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# Administration and K-12 Teachers Promoting Stress Adaptation and Thriving: Lessons Learned from the COVID Pandemic

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**Abstract:** Lessons learned from the effects of the COVID-19 pandemic on the well-being of teachers reveal how school administrators can promote teacher stress adaptation and thriving, even in highly disruptive work environments. In a mixed-methods study within a single school district in Canada, consisting of a survey of 65 K-12 teachers and interviews with 10 administrators and teachers, the results showed the degree to which teachers were coping, had job satisfaction, and demonstrated thriving. Interviews yielded information on the limitations of the education system response and how school district administration could provide additional key resources that would strengthen individual stress coping and resiliency, create a culture of safety and community, and lay the foundations for teacher thriving, even in challenging and disruptive conditions

Keywords: school administration; stress coping; thriving; K-12 education; COVID-19 pandemic

# 1. Introduction

Even the presence of the word thriving is offensive: who is supposed to thrive in this? If even a handful of teachers say they're doing well, the board will jump on that data to pat themselves on the back and say they're doing a great job. I don't trust that they won't find a way to manipulate the data no matter what it really shows. . . . The teachers at my school are under . . . pressure in January to act like everything is normal in school (and go back to "normal"), and they're so beaten down that they don't even have energy to fight back anymore.

These were the words of union representatives explaining why they were opposed to an independent university-sponsored study investigating stress adaptation and thriving strategies for K-12 teachers in their district. They reflect the mindset of individuals who have framed the COVID-19 pandemic as unmanageable and consequently perceive threats from multiple sources, including the school administration and board. They reflect the response of individuals—teachers of children and young people in the province of BC—who are not coping and therefore do not think they are receiving help from any source, certainly not school administrators nor government or public health system policy makers.

It does not need to be this way. There is substantial evidence that teachers can adopt more effective stress adaptive responses, even thrive, in the face of disruptive and disorienting situations like the COVID-19 pandemic of 2020 and which went on into 2021 and 2022. The key is administrative support systems.

In January 2021, the authors launched a study investigating how teachers in a rural school district on Vancouver Island, B.C., Canada were responding to the stresses of COVID-19 and to encourage the development of administrative support systems that would help teachers adopt effective stress adaptation and thriving strategies. By gathering the narratives of teacher responses and coping strategies, the objectives of the study were to:



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- understand how the COVID-19 pandemic had impacted K-12 teachers as individuals, learn how they have responded and coped, and identify the resources they relied upon and/or lacked in the face of serious stress and disruption;
- shed light on the impact of COVID-19 on managerial and teaching practice;
- build knowledge on the potential strategies for managing teacher recovery efforts and building resilience in teachers to handle events such as the COVID-19 pandemic; and
- identify strategies for better stress adaptation and thriving for the teachers.

The school district had initially closed its buildings in March 2020, with class instruction moving to virtual platforms. However, by September, most teachers and students were back in the in-class environments with a variety of safety measures recommended. Over the fall of 2020, tensions were high as policies were enacted, often contradictory or changing from the public health, provincial ministry of education, the school district, and the BC Teachers Federation.

# 1.1. Effects of COVID-19 Pandemic on Teachers

Disruptive events and crises that create overwhelming change for individuals have been well documented as stressful and disorienting, contributing to many negative physiological and cognitive effects [1–3]. As an individual's psychological and physical resources are overwhelmed, negative symptoms emerge, such as depression, memory loss, poor attention, and anger. Sustained stress leads to cynicism, inefficiency, and exhaustion [4,5]. It is notable that teachers, in particular, under normal conditions experience high levels of stress due to changing and increasing job demands related to class loads, high-need students, and institutional policies and regulations, amongst other factors [2,6]. The pandemic created more.

Teachers often deal with disruptive children and violence in the classroom while simultaneously trying to maintain a positive learning environment for the majority of students. Additionally, they seek to build positive relationships with top administrators, to parents and to students, and deal with social issues such as access and equity well beyond their scope of professional knowledge. Consequently, many teachers experience compassion fatigue as a result of education being a caring or 'service' profession [7].

It stands to reason that teachers' stress would be compounded by the COVID-19 pandemic as they had to deal with additional student and family needs, constant COVID-19 protocol management, and ever-changing communications, directives, and policies. Initial reviews on teacher reactions to the COVID-19 pandemic work conditions revealed mixed emotions: negative emotions of fear, anger, anxiety, and sadness, and positive emotions of gratitude and altruism as an essential worker in sustaining education for thousands of children [8].

In a study on COVID-19 burnout among teachers during the early stages of the pandemic, researchers Sokel and colleagues [9,10] gathered data from 1626 Canadian teachers to assess how attitudes toward change impacted on stress and burnout. Sokal and colleagues cited theory by Maslach and Jackson [11] that the outcomes of stress first start with exhaustion (mental, physical, and emotional), which can then lead to cynicism and resentment. According to Sokal and colleagues, the final stage of burnout is 'loss of accomplishment', when teachers no longer feel they are successful in fostering student learning and therefore gain a sense of hopelessness and purposelessness. In their study, Sokal and colleagues observed moderate effects of stress exhaustion and cynicism, which was correlated with lower teacher efficacy and attitudes toward change and resiliency; they did not observe a lowered sense of accomplishment.

