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Post-Traumatic Growth and Protection From Burnout in Teachers During the COVID-19 Pandemic

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Teachers have demonstrated a wide range of responses to the challenges of teaching within a pandemic. The current study investigated the relationship between resilience and post-traumatic growth in teachers during the COVID-19 pandemic. Based on administration of the Maslach Burnout Inventory in 2022, four teachers demonstrated high levels of resilience, indicating the potential that they had experienced post-traumatic growth. Follow-up interviews were therefore conducted to investigate whether these teachers demonstrated all seven characteristics of post-traumatic growth. Although all four resilient teachers indicated experiencing several characteristics, only two teachers demonstrated post-traumatic growth. The findings support a clear distinction between resilience and post-traumatic growth. Implications related to future research using both qualitative and quantitative methods to further illuminate the processes and conditions of post-traumatic growth are discussed.

Les enseignants ont fait preuve d'un large éventail de réactions face aux défis de l'enseignement dans le cadre d'une pandémie. La présente étude a examiné la relation entre la résilience et la croissance post-traumatique chez les enseignants pendant la pandémie de COVID-19. L'administration du Maslach Burnout Inventory, un questionnaire évaluant les symptômes de l'épuisement professionnel, en 2022 a révélé des niveaux élevés de résilience chez quatre enseignants, indiquant la possibilité qu'ils aient connu une croissance post-traumatique. Des entrevues de suivi ont donc été menés pour déterminer si ces enseignants présentaient les sept caractéristiques de la croissance post-traumatique. Bien que les quatre enseignants résilients aient indiqué avoir vécu plusieurs de ces éléments, seuls deux enseignants ont fait preuve d'une croissance post-traumatique. Les résultats soutiennent une distinction claire entre la résilience et la croissance post-traumatique. L'article discute des implications liées aux recherches futures utilisant des méthodes qualitatives et quantitatives pour éclairer davantage les processus et les conditions de la croissance post-traumatique.

Copious media attention to teacher stress during the pandemic has highlighted concerns about increased rates of burnout in the field of education (Edelman, 2022; Inglis, 2022). A more nuanced quantitative analysis of almost 2000 Canadian teachers' experiences during the pandemic, however, has suggested that personal and situational factors together predict five unique and possible pathways under which teachers navigated the pandemic, ranging from burning out to flourishing (Babb et al., 2022). Traumatic events—such as a pandemic (Chen et al., 2021)—are commonly believed to result in post-traumatic stress disorder. In actuality, they are

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more likely to result in resiliency (Bonanno et al., 2006; Galatzer-Levy et al., 2018), and in some cases, post-traumatic growth (Jayawickreme & Blackie, 2014; Tedeschi Calhoun, 1996). The current research first explores the literature about some of the possible pathways resulting from traumatic events, including post-traumatic growth. Then, we examine qualitative interview data from four teachers who avoided burnout and flourished under pandemic conditions—as identified by quantitative measures—to determine whether these teachers who were identified as avoiding burnout and flourishing during a pandemic also demonstrated the criteria for post-traumatic growth.

Trauma and Post-Traumatic Growth in Teachers

In the range of positive and negative impacts that can occur as the results of teachers' work, attention has focussed on negative effects of the pandemic on teachers. Trauma is defined in the fifth edition of the *Diagnostic and Statistical Manual* (*DSM-5*; American Psychological Association, 2013) to include

> [Exposure] to death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence [by] direct exposure, witnessing the trauma, learning that a relative or close friend was exposed to a trauma, or indirect exposure to aversive details of trauma, usually in the course of professional duties. (Section 1.3.4a)

This description of trauma has applied to many teachers during the COVID-19 pandemic (Panlilio & Tirrell-Corbin, 2021), as they dealt with fear of illness and death in the course of their teaching duties, and as they witnessed colleagues and students who were infected with the virus. One of the most well-known outcomes of experiencing trauma is post-traumatic stress disorder (PTSD). PTSD and its diagnostic criteria were introduced in 1980 in a then-new edition of the *DSM* of the American Psychological Association, creating a clinical and media focus on the "ways in which trauma could lead to destruction and devastation in a person's life" (Joseph, 2012, p. 317).

It is important to note, however, that not all trauma leads to PTSD. Moreover, along with the negative impacts such as PTSD, positive psychology has begun to look at the growth experiences that may occur concurrently and/or sequentially to the experiences of harm in stressful and/or traumatic experiences. Bonanno (2004, 2005) identified the potential for growth, increased wellbeing, and resilience as results of coming through these experiences. Tedeschi & Calhoun (1998) coined the term *post-traumatic growth* (PTG) to describe the sequential process of experiencing the negative impacts of stressful and/or traumatic experiences followed by increased wellbeing and growth as these experiences are resolved and healed. PTG is a response to trauma that is characterized by

> a change in people that goes beyond an ability to resist and not be damaged by highly stressful circumstances; it involves a movement beyond pre-trauma levels of adaptation. … [and] has a quality of transformation, or a qualitative change in functioning. (Tedeschi & Calhoun, 2004, p. 4)

This change in an individual may include three domains: (a) enhancement of personal relationships; (b) introspection and change in view of self; and (c) recalibration of what individuals value in life (Joseph et al., 2005). According to Jayawickreme and Blackie (2014, p. 319), however, PTG may occur in five domains with individuals reporting experiences such as

1. a greater appreciation of life;
2. more intimate social relationships;
3. heightened feelings of personal strength;
4. greater engagement with spiritual questions;
5. and the recognition of new possibilities for their lives (p. 319).

