021), other parts of Europe (Blaskó et al., 2021; Giancola & Salmieri, 2024), Asia (Molato-Gayares et al., 2022), and the developing world (Khan & Ahmed, 2021). Perhaps more troubling is that the pandemic has accelerated achievement gaps for children in disadvantaged circumstances, whether it be socio-economic factors (SES) or other identified risk factors such as migrant status, identified learning challenges or disabilities (Bartholo et al., 2023; Betthäuser et al., 2023; De Witte & François, 2023; Organisation for Economic Co-operation and Development [OECD], 2020, 2021; UNESCO, 2022; United Nations, 2021; Volante, Schnepf, & Klinger, 2022). Most recently, studies in developing nations, a previous gap identified by Betthäuser et al., have shown similar trends, highlighting that the pandemic has likely had greater impacts in low- and middle-income countries (e.g., Guariso & Björkman Nyqvist, 2023; Alasino et al., 2024). Emerging research also indicates mixed results in terms of recovery of educational outcomes relative to pre-pandemic levels, and increased achievement gaps for children from low socio-economic status families (Bennett, 2023; Fahle et al., 2024).

In addition to academic learning losses in traditional content domains, research has also highlighted the pandemic's impact on a number of attributes often classified under the heading of the non-cognitive domain. These attributes have long been of interest to educators, as highlighted in student report cards across provinces (Merchant et al., 2018). In terms of education, Farrington et al. (2012) identified broad categories that could be considered components of the non-cognitive domain (e.g., interpersonal skills, academic mindsets, academic perseverance, metacognitive strategies). We acknowledge that the conceptualization of the non-cognitive domain is problematic but it tends to be more widely used

than the concept of self-regulation, another heading under which researchers tend to place these attributes (e.g., Zimmerman, 1989). Regardless, these attributes have been shown to be critical antecedents for the achievement of educational outcomes.

Lastly, there has been a growing focus on children's mental and physical health and well-being over the past several years (e.g., Freeman et al., 2011; Saab & Klinger, 2011). As with emerging data regarding the impact of the pandemic on the cognitive and non-cognitive domains, sobering statistics collected during the pandemic suggest children and adolescent youth have reported a marked increase in depression, disconnection with school, poor mental and physical health, anxiety, self-harm, and even suicidal behaviour during the pandemic (Boak et al., 2022; Michaud et al., 2022; Panchal et al., 2021; Sniadach et al., 2021). Similarly, physical health has also deteriorated in child and adolescent populations around the world (see Duncan et al., 2023; Kovacs et al., 2022; Neville et al., 2022; Rossi, et al., 2021; Xiang et al., 2020). Overall, research suggests that in the absence of significant policy interventions, students may suffer long-term mental and physical health challenges well into adulthood (Cénat & Dalexis, 2020; Meherali et al., 2021).

Shortly after the global lockdowns occurred, scholarly predictions focused on the potential negative impact on children's cognitive, non-cognitive, and health outcomes. Summarizing the available literature at the time, Di Pietro et al. (2020) surmised that students' educational outcomes would be negatively impacted by the pandemic, and that these impacts would differentially impact children. They also acknowledged the potential long-term impacts of the pandemic on both cognitive and non-cognitive learning outcomes. Given these early predictions and the subsequent global analyses largely supporting these predictions, it is not surprising that governments have implemented or revised educational policies to address the negative educational impacts of the pandemic and to ameliorate any longer-term impacts. The present study attempts to understand the education policies that were developed across provincial jurisdictions in Canada from January 2022 to December of 2023. This period coincides with a "recovery phase" in which Canadian schools were open for in-class instruction. We distinguish this from the initial period of the pandemic in which system lockdowns commonly occurred, in what can be considered a "disruption phase." As a result, educational policies developed during this recovery phase would likely be more focused on reducing the predicted long-term impacts and educational inequities resulting from the pandemic. This analysis provides an important review of the nature and scope of policy interventions developed by provincial

education jurisdictions and considers the available evidence base to evaluate the rigour of these adopted policies. Since Canada follows a decentralized governance model, the present study also provides a timely and important comparative analysis that can inform future policy deliberations. Before outlining the methodology employed, an overview of school closures and general policy developments during the disruption phase (2020–2021) is provided below.

Disruption Phase: School Closures and Challenges

With a population of over 40 million (Statistics Canada, 2023), primarily concentrated in cities located near the southern border with the United States, the predicted impacts of the pandemic could be ascertained to vary depending on regional differences. Given that each province has complete autonomy in the development of education systems, structures, curricula, and related policies, provinces were able to develop educational policies specific to their circumstances resulting from the pandemic. During the initial disruption phase of the COVID-19 pandemic, Canadian schools were fully closed for 13 weeks and partially closed for 39 weeks on average from the beginning of 2020 to the end of 2021. Unsurprisingly, a significant number of children and youth reported significant challenges in response to the initial waves of the pandemic. For example, Statistics Canada reported that of the 5.7 million children who attend primary and secondary schools in Canada, 58% of households reported they lacked sufficient electronic devices for members working and studying from home (Statistics Canada, 2021). The latter is especially troublesome when one considers schools were essentially reliant on synchronous and asynchronous instruction during the closure of schools. In addition to academic concerns, national statistics indicated 64% of 15–24-year-olds reported a decrease in their mental health during the pandemic, while 61% of 5–17-year-olds did not meet physical activity guidelines (Statistics Canada, 2021). Collectively, these statistics converge with other Canadian studies to underscore the adverse effects of the pandemic in relation to both cognitive and non-cognitive outcomes (e.g., Duncan et al., 2023; Whitley et al., 2021; Volante & Klinger, 2023).

