

Students' Well-Being Since the Pandemic: An Ongoing Concern

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ABSTRACT

Management of the health crisis reduced social contact for children and adolescents and led them to spend months schooling from home. During case studies conducted in 12 schools in 2021 and 2022, interviews with principals and school board directors revealed an increase in student difficulties whose dimensions vary widely. To assess the extent to which the difficulties identified were present throughout Quebec in 2023, an online survey about students was sent to all school boards. A total of 309 elementary and high school principals responded to the survey. It appears that difficulties have increased since the pandemic. Those difficulties have various dimensions; they are not only cognitive and methodological, but also and especially social, affective and psychological. Although they do not affect all students and tend to diminish over time, the aftereffects of the health crisis are still apparently present and students continue to require help overcoming difficulties they have encountered.

Introduction

“Four Years After COVID, Many Students Still Lose Ground,” the Washington Post headline alone (July 23, 2024) reminds us that the effects of the pandemic are still visible among learners. Due to the COVID-19 pandemic, 90% of the world’s

students faced school closures (Aurini & Davies, 2021). In the United States, learning was found to have slowed in the first few months of the pandemic, and students showed a decline in reading and math skills by the end of the 2020–2021 school year (Lewis et al., 2021). It should be noted that the losses extend beyond the period of distance learning: in the Netherlands, for example, a study highlights a learning loss of about two and a half months in math and reading, even though schools were closed for only eight weeks (Schuurman et al., 2023).

Beyond emergency distance education (Hodges et al., 2020), it was the context of the health crisis and the measures taken to contain it that affected students. Studies agree that the public health measures, namely the lockdown periods (Barendse et al., 2021; Bignardi et al., 2020; Li et al., 2021), had a negative impact on many children and adolescents, especially those with pre-existing vulnerabilities. In the United States, for example, it was estimated that by 2021, 30% to 40% of young people would be negatively affected by the pandemic in terms of their mental or social-emotional health (Hamilton et al., 2021). However, is it enough to return to school and “normalcy” to overcome all these problems? How are the students faring after attending school full-time during the 2022–2023 school year? In other words, to what extent is the health crisis still impacting young people’s well-being?

The study proposes to answer this question by looking at the literature published since the beginning of the pandemic, on the one hand, and by examining the perceptions of elementary and high school principals in Quebec, on the other. Depending on the country, different government directives have been issued to minimize the impact of the health crisis on children and adolescents. What happened in Quebec seems of interest because the government decided to encourage and finance the development of services and activities to support the learning and well-being of students as of January 2021. As a result, most school principals have implemented programs to support students. Therefore, it seems

appropriate to evaluate whether the support provided and the end of the health crisis have allowed students to quickly return to a normal student life. After the non-exhaustive literature review, the framework and the survey will be described; the results will then be presented. Finally, a discussion and some elements of conclusion will be offered.

The Effect of COVID-19 on Children

According to the Conseil supérieur de l'éducation (CSE), whose mission is to inform the Ministers of Education and Higher Education about the state and needs of education in Quebec — by offering rigorous reflection supported by research and consultation with experts and practitioners — in a school context, well-being can be viewed as “multifactorial and multidimensional, and includes emotional, psychological and social aspects.” (CSE, 2020, p. 4) The CSE considers that “Children’s well-being is a responsibility to be shared by all school staff, the family, the community and the decision-making bodies at the different levels of the education system and within government.” (CSE, 2020, p. 5) This section presents the results of several studies. They show that the impact of the health crisis on children is not uniform and depends on different elements such as social environment and support received or children’s lifestyle.

Diversity of Problems

A report by the Institut national de santé publique du Québec, based on 14 foreign publications on the impact of the COVID-19 pandemic on children aged 2 to 12, highlights that every study mentions a significant increase in internalized and externalized behavioural problems in children (INSPQ, 2021). Some children seem to be more affected than others. Indeed, a literature review (Samji et al., 2022) of 116 articles on the health of children and adolescents under 19 years of age, published between January 2020 and February 2021, noted an increase in symptoms of depression and anxiety since the start of the health measures and

points out that the negative effects of the pandemic on mental health are felt most acutely by girls, as well as by older children or adolescents, or those with particular mental or physical health conditions that were already present before the pandemic. A meta-analysis published the same year (Racine et al., 2021), taking into account articles published between January 2020 and March 2021 and based on 29 studies involving 80,879 children and adolescents under 18, revealed a 25.2% increase in symptoms of depression and a 20.5% increase in anxiety symptoms since the start of the pandemic. The meta-analysis also specified that these symptoms are more severe in girls, and that depressive symptoms are more frequent in older children. Similarly, a study found that the health crisis led at times to manifestations of psychological trauma in around 20% of adolescents during the first year of the pandemic (Lewis et al., 2023). Consistent with other studies conducted after natural disasters, one study shows that the pandemic is likely to increase risk factors (such as anxiety or family difficulties) associated with suicidal ideation while decreasing protective factors (such as family or school support) associated with it (Pouliot et al., 2022a).