Changing expectations from parents during the COVID-19 crises also created stress for teachers. Some parents believed not enough was being done, and their children were not learning enough, while other parents were frustrated with teachers because they thought workload expectations for students were much too high. A survey of Alberta teachers revealed that 70% of teachers said they were exhausted by the end of the day. Many teachers felt they were not good at their jobs, and that engagement from students had

dropped drastically through online schooling [12]. Marshall and colleagues [13] noted teacher attrition during the COVID-19 pandemic was higher considering factors related to retirement age, lack of teacher autonomy, and lack of student resources.

In normal conditions, teachers counterbalance the demands and stresses of their workday with a sense of satisfaction that they have contributed to the learning progress of their students. This was not happening during the pandemic with the distorted teaching environment of online and hybrid classes and negative feedback from parents. In research by Pelosi and Vicars [14] with Australian teachers in the early days of the pandemic, it was discovered many teachers were struggling with online learning for a variety of reasons, such as inequality of technological access, lack of community and relationships with students and colleagues, and a feeling that everyone was only looking out for him/herself. A survey of 16,416 teachers in British Columbia, Canada, completed three months into the pandemic, revealed similar feelings of stress and anxiety. The BC Teachers Federation report [15] stated:

More than half of teachers (57.8%) did not feel safe working in person. A majority of teachers (77%) felt fatigued. More than 78% said they felt exhausted at the end of the day. 55% were feeling unable to balance teaching with their personal lives during the pandemic. 30% said they felt depressed. Well over half reported they did not have the same connection to their students as before the pandemic (69%).

It should be noted that the primary focus of the BCF study was about workload and risks of a COVID-19 infection, rather than on the psychological wellness of teachers and how to increase stress-coping strategies. Educational institutions (schools, districts, and ministries) can be home to a cultural belief that teaching, like any service or caring profession, is supposed to be emotionally demanding and that teachers should expect to feel stressed, burned out, and overworked [7,16]. It seems to be a typical expectation of society that teachers should be willing to work 'extra hard' in response to the demands of the job because of the devotion and care they have for their students. Given the pressure and stress this creates, it would seem more attention might be given to considering what resources and support should be provided to teachers to increase capacities and resiliency to deal with this expected stress and pressure.

## 1.2. Stress Coping and Adaptation

Researchers and practitioners investigating the effects of workplace stress document numerous, but not always successful, coping responses. Often, stress-coping techniques involve an attitude of working harder or being tougher, which is unsustainable over the long term. Some short-term coping strategies such as presenteeism—working while ill [17] or putting in longer hours [18]—have actually been shown to exacerbate the costs of stress [19–21]. Lazarus and Folkman [22] suggested many emotion-focused coping techniques allocate attention to reducing or eliminating stress (e.g., confrontive thinking, distancing, escape/avoidance, thinking/regret, blaming others, or acceptance/resignation) but do little to deploy the cognitive resources that build resilience in the face of disturbance or contribute to problem solving to resolve the situation. Nevertheless, Lazarus and Folkman argued that managing the initial emotions is a critical first step in addressing stress and can set the stage for later, more productive cognitive and behavioural, problem-solving actions.

It is the cognitive response to the disorienting event that directs the long-term strategies for dealing with specific stressors. These strategies include the following: analyzing the problem to understand what is happening; establishing who is accountable and over what; interpreting evidence to separate facts from assumptions; and acting to establish control over events [23]. Siebert [24] added additional mechanisms, including the following: reducing confusion and conflict by improving lines of communication; setting goals and engaging in learning strategies that support change and growth; and asking questions, observing what works, and adjusting strategies. These various strategies can be organized into actions that contribute to sense making, framing goals, and problem-solving action. Individuals enhance their coping responses and are more resilient when they seek out social supports such as friends, social service helping systems, or colleagues and superiors in their organizations [25]. This is further strengthened in the workplace through organizational resources and systems that empower the individual to adapt [26–30]. Spreitzer and colleagues [31] provided evidence that employees engage in more task focus, exploration, and relating with others when working in an environment that features discretion, information sharing, and a climate of trust and respect. Other researchers have noted employees are more resilient when there are processes that allow for open communication, expression of emotion [32,33], and a forum for sharing of ideas and differences [34]. Organizational leaders can promote more sustainable coping practices by providing and creating environments that encourage and enable expression, relating, supporting, information processing, and sharing.

What we know is that stress in the workplace can be addressed in a more sustainable and productive manner for the individual as well as others in the workplace, which has beneficial value to the organization. In the literature, this is referred to as adapting to changing work conditions [35,36], maintaining positive adjustment under challenging conditions [37–40], learning from failure [41,42], creating coherence and order out of a chaotic situation [43,44], and flourishing or prospering from the experience with transformational learning in the face of challenge [45–50]. Carver [45] described thriving as being "better off after adversity" (p. 247). Researchers have found an association between personal thriving at work and health outcomes such as good physical and mental health [51,52].