We have classified the disruption phase of the pandemic across Canada to encompass the period of January 2020 to December 2021, during which schools were required to transition between in-person learning and partial or full school closures multiple times. Students largely completed their studies at a distance when schools were closed using

a variety of online learning environments. The most extensive analysis of provincial policy developments during the disruption phase identified a total of 62 documents that addressed three dimensions under the broad domain of academic resilience: academic supports, mental health and well-being supports, and/or physical health supports (Volante, Lara, Klinger, & Siegel, 2022). Unsurprisingly, provincial governments focused the majority of their attention on providing teachers, administrators, board/district leaders, and parents with guidance in relation to academic supports, and relatively less attention was devoted to providing guidance in the other two domains. Indeed, there were also select provincial jurisdictions that were largely mute on the issues of mental and/or physical health. In light of the previously reported statistics, the general lack of policy generation in these areas is particularly troublesome. Overall, our previous study aligns with many of the trends noted in the international literature; namely, associated supports and related policy interventions were (and are) the most prominent concern of education systems globally (Blaskó et al., 2021; Schnepf et al., 2024).

Disruption Policy Developments: Brief Critique

Although provincial education jurisdictions developed policies during the disruption phase, the suitability or appropriateness of these interventions remains an open question. For example, Alberta encouraged more instructional time in traditional content domains such as English and mathematics by advising educators to reduce time spent teaching non-core subjects (Alberta Education, 2020). Clearly, this could easily lead to a narrowing of the curriculum, which has been consistently associated with negative school outcomes (e.g., school failure, reduced engagement), particularly for low SES student groups (see Canovan & Fallon, 2021; Quilter-Pinner & Ambrose, 2020; Schnepf et al., 2019). Narrowing of the curriculum often occurs at the expense of non-core subjects such as physical education courses, which were even more important given the rise in children's sedentary activities that occurred during pandemic school closures (McCormack et al., 2020; Ostermeier et al., 2021; Vandoni et al., 2021). Overall, Alberta's approach was markedly different than that of the neighbouring province of British Columbia (BC), which encouraged school authorities to focus on the "whole child," providing supports in literacy and numeracy, but also directives to carefully consider social-emotional development and mental health (British Columbia Ministry of Education and Child Care, 2021).

Ontario policy makers set minimum time requirements for synchronous instruction. Students in kindergarten (4–5 years old) and Grade 1 (six years old) were expected to engage in 180 and 225 minutes of instruction each day, respectfully (Ontario Ministry of Education, 2020). This raised justifiable concerns given that not all children had the necessary supervision at home or technological resources (i.e., an available computer/tablet, broadband internet, etc.) to meaningfully engage in synchronous online learning activities. Perhaps more disconcerting is that excessive screen time in young children is generally associated with adverse mental and physical health (Pandya & Lodha, 2021; Timmons et al., 2021; Toombs et al., 2022). Overall, the proposed synchronous times mandated by the Ontario government exceeded recommendations proposed by medical experts and researchers of no more than 60 minutes per day for children younger than five years old (see Kerai et al., 2022), and 120 minutes per day for children over five years old (Guerrero et al., 2020).

Collectively, the cases noted above illustrate how a range of policy approaches were adopted across Canadian educational jurisdictions, sometimes in a manner that did not align with available research or "best practice" in the field. The present analysis conducted a comparable analysis in relation to the more recent recovery phase that encompassed January 2022 to December 2023. The primary purpose of the current study was to determine if educational policies adopted during the disruption phase shifted or differed in response to emerging data on educational outcomes or in response to entering the recovery phase. For the purposes of comparability, a similar structure was adopted under the broad domain of academic resilience. We chose to use the overarching concept of academic resilience for two reasons. Firstly, academic resilience represents an increasingly popular conceptual framework for examining positive educational outcomes for students while in the presence of adversity (e.g., Hart et al., 2016; Martin & Marsh, 2006). As an example, the OECD has included a focus on academic resilience and developed measures to identify educational systems that appear to provide greater levels of equity for children (OECD, 2019). Secondly, while multiple definitions of academic resilience abound, correlates linked to more multifaceted notions of academic resilience and embracing holistic notions of student development include attributes within the academic, well-being, and mental health domains (e.g., Hart et al., 2016; Volante & Klinger, 2023; Volante, Lara, Klinger, & Siegel, 2022). Our initial study highlighted that these three domains were the predominant focus of educational policies created during the disrup-

tion phase of pandemic in Canada (Volante et al., 2021; Volante, Lara, Klinger, & Siegel, 2022). Hence, in recognition of ongoing research and the focus of educational policies, we created an overarching conceptual framework of academic resilience consisting of these three domains. This triarchic model of academic resilience provides a sound foundation for organizing the documents that form the basis for the current study, while also providing important linkages to relevant international research and studies (e.g., Hart et al., 2016; OECD, 2023a).