In Quebec, three studies using different methodologies highlight the increase of children's mental or physical health problem. The first is based on interviews (Montreuil et al., 2022) with 25 children and adolescents aged 6 to 17 during the first two waves of the pandemic. It reveals that imposed isolation led to the development of feelings of loneliness and sadness, as well as anxiety, and that this isolation was even more difficult for adolescents than for children, due to their greater need for peer interaction. This study also points out that periods back in the classroom were marked by the confusing, even incoherent nature of the health measures, which deprived young people of many of the activities they were used to enjoying at school. While many felt supported by their family, in some cases, home proved to be a place filled with heightened tensions, and the impossibility of reuniting with extended family affected morale. According to Montreuil et al. (2022), the children or adolescents who coped best had a variety of leisure activities

they could pursue on their own, the opportunity to express their emotions, and access to material and financial resources were likely to help them. Some participants even mentioned positive aspects, such as the fact that it led them to rethink their priorities and values.

The second study is based on interviews with 12 groups of elementary school students in seven schools and 11 groups of high school students in three schools, for a total of 154 youths (Pouliot et al., 2022b). It reveals that, although some children and adolescents feel that they learned a great deal during the pandemic, they are seeing the negative effects of the health crisis on their personal, family, social and school lives. It also shows an increase in the challenges experienced by students who were struggling before the pandemic, who lived in rural areas or who had less support and resources. Finally, the third study used a comparative approach (Lane et al., 2022) based on responses to a survey completed in the fall of 2019 and 2020 by 2,990 French-speaking Secondary 1 and Secondary 2 students in Quebec. It highlights that, beyond the variability of the effects (positive/neutral/negative) of the pandemic, there is an increase in anxiety, fear of judgment and perfectionism. Older students and girls are also described as being particularly affected by the negative effects of the pandemic.

Social Environment and Support

Social environment plays an important role in the experience of a health crisis. A longitudinal study of children and adolescents aged 7 to 15 years found that those who had the least social contact (face-to-face or remote) and the least support from peers and parents experienced the most difficulties during the pandemic (Rodman et al., 2002).

A study comparing situations in Spain, Portugal and Italy also highlights the relationship between parents' stress levels and children's symptoms of anxiety and

depression (Orgilés et al., 2021). Another study indicates that the greater the number of children in the home, the more significant the internalized and externalized symptoms appear to be (Fitzpatrick et al., 2020). This observation can be linked to other findings, highlighting that the greater the childcare burden on the mother, the more behavioural problems the children have, and that maternal depression influences children's moods (Borbás et al., 2021).

Indeed, from the onset of the pandemic, changes in routine generated by the health crisis and lockdown led to a deterioration in the mental health of more than a quarter of all parents in the United States (Patrick et al., 2020). Parents' level of distress tends to be greater the lower their socioeconomic status, or the worse their professional or family situation became during the pandemic. A meta-analytical review put into relief the association between parenting stress and child behaviours (Chung et al., 2024). However, the transmission of parental distress to children appears to depend on the parents' sense of competence in their role. Parents who feel they are able to exercise their role and support their children despite the situation are more likely to ensure their children's emotional stability (McMahon et al., 2021; Morelli et al., 2020).

Similarly, several American studies have highlighted the problems faced by teachers. One study found that teachers had more mental health problems than other professionals. It also showed that those who worked remotely had higher levels of distress than those who taught face-to-face (Kush et al., 2021). Another study highlights the more or less severe forms of depression reported by the majority of music teachers in primary and secondary schools (Parkes et al., 2021). Teachers' well-being, like the quality of their classroom management and the well-being of their students, influences the decision to remain in or leave the profession (Viac & Fraser, 2020). The well-being of both students and teachers appears to be interrelated. Therefore, addressing the psychosocial needs of teachers is essential to supporting students (Ferren, 2021).

Screen Time and Its Impacts

The Quebec National Institute of Public Health report highlights the influence of lifestyle on the way children experienced the pandemic (INSPQ, 2021). In fact, research conducted in various countries shows that the measures taken to contain the pandemic led to an increase in screen time (UNESCO, 2023). For example, among Canadian children aged 2 to 8 years, the amount of screen time during the pandemic was found to depend on socioeconomic status, as well as family structure and availability of childcare (parents with unmet childcare needs indeed had to keep the children occupied, maybe while working or studying from home) (Stienwandt et al., 2022).

While the media have a profound influence on children's psychosocial development, the numerous and rather negative messages about deaths and hospitalizations, and the caricatured division of the population into vaccinated and unvaccinated, certainly contributed to increased anxiety among children who were most exposed to such messages (Pouliot, et al., 2022b). In addition, time spent surfing the Internet, playing video games, or communicating through media can have a negative impact on relationships, health, and concentration (Tsai et al., 2020; UNESCO, 2023). To the extent that time for social interaction and physical activity is simultaneously reduced, especially in the most vulnerable families (Medrano et al., 2021; Wunsch et al., 2021), mental and physical health suffer even more.