## 1.3. Thriving in an Environment of Disruptive Stress

Stressful experiences have the potential to offer an opportunity for positive growth with the appropriate support mechanisms in place. Carver [45] defined thriving as high engagement, learning, and growth in environments of high work-related stress. Further, he observed that flourishing becomes possible when stressors are defined as an opportunity to acquire new perspectives, new strategies, new skills, and new behaviours. Spreitzer and colleagues [53] defined thriving as a "psychological state in which individuals experience both a sense of vitality and a sense of learning at work" (p. 538). Thriving has also been described as an outcome of transformational learning [54] involving a re-evaluation of one's values, assumptions, and behaviours to make possible a new identity and understanding of oneself [54]. Crises such as the COVID-19 pandemic can be opportunities for learning and personal development if appropriate space is provided for reflection and reframing with different ways of responding.

In a narrative study on stress transformation for public sector managers dealing with complex and disruptive organizational events, Walinga and Rowe [55] found that some individuals are capable of thriving in a stressful situation in contrast to the majority, who are just coping and perceive themselves as just surviving. Thriving in response to stressful crises or problematic events appears to be more than just a trait or personal characteristic of the individual, but rather describes a way of responding, using workplace resources, that is fundamentally different from mere coping. In their study, Walinga and Rowe [55] found that individuals who demonstrated a thriving capability were confident, had a personal sense of power, and viewed a disruptive event as truly solvable with positive outcomes if alternative resources were drawn upon. The thriving managers in this study engaged in dialogue and listened to ideas from others rather than relying on themselves or a select few in positions of authority. They took time to access accurate facts so as to view the situation and related issues widely and from multiple perspectives and maintained an open and transparent communication style.

Walinga and Rowe [55] concluded that individuals who engage in systems thinking and inclusive strategies with others are more likely to thrive and achieve more enduring outcomes for the organization, as indicated not only by the growth and high energy of the individual themselves but also by the well-being and satisfaction of all those impacted by the events. In contrast, individuals who adopted solitary 'fix it' responses and who described themselves as coping with the situation reported only satisfactory outcomes for themselves and the organization, noting that the organization was able to 'move on' but only with strategies of management control and with negative ramifications for individuals or particular parts of the organization. A thriving response, as opposed to merely surviving, implies time allotment, as well as external supports, spaces, and processes to enable the reflection, reframing, and solution generation required to thrive.

# 1.4. External Resources to Support Stress Adaptation and Thriving

In a crisis such as the COVID-19 pandemic, it is impossible to reduce or change the stressors; additionally, individuals cannot thrive or even cope with disorienting stress in the workplace entirely on their own [56]. People demonstrate a greater ability to achieve effective control over their emotions and behaviours in stressful work situations when they access external resources such as friends, social service helping systems, or colleagues and superiors in their organizations who support sharing of emotion, effective processing, reflection, and problem solving [57–59]. Friends and supportive social environments have been shown to mediate abusive environments to enhance thriving [60].

Not only are familial supports important, but it appears organizational supports also play a significant role in fostering or undermining the ability of the individual to adapt to stressful work conditions [26,29,30,61,62]. Critical to how individuals cope and adapt to the stressful work conditions is the degree to which they get personal support, training, and supervisory mentorship and resources from within their organization [32,63].

In their research, Spreitzer and colleagues [31,56] noted that employees who thrive are more likely to be working in supportive social and work environments that foster discretion, information sharing, a climate of trust and respect, performance feedback, and diversity. Spreitzer and colleagues go on to say that decision-making discretion promotes control and a sense of having choices in the workplace and that people are more energized and exhibit more learning when they have choices at work. As Spreitzer further stated, thriving is not simply the elimination of stressors but an increase of specific contextual factors. Such processes allow for open communication, including feedback, tolerance for conflict and differences, expression of emotion [33,34], and a forum to share ideas and disagreements.

In the educational sector, too often these organizational supports are missing, and the onus is put on the teacher to adapt to and deal with added stressors, stressful events, or environments. As Margolis, Hodge, and Alexandrou [64] noted, it seems easier to look at how individual teachers' personalities impact their own well-being, rather than looking at the "power of environment, structure and the multitude of situational factors that impact the work of teachers" (p. 392).

## 1.5. Organizational Strategies and Resources for Teachers

Sokal and colleagues noted in their study [10] the importance of organizational supports to augment the personal coping resources of individual teachers, including training and specialized skills development, to handle difficult situations with students or learning resources. Other resources include collaboration and professional learning time, as well as opportunity to collectively contribute to decisions in the school building, giving teacher voice and empowerment [65]. The quality of the principal–teacher relationship is significant in times of stress and disruption. Principals exert considerable influence in a school building, providing deep psychological and relational comfort and direction for teachers when the relationship is positive but a discouraging and damaging environment when the relationship is negative [66].

While there are many strategies and resources that organizations can implement to support teachers' stress adaptation and thriving in the workplace, one must keep in mind that what works for some employees within the organization may not work for all. Ainsworth and Oldfield [67] argue that teachers should not be classified as one homogenous group who all experience circumstances in the same way. The authors found a variety of differences in how teachers handled stressors and even how they viewed excessive workloads and support from management. That being said, there are some strategies that may support stress adaptation and thriving for most people. One suggestion from Ainsworth and Oldfield was to allow teachers a space for their own research and learning, which may help them feel more agency within their classroom. Another strategy these authors discussed as a way to enhance resiliency in teachers is to provide peer mentors, who have no bearing on the teachers' job performances. Peer mentors allow teachers to talk freely and to express how they feel with no judgement or possible repercussions from their employer.