As previously noted, schools were fully open for in-person learning during this phase, but undoubtedly grappling with increased absences, as well as significant cognitive, non-cognitive, and health and well-being challenges created by the pandemic. One might naturally assume that the nature and scope of policies developed within and across provincial education jurisdictions would attend to the changing circumstances of schools and also remain responsive to emergent data and research on the impacts of the pandemic on Canadian student populations. The present study documented and assessed the suitability of these recent policy developments via a systematic approach outlined below.

Methods

Our data collection and analysis considered provincial guidelines and resources that addressed one or more of the dimensions of academic resilience during the recovery phase. Since our previous study (Volante, Lara, Klinger, & Siegel, 2022) did not include the three territories, we did not include the territories in this analysis either so that we could better compare the policy documents and directions between the disruption phase and the recovery phase. We acknowledge that the territories have also developed relevant policies. As an example, the Yukon's *Kindergarten to Grade 12 Pandemic Recovery Plan* (Yukon Department of Education, 2023) is aligned with our focus and the three dimensions we have included under academic resilience.

All the policy documents were obtained through provincial Ministry/Department of Education websites. Only provincial (again, the territories were not included) policy documents issued between January 2022 and December 2023 that made explicit or implicit reference to academic achievement or support, recovery strategies, learning loss, physical health, mental health and well-being, and/or resilience were selected for inclusion in this study. Given our interest was focused on schools, we did not include materials

produced solely by Ministries of Health or other funded government agencies. Typically, any relevant health policies would be referenced within education department or ministry websites or co-created with these departments, as illustrated by the *Alberta Child and Youth Well-Being Action Plan* (Alberta Children's Services, 2022).

Given the purpose of this study was to replicate and expand our previous research, with the current focus being on the "recovery phase" of the pandemic, we followed the same deductive methods we previously used (Creswell & Poth, 2017; Volante, Lara, Klinger, & Siegel, 2022). This resulted in a further refinement of the three dimensions previously developed, modifying each dimension to reflect the focus on supports, consistent with education policy concerns globally (Blaskó et al., 2021; Schnepf et al., 2024). Thus, we adapted our triarchic model of academic resilience to better represent three broad dimensions of support: Academic Supports, Physical Health and Well-Being Supports, and Mental Health Supports.

- Academic Supports: Policies, procedures, and/or guidelines that support students' academic learning and success.
- Physical Health and Well-Being Supports: Policies, procedures, and/or guidelines that support students' physical health and well-being.
- Mental Health Supports: Policies, procedures, and/or guidelines that support students' mental health.

Document Collection and Classification

Our review resulted in a total of 46 documents that were analyzed for further study. We did not distinguish documents based on their explicit connection to the pandemic or to the recovery phase of the pandemic as our interest was to highlight the focus of educational policies during this phase rather than just those focused on recovery. Table 1 below provides the total number of documents identified in relation to each dimension, as well as the relative percentages across all of Canada. The documents included formal policies, policy briefs or updates, and guidelines or procedures. Individual documents could be counted toward more than one dimension, since it was possible, and often likely, that they offered guidance in more than one dimension. Thus, the raw total of documents in each dimension equals more than the total number of documents for each province. Overall, our approach allowed us to capture a broad overview of the distribution of dimensions

within and across provinces. More fine-grain analyses are offered to comment on the evidence-base for specific policy directions or reforms.

Table 1

Number of Documents Analyzed by Province and Resilience Dimension

| Province	Total No. Documents	Academic Supports	Physical Health and Well-Being Supports	Mental Health Supports
1. AB	10	9	1	2
2. BC	6	6	0	0
3. MN	7	5	1	3
4. NB	2	2	0	0
5. NL	2	1	1	0
6. NS	6	5	1	0
7. ON	7	5	0	4
8. PEI	0	0	0	0
9. QC	3	0	2	1
10. SK	3	2	0	1
Total	46	35	6	11
% Share	100	76	13	24

Document Analysis and Coding

In our earlier work, an iterative process was followed to identify sub-categories within these dimensions (Volante, Lara, Klinger, & Siegel, 2022). These sub-categories helped to better identify and organize the focus of the provincial documents under each of the three dimensions. Once again, this process was repeated for documents published in 2022. As a result, the sub-categories we previously used changed to better reflect the focus of the more recent recovery phase policies and materials. These sub-categories are not intended to reflect underlying conceptual components of each dimension. Rather, they serve as organizational structures to represent key policy developments noted cross-nationally (See Figure 1).

It is worth noting that the sub-categories were continually revised over time using successive analyses and re-analyses. The overall approach aligns with general notions of

grounded theory in that data collection, data analysis, and theory development are intertwined and interdependent, rather than successive steps in the research procedure (Thornberg & Charmaz, 2014). The model is well aligned with educational policies across Canada, and the three domains fully encompass the focus of the 46 documents we identified and analysed. The sub-categories that emerged through our analysis are also well aligned with established educational priorities or emerging issues resulting from the pandemic.