Given that enhanced closeness of personal relationships is included in both criteria lists, the resulting construct includes seven possible domains or outcomes of PTG. On the other hand, it should be noted that the PTG is not defined in the *DSM-5*—unlike PTSD—and there continues to be variation in the way it is understood and operationalized (Jayawickreme & Blackie, 2014). Moreover, being that the majority of research uses subjective reporting as a proxy for PTG, it could more succinctly be termed self-perceived PTG (Zoellner & Maercker, 2006). Although copious attention has focussed on negative effects of the pandemic on teachers, the present study concentrated on the process of teachers coming through the trauma associated with the COVID-19 pandemic and the degree to which they experienced PTG.

Processes of Post-Traumatic Growth

PTG is not simply a return to baseline psychological functioning after a traumatic event but is characterized instead as demonstrated growth to levels exceeding pre-trauma levels (Calhoun et al., 2000). Importantly, Tadeschi and Calhoun (1996, 2004) stressed in their functional descriptive model that PTG occurs after a traumatic event. Although other researchers (e.g., Affleck & Tennen, 1996) have viewed PTG as a coping mechanism associated with adaptation and well-being, Tadeschi and Calhoun (1996, 2004) viewed it as a possible and desirable outcome of coping with trauma. This outcome is the result of self-work where a trauma survivor looks for benefits resulting from the trauma and uses solution-focused thought patterns (termed *deliberate rumination*) to find meaning in their experiences of trauma, prompting reframing of their trauma, as well as growth and agency (Finstad et al., 2021). Deliberate rumination should not be confused with perseveration, where an individual is caught in an unfruitful pattern of thinking about the trauma without making progress or finding resolution—much like a hamster on a wheel who exerts energy but does not make progress.

Prevalence of Post-Traumatic Growth

Despite the longer history of PTSD as a research topic as well as its heightened attention in the media (Joseph et al., 2012), research has demonstrated that PTSD is not the normative response to traumatic events. Moreover, individuals can experience the same trauma differently due the intensity, duration, severity of the event as well as individual and contextual factors (Zoellner & Maercker, 2006). An example of how a traumatic event can affect large populations concurrently—much like the COVID-19 pandemic did—was the 9/11 World Trade Centre attacks. Bonanno and his colleagues (2006) studied the population directly affected by these attacks and found that although some people developed PTSD, most did not. Likewise, a large-scale meta-analysis of responses to a wide range of traumatic events conducted by Galatzer-Levy and colleagues (2018) found that the most common response to trauma was resilience (65.7%). Although consensus has not been reached on a definition of resilience, “the construct can be

defined as positive adaptation despite adverse conditions or as the ability to maintain adequate functioning despite destructive events" (Finstad et al., 2021, p. 2). This response pattern is supported by Linley and Joseph (2004), who showed that 30–70% of those individuals they studied who had experienced trauma also reported having made positive changes after those experiences. Collectively, these studies suggest that the science related to response to trauma runs counter to the media attention given to PTSD, as only a minority of people experience short-term or long-term negative effects of trauma in comparison to those who experience resilience or PTG.

Burnout in Canadian Teachers During the COVID-19 Pandemic

Similar to the literature on trauma, research about burnout has also demonstrated individualized patterns of responses to work stress. The current study builds on a previously reported, multi-year, mixed methods study of Canadian teachers during the pandemic (Babb et al., 2022) to examine the relationship between PTG and resiliency in teachers. The original study involved a national survey of 1,930 Canadian teachers conducted three times between May 2020 and June 2021. The survey instrument included the Maslach Burnout Inventory survey for educators–MBI-ES (Maslach et al., 1996)–which uses a Likert scale of zero to six to measure three components of burnout including (1) Exhaustion, including physical, psychological, and emotional exhaustion; (2) Withdrawal of energy towards the relationships with students, termed depersonalization; (3) Accomplishment in terms of meeting their role demands, with lower scores indicating higher levels of burnout for the Accomplishment component only. The survey also measured teachers' perception of the effects of 17 demands (e.g., work/life balance, administrator demands, parental demands), internal resources (e.g., teaching efficacy, self-care) and external resources (e.g., supportive administrations, family support) shown to be relevant to teachers during the pandemic (Babb et al., 2022). Latent profile analysis revealed that teachers' responses to the MBI organized the sample of teachers into five unique profile groups (Babb et al, 2022). Two of the groups were navigating the pandemic well: The Engaged (10.8%) and Involved groups (21.6%) demonstrated slightly elevated exhaustion, low depersonalization, and high accomplishment. Correlational analyses showed that these flourishing teachers had sufficient internal and external resources to meet their current teaching demands within the pandemic. The Over-Extended group (40.4%) demonstrated exhaustion at levels higher than the first two groups, elevated depersonalization, and a slight drop in accomplishment of their teaching goals. Furthermore, the Over-Extended group indicated that there was a small gap between the resources available to them and the demands of teaching during the pandemic. Our final two groups were the Detached group (18.4%) and the Inefficacious group (8.8%). The Detached group indicated the highest levels of exhaustion and depersonalization of any of the five categories as well as the second lowest accomplishment, whereas the Inefficacious group indicated exhaustion levels similar to the Engaged and Involved groups, yet also demonstrated elevated depersonalization similar to the Over-Extended group as well as the lowest accomplishment of any of the five groups. Both the Detached and the Inefficacious groups indicated large deficits in the internal and external resources available to them to meet their job demands and were at risk for burnout.