This change in the way young people spent their time is generally associated with an increase in depression, suicidal ideation, sleep disorders, difficulty in communicating, myopia, type 2 diabetes, hypertension and obesity (Loutfi et al., 2021; Sultana et al., 2021; Woolford et al., 2021). Significant eating disorders were also reported (Solmi et al., 2021). For example, in Western Australia, a 104% increase in the number of anorexic children was noted as early as 2020 compared

with the previous three years, even though cases of COVID-19 were few, especially among children (Haripersad et al., 2021). Similar findings were made in Canada, where the number of children hospitalized for eating disorders, especially anorexia, rose sharply during the pandemic (Szklański, 2021; Wilton, 2021).

In summary, since the beginning of the health crisis, well-being (including mental health) has become a major issue. In fact, in addition to the medical problems caused by the virus itself, the health measures implemented in Canada and around the world (lockdown, distancing, masks, vaccination passports, etc.) changed everyone's life in a significant way (Bozkurt et al., 2020). Distance learning, having to comply with distancing measures or being deprived of certain sports and artistic activities have had consequences on children's and adolescents' well-being directly and indirectly through their parents, peers and teachers.

Methodology

Context

The context of the pandemic alternating periods of confinement and distancing made it necessary to provide extra support for learners, especially elementary and high school students. In Quebec, three measures were taken to support them encouraging 1) the development of tutoring services; 2) activities to support the well-being of students and teachers as well; 3) the promotion of programs to prevent summer learning loss. The first two measures concern schools. On the one hand, there is funding for tutoring, defined as a system enabling "an intensive, frequent, and time-limited intervention" (Ministère de l'Éducation du Québec [MEQ], 2022a, p. 77). On the other hand, there is funding dedicated to well-being, aimed at "implementing strategies to enhance the level of well-being at school for students and school staff" (MEQ, 2022a, p. 84). This initiative focuses on the development of "social and emotional skills," "self-esteem," "self-efficacy,"

“healthy lifestyle habits,” as well as “good mental health” and a positive school climate. In January 2021, the Ministère de l’Éducation du Québec invested CAD 37.9 million to develop a Strategy for Educational Support and Well-Being in Schools, with the goal of supporting students and school staff affected by the pandemic. This amount included CAD 11 million for the “Support” component focused on tutoring; CAD 15 million for the “Well-Being in Schools” component; and two-year agreements with the organizations Alloprof (CAD 7.3 million) offering learning support and Tel-jeunes (CAD 4.6 million) offering well-being support. In March 2021, an additional CAD 10 million was allocated for tutoring. The first two objectives of Axis 1: Educational Success and Reduction of Learning Gaps from the 2021–2022 Recovery Plan (MEQ, 2021) align with this initiative by allocating CAD 60 million for the “Support” component (Papi, 2024; Papi et al., 2024). The third measure concerns the regional consultation bodies that were invited to submit program proposals to combat summer slide. The regional consultation bodies have thus implemented numerous programs supporting learning and well-being during the summer (Papi, 2024; Papi et al., 2025) thanks to the funding of \$3.9 million granted in 2021 and \$4.9 million granted in 2022. These three measures have been consistently renewed since their implementation. Although one measure (number 2) is specifically dedicated to well-being, the other two are also well-being-related, since any learning activity requires students to be in good condition.

Interviews

Given the unprecedented nature of the social context and the novelty of the government policy, I decided to use first a qualitative inductive approach (Lincoln & Guba, 1985) based on 34 semi-structured interviews with 23 principals and 11 school board members conducted in the fall of 2021 and 2022. Details of this protocol and results of all investigation about the three measures adopted by the government are presented in a book (Papi, 2024). What is relevant here is to

understand that the content analysis developed from the interviews facilitated the highlighting of the main issues concerning students' well-being as identified by adults and the categorization of those issues according to their nature. In an attempt to bring the reality of student well-being to light, I was also inspired by the definition of well-being presented earlier, which distinguishes "emotional, psychological and social aspects," and by the work on learning support, which distinguishes cognitive, metacognitive, methodological, motivational and socioaffective support (Deschênes et al., 2004; Papi, 2013; Rodet, 2020). This makes it possible to identify the following categories of issues: those of a cognitive nature, relating to the ability to learn and reason as such; those of a methodological nature, corresponding to the ability to organize and carry out planned activities; those of a social nature, relating to relationships with others and also to behaviours that may affect them; those of an emotional nature, relating to mood and emotions displayed; and those of a psychological nature, including motivation and addiction.

Once these categories had been identified, it was necessary to assess whether and to what extent these different types of difficulties would still be present in 2023 throughout the province of Quebec. To do this, a questionnaire was created to ask school principals about the presence or absence of deficits or difficulties in each category, as explained in the next subsection.

Survey

Procedure

Most research on student well-being is carried out through surveys completed by young people, but as I wanted to know both the situation and what was settled on to support students, I have chosen to look for an external point of view and seek a more distanced perspective, namely that of school principals.

In other words, this survey is not so much interested in “subjective well-being,” which corresponds to the person’s cognitive and affective evaluation of his or her level of satisfaction in the various domains of life (Bacro et al., 2017), but in the well-being perceived in the context of school. This did not provide a detailed measure of the evolution of individual subjective well-being, but rather a bird’s-eye view, which seems useful as a way to see what stands out most in a broader picture.