Van Wingerdend and Poell [68] argue that HR policies need to be written and designed to enhance meaningful work by clearly communicating how the work being done contributes to the goals and values of the wider social structure in which they live. There should be an ongoing dialogue with management (including principals and district administrators) and teachers, which may allow teachers to reflect on their own values and how their work may be meaningful to them. It was also suggested that "managers should express appreciation for teachers' contribution frequently" (p. 8) and not only during performance reviews. Job crafting enhances feelings of meaningful work, and teachers should be given opportunities to continuously craft and improve their teaching techniques. Lastly, it is recommended that very specific and intentional training programs aimed at enhancing sustainable practices and resiliency are provided for teachers as a way to help them cope through the many changes within the education system This training would likely also benefit managers so that they may also manage and adapt to the stresses of their leadership responsibilities.

## 2. Study Approach

A mixed-methods action research approach was adopted based on a Participative Action Research (PAR) framework articulated by Piggot-Irvine and Zornes [69]. The PAR process involved five phases: (1) preparation, (2) reconnaissance, (3) data collection and analysis, (4) interpretation and review, and (5) report achievements, recommendations, and knowledge mobilization. Ethics were granted by the Royal Roads University Office of Research Ethics. Funding for the research was provided through the Canadian Government Social Sciences and Health Research Council (SSHRC).

During Phase 1 (preparation), the researchers engaged with the partner organization to establish the partnership, finalize goals and activities, and determine protocols for the distribution of the survey to teachers through district channels. Several meetings were held with senior administrators of the school district to review the purpose of the research and the data collection tools. This phase also included contact with representatives of the Teachers Association (TA), which is a union district office belonging to the BC Teachers Federation. Documents on the purpose of the research were shared with the Union President and Vice President, followed by a meeting to answer questions. The TA expressed concerns that the study would only reinforce school district policy and practices. Despite efforts to allay their concerns and to provide assurances that the study would be impartial and focus entirely on the well-being of teachers, the TA declared they could not support the study and consequently instructed the district teachers not to participate in the survey and interviews.

Despite the refusal of the TA to support the investigation, the research team proceeded with Phase 2 (reconnaissance). In this research phase, the researchers sought to more fully understand the context through interviews with school district officials on the specific events of school and classroom shut down and how it redefined the work of teachers and teaching practices. Additionally, information was gathered on the specific policies and practices enacted by the school district at various points in time, as well as the policies of the B.C. Ministry of Education, B.C. Provincial Health Authority, BC Teachers Federation, and Federal Government as they impacted on the teachers in the school district. Phase 2 culminated with the development of the online survey tool, as well as the development of a follow-up interview guide.

Survey questions included a 10-item Job Related Stress Index [70] (a 15-item work wellness survey based on items drawn from Porath et al. [71], and items taken from the work by Parker and Hyett [72]. Additional questions addressed individual's coping response to the COVID-19 situation adapted from the L-Thrive Inventory [73] across six domains: (a) emotional reactions, (b) systems framing, (c) collaborative problem solving, (d) action strategies, (e) learning and growth, and (f) outcomes for others. The majority of survey questions were quantitative Likert-scale questions, with an opportunity for respondents to add in additional commentary, while the interview guide consisted of open-ended questions. A final question invited teachers to participate in a one-on-one interview to explore more fully how they had attempted to cope with their new working world. Interviews with administrators focused on their perceptions of how the crisis was impacting teachers, teacher capabilities, and resiliency, and actions taken to support teachers, as well as their personal reactions and coping strategies. Teacher interviews focused on their perceptions on how the pandemic had impacted teachers across the district, what stresses teachers were experiencing, what teachers were doing to cope in their new work world, what frustrations or barriers they were experiencing, and what their needs were.

Phase 3 (data collection) began in January 2021 with an email from the District Superintendent announcing the study and asking school principals to distribute the anonymous survey to all K-12 teachers in their school. Information packages were sent out to 26 school principals (of which 21 were elementary or middle schools), who proceeded to send out the survey link and study information to approximately 618 teachers attached to their school location.

Phase 4 (data analysis and report writing) involved integrating the quantitative and qualitative data so as to establish the extent or presence of a phenomena while using participant perceptions and opinions to understand the phenomena at a deeper level. First, all quantitative items from the teacher survey were analyzed using SPSS version 28.0 software to determine means and descriptive distribution patterns across and within items. Limited sample sizes permitted only minimal cross tabulations statistical analysis. Descriptive patterns were matched to a thematic analysis of respondent comments and the additional teacher interviews, using a priori themes pertaining to stress awareness and behaviors, coping strategies, resiliency and job satisfaction attitudes, and engagement in thriving behavior, as identified by Rowe and Walinga (such as taking a systems perspective, reframing the crisis, building relationships, and engaging in collaborative solutions).

The administrator interviews were transcribed verbatim and then grouped into general categories pertaining to recognition of stress and organizational capabilities, evidence of systems perspective, collaborative relationship building with the school districts and the province, and strategic action planning and actions to mitigate negative impacts on teachers. Deeper level analysis proceeded by identifying notable phrases representing key conceptual patterns. This process aligns with Braun, Clarke, and Weate's six-phase model of analysis [74]—familiarization with data, initial code generation, theme search, theme review, theme definition and naming, and report production—while applying an insider–outsider–expert lens to the analysis. Both researchers were involved in the data analysis process to establish inter-rater reliability on the emergent themes.