As part of the 2020 survey study, 20 teachers from central Canada were interviewed every two weeks from September 2020 to June 2021. Each biweekly interview consisted of two consistent prompts (i.e., "Please tell me how things have been over the past two weeks"; and "Is there anything else you would like to tell me"?) separated by a question specific to changing contexts within the pandemic (Creswell & Creswell, 2018). Examples of the middle questions included

"How has the winter break affected you, the students, and the school setting? How are the classroom procedures altered in response to safety protocols and how, if at all, have they affected your job and teaching"? Data from these interviews were coded and reported elsewhere (Eblie Trudel et al., 2021; Sokal et al., 2022, in press).

Based on the findings of our past studies (Babb et al., 2022) as well as theorizing about PTG, we were especially interested in teachers whose MBI scores placed them in the flourishing categories—the Engaged and Involved groups. However, being as our national surveys were completed anonymously, we had no way to contact only those teachers within the two desired profile groups to investigate their experiences with PTG. Given research showing that PTG takes time to develop (Joseph et al., 2012) as well as our year-long relationship with the 20 teachers involved in the qualitative study (September 2020–June 2021), we contacted those 20 teachers again in June 2022 with the purpose of completing the same surveys as the previous national sample. We then placed them within their profile groups based on their 2022 MBI profile scores, and then interviewed only those teachers in the Engaged and Involved groups to explore their experiences as they related to the domains of PTG. Our research questions were as follows:

- How does the prevalence of teachers in the Engaged and Involved groups in the interview sample of 2022 compare to the prevalence of these groups in the Canadian sample in 2020-2021?
- Do teachers in the Engaged and Involved groups demonstrate the domains of PTG in their interview comments in June 2022?
- What can we learn about the relationship between PTG and burnout by using mixed methods?

Method

Design

The project was approved by the Research Ethics Board (HE#14993) at the University of Winnipeg and supported by a grant from the Social Sciences and Humanities Research Council of Canada (#1008-2020-0015). After obtaining approval from the school division superintendent, the 20 teachers who participated in the previous research were contacted by email and invited to participate in an additional survey and one-hour interview in June 2022. The interviews were conducted by the same research assistant who called them biweekly for one school year ending in June 2021. Eighteen of the teachers agreed to participate, a noteworthy rate of participation. Once each participant had filled in the online survey, they were interviewed over the phone individually and the research assistant transcribed the audiotape. Each participant was provided with a small honorarium.

Participants

The participants' demographic data is included in Table 1.

Table 1

Demographic Information

	Number of participants
Gender	
Male	1
Female	17
Other	0
Don't wish to say	1
Age	
Under 26	0
26–30	2
31–40	6
41–50	6
Over 50	4
Teaching experience	
Under 1 year	0
1–5 years	2
6–10 years	4
11–15 years	4
Over 15 years	8
Education	
Less than a bachelor's degree	0
Bachelor's degree	8
Some graduate work	7
Masters	3
PhD	0

Instruments

Of interest in the current study were the participants' scores from the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach et al., 1996). Three components of burnout (exhaustion, depersonalization, and personal accomplishment) are determined using this 22-item measure. The MBI-ES uses a 7-point Likert scale which indicates the frequency with which educators agree with the statements: 0 (never), 1 (a few times in the past year), 2 (once a month or less), 3 (a few times a month), 4 (once a week), 5 (a few times a week), or 6 (every day). Three examples of statements are as follows: "I feel emotionally drained from work" (exhaustion); "I don't really care what happens to some students" (depersonalization); and "I have accomplished many worthwhile things in this job" (accomplishment). Cronbach's alpha values were calculated for each subscale and indicated acceptable to very good values: nine items measuring exhaustion alpha value = .93, five items measuring depersonalization alpha value = .85, and eight items measuring personal accomplishment alpha value = .78.