At the end of March 2023, I sent emails to all French- and English-language school boards across Quebec, asking them to forward an online survey, including both closed and open-ended questions, to the elementary and high school principals in their area.

Material

The survey was implemented on Microsoft Forms and divided into five sections. The third section examined here was constituted by 11 questions about the students’ well-being:

- 5 closed questions on the level of difficulty observed in each dimension (cognitive, methodological, social, affective, psychological). Each participant was asked to place his/her observations on a Likert scale (compulsory).
- 5 open questions allowing each participant to explain his/her choice in writing in a comment box (optional).
- 1 question on the observed evolution of difficulties and gaps between the beginning and the end of the school year 2022–2023.

Participants

In total, elementary and high school principals from 49 of the 72 school boards completed the survey, representing 68% of the school boards in Quebec.

Specifically, 309 public elementary and high school principals completed the survey, which corresponds to nearly 13% of all elementary and high school principals in Quebec as of September 30, 2022 (N=2,394). With a population size of 2,394 schools and a minimum sample size of 305, the sample could be considered representative of the population¹ (95% confidence level, 5.25% margin of error and a population proportion of 50%), especially considering that the same principal may work in several schools when these are small. Principals from schools in all 17 regions of Quebec took part in the survey. Of the 309 survey respondents, 241 principals work in elementary schools. In addition, our sample includes schools in different Socioeconomic Environment Index (IMSE) deciles and 36.15%² of our sample are considered situated in an underprivileged area (deciles 8, 9 or 10), which also seems representative of the situation in Quebec (MEQ, 2022b).

Data Analysis

The closed-ended questions were analyzed using descriptive analyses based on frequency distributions and cross-tabulations. The content of the open-ended questions was analyzed by classifying the responses according to the type of institution (elementary/high school), then, using N-Vivo, for each question. First all the responses were read once to identify the main themes. They were then read a second time, the different responses were classified under these themes, and new ones were created if necessary.

The responses were then drafted, taking care to report on all the themes and sometimes counting the number of occurrences of certain key themes. To

¹ To test the representativeness of the sample, the following calculator was used:

<https://www.calculator.net/sample-size-calculator.html?type=1&cl=95&ci=5.25&pp=50&ps=2397&x=74&y=18>

² N=307 here, as the two special-status schools with no IMSE rank must be removed.

emphasize the voices of the principals, numerous quotations are systematically included. Since most of the responses were written in French, they were translated into English for this article.

To maintain anonymity, a unique code was not assigned to each participant. However, to assist the reader, it is systematically indicated whether the participant was an elementary school principal (ES), a high school principal (HS), or an elementary and high school principal (EHS). In addition, because socioeconomic background is likely to influence well-being, the IMSE decile of the school is also reported. The reader should keep in mind that the IMSE goes from 1 (most privileged area) to 10 (most underprivileged area). Thus, a quote followed by (HS4) means that the comment was made by the principal of a high school in IMSE decile 4.

Results

The results section on the development of well-being and difficulties will present the perceptions of the school principals about the children. In each subsection, after a brief presentation of the quantitative data in a table, the qualitative data are presented in detail with numerous quotations.

Development of Children's Difficulties, as Perceived by Principals

There were 97% of principals who reported having activities or programs to support student well-being (e.g., socio-emotional work, social or physical activities), and 96% reported providing individualized and regular learning support (e.g., tutoring) for struggling students. The results of these programs or activities tend to be perceived by principals as positive. Nevertheless, difficulties are still observed in the 2022–2023 school year at the cognitive (knowledge, reasoning, etc.), methodological (completing work, organization, etc.), social (behaviour,

relationships, etc.), emotional (emotions, mood, etc.), and psychological (motivation, addiction, etc.) levels.

Global Perception

In table 1, the predominant responses for each level are shaded. This table shows that, in most cases, more difficulties are identified now than before the pandemic, and that it is the social and emotional dimensions of those difficulties that have increased most sharply. If we add the number of “Slightly more” and “Many more” responses, we see that this increase was mentioned by 78.31% of principals regarding the social level, that 75.40% mentioned the cognitive level, 71.84% mentioned the emotional level, 64.40% mentioned the psychological level and 55.99% mentioned the methodological level.

TABLE 1: DEVELOPMENT OBSERVED IN STUDENTS’ DEFICITS AND DIFFICULTIES IN 2022–2023, COMPARED WITH THE PRE-PANDEMIC SITUATION (N=309)

	Fewer	Just as many and similar	Just as many but different	Slightly more	Many more	Total
Cognitive	0.65%	16.83%	7.11%	45.95%	29.45%	100
Methodological	1.62%	22.01%	20.39%	36.57%	19.42%	100
Social	1.94%	10.68%	9.06%	34.95%	43.37%	100
Emotional	1.94%	12.94%	13.27%	32.69%	39.16%	100
Psychological	0.97%	22.33%	12.30%	38.51%	25.89%	100

In addition, principals were asked about their perception of the development of difficulties between the start of the 2022–2023 school year and the time they received the survey (end of March 2023). Approximately a third of them reported a drop in the number of identified difficulties (2.3% reported a sharp decrease and



32.3% a slight decrease). Approximately a quarter (25.5%) of respondents reported no change at all. More than a third reported an increase in difficulties during the year (9.7% mentioned a sharp increase and 25% a slight increase).