Phase 5 (interpretation and review) involved representatives from the school district holding discussions with the researchers to interpret and understand the data. The interview narratives were particularly useful in helping to interpret the quantitative survey data, making sense of the context and sense of disruption to the teaching environment over time. A finalized report was generated as part of Phase 5 (reports, presentations, resource publications), with recommendations on new organizational processes, supports, and resources, and educational, coaching, and mentoring tools. Presentations were made to school administrators and the school district education committee.

## 3. Findings

Despite the pessimism of the Teachers Association towards the study, as expressed in this quote from a union official, "the only people who will respond to a survey at this time are the few who aren't losing their minds. The people you need to reach are barely hanging on, and you won't hear from them", there were 65 teacher survey respondents and 10 interviews with teachers and administrators.

It would seem reasonable to assume that in a time of tremendous disruption and chaos caused by the COVID-19 pandemic that supporting the wellness of teachers as front-line workers trying to take care of the educational needs of children would be a top priority. As an anecdote, consider how parents are instructed in airplane incidents that involve a drop in cabin air pressure to 'put the mask on yourself first and then attend to your children'. Parents who pass out due to lack of oxygen cannot aid in the protection of their children. Despite these well-known disaster management guidelines, action taken to protect the wellness of K-12 teachers was not an overarching priority. Lack of support by the Teacher's Association certainly interfered with the study, such that it was not possible to derive generalizable evidence on how teachers were coping with the stresses of COVID-19. Nevertheless, the general observations from the small sample of respondents led to recommendations for system changes that can support greater stress adaptation, coping, and thriving.

In this study, we learned that most teachers are amazingly resilient and coping but were not thriving under the current work conditions, with perhaps a third of them not coping at all. This is a significant proportion of K-12 teachers and must be taken into consideration by school districts promoting teacher wellness and stress adaptation. K-12 teachers were experiencing considerable stress in dealing with all the changes in their teaching practices, the curriculum, and methods of teaching, while also coping with a fear of becoming infected with the coronavirus themselves. Additionally, there were demands of managing home life given that spouse and children were often trying to work from the family home using shared resources and were at risk of becoming ill themselves should a teacher become infected.

#### 3.1. Initial Reactions and Appraisal of Personal Capability to Cope with the Pandemic

Initial reactions of stress to disruptive and crisis events in the workplace is a common phenomenon, and teachers faced with the disruptive events caused by the COVID-19 pandemic were certainly no exception [9,10]. The teacher survey respondents in the study clearly indicated they had been impacted by the COVID-19 pandemic, with 67% indicating anxiousness, fatigue, and negative physical effects such as sleep disturbances and anxiety. Comments from survey respondents, augmented by the teacher interviewees, revealed there was a primary fear of getting sick from the coronavirus. Secondly there was stress associated with adjusting to the changes in the normal day-to-day patterns of working and living. Teachers noted challenges adjusting to the lack of information and direction on changes to be implemented in the classroom and in their school, and the difficulty of following protocols that were new and often changing. Teachers expressed concern they would make mistakes or would be blamed if they did not follow protocols correctly, even though these protocols were often changing without any explanation or notice. These concerns were compounded by the feelings of isolation that came from the loss of collegial connections to debrief the day-to-day issues, to get clarity on the protocols, and to get instructions on how to implement some of the directives. Finally, teachers had to cope with the added challenge and stress of teaching from home or in a hybrid model while also trying to manage the needs of their own children at home. Also interesting was a comment from one teacher who noted that the loss of events such as field trips, presentations, and celebrations took the joy out of teaching.

A third of the survey respondents said they had had to take some stress leave in the first year of the pandemic. Most respondents (86%) reported they received messaging from the school administration and school district offering assistance, reassurance, and

calm for people directly impacted, which was appreciated. However, only 20% said they had received personal messages of reassurance and calm. Despite their initial reaction of alarm, more than 73% of the survey respondents said they had felt confident they had the resources to deal with it themselves; 47% said they were determined to remain professional and follow protocols to keep themselves and their school safe

Interestingly, when asked if they saw the situation as manageable and resolvable with satisfactory outcomes, only 25% felt the situation was manageable with good outcomes, while 42% felt it was unmanageable with negative outcomes.

## 3.2. Teacher Resiliency and Stress-Coping Capabilities

Many of the teachers who responded to the survey were suffering to some degree, which was affecting their energy level. On the survey, when asked how they felt about themselves in the workplace, only 40% said they felt alive and vital, and only 33% said they had energy and spirit. Forty-three (43) percent said they looked forward to each day. Nevertheless, despite the stress that teachers were experiencing, there is evidence that most teachers were coping with some degree of personal resiliency and adaptability.

In the survey, there was a very high percentage of respondents (more than 80% across the survey items) responding strongly to questions about collaboration with others, learning from mistakes, continually re-evaluating performance and making improvement, responding to feedback, and seeking assistance from others—these are all characteristics of good resiliency. Further, 83% said they were continually learning, and despite the circumstances they were in, 78% said they were continually improving their skills and practice as teachers.

Survey data were consistent with the perceptions of the teacher interviewees. Interviewees spoke of various personal strategies they were using to manage the stress, such as exercise, looking to supports from friends and family, and taking mental health days when needed. Caring for oneself, colleagues, and for students was a theme expressed in various ways by different teachers.