The hour-long, individual interviews were conducted in June 2022 and followed a script. The research assistants were asked to probe for more details when short or general answers were given

by the participants. They were not to affirm the participants' comments or lead the participants. Sample probes included, "Can you tell me more about that? I'm not sure I understand," and "Could you give some examples or be more specific?" Although many of the planned questions related to teaching in the pandemic in a general sense, a series of questions focused specifically on aspects of change resulting from the pandemic: "Has the pandemic changed the way you think about students? Your job? Yourself as a teacher? The purpose of education?"

Findings

The first step of the research analysis plan involved calculating the exhaustion, depersonalization, and accomplishment scores of each of the 18 participants in the June 2022 survey. Please see Table 2 for the results. We then turned our attention to the cut off values for inclusion in the Engaged and Involved groups generated by the latent profile analysis of the 2020 Canadian data set (Babb et al., 2022). Examination of those values indicated that Engaged and Involved teachers demonstrated Exhaustion means below 3, Depersonalization below 1.7, and Accomplishment means above 4: scores that together distinguished them from the other three profile groups. An examination of the means in the June 2022 teacher group revealed that four of the 18 teachers fell within the criteria for the Engaged and Involved groups. Their self-selected pseudonyms were: Black, Blue, Green, and Twila. The scores of these participants are bolded in Table 2.

Once we determined which of the 2022 participants were included in the two flourishing groups, we then turned our focus to the qualitative data gathered from the four teachers in June 2022 through hour-long interviews. Each transcript was examined separately and analyzed

Table 2

MBI-ES Means for Participants

Pseudonym	MBI Exhaust	MBI Depersonalization	MBI Accomplishment
x	5.11	3.8	3.63
x	4.44	3.2	4.13
x	4.25	3.8	3.88
x	4.22	3.2	4.25
x	5.33	4.4	4
Green	**2.56**	**0.2**	**4**
x	2.00	0.6	3.88
x	5.00	3.0	4.13
x	3.67	1.8	6
x	3.22	2.4	5.25
x	4.44	1.2	4.38
x	4.33	3.0	4.13
x	3.89	2.4	5.13
Blue	**1.89**	**0.2**	**5**
x	3.78	0.2	4.13
Black	**2.13**	**1.6**	**4.33**
Twila	**0.67**	**0**	**5.38**
x	5.67	3.6	3.25

deductively using pre-existing codes (Creswell & Creswell, 2018). These codes were generated based on past research about the domains of PTG (Jayawickreme & Blackie, 2014; Joseph et al., 2012). The coding scheme therefore included seven codes: (a) enhancement of personal relationships; (b) introspection and change in view of self; (c) recalibration of what they value in life; (d) experiencing a greater appreciation of life; (e) heightened feelings of personal strength; (f) greater engagement with spiritual questions; (g) and the recognition of new possibilities for their lives. Zoellner & Maercker (2006) showed that this post-hoc coding approach is the most common approach to PTG research.

All four of the flourishing teachers identified as with the pronouns "she/her." Green and Blue were both aged 31–40 and had 6–10 years of teaching experience, the youngest and least experienced of the four flourishing teachers. Both had completed some graduate work. Green taught middle and senior high students (Grades 7–12), and Blue taught elementary school students (Grades 1–3). Black had 11–15 years of teaching experience and was 41–50 years old. She held a bachelor's degree and taught middle and senior high students (Grades 7–12). Twila was our most experienced teacher, with over 15 years of experience. She held a masters' degree in education, was over 50 years old, and taught kindergarten to third grade students.

In terms of the seven codes provided by past theorizing about PTG, all but one were evident in the data generated by the four flourishing teachers from the Engaged and Involved groups. Here we explore each to the criteria for PTG in turn and present evidence of their salience within the italicised interview data when possible.

Enhancement of Personal Relationships

Each of the respondents made comments about the importance and enhancement of personal relationships. Many of these comments were generated in response to the question sequence, "What have been the most effective supports for you over the past year? Who has supported you and what have they done specifically for you? How have you supported yourself in coping with the ongoing pandemic?" Responses fell into the groups of administrators, colleagues, families, and therapists.

In terms of administrators and family members, all four teachers viewed these as important supports. However, none of the participants made comments indicating that the nature or intensity of these relationships had changed as a result of the pandemic.

Colleagues were among the most mentioned of personal relationships that supported teachers during the pandemic. Black specifically attributed the closeness of colleagues to her own response to the pandemic:

> I think teachers, at least in our school, there's a lot more comradery, because we all feel like we are going through the same things. I think people have each other's backs. There's just been a "we're here for you", and there's been lots of things in addition to just pandemic stuff going on for people. I would say there is an extreme support through coworkers. So, I feel like there's a closeness that has developed due to the pandemic.

Twila also expressed perceptions of intensified peer support attributed to the pandemic:

> I think the big thing of COVID for me was finding ways to be more resilient. I think I've talked about that resilience from number one—finding a community of support. You know, I had a little kindy

> [Kindergarten] group that we immediately linked together as soon as the pandemic started and said how are we going to do this, and we were all there supported and present for each other. There was a support group in that way, especially when we entered into the pandemic of what it meant to feel fear and worry about things.