Principals were asked to identify any difficulties they had observed in their students in various areas. Whenever possible, I differentiated their responses by educational level, namely preschool, elementary, and high school. The following is a description of the principals' observations of the cognitive, methodological, social, emotional, and psychological dimensions of the difficulties.

Cognitive level

The cognitive difficulties identified by the 234 principals who shared comments mainly relate to language, reading, writing, mathematics, attention, concentration and memory, as expounded below for each education level.

Preschool and elementary school students

For preschool children and even those in their first year of elementary school, there are several mentions of "more frequent language difficulties" (ES3) and a deficit in the development of "gross and fine motor skills" (ES8). Specifically, "developmental delays" (ES8) are significant and require individual support, namely in terms of speech therapy.

According to all elementary school principals, deficits relate to both cross-curricular and subject-specific skills, namely reading, writing and mathematics. One principal comments: "Expressive language appears to be in decline, which has an impact on the development of literacy and mathematical reasoning." (ES2)

Another one expresses: “There are significant delays in French³ and mathematics.” (ES10) The principals repeatedly mention difficulty concentrating, maintaining effort or persevering: “Lack of concentration is an epidemic. We see a HUGE number of students who have trouble focusing their attention and putting in consistent effort.” (ES4). In addition, several principals report an increase in the number of cases of learning disabilities. For example, the number of students with ADHD is reported to be on the rise, to the point where one principal spoke of “an abundance of ADHD.” (ES4)

High school Students

At the high school level, too, “Results are down, especially for students who were already struggling” (HS3), and there are “more failures in math and French” (HS8), as “previous notions appear to be less well assimilated by a greater number of students.” (HS4) Principals have observed a lack of general knowledge and delays in reading, writing and especially “mathematical reasoning.” (HS1) Students are portrayed as being “less hard-working” (HS4), and as lacking motivation and having “attentional difficulties” (HS1) or an inability to “remain focused for long periods” (HS5). The principals refer to students’ difficulty in complying with the demands of schooling: “I see that maintaining an effort is more difficult than before the pandemic. Their attention span seems to be shorter than before the pandemic.” (HS6)

³ It should be kept in mind that French is the language that is spoken in Quebec.

Methodological level

The methodological difficulties identified by the 206 principals who shared comments mainly relate to students' lack of organizational skills, difficulty completing homework assignments and students' lack of autonomy.

Preschool and elementary school students

In both preschool and elementary school, lack of autonomy stands out among the issues: "It appears that our young people haven't learned to organize themselves to perform tasks, and that certain skills that should have been taught by their parents have not been learned." (ES10) Principals have observed that they "often ask for help. They need support and clarification" (ES3). One principal explained that "It takes them longer to get to work, prepare materials, etc., routines take longer to set up." (ES7) Similarly, "thought organization" (ES8) and "using learned strategies" (ES8) seem difficult. One principal explained that when it comes to writing or solving mathematical problems, students have: "Difficulty determining the steps to follow, despite having significant support." (ES7) Completing homework and "handing in assignments on time" (ES2) while meeting "deadlines" (ES5) seems to be a problem for many students.

High school students

In high school, observations are similar: "Students are less organized than before the pandemic. We notice that students are less well prepared for high school and that they are much less mature." (HS2) Principals noted that "a large proportion of students lack work methods and organization." (HS8) Many principals also noted that punctuality and attendance are an issue. Students seem reluctant to behave as such and tend to refuse "to force themselves to follow a schedule" (HS6) or to meet deadlines. Apart from certain nuances, the observation is always the same: "Class work and homework are more frequently sloppy, incomplete or not done at all." (HS4).

Social Level

The social difficulties identified by the 252 principals who shared comments mainly relate to students' lack of social skills and difficulty tolerating others. In addition, conflicts between students and violent behaviour were mentioned often.

Preschool and elementary school students

In preschool, children seem to have significant deficits in terms of socialization. One principal explained: "Preschoolers haven't socialized much in recent years, and we notice that they have difficulty sharing, being told no, losing, playing, etc." (ES10). Thus, many inappropriate behaviours were observed in the youngest children. One principal stated that "Preschoolers are always in conflict. They don't know how to relate to their peers. They hit, push and kick to try to make friends" (ES2).