Figure 1

Triarchic Model of Academic Resilience (adapted from Volante, Lara, Klinger, & Siegel, 2022)
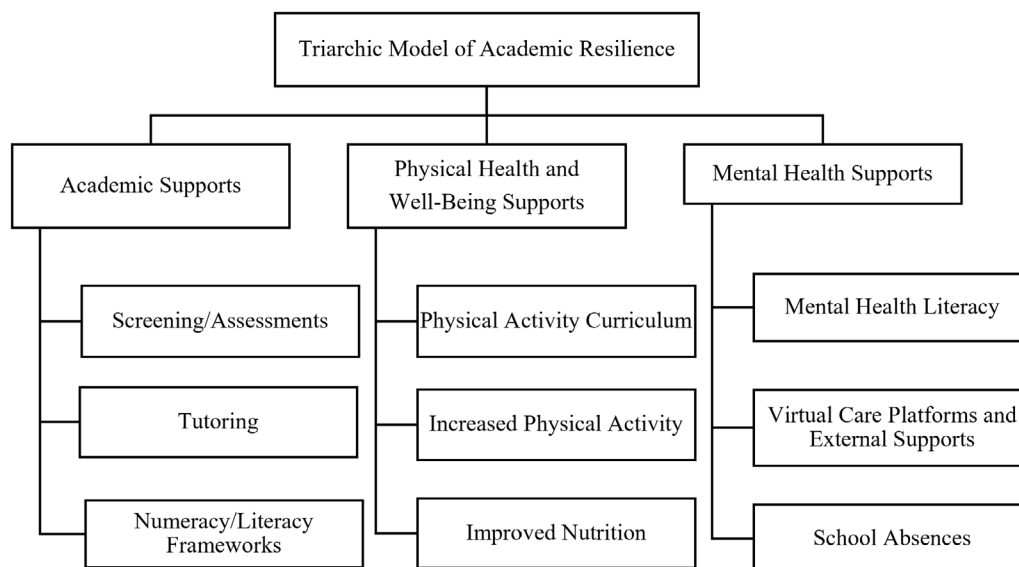
Recovery Phase: Findings

Our analysis indicated that 46 documents were published or enacted by provincial ministries (departments) of education during the recovery phase (January 2022 to December 2023). The analysis demonstrated the continued emphasis on academic achievement and support, and learning loss (76%), particularly reading and mathematics. Overall, only two provinces—Alberta and Manitoba—developed strong recovery policy responses that addressed all three key resilience dimensions for their K–12 student population. While Ontario and Saskatchewan also produced policy responses to address students' learning

loss and mental health, both provinces did not produce or provide specific educational responses to support the physical health and well-being of their students. Nevertheless, these four provinces appear to have developed specific, detailed action plans (*Alberta's Child and Youth Well-Being Action Plan*, *Manitoba's K to 12 Education Action Plan*, *Ontario's Learning Recovery Action Plan*, and *Saskatchewan's Interim Provincial Education Plan*) to support students' recovery from the pandemic. British Columbia, which published the *K-12 Education Recovery Plan* in 2021 (British Columbia Ministry of Education and Child Care, 2021), did not produce any further recovery-related documents during the recovery phase we defined.

Other provinces, such as New Brunswick, focused solely on academic recovery. No detailed action plans or policy responses were developed to address the post-pandemic physical and mental health needs of students. The remaining jurisdictions—Quebec, Nova Scotia, Newfoundland and Labrador, and Prince Edward Island—did not develop any materials that had explicit connections to address the post-pandemic needs of their K–12 student populations. The next sections consider in greater detail how these documents relate to the specific dimensions of our resilience model across Canada.

Academic Supports

Similar to the disruption phase findings, out of the three resilience dimensions discussed in our model, provincial policy responses largely centred on academic supports. For the recovery phase specifically, provinces focused on reintroducing and/or developing new screening and assessment tools, addressing numeracy and literacy learning loss through the provision of appropriate support measures, and providing additional tutoring services to close the learning gap. As outlined below, there were provincial examples in which schools were expected to identify potential performance gaps, and to implement differentiated supports to address these gaps. Nevertheless, the vast majority of policies, interventions, and resources did not specifically target "disadvantaged" students or communities.

Screening and assessments tools. One of the first recovery policies to be initiated across Canada was the reintroduction of large-scale assessment programs with a renewed purpose to better harness student achievement data to respond to the unique challenges posed by the pandemic. For example, Alberta's *Child and Youth Well-Being Action Plan* outlined the importance of implementing "learning assessments, screening tools and inter-

ventions for Grades 1-3 in language and math to help assess progress in the critical early years," underscoring the need to "better track, measure, and understand the learning impacts of the pandemic, and inform decisions to strengthen school capacity to respond" (Alberta Children's Services, 2022, p. 13). As such, Alberta's *Literacy and Numeracy Screening Assessments* policies required school authorities to administer literacy and numeracy screening assessments for Grade 2 and Grade 3 students in September 2023, followed by Grade 1 in January 2024 (Alberta Education, 2023a, 2023b, 2023c). School authorities are required to re-assess all students identified as at-risk in Grades 1–3 at the end of the school year to measure their progress (Alberta Education, 2023a, 2023b, 2023c).

Similarly, under Ontario's *Learning Recovery Action Plan*, the Education Quality and Accountability Office (EQAO) assessments resumed for Grades 3 and 6 to understand the impacts of learning disruption in different regions and student populations (Ontario Ministry of Education, 2022a, 2022d, 2022e). The province also introduced the *Mandatory Early Reading Screening Policy*, whereby school boards were required to have all students in senior kindergarten, Grade 1, and Grade 2 screened for early reading using a ministry-approved, evidence-based screening tool (Ontario Ministry of Education, 2023b). As per the guidelines issued by the province, the screening should be administered near the beginning of the school year to ensure students have access to appropriate literacy instruction and tiered supports as soon as possible (Ontario Ministry of Education, 2023b).