In terms of therapy, Green, Blue, and Black commented on the support they received from a resource of this nature. In all cases, the introduction of a therapist was a new resource sought in the 2021–2022 school year. For example, Green shared,

> My division has established a connection where you could reach out and talk to someone. And so, I took them up on that and basically on my first meeting, I was like 'I don't really know what to talk about, but I just feel not great and not okay.' I think just having that option was very helpful, and I'm thankful for that.

It is noteworthy that all the flourishing teachers had strong social relationships, whether professionally with administrators and peers, personally with partners and/or families, or with clinical supports such as counsellors or therapists. In terms of growth, the respondents made it clear that the intensification of positive relationships with colleagues and therapists were direct consequences of the pandemic. In contrast, their relationships with their administrators and families, although viewed as important to resilience, were not highlighted in their comments as enhanced specifically by the pandemic.

Introspection and Change in View of Oneself

There were clear examples of introspection and change in three of the four teachers. Green shared:

> Yes, absolutely [the pandemic has changed the way I think about myself as a teacher]. I think I try not to make as many judgement calls. So, just being mindful of that and trying to really slow down and not thinking so fast all the time has been an interesting change to myself as a teacher, I think.

Likewise, Twila surprised herself by leaving her long-term position as a kindergarten teacher to become an early years learning support teacher. Through introspection about her values and her recognition of the need for greater connection with others in her teaching, she accepted that a change was needed. She said:

> I was speaking earlier about the need to change, and I think I talked a little bit about being in kindergarten and being in your own little world and doing your own things, in kindergarten in particular. The pandemic certainly made that visible for me. It just made [me] feel a little more isolated. I think you come to a point in your life, me being in the later part of my teaching career … I think now I'm at this time where I need to just mentor, and so I have really enjoyed this opportunity to take what I know and share with it different people in different ways.

Black also recognized change in herself through introspection, however, she did not view this change as positive:

> I think that the part [of me that] has been changed [is that] I'm not as enthusiastic or perfectionist as I used to be, and I'm hoping that will change. Just right now I feel disappointed in myself not feeling like

> I have the energy to be super enthusiastic, you know, and giving 110%. So, that part has been kind of difficult, but I'm hoping that it doesn't stay this way, that I will have a bit of a break and get a chance to remember who I am, and not the person who is in charge of everything, and teach everyone, and be "on" all the time.

In all three cases, the teachers recognized changes in their perceptions of themselves as a direct response to the pandemic.

Reassessment of Life Values

All the teachers demonstrated increased awareness of the things they value most in life, and oftentimes these were related to their ideas about students and education. These reflections sometimes led to big changes. Blue shared:

> Yeah, [the pandemic has changed the way I think about students] a little bit. It reminded me about how much is valuable about school is the kids interacting with each other. Like how they grow and develop, and that's what motivated them to be at school. I have a stronger sense of my teaching philosophy, and the things I value that are most important in the classroom.

Black similarly recognized revision of her values in teaching:

> I think maybe I had a different view of what education should be before [the pandemic] started, and now it's definitely solidified. I think education is stuck in the past. It really focuses on kids being able to remember things in the short term, and apply things short term, and basically fill in the blanks from something they've been told. I think it should be problem-solving: I think it should be learning more things in different ways, and different methods, a lot more hands-on.

Green not only reflected on her values in education, but she also changed teaching positions because of these reflections on her values. Green said:

> From this past year, my experiences really pushed me to make a big change and try something new in a different type of setting for teaching. I just found with everything that was happening, I wasn't able to connect students to the world the way I wanted to or thought I should be. I chose to switch jobs, because I didn't feel good about the position that I was in and how I could respond and provide equitable learning opportunities. A personal thing I've had to unpack is … being able to recognize what's actually important. I used to think the most important thing in order for me to be good at my job was mastery of content, so, in my lane, mastery of biology, mastery of chemistry, mastery of math. And then, what I've learned is I can do my job better when I'm learning alongside students and when I'm aware I'm not an expert in everything—like being vulnerable and admitting these are my strengths but these are the things I'm not as good at, and who can I connect with to answer these questions. Yeah, that's definitely been a great experience as we're coming out of, or hopefully coming out of with this pandemic.

Twila also reflected deeply and chose a change of position as a result. Her reflections about her initial and long-term kindergarten position demonstrated the mismatch between her values and the actions made necessary by pandemic conditions, eventually leading to a change in positions:

> How do we make sure what we do for kids is honouring what we believe about education? Because the choices that we make really show what we think and don't think about education. I keep thinking about

> the amount of paper packages that went home for kids to do home learning with. Is that what we value? For me it was always maintaining joy—in kindergarten maintaining a play-based curriculum—and how do you do that from home? How do you do that through a video screen? So, I think just strengthening my understandings and my solid philosophy of education. And my belief system about what it is that kids need was really solidified.