Teachers who had a support system with colleagues and found their work meaningful appeared to cope better. For some of the interviewees, the shift to working from home opened up new opportunities for them. For others, it added more stress as they did not have all the resources that were normally available in the classroom. One teacher commented on the changes that had to be implemented and how teachers rose to the challenge, which was different for teachers at each level.

# 3.3. Workplace Satisfaction

Further, despite the day-to-day stresses and abnormal demands being placed on teachers, it would appear for most teachers who had responded to the survey that their work satisfaction remained high. These are professionals who derive meaning from their work as teachers. More than 75% indicated their daily work activities gave them a sense of direction and meaning, brought them a sense of satisfaction, offered them chances to advance their skills, provided the autonomy to recraft their job to suit their strengths, and offered some level of independence at work. A slightly lower percentage of individuals (70–72%) said their work increased their sense of self-worth, and they felt capable and effective in their work on a day-to-day basis. These results do not suggest a high rate of burnout as of 9 months into the pandemic.

While overall it would appear that a large majority of the educational personnel, as represented by the respondents in this survey, indicated a reasonably high degree of work satisfaction, it should be noted that only 62 % said they felt 'personally connected to their organization's values' and only 64% said they felt they were 'flourishing in their job'.

## 3.4. Outcomes of Stress Adaptation and Thriving to COVID-19

When the survey respondents were asked how they felt about the past year in terms of dealing with specific issues or problems, 21% felt satisfied they did the best they could, with

50% having mixed feelings of accomplishment and frustration or disappointment. Over 28% of the survey respondents felt disappointed, frustrated about their ability and sense of accomplishment. Despite the mixed feelings of frustration and disappointment, more than 97% stated they felt they had learned more about themselves, or acquired new knowledge or skills, and/or more knowledge about their organization. Additionally, 75% of the survey responders felt they had been able to maintain good relationships with colleagues in their workplace; although it is sad to note that 25% felt the COVID-19 pandemic had resulted in impaired relationships and a feeling of distrust with colleagues.

## 3.5. Lack of System Coordination and Communication Failed to Mitigate Stress for Teachers

One of the most serious barriers to stress adaptation for teachers is not having a school system where all institutional bodies (district office, local and provincial teachers union, provincial ministry of education and public health) are working together to implement resources that support the wellbeing of teachers in the classroom with their students. The educational institutions and individual managers/policy makers are caring and well-intentioned but nevertheless seemed unable to adjust their standard administrative practices to coordinate an integrative response that would support the wellness of teachers. This is a system issue and, while no individual is to blame, it will take strong leaders across multiple institutional bodies to overcome the historical distrust and bureaucratic policies that prevent these institutions from working together to achieve integrated solutions.

Despite evidence of uncoordinated support across the educational system in the province of BC, teacher interviewees were generally positive about the efforts taken by their school district to reduce the spread of the coronavirus. Nevertheless, a majority of teachers did not feel they had a sufficient role in crafting how to deal with the effects of the COVID-19 pandemic on the student learning environment. Rather than offering an opportunity for whole system engagement and a role for everyone—teachers, principals, and administrators—to develop a response to the COVID-19 crisis, find solutions, and take action, most decisions were being made by administrators or a select group of curriculum experts.

It seemed this trend to limit responsibility for developing the COVID-19 response to just a few individuals was also reflected in limited communication in the early days of the pandemic. Only 33% of the respondents said all individuals were kept fully informed of the situation and what was being done to address it. Only 25% said they had received some limited communication. About 42% said only a limited few—often the administrators and principals at the school or the smaller crisis team—were kept informed about the COVID-19 crisis and what the school or the district was doing to address the crisis.

The limited information being shared on how the school and district were responding to the COVID-19 situation contributed to a sense of powerless by a majority of individuals (67% of the respondents), with little authority to address the situation. About half of these survey respondents (52%) said they took solitary actions to deal with the demands of their job (sometimes with a bit of consultation). On a positive side, with little authority and lacking information from senior levels, 48% took steps to develop a plan and coordinate a collaborative response with colleagues at their school level. These individuals took action to the best of their ability, with only 55% of them saying information was being shared widely. Most individuals sought factual information and opinions on their own initiative and from other sources outside the school district.

Interviewees spoke of the communication process and messages. There were messages coming from the school district office, from the province public health officer, from the Ministry of Education, and from the BC Teacher's Federation, but it was noted these messages were not always coordinated and were often brief or one-off videos without any opportunity for teachers to respond or ask questions. In particular, one interviewee expressed a concern that communication was being further compounded by the Union's animosity to the school district office. It was noted that school district staff were not allowed to communicate with teachers without the approval of the Union. Then there was the added challenge of teachers trying to communicate to parents, since for distressed parents, it was the teachers to whom they would turn for information and assurance.

Where teachers had the greatest degree of dissatisfaction was towards the Ministry of Education for not putting the wellness of teachers as a priority in terms of access to COVID-19 sick days and access to vaccines. For the most part, teachers felt they were on their own in coping with the pandemic as it unfolded in their classroom and in their lives. Some were fortunate to have sufficient personal resources to help them cope, while others were less fortunate and unable to cope at all.