Manitoba's *K to 12 Education Action Plan* also required schools to introduce consistent *Early Years Assessments*, focusing on children entering kindergarten and students who experienced disrupted learning (Manitoba Education, 2022, 2023a). Additionally, Manitoba revised its provincial assessment program to include curriculum-based summative assessments in Early Years, Middle Years, and Grade 10 (Manitoba Education, 2022, 2023d). Manitoba also expanded access to assessment tools through the Digital Assessment Library, a resource that includes more than 40 resources and assessment tools, from classroom-based to clinical (Manitoba Education, 2023c).

Saskatchewan also introduced a new student assessment framework that focuses on engaging, empowering, and inspiring the learner, as well as supporting responsive instruction (Saskatchewan Ministry of Education, 2022b). The framework follows a holistic approach whereby the intellectual, physical, emotional, and spiritual needs of students are considered to achieve progressive growth and learning (Saskatchewan Ministry of

Education, 2022b). Similarly, Nova Scotia's *Student Assessment Policy* provides "clear, consistent direction with respect to assessment, evaluation, and reporting practices, focusing on enhancing all students' learning and achievement" (Nova Scotia Department of Education and Early Childhood Development, 2022b, p. 2). Finally, New Brunswick launched the new *Early Grades Literacy Assessment (EGLA)*, which specifically supports teachers in evaluating and tracking the acquisition of foundational reading skills (New Brunswick Department of Education and Early Childhood Development, 2023).

Tutoring supports. Investments in tutoring programs have been a key strategy to improve post-pandemic student learning for two provinces in particular. In Ontario, a comprehensive $175 million tutoring program was unveiled to support learning recovery from the impacts of COVID-19 (Ontario Ministry of Education, 2022b). Students were provided options to access tutoring at a variety of times, including during the school day, before and/or after school, on weekends, and during the summer, with prioritization of math and literacy skills, as well as other foundational learning skills (Ontario Ministry of Education, 2022a). Similarly, Alberta launched a free e-tutoring hub to help students in Grades 4–9 catch up on skills and learning they may have fallen behind on (Alberta Education, 2022g). Students can also access pre-recorded video sessions online anytime to build their literacy and numeracy skills (Alberta Education, 2022g).

Numeracy and literacy frameworks. Several provinces developed frameworks and guidelines to support students' literacy and numeracy skills in all learning areas. For instance, British Columbia developed its *Learning Pathways: A Guide for Teachers*, which provides teachers with an overview of how to incorporate literacy and numeracy learning opportunities into their teaching practices to support deeper learning in all areas of the provincial curriculum (British Columbia Ministry of Education and Child Care, 2023). Similarly, Manitoba's *Framework for Learning* also encourages schools to shift to a global competency approach of teaching with literacy and numeracy at its core (Manitoba Education, 2022, 2023b). Reading skills have been a target domain for several other provinces as well. For example, Saskatchewan's *Interim Provincial Education Plan* required schools to develop reading strategies and support plans to target students who require additional supports (Saskatchewan Ministry of Education, 2022a). Nova Scotia's *Six Pillars of Effective Reading Instruction* framework provided guidelines for teachers to focus on enhancing oral language skills, phonological awareness, phonics, vocabulary, and reading fluency and comprehension (Nova Scotia Department of Education and Early Childhood Development, 2022a, 2023a).

It is also worth highlighting that Alberta piloted a new K–6 curriculum in 2022, featuring a renewed focus on literacy and numeracy skills (Alberta Education, 2022b, 2022c, 2022d, 2022e). This province also developed the *Continuum of Supports and Services: A Resource Guide for School and School Authority Leaders*, which contains an "intentionally designed set of actions, strategies, supports and services designed to maximize the academic success, well-being and sense of belonging of each learner" (Alberta Education, 2022a, p. 8).

Physical Health and Well-Being Supports

Provinces rarely developed education policies that explicitly addressed the physical health and well-being of students in relation to the recovery phase of the pandemic. Only five jurisdictions developed policy responses under this dimension through the introduction of a new curriculum, development of general guidelines/frameworks for school authorities to encourage positive physical activity outcomes for their students, and mandating improvements to school nutrition programs. With the exceptions highlighted below, the terms "pandemic" or "COVID" were not included in these documents. Similarly, these documents were directed toward the entire student cohort, although one might conclude that the documents related to physical health supports addressed issues more commonly associated with low socio-economic backgrounds—for example, greater screen time, less physical activity, less varied activity, and poor nutrition. Alberta was unique in its efforts to connect non-profit organizations and schools to provide healthier food options to vulnerable children.

Physical activity and well-being curriculum. The introduction of a new curriculum around physical health and well-being was an approach taken by Alberta and Manitoba to address the needs of students under this dimension. Alberta's *Child and Youth Well-Being Action Plan* required the Alberta Ministry of Education to implement the *Physical Education and Wellness Curriculum for K-6* to "advance existing and create new interventions and supports to help children and youth navigate the physical effects of the pandemic" (Alberta Children's Services, 2022, p. 6). The new curriculum supports students "on their journey to achieve well-being as they learn about active living, movement skill development, growth and development, safety, [and] nutrition" (Alberta Education, 2022f, p. 1). Similarly, Manitoba's *K to 12 Education Action Plan* also required

school districts to "implement a cyclical curriculum renewal process with an initial focus on physical education [and] health education" (Manitoba Education, 2022, p. 13).