These findings are similar for some elementary school children. Several principals reported that they are less "comfortable connecting" (ES9) with other students. For example, one principal mentioned: "Students prefer to keep quiet to avoid dealing with a relationship challenge that could provide a learning opportunity" (ES3). In addition to a certain level of isolation, the identified problems mainly relate to "inadequate social relationships" (ES5) and "coexistence" (ES3), in other words, the ability to deal with other children: "Tolerance of others is really low; there are many conflicts over mundane things that didn't use to happen before the pandemic" (ES7). Several principals noted a rise in impatience and impulsiveness: "Because they have 'shorter tempers,' there are more conflicts" (ES3). One principal reported that "there are words and acts of violence on a daily basis" (ES10). Students struggle to adapt to school constraints, and don't hesitate to refuse to compromise: "We have a few students who completely refuse to work. They won't even write their name on their worksheet. We didn't really see this kind of behaviour before" (ES7).

High school students

At the high school level, there is also “a little more isolation among students” (HS4) who have difficulty socializing with others, even to the point of “social phobia” (HS8). This leads to challenges in behaving as expected in the school environment, as highlighted by the following comments: “Loss of the habit of living together, social conventions are difficult to enforce, respect for rules and authority is diminished and difficult to obtain” (HS4). While some students try to avoid conflict, others do not hesitate to generate it. Compared to the situation before the pandemic, there is “more intolerance, more aggression (verbal and/or physical) toward others” (HS8). In addition, a particular feature of the testimonials concerning high school students is the sometimes sexual nature of the behaviour. One principal spoke of “inappropriate sexual contact and gestures” (HS4) and another mentioned a “documented increase in violent incidents or sexual assaults” (HS9).

Emotional level

The emotional difficulties identified by the 238 principals who shared comments mainly relate to the management of emotions, namely anger and sadness.

Preschool and elementary school students

In preschool, principals note that “little ones have a lot of difficulty managing their emotions” (ES10) and being separated from their parents. This is reflected in the children’s behaviour. As one principal put it: “Mood swings are more frequent in younger children. Conflicts are quickly resolved by pushing and hitting” (ES1). The lack of emotional management skills is linked to a certain developmental delay. One school principal noted: “Children are less mature, they cry more. Children’s emotional stages don’t always correspond to what they should be. More children have tantrums; more children have emotional issues” (ES9).

One elementary school principal is relatively positive: “Students are generally happy and feel good at school. However, we see spontaneous and rapid changes in emotions when they are upset, disorganized or experience an unexpected event” (ES8). Several principals insist on the “difficulty in managing emotions and controlling frustration” (ES5), which leads to “tantrums or disproportionate anger” (ES6). Emotional deprivation and difficulty in understanding others go hand in hand with “difficulty in making friends (especially new students)” (ES10).

High school students

Similarly to preschool and elementary school, in high school “many students don’t know how to manage their emotions. They lack the vocabulary to verbalize them, and they have no way of managing them” (HS4). One principal notes that “students are more ‘neutral’..., more grunge, darker. Mood swings are quite significant. Educators are very much in demand to work on the relationship with students” (HS10). Another describes the climate: “We have a lot more [...] students who have difficulty managing their emotions. Anxiety about entering the classroom, fear of not understanding, of being judged” (HS8).

Psychological Level

The psychological difficulties identified by the 204 principals who shared comments mainly relate to anxiety, lack of motivation, lack of engagement in schooling and absenteeism. Depressive states were mentioned several times using various terms (distress, depression, suicidal ideation, self-mutilation).

Preschool and elementary school students

For preschool and elementary school students, adapting or readapting to the demands of the school environment appears to be a challenge. Younger children are said to have difficulty sitting still, and “don’t understand their role as students, what they’re doing at school” (ES9). One principal also reported that “some students are more anxious and may have tantrums about coming to school” (ES7).

Findings show that there is: “A lot of distress and anxiety of all types. Great need for psychological and educational support” (ES3). Many principals mention low self-esteem and self-harm. For example, they reported more “self-mutilation” (ES8) and “talking about suicide” (ES4) than before the pandemic. Principals repeatedly mention anxiety, regardless of which level the question focused on. As one principal put it: “A lot of anxiety. Low levels of engagement and motivation. Separation-related stress” (ES4). Several comments draw a connection between anxiety and sensitivity: “Students who were emotionally fragile seem to be more anxious. Behaviours have become amplified” (ES10). In fact, several principals notice students’ unease: “Students who were already ‘fragile’ are even more so. We’re seeing an increase in psychological distress (apathy, sadness, anxiety)” (ES9). Several principals report an increase in follow-up care: “Many children are referred to child psychiatry, pediatrics” (ES8).

While the resumption of school may have offered hope of gradual improvement, one principal noted that “It’s not getting any better; short attention span, less motivation, low levels of perseverance, disengagement, little interest” (ES4). Students seem to question the relevance of school activities and lack the motivation both to go to school, which leads to a “high rate of absenteeism” (ES4), and to participate in learning activities, where it is noted that “the proposed challenges no longer interest them...” (ES5). One principal speaks of a “general loss of motivation” (ES6). Although loss of motivation already existed before the pandemic, it now seems to be manifesting itself more rapidly: “Motivation is dwindling and, for certain students, it is happening very early in their educational pathway” (ES10).