Greater Appreciation of Life

Some of the teachers made comments about their greater appreciation of life, although most changes related to eagerness and comfort in having school contexts return to what were more like their pre-pandemic states. It is noteworthy that aspects of schooling that may have been taken for granted pre-pandemic were now appreciated by the teachers in the flourishing groups. Blue shared:

> This outdoor learning centre is free for any school in our school division to visit, we just need to book the bus. So even when we were in code orange last year, we were still allowed to go to this place because it was outdoors. So, this year I took my students, once in the fall and then again in the spring, and they just really enjoyed it. I've kind of integrated my science plants and soil unit so that we can explore plants throughout the season at this location. It was kind of (an) unexpected positive outcome.

Twila, the most experienced and educated of the group of teachers, provided evidence that she thought deeply about gratitude:

> I think one thing that I can honestly say [is that] everyone—staff and kids—are just excited to be back at school. I think there is a joyfulness that has come back; certainly, and I'm feeling that. I think laughter is something I gained and just keep smiling. I think (the) pandemic has really built me with resistance and wisdom and some hope.

In this regard, Twila gave advice about gratitude to others:

> Just be grateful, grateful that we're still here. Live life fully, within your classroom, to make sure what you're doing is bringing meaning, [and] that every day is a gift. Take pleasure in the small moments, and make every day special.

Heightened Feelings of Personal Strength

Two of the four teachers in the flourishing groups made comments about how they had developed greater capacity in their personal strengths. Blue shared:

> I guess my perspective changes the longer I'm teaching and the more experience I get. I don't know if it's completely related to the pandemic. It's always a big juggling act in this line of work, but I'm so happy that I'm in it. Yeah, I guess it taught me that I can teach in a variety of ways [making reference to new skills developed through online teaching], and I can adapt in circumstances.

Twila expressed some surprise and joy at her ability to adapt late in her career:

> I do think coming out of this time, [I] know [I] can manage. It was a crazy time I just feel lighter from it. I feel stronger from it. I still go, "Wow, at 60 I could do this and still feel great with it!" Just in that

> leadership role, I've been offered more of that leadership piece within this bit. Of course, the workload has changed and shifted in a way that is new so it's a lot more energy, and maybe that's a little bit of a difference. There's a breath in it, and there's an honouring in being able to share what I know with other people too.

Serendipitously, Twila had been exploring PTG on her own, and her comments throughout her interview reflected these ideas:

> I was reading a little bit of the Doctor Bruce Perry and Oprah book, just over the last few weeks called *What happened to you?* They talk a little bit about post-traumatic wisdom, which sort of caught my interest. What it is— it just comes out of real-life hardships. It's that piece of fact that [says] you can weather it, and weather things together.

Inversely, despite being in the flourishing group, Black expressed feelings of fatigue and indifference rather than recognition of strength:

> We keep having these PD days, and everyone looks at each other and goes "I can't," It's like "not now." "Don't ask me to learn something new right now. I'm just trying to get back on track." Like kind of that burnt out, I can keep trucking along, and maybe slowly repair, but I can't take on something new. I can't learn something new: I need to fix everything that is broken.

These comments by Black stand in stark contrast when compared to those of the other three flourishing teachers.

Greater Engagement with Spiritual Questions

Considered within a narrow definition, there were no comments in any of the interviewees that made references to spiritual engagement, including religion. In a broader interpretation that encompasses the spirit of community and reflection on philosophical questions related to education, comments previously shared in the domains of Relationships, Introspection, and Life Values provided evidence of this engagement.

Recognition of New Possibilities for Lives

After reflecting, two of the four teachers made major changes to their teaching lives to align them with their values. Previous comments made by Green spoke to her disequilibrium provoked by her deepening values and commitment to her teaching philosophy and the mismatch with her teaching position. With social support, she actively chose to rectify this situation:

> My partner has been very supportive. We were able to take a hard look at our lives and are lucky enough that we could make changes as necessary because we have the privilege to being able to do that with our jobs. So, we both changed jobs. I'm still a teacher, but I switched, and he totally changed his work to support me and my work, and therefore, our life together.

Similarly, Twila changed her job to ensure her teaching beliefs and need for social connection were met through her work. Her previous comments related to her newfound wisdom, joy, and energy—as well as her surprise at her own capacity—spoke to her recognition of new possibilities.

Emergent Theme

One other theme arose inductively through analysis of the interview data (Creswell & Creswell, 2018). We considered that past research has explored the effect of a positive outlook on determining the outcome of trauma (Bonanno et al., 2006), and we found that all four of our interview participants viewed themselves less as optimists and more as having a balance between optimism and realistic negativity. Blue disclosed, "I prefer to be an optimistic person, but sometimes it's nice to vent everything out, and then focus on the positive. You can't dwell on the things you can't control."
Green felt similarly:

> I feel like I'm the only person who gets frustrated by things that I feel are unjust, archaic, or not responsive. But I always feel like I do something about it. So, I feel like that keeps me on the sunnier side even though I will vent those frustrations.