In conclusion, this study revealed the school system at both the provincial government level and school board level was unprepared for an event such as a large-scale health pandemic. Teachers were distressed by the uncertainties and lack of knowledge about the future of their classes. Then, when the province and school district began to establish policy and guidelines, the focus was primarily on keeping the system operating with some steps taken to reduce health risks to students emerging with time. There was almost no attention given to how the pandemic was impacting teachers' mental health. Teachers carry a certain degree of stress as a normal part of their day-to-day jobs, but the pandemic created additional stress due to lack of communication and lack of clarity on how to proceed [7,16], not to mention an apparent disregard for the health of those responsible for delivering education. The pandemic and response of the school system that ignored the welfare of teachers simply increased their levels of stress. What is remarkable is how most teachers reported making adjustments and taking personal steps to adapt to the situation while maintaining their work with students. Strategies primarily included turning to their colleagues and family for emotional support, keeping abreast of information on the situation, taking risk prevention actions, and following the guidelines of their school officials.

### 3.6. Doing Better through Resiliency Strategies

Consistent with extant literature on stress coping, many authors subscribe to a prevailing perspective that resiliency is a capability possessed by individuals, based on innate traits and skills such as emotional intelligence, problem solving skills, and patience/tolerance for change, as well as behavioural actions taken to reduce stress through self-care strategies (such as exercise and diet), mindfulness exercises, and by developing a personal social support structure at home and at work [75–77]. Interestingly, in a study on 6026 healthcare workers in New York City during the early months of the pandemic, perceived support from spouse/partners and colleagues was the strongest predictor of individual factors that reduced the risk of trauma-related disorders [78].

While emotional support in the form of praise, appreciation, and compassion from friends and colleagues is important, Papatraianou and Le Cornu [78] further argue that friends and colleagues are a good source for reality testing and reflection during stressful times. Individuals who share resources, ideas, and knowledge are better able to deal with problems or challenges. Discussions with others, such as peer mentors, helps individuals examine their feelings, attitudes, and perspectives and to interpret what is going on in their environment [79,80]. Attitude in social and professional engagement is critical. A team in Italy [81] observed that a positive attitude was the strongest protective factor against distress. Related to this is the sense of purpose and belongingness to the culture of teaching. Flores, Ferreira, and Parente [79] found that teachers who were dedicated to their students were more positive and able to manage the challenges of the teaching world. Teachers who derive joy from interacting with students are more resilient and able to manage the tough times.

In addition to the use of personal resiliency skills and strategies, researchers/practitioners have increasingly noted the role of organizations and administrators in supporting their employees in ways that contribute to fostering trust and collaborative relationships [77]. On an immediate level, training and development to employees can strengthen personal resources [76,77], but such an approach still has a tendency to put the responsibility for

coping with work-based stresses entirely onto the individual. If an individual fails to master these resiliency skills or lacks personal support structures, it is often seen and framed as the individual's personal failure.

Kangas-Dick and O'Shaughnessy [77] have taken a more bio-ecological stance, stressing that individual resiliency factors such as self care activities and social engagement are not enough; in seriously disruptive and stressful work situations it is critical that individuals have the support of supervisors and administrators to ensure that workers are not overloaded.

Aiello and colleagues [82] speak of the need to establish institutional mechanisms such as forums, committees, town halls, and focus groups, that give front-line workers the opportunity to contribute to decision making in the workplace and feel supported and listened to by their organization. When staff and front-line workers such as teachers and healthcare workers are given the opportunity to seek information, ask questions, give suggestions, and give feedback, they increase their sense of control over their environment. In return, the organizational administrators demonstrate their respect and appreciation for what teachers or healthcare workers "know" and "experience", and ultimately benefit from additional front-line insights, solutions, and recommendations.

Relevant to this discussion of resiliency strategies is the work of Walinga and Rowe [55] who found that to go beyond mere coping and reach a state of thriving, individuals need to shift their perspectives to see the bigger picture and then work in collaboration with other co-workers supported by administrators and senior leadership to craft interventions and solutions. While individuals can learn to cope with challenging work demands, thriving requires a systemic perspective and engagement with the whole community.

Flores [79] sums up the interplay of individual factors such as personal wellness, identification with the teaching mission, having a joy of teaching, and personal social supports (friends, colleagues, and mentors), with external or institutional factors such as good leadership, professional training and development, and having an authentic voice in shaping the teaching context, especially during challenging conditions:

As such, professional development opportunities as well as conditions for teachers to exercise their professionalism in supportive and encouraging school cultures are of paramount importance if teachers are to be resilient, motivated and engaged in their profession. Also relevant are opportunities for teachers to develop their sense of vocationalism, their values as professionals and their views of teaching and learning as well as their care for the students. . ., [Citing Gu and Day [83] resilience is determined by "the *interaction* between the internal assets of the individual and the external environments in which the individual lives and grows (or does not grow)" (p. 171)].

Trust and positive relationships are at the core of a positive work environment that strengthens the individual capacities of teachers to cope and thrive in disruptive and stressful conditions. To enable thriving in challenging situations, teachers need to have opportunities for growth and development and have the resources to feel energized and effective.

## 4. Implications and Recommendations

There were many lessons learned from the COVID-19 pandemic on how to facilitate a better response from school districts and administrators. This study identified many avenues to implement resources to better support teacher resiliency, stress adaptation, and thriving amidst disorienting and disruptive work conditions.