High school students

At the high school level, the findings seem to be quite similar in terms of students’ lack of motivation to attend school and carry out the proposed activities, as highlighted by the following comments: “Students are very unmotivated, find it

difficult to rally themselves to carry out the learning activities” (HS6). Students’ “need to get moving” (HS3) and their difficulty in finding “meaning in school” (HS3), “trusting in the future and looking ahead to the future” (HS10) are also linked to the “rising dropout rate” (HS10). Principals remark that “school does not represent a positive element in their life” (HS5).

Students’ unease seems even more widespread than in elementary school: the number of “mental health cases has exploded” (HS9). Principals describe students in the following way: “They’re less enthusiastic, more amorphous, less engaged” (HS9). Even when they are physically present, they seem absent: “I see more students who are not up to learning in class. They’re experiencing difficult things that they’re not able to manage (managing emotions) and this leads to dark thoughts, making them unable to be in class” (HS3). Principals reported an “increase in cases of anxiousness, anxiety and depressive symptoms” (HS4). Similarly, another states: “More anxiety, several diagnoses of depression last year as well as the previous year... and the effects are here to stay in the young people who are affected (especially in the older ones: Taking antidepressants, hospitalization, dropping out)” (HS10). One principal noted the following issues: “Disengagement, talking about suicide, self-mutilation, drug use” (HS6). Another one reports: “We’re also seeing more students with addictions (video games, vaping, drugs...)” (HS8).

Discussion and Conclusion

The data collected show that the effects of the health crisis on children and adolescents, which were highlighted in publications from 2020 to 2023, are still relevant in 2023, despite the end of the health crisis. Indeed, more than half to more than three quarters of the school principals reported a large number of problems that students, and consequently the school community, have had to deal with since the COVID-19 pandemic. In fact, even during a year spent entirely in traditional face-to-face instruction without health interventions, only one third of

the principals noted a reduction in deficits and difficulties between the start of the school year (fall 2022) and the time of the survey (spring 2023), while the other two thirds saw no change or an increase in the number of challenges regardless of the school's socioeconomic index decile. Obviously, this does not mean that there is no connection at all between socioeconomic background and the difficulties experienced by students, but rather that these differences are not statistically significant in our study. This may be due, in part, to the fact that the socioeconomic index decile is assigned to the school as a whole, without accounting for potential differences among the families sending their children to these schools. Indeed, even a school located in what appears to be a well-off neighbourhood may still have students from disadvantaged families. Furthermore, several school principals also mentioned having students whose parents have strong financial capital but low cultural capital, which limits their ability to support their children's education and, in some cases, even leads them to question the value of schooling. It would therefore be relevant to examine potential correlations with parents' level of education, or even their occupation. Additionally, even in families where children were engaged in learning during the pandemic and received the necessary academic support, no one was entirely spared from the impact of the insecurity and isolation of that period.

Clearly, it is at the social dimension that the most deficits and difficulties are found, followed by the emotional and cognitive dimensions, then the psychological level and the methodological level. The fact that the social component is the one that stands out the most is a reminder of the lack of socialization caused by imposed isolation. Its top position may also be related to the fact that behavioural problems are the most obvious aspects to school principals, especially when compared to those experienced on a psychological level. However, the psycho-emotional challenges experienced by children and adolescents have not escaped the attention of school principals. They report the same problems as those noted in the surveys conducted directly with young people. Indeed, a survey conducted in four regions of

Quebec in January 2023, involving 17,708 young people aged 12 to 25 (mainly students from 23 public high schools and 18 private high schools), also revealed that, in public high schools, 24.9% of students had “fair or poor mental health,” 40.1% had “symptoms of anxiety or depression” and 27.6% said they had had “dark thoughts” in the two weeks preceding the survey (Généreux et al., 2023, p.11).

While the categorization of different dimensions of difficulty (cognitive, methodological, social, emotional, psychological) makes it easier to understand the variety and scope of problems, it should be noted that these are often interrelated. These problems do not affect all students, but it is worth noting that the comments made by school principals highlight the large number of children and adolescents who are still lagging in terms of socialization and emotional management. Some may also have to cope with the emotions and difficulties of their parents, although interactions with them may have deteriorated during periods of confinement and virtual learning (Orgilés et al., 2021). In fact, research has highlighted that while teachers and parents who were fully able to perform their roles experienced more positive effects that were likely to promote children’s emotional stability (Ferren, 2021; McMahon et al., 2021; Morelli et al., 2020; Viac & Fraser, 2020), many environments failed to provide such stability. Unesco (2023b, p. 60) asserts that “As the health crisis and school closures stretched on, it became increasingly apparent that technology-dependent remote learning in response to school closures was disrupting family dynamics, amplifying existing educational disparities, causing emotional and physical distress, lowering academic achievement, narrowing aims and possibilities for education, and damaging the environment.” In our research remote learning does not appear as the cause of the

problem in itself⁴, the problem appears more generally to be the context of the pandemic, and the health measures associated including closing schools.