   Increased physical activity. Similar to the disruption phase, promoting healthy habits among students—specifically increased physical activity—was evidenced in the documents released by Nova Scotia and Quebec. For instance, Nova Scotia released the *Physical Activity Framework for Nova Scotia Schools*, which provided guidance to schools on how to increase students' physical activity and reduce sedentary behaviour throughout the school day. Some recommendations included increasing opportunities for energetic movement, establishing structured and unstructured movement, and being outdoors during instructional time (Nova Scotia Department of Education and Early Childhood Development, 2023b). Quebec developed general intervention guidelines to promote physical activities in schools to "support young people in adopting a physically active lifestyle" (Quebec Ministry of Education, 2023b, para. 2). The intervention guidelines encouraged schools to provide students with appropriate opportunities for various types of physical activity, ensuring that different ways of being physically active are valued and integrated into daily life, and creating supportive environments that encourage a love and enjoyment of movement (Quebec Ministry of Education, 2023b). These documents did not directly reference the pandemic, but the text and recommendations indicate the pandemic had some influence. As an example, one of the recommendations from the Quebec Ministry of Education was for students to "avoid the use of screens (television, computer, audiovisual equipment) for anything other than educational purposes" (Quebec Ministry of Education, 2023b, Specific recommendations section). It is highly unlikely the suggestion that screen use should only be used for educational activities would have been considered prior to the pandemic.

   Improved nutrition. There were also examples in which provinces focused on ensuring students receive proper nutrition in schools. Alberta, Newfoundland and Labrador, and Quebec developed guidelines to promote healthy eating habits in schools (Alberta Children's Services, 2022; Quebec Ministry of Education, 2023a; Government of Newfoundland and Labrador, 2023). For example, Alberta's *Child and Youth Well-Being Action Plan* tasked the Alberta Ministry of Education to investigate ways to improve school nutrition in Alberta and issued a call for proposals from non-profit organizations to collaborate with schools to pilot innovative ways to support vulnerable youth and ensure students receive healthy, balanced meals (Alberta Children's Services, 2022). Similarly,

the Government of Newfoundland and Labrador worked closely with the school districts, health authorities, and non-profit/private sector partners to help create the *2023 Provincial School Food Guidelines*, which focused on providing healthy food and beverage options to students (Government of Newfoundland and Labrador, 2023). Quebec's *Healthy Eating Habits* policy encouraged the adoption of interventions that promoted healthy habits, such as the consumption of nutrient-dense foods (Quebec Ministry of Education, 2023a). As above, neither of these documents specifically referenced the pandemic, but underlying connections can be observed—for example, suggesting that students should have "sufficient time and a comfortable environment to enjoy food with their peers (Government of Newfoundland and Labrador, 2023, p. 5).

Mental Health Supports

The development of mental health policies during the recovery phase decreased significantly compared to the disruption phase, with over half of all departments not releasing any new guidance under this domain in 2022 or 2023. During the disruption phase, all provinces—with the exception of Prince Edward Island—had acknowledged the importance of addressing the mental health needs of students during the pandemic as a means to support their academic success. During the recovery phase, only a select number of provinces, including Ontario, Manitoba, and Alberta, appear to have specifically provided resources and directions to address mental health. All three provinces developed specific mental health requirements and/or mandates that school authorities were required to implement to support students' mental health (Alberta Children's Services, 2022; Manitoba Education, 2022; Ontario Ministry of Education, 2022a, 2022d, 2022e). Other jurisdictions that had developed extensive mental health policies and resources during the disruption phase of pandemic, such as British Columbia with their *K-12 Education Recovery Plan*, did not release any additional documents, guidelines, or policies to support students during the recovery phase. As described below, some provinces directed resources to specifically address mental health challenges, including staff training and a variety of dedicated support systems. We could not find any evidence that these supports would be differentially distributed or targeted based on community needs.

     Mental health literacy for staff and students. Providing training and professional development for staff and educators around the mental health needs of students has been

an important strategy adopted by Ontario, Alberta, Manitoba, and Saskatchewan. Ontario's *Learning Recovery Action Plan* and the *Three-Year Mental Health and Addictions Strategy and One-Year Action Plan* required schools to enhance mental health literacy for educators and staff by providing mandatory professional learning on mental health (Ontario Ministry of Education, 2023a, 2023c). Alberta's *Child and Youth Well-Being Action Plan* increased and improved access to online resources for teachers and school staff to better support the mental health and well-being of students (Alberta Children's Services, 2022). Similarly, Manitoba and Saskatchewan increased funding for mental health training sessions for educators and staff (Manitoba Education, 2022; Saskatchewan Ministry of Education, 2022a). Saskatchewan in particular provided additional funding to offer *Mental Health First Aid (MHFA)* training to school divisions in order to have at least one staff member trained in MHFA in each school (Saskatchewan Ministry of Education, 2022a). As of June 2022, 926 staff received training and 733 out of 736 schools in Saskatchewan employ at least one individual trained in MHFA (Saskatchewan Ministry of Education, 2022a).