Black concurred:

> I don't think it's one or the other. I think it's good to get certain things out to realize other people are feeling the same way. But, then there's been a lot of positivity—like we're so happy we're back. This is so much better. I think you need a good balance of both.

Like Black, Twila also recognized the utility of balance by framing of her experiences:

> I think it's really good to let people know what you're feeling and what you're thinking and that could be called venting, but it's always done with 'this is where I'm at' and 'this is what I'm thinking' and 'this is what I need'. So, with that, and I'm always a hopeful person, always tend to lean more towards that positive aspect, but I think you have to honour your body when it says it's confused, or it's sad, or it's mad, like know it's there. So, I don't know if that's quite venting, but honouring my feelings, and always know that there's a way to work through it.

It is interesting that all four of the participants responded in the same way and, moreover, three of the participants referred to the practical utility of this approach both for themselves and for resolution. Although all four participants rejected the label of optimism, their descriptions of the balance they incorporate in response to the pandemic is very similar to the definition of optimism that has been found in others who demonstrate resilience after traumatic events. When defining optimism in his research about PTG, Bonanno (2006) stated that a positive outlook acknowledges both the negative, challenging aspects as well as the more optimistic frames and pathways. In acknowledging the negative and challenging aspects of the traumatic event but then choosing to frame it in a more positive way that promotes agency and progress, the element of choice of reaction in highlighted (Sokal et al., 2020). Unmistakably, our participants demonstrated the balance indicated in Bonanno's (2006) definition of optimism.

Discussion

We found that four of the eighteen teachers were flourishing in June 2022, according to their reported scores on the Maslach Burnout Inventory for Educators (Maslach et al., 1996). Therefore, the first research question was answered. Given that four of the eighteen teachers (22%) teachers

were flourishing in 2022, this percentage fell short of the percentage of teachers fitting within these groups from our previous national 2020 sample of burnout in Canadian teachers (32.4%; Babb et al., 2022). This finding could have been the result of the longevity of the pandemic, as these second data reported here were collected 27 months into the pandemic.

It is clear from the analysis of the interview data that all four teachers experienced growth within some of the domains proposed in the literature (Jayawickreme & Blackie, 2014; Joseph et al., 2005). Essential to the analysis of PTG specifically, however, is an important consideration: Did the participants' growth within the domains simply return them to a prior level of functioning or did it result in growth beyond prior levels that could be attributed to their coping activities prompted by the pandemic? Although there was evidence of six of the seven domains in the perspectives of the interviewees, only a few of the domains were referenced in comments where change was explicitly discussed and concurrently attributed to the pandemic. The threshold for PTG is set high: Sears et al. (2003) showed that ruminating to simply identify benefits of trauma was not enough to promote adjustment and growth. In addition to recognizing benefits, the researchers contended that adjustment resulted from conscious habits that transferred the new awareness into action. Zoellner and Maercker (2006) offered support for this notion in their findings that actions prompted by the awareness of the benefits of trauma buffered the effects of trauma over time, whereas simple awareness of the benefits overtime predicted increases in trauma symptoms.

With consideration of the action orientation described by Sears et al. (2003) as well as Zoellner and Maercker (2006), two of the teachers are exemplars of both explicit identification of self-growth within the domains of PTG as well as taking action. Twila and Green both changed positions in the year between the data collection periods, and both made the modifications to ensure that they could find meaning in their teaching. Both explicitly recognized the work and awareness of trauma that could lead to new opportunities through their own agency. Through explicit introspection, Green attributed her personal growth as a teacher as well as her understanding about the purposes of education to a crisis caused by the pandemic teaching conditions. She concluded,

> I chose to switch jobs, because I didn't feel good about the position that I was in and how I could respond and provide equitable learning opportunities. A personal thing I've had to unpack is … being able to recognize what's actually important.

She made specific reference to the importance of the support of her partner as they took a "hard look at [their] lives and … [made] changes as necessary." Despite being a person who discussed her frustrations, "[she] always … [did] something about it." Her comments indicate that the pandemic has "absolutely" changed the way she thinks about herself as a teacher.

Likewise, Twila chose to move from her long-term kindergarten position, where she originally thought she would end her career. She attributed the need to change to "the pandemic mak[ing] that visible to [her]," demonstrating both introspection and attribution to the pandemic. In her role in kindergarten within the pandemic conditions, she was unable to teach to her beliefs. The pandemic, and the resulting change of teaching position, served in "strengthening [her] understandings and [her] solid philosophy of education," as well as "[her] belief system about what it is that kids need was really solidified," resulting in Twila being "buil[t] up with resilience, wisdom, and hope." She talked about the importance of "finding a community of support" in her colleagues to address the "fear" she felt during the pandemic, indicating that her development was

a response to the trauma of the pandemic.