As in many of the studies quoted above (Borbás et al., 2021; Orgilés et al., 2021; Patrick et al., 2020), among the explanations spontaneously put forward by principals to help us understand the observed phenomena, the role of parents stands out. Many parents seem less involved in their children's education since the pandemic, to the point where certain students lacked stimulation and guidance, and still receive very little support (namely while doing their homework). The fact that students' learning deficits and difficulties widened during the pandemic and that they "find the road ahead more arduous" (HS2) is presented as a factor in declining motivation. Some pupils find themselves in difficult family situations in terms of relationships or finances. Price inflation is mentioned, for example, as a source of instability and stress for parents, that also sometimes lead adolescents to work more than 20 hours a week which makes it difficult to study. In fact, a number of principals are seeing a correlation between parents' difficulties and distress and those of elementary and high school students. Because this situation is not generalized, the gaps between the children who received the security, love, attention and stimulation they need during the pandemic and the others "placed in front of a screen for several hours a day" (ES9) appear to be widening. As we can see, another frequently recurring factor in principals' explanations of students' difficulties is what the literature refers to as "screen time." Even beyond distance learning, students' reliance on mediated communication and video games has increased, which may impact their ability to relate in non-mediated contact (Tsai

⁴ It is important to remind that distance education is still a wonderful mean of learning when courses and programs are built by experts in distance education and when students choose distance education on purpose, which is quite different from what happened during the pandemic (Hodges et al., 2020).

et al., 2020) and their ability to concentrate, (see UNESCO (2023a), which notes that having a mobile device nearby is a source of distraction that is detrimental to learning). While research conducted during the pandemic focused mostly on the correlation with lack of physical activity (Medrano et al., 2021; Stienwandt et al., 2022; Wunsch et al., 2021), in our research, it is the link between screen time and socialization that is most apparent. The problems encountered in high school are more frequently correlated with the use of digital technology, especially cellphones, than in elementary school. Indeed, the increased level of engagement with digital communications and video games during the pandemic makes it difficult to return to in-person communication, both in the classroom and in more general exchanges with peers and school staff. Interaction over the phone is preferred to speaking face-to-face, and one principal goes so far as to suggest that current social challenges stem more from exchanges through social media networks than from the pandemic. Whether it's tablets in the hands of the very young, or the social media sites that adolescents are so fond of, excessive use of digital technology is condemned as one of the causes of the apathy and violence reported by school principals. Other studies also indicate that, since the pandemic, some parents have experienced exhaustion from ongoing conflicts with their children regarding screen time (Eales, Giammanco & Ferguson, 2025). Finally, one adolescent-specific problem is drug use, which is said to be on the rise, making it difficult to escape from the unease that they feel. A principal explains that "The use of vaping and wax pen products also leads to certain emotional and psychological problems" (HS8). Similarly, the above-mentioned survey of young Quebecers conducted by G  n  reux et al. (2023) finds that anxiety or depressive symptoms are more frequently associated with an unhappy family life, spending more than two hours a day on social media, vaping or working more than 15 hours a week.

It is worrying to note the extent of the unease experienced by students; some principals even highlighted cases of distress going as far as self-mutilation. In fact, the accumulation of psycho-social-emotional problems and academic difficulties

has the potential to create a snowball effect from which some may never recover (Hoofman & Secord, 2021). In the same way that health measures affected the entire population, it's interesting to note that these difficulties impacted students of all ages, although adolescents appear to be slightly more affected, as several studies already pointed out during the pandemic (Racine et al., 2021). Moreover, as highlighted by the quotations, the deficiencies and difficulties are present in all environments, regardless of their socioeconomic index decile. However, at the individual level, several comments point out that, as anticipated and confirmed in research (Cotini et al., 2025; Kuhfeld et al., 2020; Peters et al., 2025), inequalities among students have widened depending on their previous level of difficulty and their social environment. In other words, students who were struggling before the pandemic are struggling even more, and the proportion of students who are struggling has increased. Even students who are not particularly affected by the pandemic are therefore likely to experience its consequences indirectly, through the behaviour of their peers and the adaptation of teachers to the needs of struggling students.

This situation is all the more worrying because Quebec is a province that has invested in support of students and staff through financial measures dedicated to tutoring and well-being, and by distributing funds to school boards to enable schools to offer activities, which many schools have done. Indeed, depending on the schools, various programs have been implemented, particularly to promote emotional regulation, stress management, healthy lifestyle habits, and a sense of belonging to the school. More specific actions have also been deployed to value and reward efforts and achievements, and most principals estimate that the activities thus proposed have had positive effects on the students. While this support has certainly prevented the situation from worsening, the effects of the health crisis were still present in 2023, especially as price inflation continued to weigh on many households and they still seem to be a current issue in 2025, judging by the title of this Canadian CBC news: "5 years after COVID-19 started, parents and experts say

the impact on kids remains” (Sumanac-Johnson, 2025). While it can take up to five years for symptoms of depression and post-traumatic stress to subside (Pinard & Lalonde, 2016), it seems that support focused on all dimensions, is still essential for some students to effectively emerge from the crisis. That’s why, continuing offering well-being, tutoring and summer slide programs seem necessary since well-being can indeed be considered “a foundation for learning and success” (Haag & Martin, 2023, p. 165).

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