Ways to support teacher coping, resiliency, stress adaptation and thriving:

 Make teacher wellness a priority by making it a topic of discussion and investigation, recognizing when individual teachers need personal time off, temporary relief help, peer supports, help in the classroom; this should be available easily and without extensive justifications or stigmatization. This might consist of strategies and supports that allow for spontaneous, one-hour breaks throughout the week (without the teacher having to ask or make a formal request). Allowing flexibility around break taking would contribute to a culture of trust within the school building.

- 2. Offer interactive and dialogic training workshops on problem-solving stressors, make these available at the school level so that they become an opportunity for individuals to engage with their professional colleagues facing similar situations, share experiences and support, while generating solutions that can be implemented or shared with school and district leaders.
- 3. Recognize that some teaches may have deeper mental health needs and need to access informal and confidential resources for initial inquiry and exploration. Identify clear and readily accessible informal pathways and resources. A lack of formal access to resources through the medical/health and HR system (as in employee assistance programs) is often a barrier for some individuals who are struggling with the stress of a crisis situation; they do not want to appear weak or needy and are afraid of being labelled and stigmatized.
- 4. Develop a system of teacher mentors who have training as peer counsellors and resiliency coaches and who focus on supporting teachers with the psychological adjustments to their job, whether it is dealing with a crisis such as COVID-19 or dealing parents or children with behavioural problems, etc. Teacher mentors can be a soothing voice while helping teachers find and access the right professional resource or training they need to carry on.

Ways to develop an institutional system that promotes teacher engagement and a culture of trust:

- 1. Acknowledge the role and dedication of teachers; do not take it for granted that they will always be able to 'rise to the challenge'. This should include teacher recognition awards and daily acknowledgements ('kudos') for teachers for creative teaching, for supporting individual students, and working with parents.
- 2. In the case of a health crisis such as the COVID-19 pandemic, which placed extra work demands on teachers, advocate for institutional rewards such as extra pay, time off to deal with related health issues, offer compensation for the cost of home computers and other technologies, etc.
- 3. Create multiple and overlapping communication mechanisms that counter the hierarchical chain of command structure of most institutional systems so that teachers have a voice at all levels of administration in their organization. Teacher's unions play a critical role in representing the needs of teachers as a whole but should not be a barrier for individuals to share their knowledge and experience to the administrators and policy makers in their system. A union is one voice, but not the sole voice, for teachers. Create overlapping and multiple layers of communication so that teachers can obtain information from multiple sources while accessing multiple avenues for their voices to be heard. Chain of command communication systems are too narrow, slow, and vulnerable to breaks or distortion.
- 4. Provide regular administrative information updates—daily during times of disruptive events (such as the COVID-19 crisis), even if it repeats the same information as the previous day. This daily update acts as a stabilizer and anchor by communicating district responsibility—that 'someone is paying attention'.
- 5. Provide information on the full scope of the nature of the crisis and the problems, not just bite-size pieces that can be misinterpreted and misapplied. This means being transparent on good information and bad information, as well as acknowledging what information was later deemed to be wrong or inaccurate. Trust can only be achieved if there is full information disclosure. Full information disclosure also facilitates the process of full 'systems learning', which has been shown to contribute to better stress adaptation and thriving for employees. A portal where teachers can find a collation of all the information, clearly labelled and dated for ease of reference and timestamping.

- 6. Through professional development, strengthen the role of school principals to provide support to individual teachers as well as how to develop a strong culture of community support and collective engagement for all teachers in their building.
- 7. Create mechanisms for teachers to participate in problem solving and decision making that is relevant to the issues they are facing. While it would not be possible to have all teachers participate in the decision-making process at all times and at all levels, create working committees and task groups that have rotating and dynamic membership. Teachers should have the opportunity to contribute through decision-making committees for periods of time and then rotate off, thus creating opportunities for others to participate for certain periods of time. This facilitates more teachers having more complete knowledge and making meaningful contributions to workplace strategies.
- Create mechanisms and supports for teachers to work on collaborative teams to adapt the curriculum to new or changing teaching environments.
- 9. Listen to teachers when they talk about the needs of students and parents; be willing to provide the resources to teachers to develop the curriculum and teaching resources that will help students 'catch up' and reach or maintain learning progress, even under these challenging times.

Finally, this study emphasizes that the ultimate protective factors teachers require in order to deal with and thrive during events such as the COVID-19 pandemic include: 1. Meaningful work and 2. Work relationships – both of which are only possible in a cultural environment of safety [68]. Culture plays a significant role in enabling teachers to navigate the stress of situations as intractable as a pandemic. Culture has to do with the values, beliefs, and assumptions operating across a workplace as expressed through structures, processes, and artefacts such as policies or rewards [84]. Educational leaders from all aspects of the system (principals, district administrators, government officials) can support teachers best by starting from a place that values a teacher's sustainability, and believes that teachers are remarkable, caring, and resilient, while also human and fallible when under extreme duress. Finally, educational leaders must also shift their assumptions from 'teachers are partners in the development of the children in our care'. Such cultural values, beliefs, and assumptions manifest in practices, policies, and processes that focus on sustainability, recognize humanity, and function collaboratively.

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