Turning our attention to Blue, we see less evidence of PTG. Like Twila and Green, Blue stated that the pandemic strengthened her values and her teaching philosophy. Although the pandemic changed the ways that Blue thinks about students "a little bit," she explicitly stated that her insights may be related to her increased years of teaching experience rather than to the pandemic in particular. In comparison to Twila and Green, her changes in action were more subtle and related to reactive pedagogical changes that were required by pandemic conditions (e.g., online pedagogies) rather than a change that she chose for herself. Blue chose not to "dwell on things [she] [could] not change" and viewed her development of new pedagogies as "unexpected" benefits of the pandemic. Together, these comments do not demonstrate the same focus, effort, and outcomes demonstrated by Twila and Green.

Although Black was identified by the MBI measure (Maslach et al., 1996) as flourishing—like Twila, Green, and Blue—her comments suggested that she is did not demonstrate PTG. Although Black's comments illustrated closer relationships with colleagues which she attributed to the pandemic, her comments resulting from reflection about herself indicated her disappointment rather than growth. Like the other three participants, Black recognized that her values in teaching were solidified during the pandemic; however, she also indicated a lack of motivation and agency in enacting this new insight. Black's comments implied that she is stuck and not able to take the actions necessary for growth. She strived to get back to being the person she knew before the pandemic but demonstrated exhaustion and negativity when asked to try new pedagogies by her employer. Her comments reflected that her plan for change rested on hope rather than action:

> I'm not as enthusiastic or perfectionist as I used to be, and I'm hoping that that will change. Just right now I feel disappointed in myself not feeling like I have the energy to be super enthusiastic … but I'm hoping that it doesn't stay this way.

Importantly, although the pandemic resulted in closer peer relationships for Black, this is the only PTG criteria exhibited by Black.

Together, the results suggest that PTG is not simply a checklist of criteria and that avoiding burnout does not necessarily indicate PTG. Rather, the seven criteria individually are indicators of PTG only when the individual has undergone a trauma, ruminated about the experience in a personal way, and consciously made active changes that result in growth. Although all four of the participants avoided burnout and performed their teaching roles throughout the pandemic, only Twila and Green exhibited PTG as defined by purposeful rumination and action that resulted in growth beyond their former levels. Blue, in contrast, made the changes necessary in her pedagogy to get by during pandemic conditions, but did not demonstrate the other characteristics of PTG including personal growth attributed to the trauma. Black is the outlier in the group, in that her comments indicated a degree of exhaustion and cynicism not evident on her quantitative MBI (Maslach et al., 1996) scores. Rather than indicating PTG, her comments demonstrated disappointment in herself and a hope for resolution without a process to achieve it, far from the outcomes that indicate PTG.

Limitations and Strengths/Contributions

There are several limitations to the current research. First, the sample size is small. Replication in larger samples would lend greater confidence to the results. Second, the study relied on self-

reported data. This limitation is common to most studies of PTG, as PTG is subjective in its nature. Joseph et al. (2012), in addition to Jayawickreme and Blackie (2014), posited that without pre-post trauma measurement, it is uncertain whether it is perception of growth or actual growth that is being measured. Zoellner and Maercker (2006) have furthermore suggested that subjective perceptions of growth are sometimes illusionary but functional, in that they serve as a coping mechanism to respond to distress. Third, the four teachers who demonstrated membership in the Involved and Engaged groups and participated in the interviews all identified with the pronouns "she/her." Although most teachers in Manitoba are women, inclusion of teachers from other gender groups would enhance the findings. Fourth, the media narrative around teaching in a pandemic highlighted the risks of burnout and may have normalized this expectation in teachers. Recent research showed that as early as within their teacher preparations programs, Canadian teacher candidates come to fear possible burnout in their professional roles (Williams et al., 2022). Given the heightened attention to burnout during the pandemic, it is possible that the representation of teachers in the Engaged and Involved groups may have been diminished by this public narrative.

Despite the limitations of this study, the findings help to delineate the heterogeneous nature of teachers who avoided burnout, resulting in a deeper understanding of the differences between resilience and PTG as responses to the COVID-19 pandemic. Qualitative differences in the degree and quality of rumination, agency, and positive outcomes are evident within those teachers who were identified quantitatively as resilient. This insight suggests that qualitative and quantitative data together may produce more nuanced understandings in our evolution of theorizing about PTG (Zoellner & Maercker, 2006), and that both will be necessary in solving this phenomenon. Moreover, theorizing about burnout and its avoidance can be complemented by further research that explores the conditions that promote not only resilience after trauma, but trauma-produced growth that opens new opportunities for teachers. A recent quantitative large-scale study of trauma, burnout, and post-traumatic growth in nurses during the pandemic (Chen et al., 2021) revealed that greater levels of trauma resulted in a greater capacity for both PTSD and PTG as outcomes. Their findings suggested that PTG can serve as a protective factor against burnout, and they urged further studies about this relationship. We concur with this suggestion, but further recommend additional attention to the education sector and the benefits of including qualitative data alongside quantitative data to produce a richer understanding of the relationship between burnout and post-traumatic growth.

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