Promoting mental health literacy among students was also a policy directive in Alberta and Ontario. For instance, Alberta required its Ministry of Education to implement the *Physical Education and Wellness Curriculum for K-6*, which is meant to support students with their mental health, growth and development, personal development, and healthy relationships (Alberta Children's Services, 2022). Similarly, Ontario's *Policy/Program Memorandum 169: Student Mental Health* also required schools to implement mandatory mental health literacy learning for all students (Ontario Ministry of Education, 2023c).

Virtual care platforms and external supports. Similar to the disruption phase, the provision of mental health resources through a virtual environment has been used as an ongoing response to address the mental health needs of students. During the recovery phase, however, Alberta and Ontario opted to provide support services beyond a virtual environment to ensure students could access external resources as well, including in-person wellness programs delivered by mental health professionals. For example, Alberta invested $110 million in targeted funding over three years to advance and create new intervention supports to help children and youth navigate the psychological and social effects of the pandemic (Alberta Children's Services, 2022). With this funding, the province expanded access to youth mental health hubs, phone and virtual supports, and access to

mental health workers and other wellness supports in and outside of schools (Alberta Children's Services, 2022).

Ontario required schools to provide remote mental health services using a virtual care platform and implement evidence-based mental health programs and resources for students who may be struggling with mild to moderate mental health concerns (Ontario Ministry of Education, 2022c). These programs and resources were developed (or co-developed) by School Mental Health Ontario and delivered by school-based regulated mental health professionals (Ontario Ministry of Education, 2022c). Ontario educators have argued that schools must continue to support student resilience and well-being through mentally healthy classrooms and learning environments. As such, effective and responsive school mental health supports connections to the broader provincial system of mental health care are required (Ontario Ministry of Education, 2022a).

School absences. The attention on school absences is a further example of the ongoing influence of the pandemic, and the challenge of addressing student presence and engagement. Some provinces focused on tackling school attendance as a means to engage students and address potential mental health issues, while other provinces promoted mental health absences to support overall well-being. Manitoba released *Safe and Caring Schools: A Policy Directive and Action Plan to Enhance Student Presence and Engagement*, which requires schools to develop a provincial attendance policy and an action plan to support student engagement and presence (Manitoba Education, 2023e). As stated by Manitoba Education, attendance issues are often a first sign that a student is experiencing life challenges, and there is a multitude of potential contributing factors, including academic, social, economic, and psychological (Manitoba Education, 2023e). These include, but are not limited to, poor health, poor mental health, family and work responsibilities, and bullying (Manitoba Education, 2023e). On the other hand, Ontario's *Policy/Program Memorandum 169: Student Mental Health*, for instance, emphasized the importance of self-care and prioritizing mental health (Ontario Ministry of Education, 2023c). As such, the province argues that having open conversations with students, parents, and teachers around mental health absences, and supporting those absences, can have a positive effect on student outcomes (Ontario Ministry of Education, 2023c).

Discussion

The triarchic model of academic resilience we have developed for our research has proven to be a powerful and encompassing tool to investigate pandemic-related policies within the educational domain. Provincial control of education in Canada also made it possible to explore the impacts of diverse educational policy responses to a common issue—in this case, the recovery phase of the COVID-19 pandemic. Throughout the latter half of 2022 and through 2023, governments largely focused on reducing the impacts of the pandemic on educational outcomes. This is not at all surprising given the early predictions and ongoing research indicating student achievement would suffer, and has suffered, during the pandemic, and has yet to recover (e.g., Alasino et al., 2024; Bailey et al., 2021; Bennett, 2023; Fahle et al., 2024; Moscoviz & Evans, 2022; Schnepf et al., 2024; Skar et al., 2022; Volante et al., 2021). Academic outcomes were also a primary focus of policies during the disruption phase, although more focused on urgent responses and shifts during that initial phase. There was an interesting "tone" to these responses during the recovery phase, indicating an acknowledgement of the challenges schools and educators faced during this recovery phase, and the need for support and longer-term recovery. As an example, provincial assessment programs were stopped or delayed during the disruption phase. The importance of these assessment programs was highlighted during the recovery phase, but often using the language of being formative assessments or with a "monitoring and support" perspective. Such assessments can provide a broader picture of the long-term impacts of COVID on key achievement outcomes (e.g., numeracy and literacy), and their reimplementation was considered a critical step in identifying and monitoring the short-term and long-term impacts of the pandemic. At the same time, provinces increased resources and supports to address "learning loss" that occurred because of the pandemic, even though the actual extent of the learning loss was not known, nor was the extent to which such supports would or could have been accessed by those students who most require such assistance (Alberta Education, 2022g; Ontario Ministry of Education, 2022b). Alberta and Ontario were unique in that they did acknowledge the need to focus or differentiate supports based on student inequities exacerbated by the pandemic.

Our analysis of provincial educational documents developed and published during the recovery phase of the pandemic highlights how the three components of academic resilience have been considered to some extent within provincial educational ministries.

Mental health, which was also an area of concern prior to the pandemic (e.g., Freeman et al., 2011), did receive more attention than physical health. In addition to a diverse set of educational policies initiated during the disruption phase of the pandemic, three provinces implemented additional mental health–related policies and supports during the recovery phase (Alberta, Manitoba, and Ontario). Alberta and Ontario in particular have dedicated substantial funding to provide increased access to trained medical professionals (Alberta Children's Services, 2022; Ontario Ministry of Education, 2022c). In those select instances in which physical education was a focus, it has been primarily the result of new curriculum reforms, which may or may not have been directly initiated in response to the pandemic (Alberta Education, 2022f; Manitoba Education, 2022). In other examples, physical health and nutritional guidelines were developed, which do not have legislative authority for implementation (e.g., Nova Scotia Department of Education and Early Childhood Development, 2023b; Quebec Ministry of Education, 2023b; Government of Newfoundland and Labrador, 2023).

While there were more specific examples of policies and resources directed specifically toward mental health and, to a lesser extent, physical health and well-being, we were surprised to find these two domains received decreased attention during the recovery phase as compared to the disruption phase (Volante, Lara, Klinger, & Siegel, 2022). When one considers the relative importance of these dimensions during the disruption phase (Volante, Lara, Klinger, & Siegel, 2022), we certainly expected to see a broader cross-national focus during the recovery phase. Collectively, the long-term mental health and physical health and well-being of Canadian children, both of which were already a concern prior to the pandemic, will require a more sustained and targeted approach (e.g., Colley et al., 2019). Also of concern is that the resources and supports implemented (for example, virtual platforms, mental health hubs, or telephone support lines) may be considered equally accessible to children; however, it is unlikely these methods would be equally effective in assisting children from disadvantaged backgrounds.

Our review of the educational documents and policies produced across Canadian provinces during the recovery phase highlight an underlying conflict. On one hand, there was an acknowledgement of the previous and ongoing impacts of the pandemic on children's education and the need to address these impacts. When present, these documents and policies used language intended to highlight support and resilience of staff and students. Assessment practices, additional resources, and programs were used to deter-

mine the overall and differential impacts of the pandemic, and to provide mechanisms to address these impacts. On the other hand, the majority of the education documents developed during this time did not mention the pandemic at all. This could be expected for curriculum documents or guidelines, which would continue to have relevance after the recovery phase. Nevertheless, the extent to which these documents illustrate a desire for education to "return to normal" is surprising. Yet, we found examples in which "normal" would look different going forward. As a result of this underlying conflict, provincial educational policies implemented during the recovery phase of the pandemic have not been introduced with a level of continued acknowledgement or dedicated resourcing to address the long-term negative impacts of the pandemic. We believe this is particularly problematic for those children who faced additional adversity during both the disruption and recovery phases of the pandemic. A child from a migrant family, from a lower socio-economic status family or community, or living in a rural or remote community would likely benefit less from the broad educational policies implemented during the recovery phase, even though there was a tacit acknowledgement that disadvantaged circumstances were associated with more negative impacts from the pandemic.

Hence, it is not surprising that educational achievement outcomes continue to lag below the levels observed before the onset of the pandemic (Elez et al., 2023; Volante & Klinger, 2023). In the case of mental health and well-being, the pandemic likely exacerbated pre-existing challenges and created the conditions for new ones to arise. These challenges have impacted both staff and students. Examples of these impacts can be seen in numerous media reports and a developing research base with respect to ongoing levels of high absenteeism in schools, the increased turnover of teachers, and the decline in enrolment for teacher education programs (e.g., Barnum, 2023; Dorn et al., 2020). The attention to educating on and addressing these challenges for both educational staff and students is a step in the right direction. Unfortunately, such policies and resources are not sufficiently widespread across the country.

Conclusion

Is it the case that a generation of Canadian children will experience cognitive and non-cognitive lags or deficits? If so, will these children, or a substantial portion of them, require additional academic, mental health, and physical health and well-being supports to en-

hance their resilience? As we continue to work through the recovery phase of the pandemic, we continue to observe the ongoing impacts of the pandemic, including greater educational disparities, increased absenteeism, and increasing reports of mental health challenges. As additional global evidence, the PISA 2022 results reported the largest four-year decrease in mathematics and reading ever observed: 15 points and 10 points, respectively (OECD, 2023a, 2023b). The results also highlighted the ongoing socio-economic disparity in student performance, with the difference being an average of 93 points between students in the highest and lowest socio-economic groups across OECD countries. On a positive note, these same PISA results found lower performance gaps (higher academic resilience) in Canada, representing higher levels of educational equity (OECD, 2023a). In other words, the PISA performance disparities between the highest and lowest socio-economic groups in Canadian schools were lower, and did not increase during the pandemic.

Our results highlight that K–12 educational policies have likely not been sufficiently resourced to address a number of challenges created by the pandemic, and educational recovery will continue to be a challenge. Further, it is likely that academic resilience, physical health and well-being, and mental health will likely need to be focused on across educational and vocational sectors. While Canada has long been known to have a highly equitable education system, and the recent PISA results suggest that educational systems across Canada may actually also be quite resilient, rising economic challenges have resulted in further financial constraints across the educational sector. As a result, it is unlikely that provincial governments will direct sufficient educational resources to address the aspects of academic resilience all have agreed are critical to positive educational outcomes for our children impacted by the pandemic. Our final concern is that the supportive language within provincial education documents and policies produced during the first 12 months of the recovery phase will shift to focus on the need for system restructuring and improvement, as is being increasingly observed internationally (Finnish Government, 2023; Government Offices of Sweden, 2024; Stanford, 2024).

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